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COMPULSORY LICENSING OF STANDARD ESSENTIAL PATENTS TO REMEDY ABUSES OF DOMINANT POSITION

Presentata da:
IZARNE MARKO GOIKOETXEA

Coordinatore Dottorato
Prof.ssa Monica Palmirani

Supervisore
Prof. Jesús Alfaro Águila-Real

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Submitted by: **IZARNE MARKO GOIKOETXEA**

Supervisor
Prof. Jesús Alfaro Águila-Real

The PhD Programme Coordinator
Prof. ssa Monica Palmirani

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ABSTRACT

When implementers use Standard Essential Patents (SEPs) without obtaining licenses – because parties cannot agree on royalties –, patent owners are entitled to bring infringement actions against them, seeking prohibitory injunctions and the recall of products. However, as SEP holders gave commitments to grant licenses to third parties on Fair, Reasonable and Non-Discriminatory (FRAND) terms, alleged infringers accuse SEP owners of abusing their dominant positions for bringing the aforementioned actions.

Due to an absence of express guidance from Standard Setting Organizations' patent policies, there was a considerable degree of uncertainty as to the lawfulness of SEP holders' behaviour. Accordingly, the European Commission – in *Samsung* and *Motorola* – and the European Court of Justice (ECJ) – in *Huawei v. ZTE* – pronounced on the issue.

Both treated that conduct as a specific and novel category of abuse within the meaning of Article 102 TFEU. Nevertheless, it should have been treated as a refusal to deal – to grant SEP licenses. In order to do that, it must be argued that bringing those infringement actions by SEP holders constitutes a 'constructive' refusal to grant licenses, in consistency with a critical review of *IMS Health* – issued by the ECJ. In this way, *Huawei v. ZTE* would be consistent with the ECJ's case law on refusal to deal.

Consequently, the compulsory license would emerge as the most proportionate and necessary remedy to end effectively the infringement of Article 102 TFEU committed by SEP owners. In US, *de facto* compulsory licenses – 'ongoing royalties for future infringements' – are also employed, although to remedy patent infringements. Nevertheless, that divergence between US and EU illustrates that when parties fail to enter into licensing agreements on FRAND terms, the compulsory license might be 'the tool' to make SEP licenses available to all stakeholders.

KEYWORDS

Abuse of dominant position, Art 102 TFEU, compulsory license, damages, FRAND, holdup, *Huawei v. ZTE*, *Magill*, ongoing royalties, prohibitory injunction, refusal to deal, *Samsung*/*Motorola*, Standard Essential Patents, standards, third-party-beneficiary contract.

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LIST OF ABBREVIATIONS

2/2.5/3/4/5G	Second/Third/Fourth/Fifth Generation Wireless
ADR	Alternative Dispute Resolution
AG	Advocate General
BBC	British Broadcasting Corporation
BGH	Bundesgerichtshof (German Federal Supreme Court)
CD-R and CD-WR	Recordable and Rewritable Compact Disc
CEN	Comité Européen de Normalisation (European Committee for Standardization)
CENELEC	Comité Européen de Normalisation Électrotechnique (European Committee for Electrotechnical Standardization)
CFI	Court of First Instance
EC	European Commission
ECJ	European Court of Justice
EEA	Agreement on the European Economic Area
EFTA	European Free Trade Association
ETSI	European Telecommunications Standards Institute
EU	European Union
EUR	Euros
FRAND	Fear, Reasonable and Non-Discriminatory
FTC	Federal Trade Commission
GC	General Court
GPRS	General Packet Radio Service
GSM	Global System for Mobile communications
IBM	International Business Machines
ICT	Information and Communications Technology
IEEE-SA	Institute of Electrical and Electronics Engineers Standards Association
IMS Health	Intercontinental Marketing Services Health
IOT	Internet of Things
IP	Intellectual Property
IPR	Intellectual Property Rights
IPRED	Intellectual Property Rights Enforcement Directive

ISO	International Standardization Organization
IT	Information Technology
ITC	International Trade Commission
ITP	Independent Television Publications
ITU	International Telecommunication Union
LG	Landgericht (German Regional Court)
LTE	Long Term Evolution
MWC	Mobile World Congress
NDC	National Data Corporation
NPE	Non Practicing Entity
OLG	Oberlandesgericht (German Higher Regional Court)
PC	Personal Computer
PII	Pharma Intranet Information
PMI	Pari Mutuel International
PMU	Pari Mutuel Urbain
RTE	Radio Telefis Eireann
SEP	Standard Essential Patent
SO	Statement of Objections
SSNIP	Small but Significant Non-Transitory Increase in Price
SSO	Standard Setting Organization
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
TRIPS	Trade-Related Aspect of Intellectual Property Rights Agreement
TTBER	Technology Transfer Block Exemption Regulation
UK	United Kingdom
UMTS	Universal Mobile Telecommunications System
US	United States
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

INTRODUCTION

I. Background

The relevant type of intellectual property (IP) right in this research is the patent right, whose specific subject-matter is to guarantee the reward of the inventive effort of the inventor, who has ‘the exclusive right to use an invention with a view to manufacturing industrial products and putting them into circulation for the first time, either directly or by the grant of licences to third parties, as well as the right to oppose infringements’[1].

Products protected by patents are part of our everyday lives. For instance, radio, television, smart phones, computers, laptops, tablets, wireless technologies – such as Wi-Fi – or automobile ignition and transmission systems, are comprised by various patents. Usually, these patents cover technologies that have been declared essential to the implementation of a standard by a Standard Setting Organization (SSO), so they are renamed as Standard Essential Patents (SEPs). Namely, SEPs cover technologies that have been declared essential to the implementation of a standard by a SSO and in comparison with patents that are not essential to a standard, they possess peculiarities regarding licensing and enforcement that will be studied throughout this research. For greater understanding what SEPs are and how they are licensed, it is timely to make some references to the terminological framework around SEPs that will appear throughout the research, among others, to standards’ categories and the standardization process carried out by SSOs.

The standard is a document that establishes the requirements for a specific item, material, component, system or service. It also describes, in detail, a particular method or procedure that brings a solid foundation upon which to develop new technologies and to enhance existing practices and other benefits[2]. Depending on the standards’ purpose, it is possible to distinguish between different categories. Although this research focuses on interface standards developed by SSOs, it is worth mentioning some of the most important categories[3]: vocabulary standards, measurement standards, safety standards, management standards and products standards.

Interface (also known as technical, interoperability or compatibility) standards[4] address especially the needs for interconnection and interoperability between products in a multi-

[1] Case C-187/80 *Merck & Co Inc. v Stephar BV and Petrus Stephanus Exler* [1981] ECR I-2063, para 4.
[2] Competition Directorate-General, ‘Standard Essential Patent’ (2014) 8 Competition Policy Brief 1, paras 1, 4 <http://ec.europa.eu/competition/publications/cpb/2014/008_en.pdf> accessed 1 August 2018; ‘What is a European Standard (EN)?’ (CEN-CENELEC) <http://www.cencenelec.eu/standards/DefEN/Pages/default.aspx> accessed 1 August 2018.
[3] Rudi Bekkers and others, ‘Understanding patents, competition and standardization in an interconnected world’ (ITU 2014) 14-15 <https://www.itu.int/en/ITU-T/ipr/Pages/Understanding-patents,-competition-and-standardization-in-an-interconnected-world.aspx> accessed 1 August 2018.
[4] ‘Why standards? Benefits of standards’ (ETSI) <https://www.etsi.org/standards/why-standards> accessed 28 January 2019.

vendor, multi-network and multi-service environment, which refers to the fact that complex Information and Communication Technologies (ICT) systems must communicate and interwork on all levels[5]. As an example, a laptop computer incorporates about 251 interoperability standards[6]. The fact that standards ensure interoperability and compatibility between related products, it brings many benefits[7]. Standards can encourage innovation and lower costs by increasing the volume of manufactured products. Standards can strengthen competition by enabling consumers to switch more easily between products from different manufacturers. Standards may also further the Treaty on the Functioning of the European Union (TFEU) objective of achieving the integration of national markets through the establishment of an internal market.

The technologies to implement interface standards are usually covered by SEPs, which means that implementers – the users of a standard – necessarily have to get a license if they want to manufacture standard-compliant products. If they want to avoid to pay what they consider excessive royalties to obtain that license, they can implement any other technology available on the market. However, it will not be standardized, so it will not address the needs for interconnection between products. Hence, one of the potential disadvantages of interface standards is the lack of technologies comparable to those protected by SEPs[8]. In contrast to that type of standards, safety standards – that help ensure safety, reliability and environmental care – are usually protected by copyright, so it is easier for manufacturers to 'design around' the IP right (IPR) by adopting a permitted alternative that is in a non-network market[9].

At the same time, interface standards may be classified according to their creational source. As it was mentioned before, this research revolves around technical standards created by voluntary private SSOs, so called formal standards or *de jure* standards. As it will be explained hereinafter, these standards facilitate the deployment of new technologies by supporting interoperability on the widest possible scale and by avoiding the cost, uncertainty, and delay of a competition between rival proprietary standards[10].

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[5] 'Why standards? Interoperability & Testing' (ETSI) <https://www.etsi.org/standards/why-standards> accessed 28 January 2019.

[6] Brad Biddle, Andrew White and Sean Woods, 'How Many Standards in a Laptop? (And Other Empirical Questions)' (2010) SSRN Electronic Journal <https://ssrn.com/abstract=1619440> accessed 2 August 2018.

[7] Commission, 'Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements Text with EEA relevance' (2011) OJ C11/1, paras 263 and 308; *Samsung* (Case AT.39939) Commission Decision C(2014) 2891 final [2014], para 22; *Motorola* (Case AT.39985) Commission Decision C(2014) 2892 final [2014] para 46.

[8] Bekkers and others, 'Understanding patents' (n 3) 25-29 (they mention more potential disadvantages and advantages of interface standards).

[9] Mark A. Lemley, 'Intellectual Property Rights and Standard-Setting Organizations' (2002) 90(6) California Law Review 1889, 1898, para 2 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=310122> accessed 2 August 2018.

[10] Yann Méniére, 'Fair, Reasonable and Non-Discriminatory (FRAND) Licensing Terms-Research Analysis of a Controversial Concept' (Publications Office of the European Union 2015) 9, para 4 <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/fair-reasonable-and-non-discriminatory-frand-licensing-terms-research-analysis-controversial> accessed 2 August 2018.

Hence, SSOs facilitate industry coordination on a common technological platform. Despite that fact, it is relevant to cite the other sources too: operation of the market, forums and consortia and government.

Special reference should be made to *de facto* standards that arise from the operation of the market, as far as they constitute the pivotal feature of one of the cases (*IMS Health*) subject of study in this research. When consumers preferably employ a single product or protocol and reject that of competitors, it enjoys a widespread use and broad market acceptance, so it becomes the *de facto* standard in a given industry. For instance, Adobe's PDF computer file format for printable documents was first a company standard (a standard created for company application, known as 'proprietary specifications'[11]). Later on, when they made it available free of charge, it turned into a *de facto* standard. And once it was endorsed by the International Standardization Organization (ISO) – a SSO –, it became a formal standard. Another well-known example of a *de facto* standard is the Microsoft's Office Open XML format for MS-Windows users[12].

Technical standards may also be developed by forums, consortia and other informal industry associations that are especially prevalent in the ICT industry. The idea lying behind their creation is that informal cooperation among a smaller group compound by similar companies of the same industry, can agree on a technical standard more quickly. Therefore, these organizations lie somewhere between single companies and formal SSOs. They may be established to develop a single standard, various standards or to serve a wider technology area. An example of a standard developed by a consortium was the Compact Disc standard[13].

The other possibility to create an interface standard is that the government identifies and sets the appropriate standard, compelling all participants in the market to use the standard to enforce regulations[14].

Focusing now on the SSOs as interface standards developers, these are private industry organizations compounded by companies that often compete on the same market and that voluntarily join them to collaboratively adopt standards. That is to say, SSOs' primary activity is to develop and maintain standards by bringing together industry participants and relevant stakeholders to evaluate competing technologies for inclusion in standards[15]. As mentioned before, standardisation agreements usually produce significant positive economic effects. Therefore, even though standardisation is generally achieved by means of an agreement between undertakings that are usually competitors on the same market, subject to certain conditions, standardisation agreements normally do not restrict

[11] Bekkers and others, 'Understanding patents' (n 3) 17-19.
[12] Méniére, 'Fair, Reasonable and Non-Discriminatory' (n 10) 9, para 4, fn 3.
[13] Bekkers and others, 'Understanding patents' (n 3) 20-21.
[14] Lemley, 'Intellectual Property Rights' (n 9) 1899, para 2.
[15] *Samsung* Commission Decision (n 7) [23]; *Motorola* Commission Decision (n 7) [47].

competition within the meaning of Article 101(1) TFEU. These conditions[16] are the following: (i) the participation in standard-setting is unrestricted; (ii) the procedure for adopting the standard in question is transparent; (iii) the standardisation agreements do not contain obligation to comply with the standard (*i.e.* the members of a SSO remain free to develop alternative standards or products that do not comply with the agreed standard); and (iv) members provide access to the standard on fair, reasonable and non-discriminatory (FRAND)[17] terms – participants will have to assess for themselves whether the licensing terms and in particular the fees they charge fulfil the FRAND commitment, because SSOs are not required to verify it.

SSOs also seek to ensure that industry participants contribute technology that will create valuable standards and that these standards are widely adopted. The broader the implementation of a standard, the greater the interoperability benefits. Participants in a standard-setting process can obtain significant benefits if their technology becomes part of a standard, because alternative competing technologies may disappear from the market. These benefits include potential royalties from licensees – implementers – that will manufacture products to be sold to millions of consumers, a large base of licensees, increased demand for their products and improved interoperability and compatibility with the other products using the standard[18].

Interface standards are produced for many different products and services, so their territorial power may vary depending on whether they were adopted by national, regional or international standardization bodies. For instance, in Europe, in the telecommunication and electro technical sectors, apart from national technical standards[19], there are also standards created for regional and global application. Namely, European standards, adopted by European standardization bodies, such as the European Telecommunications Standards Institute (ETSI), the European Committee for Standardization (CEN, by its French acronym) and the European Committee for Electrotechnical Standardization (CENELEC, by its French acronym). And international standards, adopted by international standardization organizations, such as the International Telecommunication Union (ITU) and the Institute of Electrical and Electronics Engineers Standards Association (IEEE-SA).

Before explaining the standardization process of SSOs, it is appropriate to specify who the members are and their respective interests. These organizations have to integrate the business interests of multiple players (*e.g.* upstream and downstream manufacturers, as well as telecommunications network providers, universities, research organizations, non-

[16] Commission, 'Communication from the Commission — Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements' (n 7), paras 280, 281, 282, 293.
[17] ibid, paras 285, 287, 288.
[18] *Samsung* Commission Decision (n 7) [24], [25] and [28]; *Motorola* Commission Decision (n 7) [48] and [49].
[19] 'Supporting European Regulation' (ETSI) <https://www.etsi.org/standards/supporting-european-regulation> accessed 28 January 2019.

practicing entities and privateers), which is very complicated[20]. Generally speaking, there might be four types of members in a SSO: strictly SEP owners, implementers, SEP owners who are also implementers[21] and Non-Practicing Entities (NPEs).

Strictly SEP owners or pure innovators are only involved in the upstream market, so they just develop and commercialize their inventions. Their funding source comes from the incomes of patents they own. Their interest is to make the most profits out of the patent rights, for instance, setting royalty rates at the level that maximize their profits.

Implementers are active only in the downstream market. They manufacture products or offer services that incorporate or contain inventions developed by third parties that are protected by patents. Their interest is to get the lowest possible royalty for the license to use the SEPs.

Vertically integrated companies own patents and manufacture the products that implement these patents, so they are also involved in the downstream market. Hence, these SEP owners are also implementers. Accordingly, they obtain incomes from patents they own. But they also have to pay royalties to implement other standardized technologies in the products they manufacture. Therefore, they will prefer to have a total royalty set equal to zero. They might obtain that through cross-licensing, where two firms license large blocks of their respective patents to one another, without paying monetary royalties. However, if they are more an implementer than a SEP owner, they will favour the lowest possible royalty. And if they are more a SEP owner than an implementer, they will prefer to have the profit-maximizing royalty[22].

NPEs own patents by acquisition, not because they invented the technology protected by them. Besides, they do not make or sell products or services implementing the patented technology. Instead, what they do is to seek licensing revenues from operating companies and assert patent rights against infringers, extracting settlement agreements or court-awarded damages from allegedly infringing operating companies[23]. Transactions from producing firms to buyers who are NPEs are increasingly common[24], a phenomenon

[20] Tim Pohlmann and Knut Blind, ‘Landscaping study on Standard Essential Patents (SEPs)’ (IPlytics 2016) 36, para 1 <www.iplytics.com/about/publications> accessed 25 July 2018.

[21] Aurea Suñol, ‘Patentes y hold-up: la acción de cesación ante compromisos FRAND’ (2015) 4 InDret Revista para el Análisis del Derecho 9, paras 5-7, 10, para 1 <www.indret.com/pdf/1189_es.pdf> accessed 3 December 2018.

[22] Pierre Régibeau, Raphaël De Coninck and Hans Zenger, ‘Transparency, Predictability, and Efficiency of SSO-based Standardization and SEP Licensing. A Report for the European Commission’ (Publications Office of the European Union 2016) 75, para 2 <https://ec.europa.eu/growth/content/study-transparency-predictability-and-efficiency-sso-based-standardization-and-sep-0_en> accessed 2 August 2018.

[23] Marcel Canoy and others, ‘Patents and standards: a modern framework for IPR-based standardisation’ (European Commission 2014) 67, para 6 <https://ec.europa.eu/growth/content/public-consultation-patents-and-standards-modern-framework-standardisation-involving_en> accessed 25 July 2018; Méniére, ‘Fair, Reasonable and Non-Discriminatory’ (n 10) 13, para 6.

[24] Pohlmann and Blind, ‘Landscaping study on SEPs’ (n 20) 34, Table 5 (the table about the ‘Top 20 declared SEP patent transfer deals’ relates to the years 1992 to 2015 and it shows that the largest declared

referred to as privateering[25].

There is a debate among economists and legal scholars about whether NPEs hinder innovation or not. According to one view[26], the aim of NPEs is to purchase patents in order to extort revenues from operating companies via the threat of litigation. They reckon that NPEs have little or no value and the revenues earned by them are a pure transfer, producing a deadweight loss to the economy by discouraging operating companies from creating new products. This is why NPEs are also named as 'patent trolls'.

According to another view[27], NPEs provide value by serving as intermediaries in the market for invention, providing insurance and liquidity to small and mid-sized companies specialized in technology development. When these companies try to license their patents to operating companies that manufacture consumer products, sometimes they infringe small and mid-sized companies' patents instead of getting licenses, fighting any lawsuit that comes along as a strategy.

As regards the standardization process carried out by SSOs – that is open and also published –, it usually starts when members propose to create a new standard (or to update

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SEP sellers are mainly manufacturers or patent aggregators, but it also identifies SEP buyers that are NPEs, as well as transactions among NPEs).

[25] John M. Golden, 'Patent Privateers: Private Enforcement's Historical Survivors' (2013) 26(2) Harvard Journal of Law and Technology 545; Björn Lundqvist, *Standardization Under EU Competition Rules and US Antitrust* Laws (Edward Elgar 2014) 25, para 1.

[26] Robert P. Merges, 'The Trouble with Trolls: Innovation, Rent-Seeking, and Patent Law Reform' (2010) 24(4) Berkeley Technology Law Journal 1583; James E. Bessen, Jennifer Ford and Michael J. Meurer, 'The Private and Social Costs of Patent Trolls' (2011) Boston University School of Law, Law and Economics Research Paper No. 11-45. < http://www.bu.edu/law/workingpapers-archive/documents/bessen-ford-meurer-no-11-45rev.pdf> accessed 2 August 2018; Mark A. Lemley and Douglas A. Melamed, 'Missing the Forest for the Trolls' (2013) 113(8) Columbia Law Review 2117, 2180, para 3 ('That is not to say trolls are not a problem; they are a large and growing one. But they are not the problem. Rather, they are a symptom of systemic issues the patent system faces in the IT industry […]'); Catherine E. Tucker, 'The Effect of Patent Litigation and Patent Assertion Entities on Entrepreneurial Activity' (2014) SSRN Electronic Journal <https://ssrn.com/abstract=2457611> accessed 3 August 2018; Fiona M. Scott Morton and Carl Shapiro, 'Strategic Patent Acquisitions' (2014) 79(2) Antitrust Law Journal 463; James E. Bessen and Michael J.Meurer, 'The Direct Costs from NPE Disputes' (2014) 99(2) Cornell Law Review 387; Robin Feldman and Mark A. Lemley, 'Do Patent Licensing Demands Mean Innovation?' (2015) 101(1) Iowa Law Review 137; Fiona M. Scott Morton and Carl Shapiro, 'Patent Assertions: Are We Any Closer to Aligning Reward to Contribution' (2016) 16 Innovation Policy and the Economy 89; 'Patent Assertion Entity Activity: An FTC Study' (Federal Trade Commission 2016) <https://www.ftc.gov/policy/studies/patent-assertion-entities-pae-study> accessed 3 August 2018.

[27] James F. McDonough, 'The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy' (2006) 56(1) Emory Law Journal 189; John M. Golden, ''Patent Trolls' and Patent Remedies' (2007) 85(7) Texas Law Review 2111; Damien Geradin, Anne Layne-Farrar and Jorge Padilla, 'Elves or Trolls? The Role of Non-Practicing Patent Owners in the Innovation Economy' (2008) TILEC Discussion Paper No. 2008-018 <https://ssrn.com/abstract=1136086> accessed 3 August 2018;
Michael Risch, 'Patent Troll Myths' (2012) 42(2) Seton Hall Law Review 457; Andrei Hagiu, and David B. Yoffie, 'The New Patent Intermediaries: Platforms, Defensive Aggregators and Super-Aggregators' (2013) 27(1) Journal of Economic Perspectives 45; Stephen Haber and Seth H. Werfel, 'Patent Trolls as Financial Intermediaries? Experimental Evidence' (2016) 149 Economics Letters 64; Noel Maurer and Stephen Haber, 'Patent Trolls or Patent Elves? Evidence from Publicly-Traded Patent Assertion Entities' (2017) IP² Working Paper No. 17003, 3 ('PAEs […] are not evil trolls, but […] are hard-working patent elves').

an existing one). Before the adoption of the standard begins, most SSOs request their members to disclosure their IPRs (*ex ante* disclosure). That is to say, they have to disclosure the patents they own, have pending (patent applications) or intend to file[28], that might be or become relevant or 'essential' to the practice of the future standard. Ongoing research is not usually declared, since doing so might jeopardise the firms' ability to obtain patent protection later on. There are two categories of *ex ante* disclosure: negative disclosure and specific disclosure[29].

Under the negative or blanket disclosure, patent owners only need to declare those patents they intend not to license on terms required by the SSO, that is, those that would not be subject to the SSOs' rules on licensing terms. In consequence, SSOs cannot know about all existing technologies and whether they are patented or not. Therefore, the negative disclosure is complemented with patent owners' declaration, assuring potential licensees that all non-declared patents that turn out to be essential (i) will be licensed and (ii) royalties will be subject to the pricing rule employed by the SSO.

In the specific disclosure, patent owners identify the patents they think will be relevant to the standard (they do not need to explain how patents are related to it). These declarations are not subject to any external check about whether patent owners declared all the patents they own or not. Nevertheless, in order to avoid later accusations of withholding information, called 'patent ambush' – which might constitute an anti-competitive behaviour as it will be explained in Section 1.3.1.2. of Chapter 1 –, patent owners tend to declare also patents others than those which can clearly be expected to be of relevance to the standard, leading to a tendency named as 'over-declaration'. The main drawback of the specific disclosure is that in patent-dense SSOs, patents involved in *ex ante* specific declarations are large and it is very costly for SEP owners to identify in their portfolios all relevant patents for the standard. Besides, as it was said, SSOs cannot look at all declarations. Therefore, some[30] suggest that in these cases the negative disclosure would be a superior policy option, because the costs of specific disclosure would not justify the benefits.

Once the *ex ante* disclosure is done, the technical committee – composed of representatives of the members of the SSO – considers the options for the best standard. That is to say, it researches and discusses the merits of alternative technologies with the goal of identifying the best available solution (technology) to a given problem by

[28] Anne Layne-Farrar, 'Innovative or Indefensible? An Empirical Assessment of Patenting within Standard Setting' (2008) SSRN Electronic Journal 1, para 1 ('I reject the hypothesis that all patenting that takes place after a standard has been published must be opportunistic. Some may be, but an assessment of the available data suggests that much is not') <https://ssrn.com/abstract=1275968> accessed 2 August 2018.

[29] See trends in standards development (disclosure) at Rudi Bekkers and others, 'Disclosure Rules and Declared Essential Patents' (2017) Boston University Questrom School of Business Research Paper <https://ssrn.com/abstract=3005009> accessed 2 August 2018.

[30] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 46, para 5, 47, para 2, 48, paras 2 and 3, 52, paras 3-5, 53, para 1.

consensus[31]. Once it is chosen, the competition between the available technologies in the market ceases by design and the standard document is drafted. Afterwards, the document will be approved and published by the members of the SSO[32], making the standard's documentation available for use by all[33].

Subsequently, members of the SSO reveal specific information about their patents become SEPs (*ex post* disclosure), that could not be included in the *ex ante* specific disclosure. The information may include the following details: patent number, grouping of SEPs (*e.g.* patent families) or mapping of patents to a specific part of the standard. The above, allows implementers to know who are the SEP owners from whom they should get licenses, bringing more transparency to the licensing process[34].

Turning now to the concept of SEPs, these patents protect technologies required to implement formal standards – adopted by SSOs – in products that depend on interconnectivity and compatibility of different systems working together [*e.g.* fifth generation wireless (5G) and the Internet of Things (IoT)]. Namely, the use of SEPs is indispensable to all competitors which envisage manufacturing products that comply with standards to which they are linked. Furthermore, complex products and systems are often based on multiple standards from several SSOs. For example, Wi-Fi is based on a family of interface standards developed by the IEEE-SA. Before becoming a formal standard, there were other alternative wireless networking technologies available on the market competing among them. However, once the IEEE-SA decided to choose the Wi-Fi as the standard technology, the existing competition ceased. Thus, nowadays, Wi-Fi is the technology addressing the interoperability needs of products, so all manufacturers want their products to be compatible with it. Therefore, as the Wi-Fi technology is covered by a large number of SEPs owned by several companies, it is essential for implementers to obtain licenses to use them.

The main difference between SEPs and non-SEPs is that when standardised technologies do not exist, manufacturers have different comparable technologies – also protected by patents, the so called 'non-SEPs' – available on the market, each of them with their own characteristics, because it is normally technically possible to design around a non-SEP. Namely, non-SEPs protect technologies that are not essential to any standard, so the election of one or another does not compromise the essential functions of the manufacturer's product[35]. For example, there are different technologies to unlock

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[31] Bekkers and others, 'Understanding patents' (n 3) 21-24 (they also refer to more standards-development principles: transparency, balance, due process, openness, impartiality, effectiveness and relevance, coherence and development dimension).

[32] 'Standards Making' (ETSI) <https://www.etsi.org/standards/standards-making> accessed 28 January 2019.

[33] Marc Rysman and Timothy Simcoe, 'A NAASTy alternative to RAND pricing commitments' (2011) 35(11) Telecommunications Policy 1010, 4, para 3 (of the version available at < http://www.ssrn.com/abstract=1978437> accessed 25 July 2018).

[34] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 49, para 4, 50, para 1, 54, para 1.

[35] Case C-170/13 *Huawei v ZTE* (ECJ, 16 July 2015), paras 49 and 50.

smartphones' screens. Among others, the 'slide to unlock', fingerprint sensors or facial recognition. Albeit all of them are patented, the industry has not developed any standard to unlock smartphones' screens. Accordingly, manufacturers can elect the technology they want to use. They might obtain a patent license to use an existing technology or they might develop their own one without infringing anyone's patent[36]. Whatever technology they choose to unlock screens, the essential functions of the smartphone will not be compromised, that is, the interconnectivity and interoperability between smartphones will be guaranteed. By contrast, an implementer has to use the technology protected by a SEP when manufacturing a standard-compliant product.

Once the SSO develops a standard, the licensing process starts. It includes, among others, the verification of essentiality claims, the organisation of patent pools, the choice of royalty base, portfolio licensing and the use of injunctions or Alternative Dispute Resolution (ADR) mechanisms to solve SEP related disputes quicker. Previously, SSOs were reluctant to get involved in the *ex post* licensing process because standard setting was seen historically as an engineering task with little economic relevance[37]. Currently, depending on each SSO, they get involved in more or less aspects of the licensing process. But the overall trend is that they do not participate in SEP licensing negotiations – because they are commercial issues between the companies – and they do not serve as a forum for the resolution of FRAND disputes. Nevertheless, common to nearly all SSOs is the inclusion of specific licensing agreements in their IP policies. Hence, most of them request to their members to commit to license their SEPs under a specific licensing rule, while others give participants a choice as to which variant to use. It is possible to distinguish among three broad types of licensing polices: FRAND[38], royalty free and non-assertion.

According to various studies[39], the most common one is the FRAND commitment, that refers to SEP holders having to license their patents on fair, reasonable and non-

[36] Competition Directorate-General, 'Standard Essential Patent' (n 2) 2, para 5.

[37] Rudi Bekkers and Andrew S. Updegrove, 'A Study of IPR Policies and Practices of a Representative Group of Standards Setting Organizations Worldwide' (US National Academies of Science, Board of Science, Technology, and Economic Policy 2012) 3-5 <http://sites.nationalacademies.org/PGA/step/PGA_058712> accessed 4 August 2018.

[38] FRAND and RAND are used as synonyms, being RAND most common in the US and FRAND in the EU. See also National Research Council, 'A Comparison of SSO Policies and Practices' in Keith Maskus and Stephen A. Merrill (eds), *Patent Challenges for Standard-Setting in the Global Economy: Lessons from Information and Communications Technology* (The National Academies Press 2013) 35, para 2; United States Department of Justice and United States Patent and Trademark Office, 'Policy Statement on Remedies for Standards-Essential Patents Subject to Voluntary F/ RAND Commitments' (2013) 1, fn 2.

[39] Lemley, 'Intellectual Property Rights' (n 9) 1973, Appendix 1 (of 36 SSO patent policies reviewed, 29 contained FRAND commitments); Biddle, White and Woods 'How Many Standards in a Laptop?' (n 6) 1, para 6 (of 251 standards embodied in a typical laptop computer, 75% were subject to FRAND commitments); Pohlmann and Blind, 'Landscaping study on SEPs' (n 20) 36, para 2 (based on the analysis of more than 200,000 SEP disclosures across a range of SSOs, they found that 68% of such disclosures contained FRAND licensing commitments); Justus Baron and Daniel F. Spulber, 'Technology Standards and Standard Setting Organizations: Introduction to the Searle Center Database' (2018) Northwestern Law and Economics Research Paper No. 17-16, 23, para 2 (of 36 SSOs coded, they identified that 9 SSOs requested FRAND licensing and 22 permitted the licensor to choose from a menu of licensing options,

discriminatory terms[40]. Under FRAND terms, SEP owners give the commitment that they will grant licenses to all willing licensees, charging same fair and reasonable conditions to all of them. In consequence, SEP owners are not allowed to refuse to grant licenses and nor can they grant exclusive licenses. Although the agreement signed voluntarily by patent holders is legally binding, SSOs do not impose automatic licensing obligations[41]. This aspect acquires special relevance when determining the nature of FRAND commitments. That is to say, it means that SEP owners will enter into good faith negotiations with the ultimate objective of agreeing a licence on those terms[42]. Accordingly, it creates legitimate expectations on the part of third parties that the proprietor of the SEP will in fact grant licences on such terms[43]. But it does not create expectations on price level or that the SEP owner will never seek an injunction.

The other type of licensing agreement is the royalty free. This rule means that SEP owners have to license their patents free of charge and the other licensing conditions (*e.g.* governing law, field of use, reciprocity or warranties) under FRAND. And under the patent non-assertion modality, patent holders must refrain from asserting their patents against potential infringers.

In theory, FRAND commitments as licensing rules may seem as an appropriate tool to license SEPs because they facilitate access to the technology, while preserving its fair value. However, as they were adopted mostly in response to regulatory pressures[44] and were not defined with sufficient detail, in practice, they are far from being non-problematic because their ambiguity. Besides, the majority of SSOs patent policies do not specify their meaning or the scope of the obligation. In consequence, both the pricing aspect of FRAND terms (of 'reasonable', in particular) and the scope of that obligation, have been subject to many disputes and even litigation.

Firstly, regarding the royalty payments due, concepts of fair, reasonable and non-discriminatory have been theoretically defined mainly by courts and scholars, but also by antitrust agencies, although there is not a consensus on the definition, because it depends on what is the goal of the SSO's IP policy[45]. Accordingly, due to the fact that there are

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including FRAND as the least restrictive option) <https://ssrn.com/abstract=3073165> accessed 4 August 2018.

[40] Bekkers and others, 'Understanding patents' (n 3) 89, paras 1 and 3.

[41] Bekkers and Updegrove, 'A Study of IPR Policies' (n 37) 32, para 3, 33, para 5.

[42] Nicolas Petit, 'Antitrust Claims in a Standards Context' (ASPI-LES, APEB Conference, Paris, 14 June 2016) [PowerPoint slides] <http://www.les-france.org/offres/doc_inline_src/758/N%2BPETIT%2B-%2BAntitrust%2BClaims%2Bin%2Ba%2BStandards%2BContext%2B-%2BASPI-LES%2BAPEB%2BConference%2B-%2BParis%2B2016.pdf> accessed 4 August 2018.

[43] *Huawei* (n 35) [53].

[44] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 37, paras 4-6, 38, paras 1 and 2.

[45] On a comprehensive analysis of FRAND licensing terms, see Chryssoula Pentheroudakis, Justus A. Baron and Nikolaus Thumm, 'Licensing Terms of Standard Essential Patents: A Comprehensive Analysis of Cases' (Publications Office of the European Union 2017) 125-147 <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/licensing-terms-standard-essential-patents-comprehensive-analysis-cases> accessed 26 July 2018.

not widely accepted methodologies to calculate FRAND royalties, there is an ongoing debate among economists and legal scholars about the appropriate methodology to calculate royalty rates and the suitable royalty base.

According to some[46], the reasonable price is the one that is just high enough to guarantee a patent holder a reasonable profit (zero economic profit) on their research investments and no higher. However, imposing this price eliminates the incentive to produce new inventions and participate in the standard-setting process, because it does not capture the rents produced by implementers' sunk investments or coordination costs. Others[47] are of the opinion that the purpose of 'fair' and 'reasonable' in FRAND is simply to avoid holdup (an abusive behaviour, see Section 1.3.1.1. of Chapter 1). Thus, a fair and reasonable royalty would be the one that independent patent holders would have been able to charge *ex ante* (*i.e.* before the standard was chosen). Some others[48] consider that the fair and reasonable royalty could be also understood as the marginal price, that is, the additional value of the standard after incorporating the technology.

The non-discrimination, that has largely been ignored, means that SEP owners should offer the same licensing terms to 'similarly situated'[49] licensees who are in similar objective conditions. That is to say, non-discrimination does not mean that licensing terms should be identical for all licensees as it would ignore economic realities[50]. Formally, price differences might be justified if costs varied across different groups of consumers. However, in practice, the issue becomes more complex because the following two reasons. One, licensing agreements include many other clauses in addition to royalty rates (*e.g.* volume discounts or different prices depending on the field of use). It is therefore very difficult to argue that a party is discriminated against just because its royalty payments are higher. Two, if SEP licensing agreements include confidentiality clauses which prevent either party from revealing the terms of the agreement, it is nearly impossible for a licensee to know whether or not he faces unlawful discrimination[51].

As there is not predictability of licensing fees, the dominant policy to determine appropriate royalties between licensors and licensees, has become vague FRAND promises followed by *ex post* negotiation and dispute resolution through ADR and judicial procedures. The latter is very costly in terms of time and fees, because litigations imply several judicial instances[52].

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[46] Rysman and Simcoe, 'A NAASTy alternative' (n 33) 8 and 9.
[47] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 27, para 1, 28, paras 1 and 2.
[48] Bekkers and Updegrove, 'A Study of IPR Policies' (n 37) 103, para 4.
[49] On a more detailed discussion of holdup and the definition of 'similarly situated', see Dennis W. Carlton and Allan Shampine, 'An Economic Interpretation of FRAND' (2013) 9(3) Journal of Competition Law & Economics 531.
[50] Damien Geradin, 'The Meaning of "Fair and Reasonable" in the Context of Third-Party Determination of FRAND Terms' (2014) 21(4) George Mason Law Review 919, 927, para 3, 928, para 1.
[51] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 28, para 3.
[52] Rysman and Simcoe, 'A NAASTy alternative' (n 33) 7, para 3.

Secondly, as it was previously mentioned, patent licensing agreements include many other important clauses besides those specifying the level of royalty payments due, such as licensing period, exclusivity, geographical scope, description of the technology, field of use, patents involved (few patents or large portfolios or patents granted after the agreement), reciprocity or transfer of patents. Furthermore, additional clauses like no-challenge clauses – they prohibit licensees from challenging licensors' patents validity – or grant-back clauses – the licensee agrees to grant the licensor a license with respect to any improvements to that patent made by the licensee – might also be considered[53].

It is important to take into account the extensive content of licensing contracts in order to know whether FRAND commitments, in addition to pricing, also apply to other dimensions of the licensing agreements. Namely, if FRAND is seen only as a commitment to make the technology available for a reasonable royalty payment, then this commitment can still be undermined by a licensor or a licensee threatening to impose other terms that are unpalatable to other parties (*e.g.* no-challenge clauses or limits on confidentiality clauses). Nonetheless, if the scope of application of FRAND is not limited to the amount of licensing fees, but it extends to other terms and conditions of the licensing contract, the risk that parties might impose a no FRAND clause is mitigated.

For instance, the issue regarding the no-challenge clause was addressed by the European Court of Justice (ECJ) in the case *Huawei v. ZTE*[54] (it will be deeply analysed in Chapter 4). It concluded that an alleged infringer could not be criticised either for challenging the validity and/or the essential nature of patents or for reserving the right to do so in the future. Namely, the licensor cannot demand the licensee to sign a no-challenge clause, renouncing his right to later dispute the validity or essentiality of the licensed patent. In consequence, the ECJ implicitly referred to the fact that not only the price must be FRAND, but also the challenge clause. It[55] based its conclusion, first, on the fact that SSOs – during the standardisation procedure – do not check whether patents are valid or essential to the standard in which they are included. Indeed, only a court can decide on the validity and the issue of whether a standard-compliant product infringes a patent that has been declared essential to a standard and therefore whether the patent is essential as declared by its owner to the SSO. Until a court decides otherwise, a SEP is thus presumed valid, like any other patent[56], and essential to the standard as declared by its owner to the SSO[57].

[53] Canoy and others, 'Patents and standards' (n 23) 186, para 3 and 53, Table 2.9; Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 24, para 5, 28, para 3.
[54] (n 35).
[55] ibid [69]; On the contrary, see the economic analysis that concludes that the European Commission and Advocate General erred to assume that consumers derive a net marginal benefit from the announced policy encouraging a licensee to challenge the validity of licensed SEPs: Gregory J. Sidak, 'Evading Portfolio Royalties for Standard-Essential Patents Through Validity Challenges' (2016) 39(2) World Competition 191.
[56] Case T-321/05 *AstraZeneca v Commission* [2010] ECR II-2805, para 362.
[57] *Samsung* Commission Decision (n 7) [33].

And second, on the right to effective judicial protection guaranteed by Article 47 of the Charter of Fundamental Rights of the EU[58]. The ECJ did not refer to any other contractual dimensions along which parties could disagree, such as, the inclusion of confidentiality clauses.

In order to verify that the licensor complies with the commitment to non-discrimination as part of FRAND, some authors reckon necessary to put some limits on confidentiality clauses[59]. This could take different forms[60], being the most extreme the one that requires compulsory publication of SEP-licensing terms and their inclusion in a publicly accessible SEP data-base. However, the ECJ merely stated that in the absence of a licensing agreement made public, the proprietor of the SEP is best placed to check whether its offer complies with the condition of non-discrimination[61]. Therefore, due to the divergent content of both clauses (no-challenge and confidentiality), in order to verify compliance with the non-discrimination commitment, it would not be proper to argue as follows. As SEP holders cannot insist on the inclusion of no-challenge clauses anymore, they cannot either insist on the inclusion of confidentiality clauses[62].

In conclusion, as FRAND-encumbered SEPs are increasingly viewed as strategic financial weapons and resources and not merely as legal assets, companies – who own a wide range of very relevant patent portfolios – and manufacturers engage in numerous patent buying and selling transactions, licensing agreements, as well as in numerous costly legal disputes that could jeopardize the positive effects associated with standardization. Patents are not only traded with regard to a merger or acquisition, which entails the reassignment of many declared SEPs, but also to strengthen the patent portfolios connected to particular technologies or standards. Or to enter in a new sector with a secure place in evolving markets (*e.g.* Google bought Motorola Mobility's portfolio in order to enter the smartphone sector)[63].

In this regard, it is interesting to raise the results of an empirical study[64] that compares declared SEPs transfer and litigation average, with control groups of patents that had not been declared as standard essential (but which were filed at the same patent office with the same publication year and which were categorized in the same main International Patent Classification classes). In the time period of 1992-2015, 12,36% of all declared SEPs were transferred at least once, whereas the percentage decreases to 9,87% in the control group. Taking into account only litigations that took place in the United States

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58 Charter of Fundamental Rights of the European Union [2016] OJ C202/389 (the Charter).
59 Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 71, para 1.
60 Ménière, 'Fair, Reasonable and Non-Discriminatory' (n 10) 21, para 4 (he proposes, either on a voluntary or on a mandatory basis, (i) the *ex ante* disclosure of licensing terms – when the value of the standard is still uncertain; or (ii) the anonymous disclosure of actual licensing terms once the SEPs are effectively licensed – to be compiled in a database available to courts and negotiating parties).
61 *Huawei* (n 35) [64].
62 Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 71, para 1.
63 Pohlmann and Blind, 'Landscaping study on SEPs' (n 20) 31, paras 1 and 3.
64 ibid 40, para 1, 41, Figure 24.

(US), 1,93% of all declared SEPs were litigated at least once, while patents in the control group were litigated in only 0.45% of all cases[65].

All in all, the aim of FRAND is to achieve a balance between the right to exclude (granted by patent law); and the right to access to markets (conferred by competition or antitrust law), ensuring that everybody has access to standardised technologies and that fair competition exists in an open-market economy. Remember that standardised technologies address the needs for interconnection and interoperability and that there are not any other alternative technologies on the market that do that (SEP owners are the sole licensors of standardised technologies). Hence, all manufacturers that want to produce interoperable products, need to obtain SEP licenses to use the standardised technologies.

Therefore, the FRAND commitment pursues to avoid or at least, to mitigate the risk of opportunistic behaviours by SEP owners. By opportunistic behaviours (see Section 1.3. of Chapter 1) I am referring to the possibility of SEP owners abusing their dominant positions, leading potential licensees to a lock-in situation. That is to say, due to the binding effect of the FRAND commitment, if SEP owners exploit, exclude or discriminate willing licensees, their products cannot compete in the market for not being interconnectable and interoperable.

For instance, SEP owners might request licensing conditions that are not fair or reasonable, thus exploiting willing licensees. These conducts known as ‘holdup’ and ‘royalty stacking’, they will be explained further on. SEP holders might also decide not to grant licenses under FRAND terms (refusal to deal), in order to exclude willing licensees from the market.

Pursuing that same purpose of exclusion, they might also bring actions seeking prohibitory injunctions or the recall of products against potential licensees, who are infringing their SEPs. As it will be explained below (see the 'Statement of the problem'), the core subject of study of my research revolves around this latter conduct. The idea lying behind considering that behaviour as abusive, it is that infringers want to get licenses but due to a lack of agreement – usually, on the price –, they are using the SEPs without paying any royalties (because otherwise, they could not implement the standardised technologies in their products). And basing on that fact, SEP owners sue potential licensees for patent infringement.

SEP owners might also discriminate between willing licensees, charging them different prices.

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[65] In the same vein, there are studies showing that SEPs are more likely to be litigated than non-SEPs. See Timothy S. Simcoe, Stuart JH Graham and Maryann P. Feldman, ‘Competing on Standards? Entrepreneurship, Intellectual Property, and Platform Technologies’ (2009) 18 Journal of Economics & Management Strategy 775; Canoy and others, ‘Patents and standards’ (n 23).

Accordingly, in order to avoid SEP holders abuse their dominant positions, some SSOs, such as the IEEE-SA[66], it went further and changed its patent policy in 2015 (only applicable with respect to IEEE standards). It was the first SSO regulating a methodology to calculate FRAND royalty rates and limiting the use of injunctions to the case the implementer refuses to accept a third party adjudicated rate.

II. Statement of the problem

Frequently, when parties disagree about the determination of FRAND royalties, the licensing negotiation breaks down, although the implementer continues using the SEP. Hence, when companies are considered to infringe patents, owners have several means available to enforce their IPRs in the EU and US.

Article 28 of the Trade-Related Aspect of Intellectual Property Rights (TRIPS) Agreement[67] provides that a patent gives its owner the right to prevent others from making, using or selling the invention without its permission. In accordance with that, the Directive 2004/48/EC on the Enforcement of Intellectual Property Rights[68] (IPRED) requires all Member States countries to provide effective, dissuasive, and proportionate measures against those engaged in IP infringements, and aims to create a level playing field for right holders in the EU. It means that all Member States will have a similar set of measures available for right holders to defend their IPRs. Accordingly, the IPRED enables patent owners to bring various actions for infringement to ensure a high level of protection for IPRs in the internal market. As it will be explained bellow, the behaviours object of study in *Samsung*, *Motorola* and *Huawei v. ZTE* consisted of bringing infringement actions seeking (and enforcing, only in *Motorola*) different measures. In *Samsung*, preliminary and permanent injunctions, while in *Motorola* only the latter one. Whereas in *Huawei v. ZTE*, an injunction prohibiting the infringement, the rendering of accounts, the recall of products and an award of damages. However, it is worth mentioning all of the measures provided by the IPRED, although only some of them raise anti-competitive concerns.

The IPRED distinguishes between provisional measures (also known as interim measures) and measures resulting from a decision on the merits of the case finding an infringement of an IPR (permanent measures). The provisional measures consist of interlocutory/preliminary injunctions, the seizure of goods suspected of infringing an IPR and the precautionary seizure of the movable and immovable property of the alleged infringer.

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[66] IEEE-SA Standards Board Bylaws 2017, Arts 6(1) (a methodology to calculate FRAND royalty rates) and 6(2) (the use of injunctions) <http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf> accessed 1 August 2018.

[67] Trade-Related Aspect of Intellectual Property Rights Agreement [as amended on 23 January 2017] of 15 April 1994, contained in the Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994) (TRIPS Agreement).

[68] Parliament and Council Directive 2004/48/EC of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L157/45 (IPRED).

The interlocutory/preliminary injunction is intended (i) to prevent any imminent infringement of an IPR. Or (ii) to forbid the continuation of the alleged infringements of that right (the so-called prohibitory injunction). And where provided for by national law and the judicial authority considers it appropriate, the prohibition might be subject to a recurring penalty payment, with a view to ensuring compliance. Or (iii) to make the continuation of the alleged infringement subject to the lodging of guarantees intended to ensure the compensation of the right holder [Article 9(1)(a)], as it will be described in Section 6.2.2. of Chapter 5.

Judicial authorities may also order the seizure or delivery up of the goods suspected of infringing an IPR so as to prevent their entry into or movement within the channels of commerce [Article 9(1)(b)].

In the case of an infringement committed on a commercial scale and if the injured party demonstrates circumstances likely to endanger the recovery of damages, the judicial authorities may order the precautionary seizure of the movable and immovable property of the alleged infringer, including the blocking of his bank accounts and other assets [Article 9(2)].

With regard to the measures resulting from a decision on the merits of the case, they consist of corrective measures, injunctions, alternative measures and damages.

Firstly, without prejudice to any damages due to the right holder by reason of the infringement, and without compensation of any sort, the judicial authorities may order that appropriate corrective measures be taken with regard to goods that they have found to be infringing an IPR and, in appropriate cases, with regard to materials and implements principally used in the creation or manufacture of those goods. Such measures shall include: (a) recall from the channels of commerce, (b) definitive removal from the channels of commerce, or (c) destruction [Article 10(1)].

Secondly, the judicial authorities may issue against the infringer an injunction aimed at prohibiting the continuation of the infringement (prohibitory injunction), without being limited in time. And where provided for by national law, non-compliance with an injunction shall, where appropriate, be subject to a recurring penalty payment, with a view to ensuring compliance (Article 11).

Thirdly, Member States have the option[69] to provide that in appropriate cases and at the request of the person liable to be subject to the measures[70], the competent judicial authorities may order – as an alternative measure – pecuniary compensation to be paid to

[69] Note that the transposition of the other provisional and permanent measures is compulsory for the Member States (‘Member States shall ensure’/ ‘Member States may provide’).
[70] Note that all the other provisional and permanent measures (except for injunctions) may be ordered at the request of the IPR holder.

the injured party instead of applying permanent measures if that person acted unintentionally and without negligence, if execution of the measures in question would cause him disproportionate harm and if pecuniary compensation to the injured party appears reasonably satisfactory (Article 12). This alternative measure will be studied in Section 6.2.1. of Chapter 5.

And fourthly, the competent judicial authorities may also order the infringer who knowingly, or with reasonable grounds to know, engaged in an infringing activity, to pay the right holder damages appropriate to the actual prejudice suffered by him as a result of the infringement. However, even if the infringer engaged in infringing activity unknowingly, or without reasonable grounds to know, the judicial authorities may also order the recovery of profits or the payment of damages, which may be pre-established. When the judicial authorities set the damages: (a) they shall take into account all appropriate aspects, such as the negative economic consequences, including lost profits, which the injured party has suffered, any unfair profits made by the infringer and, in appropriate cases, elements other than economic factors, such as the moral prejudice caused to the right holder by the infringement; or (b) as an alternative to (a), they may, in appropriate cases, set the damages as a lump sum on the basis of elements such as at least the amount of royalties or fees which would have been due if the infringer had requested authorisation to use the IPR in question (Article 13).

In addition, without prejudice to the measures laid down by the IPRED, Member States may apply other appropriate sanctions in cases where IPRs have been infringed (Article 16).

Section 283 of the Patent Act (35 U.S. Code)[71] states that a court may grant an injunction (prohibitory injunction) in accordance with the principles of equity to prevent the infringement of a patent right (equitable remedy). And Section 284 of the Patent Act provides that in the case of patent infringement, a court should award a patent holder damages adequate to compensate for the infringement, but in no event less than a reasonable royalty (legal remedy). The patent owner who succeeds in a claim seeking legal remedies – generally limited to monetary damages –, is entitled to those remedies as a matter of right. In contrast, the party does not have an absolute right to an equitable remedy, so judges have the discretion to grant or deny equitable relief. Generally, a court will award an equitable remedy where a remedy at law, such as monetary damages, would be inadequate[72].

Both in the EU and US, there has been a debate about the circumstances under which a SEP holder should be entitled to obtain a prohibitory injunction and the recall of products that infringe IPRs. The doubts in this regard arise because SEP holders state their willingness to license their patents on FRAND terms. Therefore, it would seem

[71] U.S Patent Act, 35 U.S.C. § 283.
[72] J. Gregory Sidak, 'Ongoing Royalties for Patent Infringement' (2016) 24(2) Texas Intellectual Property Law Journal 161, 167-168.

contradictory that, on the one hand, they are committed to grant licenses and, on the other hand, they bring the aforementioned infringement actions against alleged infringers who implemented their SEPs in their products, without being licensees.

In the EU, the discussion has been framed in the abuse of a dominant position under Article 102 TFEU[73]: does a SEP owner abuse its dominant position if it brings actions seeking a prohibitory injunction and the recall of products? The Recital 12 of IPRED states that the measures provided for in it, they should not be used to restrict competition unduly in a manner contrary to the Treaty. That is, these infringement actions may be liable to prevent products manufactured by SEP owners' competitors – that comply with the standard in question –, from appearing or remaining on the market. Other measures may also cause the exclusion of the infringer/competitor from the market, in the same vein as preliminary/permanent injunctions and the recall of products. I am referring to the seizure of goods suspected of infringing an IPR or the definitive removal from the channels of commerce and destruction of goods that they have found to be infringing an IPR. Therefore, all these six measures constitute the subject of study of this research.

Whereas the rest of the measures available for right holders, do not affect the maintenance of competition in markets, because they do not allow them to impede the products manufactured by competitors from entering the market. I am referring to the precautionary seizure of the movable and immovable property of the alleged infringer in favour of SEP owners, the pecuniary compensation, the rendering of accounts and the award of damages[74]. This is the reason why – from the competition law viewpoint – it has not been discussed whether it might be abusive the request of those measures by SEP owners.

Therefore, the terms of the conflict are the following[75]: the patent owner whose IPRs have been violated, has the right to an effective measure [Article 17(2) of the Charter of Fundamental Rights of the EU[76] and Article 47(1) of the Charter]. The alleged infringer, where appropriate, will be protected by the freedom to conduct a business in a position of free competition (Article 119 and Protocol No 27 of TFEU and Article 16 of the Charter).

The Commission analysed this issue in *Samsung*[77] and *Motorola*[78] cases. On the one hand, it studies whether SEP owners brought the action for a prohibitory injunction with

[73] Consolidated Version of the Treaty on the Functioning of the European Union [2016] OJ C202/1 (TFEU). I will refer to Article 102 TFEU that is in force. However, note that some case law cited in this research – that is prior to the entry into force of the Treaty of Lisbon –, refers to Article 86 of the Treaty of Rome, that was renumbered to Article 82 later on by the Treaty of Amsterdam.
[74] *Huawei* (n 35) [72]–[76].
[75] ibid [42].
[76] (n 58), to read with Article 6(1) of the Consolidated Version of the Treaty on European Union [2016] OJ C202/13 (TEU) ('[…] the rights, freedoms and principles set out in the Charter […] shall have the same legal value as the Treaties').
[77] (Case AT.39939) Summary of Commission Decision 2014/C 350/08 [2014] OJ C350/8; (n 7).
[78] (Case AT.39985) Summary of Commission Decision 2014/C 344/06 [2014] OJ C344/6; (n 7).

the objective of forcing implementers to pay excessive or disproportionate royalties (patent holdup and royalty stacking), that could be qualified as an exploitative abuse. And on the other hand, if that conduct of SEP holders could be qualified as an exclusionary abuse. The ECJ also ruled on this issue, for the first and only time, in the case *Huawei v. ZTE*[79], where it analyses whether bringing an action for infringement seeking a prohibitory injunction and the recall of products constitutes an exclusionary abuse.

Focusing only on the perspective of the exclusionary abuse, the Commission and the ECJ qualified the conduct of SEP owners as a novel category of exclusionary abuse. In particular, they did not consider that the conduct could fit in the existing 'refusal to deal' category (see Section 1.3.2.5. of Chapter 1). The negative consequences derived from that qualification will be studied in Chapters 3 and 4 (and more systematically in Section 2 of Chapter 5).

Accordingly, in this research, I will defend that SEP owners' conduct should have been qualified as a 'constructive' refusal to deal – to grant SEP licenses –, instead of as a novel category of abuse within the framework of Article 102 TFEU. That is to say, I reckon that when specific circumstances concur, it might be understood that SEP owners are not willing to grant SEP licenses to their competitors – they are implicitly refusing to grant licenses –, while their true aim is to exclude them from the market. And in order to achieve that, they bring infringement actions seeking a prohibitory injunction and the recall of products against willing licensees.

Otherwise, should not it be sufficient to request to order the payment of FRAND royalties in the form of awarding damages – increased, where appropriate, to stimulate implementers to apply for a license?

III. Research questions

This research will answer the following two questions:

- Does bringing actions for a prohibitory injunction and the recall of products by SEP owners constitute an abuse of a dominant position, because it might be considered as a 'constructive' refusal to grant IP licenses?
- If yes, is compulsory license the most proportionate and necessary remedy to end the violation of Article 102 TFEU?

Related questions derived from the main inquiries would be as follows:

- What abusive conducts may arise when licensing SEPs?
- The fact of bringing actions for a prohibitory injunction or the recall of products to remedy a SEP infringement, when does it constitute an abuse of a dominant position according to the Commission – in *Samsung* and *Motorola* – and the German Federal Supreme Court – in *Orange Book* –?

[79] (n 35).

- In accordance with the ECJ in *Huawei v. ZTE,* during the negotiation of patent licenses, what specific actions do SEP holders have to perform not to be considered that they abuse their dominant positions when bringing infringement actions? And what are the obligations alleged infringers must comply with?
- How did the Member State courts cover the legal gaps posed by *Huawei v. ZTE*?
- What is the ECJ case law on refusal to grant IP licenses?
- How should have been reviewed the *IMS Health* jurisprudence?
- What are the legal basis on which other jurisdictions – US – have been based on, to impose compulsory licenses to solve SEP disputes?

IV. Thesis outline

For the purpose of examining when the exertion of its rights by a SEP holder may be considered an abuse of its dominant position, I will start by defining the elements that comprise the abuse of dominant position, the types of abusive behaviours and its enforcement under EU law, in Chapter 1.

Then, I am going to laid the foundations to justify – later on, in Chapter 5 – that the *Huawei v. ZTE* case should have been treated as a 'constructive' refusal to deal – to grant licenses – and not as a specific and novel category of abuse within the meaning of Article 102 TFEU. Accordingly, in Chapter 2, I will carefully analyse the case law of the ECJ on refusal to grant IP licenses.

Next, in Chapters 3 and 4, I will present and review the arguments of the European Commission (EC) and the ECJ that justify the qualification of SEP owners' conduct as a novel category of abuse.

Later, in Chapter 5, I will develop the previously cited argument in the following sense: to qualify as abusive the fact of bringing actions for a prohibitory injunction and the recall of products by a SEP holder, it must be argued that is a 'constructive' refusal to grant a license. In this way, the *Huawei v. ZTE* case would be consistent with the ECJ jurisprudence on refusal to deal. And consequently, the compulsory license would emerge as the most proportionate and necessary remedy to end the violation of Article 102 TFEU.

To conclude, I will discuss the findings of the research and the future work in Chapter 6.

V. Research objective

With my research, in general terms, I would like to bring more legal certainty to SEP licensing and enforcement framework in the EU, to give licensors an adequate return on their investment and to implementers, the access to standardised technologies at a fair and reasonable cost. Specifically, its aim is to analyse the viability and usefulness of (i) qualifying the fact of bringing patent infringement actions as abusive, treating it as a 'constructive' refusal to deal – to grant SEP licenses –; and (ii) ordering the grant of compulsory licenses to remedy the anti-competitive practice, in favour of patent infringers. The finding of the infringement and the remedy design are two separate questions, and as such, I will keep them entirely apart in this research[80]. The approach defended in this research constitutes an *ultima ratio* solution when the principle of the freedom of the parties to arrange their own affairs turned out to be unsuccessful.

The issue analysed in this research acquires special relevance with the development of the 5G – the goal is to deploy it across the EU by 2025 – and the IoT. A variety of European industries are engaging in further digital integration of a constellation of objects, devices, sensors and everyday items. These applications are found in key domains: from connected cars to smart cities.

According to the EC, the benefits of IoT to businesses, citizens and public authorities may be delayed, due to regulatory uncertainty as regards the delineation, licensing and enforcement of SEPs. In other words, FRAND regime might dissuade future investments in standards-related innovations. It reckons that access to the protected technology attached to these standards remains unpredictable, notably for industries outside the ICT sector, due to factors such as risk of uncertainty in enforcement[81].

A harmonized and predictable framework, would provide a level playing field in the single market for technology providers, incentivising their investment in the standardisation, and in research and development applications for smart and connected products and services. Ando also to businesses that are preparing 5G deployment and to those using connectivity.

VI. Methodology

To answer the aforementioned research questions, I will use the following methodologies of legal research.

Firstly, the 'black letter' methodology which primary aim is to collate, organize and analyse legal data mainly from Members States, EU and US to offer critical commentaries on them[82]. That is, normative sources (hard and soft law); case law; legal doctrine (as the scientific community which discusses, accepts or rejects positions taken by colleagues and the theories they propose on the others); antitrust cases (from competition authorities) and SSOs' patent policies.

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[80] Frank P. Maier-Rigaud, Per Hellström and Friedrich Wenzel Bulst, 'Remedies in European Antitrust Law' (2009) 76(1) Antitrust Law Journal 43, 48, para 3.
[81] Commission, 'Standard Essential Patents for a European digitalised economy' (a roadmap provided for information purposes only, 2017) 1, paras 2 and 3. It resulted in the Communication: Commission, 'Communication from the Commission to the Institutions on Setting out the EU approach to Standard Essential Patents' COM(2017) 712 final.
[82] Mark Van Hoecke, 'Legal Doctrine: Which Method(s) for What Kind of Discipline?' in Mark Van Hoecke (ed), *Methodologies of legal research: Which Kind of Method for What Kind of Discipline?* (Hart 2011) 11.

It is necessary to consider not only legal data from Member States but also data coming from EU bodies, since the case law of the ECJ, regulations and directives are binding for all Member States. Equally important is to take into account legal data emanating from courts of technologically more developed countries, such as US, where licensing and enforcement of SEPs have been discussed more broadly and deeply. Although the legal system of each other varies, the research questions posed in this research are subject of discussion both in the EU and US.

Secondly, I will analyse that data, describing and explaining the problems that licensing and enforcement of SEPs entail. For a better understanding, I will also explain the whys and wherefores of legal concepts, rules, principles and constructions, as it is necessary for interpreting their meaning and scope correctly[83]. The aim of interpreting legal documents is not just to report facts (what is the current practice of the law), but also to question what should be the practice of the law to serve not only internal coherence, but broader issues of justice and other economic policies[84].

And thirdly, I will use foreign law as a tool for different purposes, because it is very useful in areas for potential reform or clarification, as it is the case of the subject matter of this research. The goal is to find a better solution to the legal problem I analyse and to conduct common rules for different Member States[85].

In particular, I will use German case law (*Orange Book*) to explain the origin of the issue analysed in this research. I will also analyse Member States case law to illustrate how national courts dealt with the legal gaps posed by the ECJ in *Huawei v. ZTE*. In the same vein, I will use US case law to support the suitability of issuing compulsory licenses in the EU, when negotiations to enter into licensing agreements are deadlocked. Namely, the purpose is to analyse how the law in a different jurisdiction – who pursues the same or akin objectives – employs different approaches to justify issuing compulsory licenses.

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[83] ibid 8, para 4.

[84] Samuel Geoffrey, 'Is law really a social science? A view from comparative law' (2008) 67 The Cambridge Law Journal 288, 292-296; Van Hoecke, 'Legal Doctrine' (n 82) 4, para 4, 5, para 2.

[85] Martha Louise Minow, 'The Controversial Status of International and Comparative Law in the United States' (2010) 52 Harvard International Law Journal Online 1, 18, para 2 ('neglecting [...] international and comparative law could vitiate the vitality, nimbleness, and effectiveness of [national] law or simply leave us without the best tools and insights as we design and run institutions, pass legislation, and work to govern ourselves') <https://dash.harvard.edu/handle/1/10511098> accessed 25 July 2018; Jan BM Vranken, 'Methodology of Legal Doctrinal Research: A Comment on Westerman' in Hoecke (n 82) 120, para 2; John Bell, 'Legal Research and the Distinctiveness of Comparative Law' in Hoecke (n 82) 158, para 1; Irene Calboli, 'The Role of Comparative Legal Analysis in Intellectual Property Law: From Good to Great?' in Graeme B. Dinwoodie (ed), *Methods and Perspectives in Intellectual Property* (Edward Elgar 2013) 5, para 2, 24, para 1.

CHAPTER 1. THE ABUSE OF DOMINANT POSITION AND ITS ENFORCEMENT UNDER EU LAW

Introduction

Generally speaking, it is permitted – and indeed expected– that dominant undertakings compete aggressively on a given market. The above, as long as their behaviours reflect competition 'on the merits' and not restrictive practices. Namely, a competition reflecting the competitive advantages enjoyed by the dominant undertakings. However, the distinction between abusive and legitimate (permissible) unilateral conduct by a dominant undertaking is not always straightforward[86].

In cases such as the one that concern us – to bring infringement actions seeking a prohibitory injunction or the recall of products by SEP owners –, it is hard to discern whether that behaviour constitutes an exclusionary abuse or not (a reflection of this is the wide academic debate that exists on the issue). In the same vein, when a dominant undertaking decides to refuse to deal to customers, suppliers or competitors, that conduct does not always constitute an abuse (in Chapter 2 will be studied under what circumstances a refusal to deal constitutes an exclusionary abuse).

The aim of this research is to propose that the aforementioned conduct carried out by SEP holders, it should have been treated as a 'constructive' refusal to deal, instead of as a novel category of abuse.

To understand it better, firstly, I refer to Article 102 TFEU that governs the unilateral or 'abuse of dominant position' conduct, that has four constituent elements: defining the relevant market, establishing dominance (if it holds a dominant position), assessing whether the unilateral conduct is abusive or not (each conduct is constructed as an abuse using different legal argumentations)[87] and determining if the abuse may affect trade between Member States.

Once the existence of an anti-competitive practice has been determined, it is time to enforce competition law. Accordingly, secondly, I mention the measures provided by Regulation 1/2003 that are divided in remedies, sanctions and binding commitments. As the main remedy ordered in cases of refusal to deal was the compulsory license, it also emerges as the most proportionate and necessary measure to remedy the abusive conduct carried out by SEP holders. Therefore, that measure will be studied in greater depth.

[86] 'Abusing a dominant position–overview' (Lexis Nexis), para 3 <https://www.lexisnexis.com/uk/lexispsl/competition/document/391329/55KB-7MK1-F187-53G2-00000-00/Abusing_a_dominant_position_overview - > accessed 14 January 2019.
[87] ibid, para 4.

1. The abuse of dominance: Article 102 TFEU

As a starting point, it is important to stress that the EU competition law – embodied in Article 102 TFEU – pursues the aim to protect competition, by regulating the actions of companies in dominant positions. That is, under the EU rules, monopolies are not prohibited as such, but the abuse of a dominant position. Whereas US antitrust law – embodied in section 2 of the Sherman Act 1890 – essentially aims the same, but by prohibiting the acquisition or maintenance of monopoly power, rather than by regulating the actions of companies in dominant positions.

According to Article 102 TFEU, 'any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:
(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
(b) limiting production, markets or technical development to the prejudice of consumers;
(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts'.

In order to determine whether an undertaking abused its dominant position on the market contrary to Article 102 TFEU, the aforementioned four elements must be taking into account. First, it is necessary to define the relevant market and secondly, to determine whether the undertaking concerned is dominant on the market so defined (the existence of a dominant position)[88]. If so, thirdly, it has to be analysed if the conduct amounts to an abuse of that dominant position. And finally, it must be assessed if the trade between Member States may be affected by the abusive conduct.

Bellow, I will define these elements. The analysis of their presence with regard to the specific behaviours subject of study in this research, it will be conducted in the respective Chapters 2 (regarding the refusal to deal) and 3 and 4 (with reference to SEP owners' behaviour of bringing infringement actions).

1.1. Relevant market definition

In order to determine if an IP owner holds a dominant position, first of all, the relevant market – product/service and geographical market – needs to be identified. That is, the area of competition in which the market power of the allegedly dominant undertaking (and of any actual or potential competitors) is to be judged[89]. Hence, the objective of

[88] Case C-242/95 *GT-Link v DSB* [1997] ECR I-04449, para 36.
[89] *IMS Health* (Case COMP D3/38.044) Commission Decision 2002/165/EC [2001] OJ L59/18, para 45.

defining a market in both its product/service and geographic dimension is to identify those actual competitors of the undertakings involved that are capable of constraining those undertakings' behaviour and of preventing them from behaving independently of effective competitive pressure[90].

Undertakings holding a dominant position always try to identify a broader relevant market. On the contrary, the Commission and Member State competition authorities generally tend to define relevant markets very narrowly. The definition of the relevant market is done for each individual case, as conditions of competition may change over time and will depend upon the peculiarities of a given case[91].

A market definition may also contain a temporal dimension where appropriate, that is, the moment of time in which the exchange of goods or services included in the relevant product market takes place. For instance, it may be convenient to define the temporary market regarding services with peak and off peak demands, such as transport, electricity or telecommunication services[92].

1.1.1. The relevant product or service market

According to settled case law[93], the relevant product or service market comprises all those products or services which are regarded as interchangeable or substitutable by the consumer, by reason of their characteristics, prices and intended use.

In theory, three are the principles to define the relevant product or service market: demand substitution, supply substitution and potential competition[94]. However, traditionally, the concept of market has been mainly linked to the demand substitution. The supply substitution may also be bear in mind, although only when its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy. Otherwise, like potential competition, they are taken into account at the assessment stage of competition analysis, when assessing whether obstacles to enter in the market exist (see Section 1.2.2.3. of this Chapter).

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[90] Commission, 'Commission notice on the definition of relevant market for the purposes of Community competition law' (1997) OJ C372/5, para 2.
[91] 'Abusing a dominant position–overview' (n 86), paras 8 and 9.
[92] Fernando Jiménez Latorre and Enrique Cañizares Pacheco, 'Dificultades para la definición del mercado relevante' (Second Seminar on Law and Economics of Antitrust Law organized by the Rafael del Pino Foundation, Madrid, 18 October 2005) [paper] 33, 38, fn 8 <https://www.frdelpino.es/wp-content/uploads/2014/10/es_02-JIMENEZ-CAÑIZARES.pdf> accessed 14 January 2019.
[93] Case C-31/80 *L'Oréal v De Nieuwe AMCK* (ECJ, 11 December 1980), para 25; Case C-322/81 *Michelin* v *Commission* [1983] ECR I-3461, para 37; Case C-62/86 *AKZO Chemie* [1991] ECR I-03359, para 51; Case T-30/89 *Hilti* [1991] ECR II-01439, para 64; Case T-83/91 *Tetra Pak* [1994] ECR II-00755, para 63.
[94] Case C-27/76 *United Brands* (ECJ, 14 February 1978), paras 22-35; Commission, 'Commission notice on the definition of relevant market' (n 90), para 13.

The reason is that demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product or service[95], in particular in relation to their pricing decisions. A company cannot have a significant impact on the prevailing conditions of sale, such as prices, if its customers are in a position to switch easily to available substitute products or services. On the contrary, competitive constraints arising from supply side substitutability and from potential competition are in general less immediate and in any case require an analysis of additional factors. Accordingly, the most common is that the relevant market comprises all those products or services considered substitutes from the point of view of the demand[96].

1.1.1.1. Demand substitution

The assessment of demand substitution entails a determination of the range of products or services which are viewed as substitutes by the consumer. The definition of the relevant product or service market depends on what would be the likely reactions of customers if the company made a small (in the range 5 % to 10 %) and permanent change in relative prices [the so called Small but Significant Non-Transitory Increase in Price (SSNIP) test]. They might decide to redirect their consumption towards other products or services (offered by existing competitors) that they would consider substitutes, either due to their objective characteristics, prices or, ultimately, because they were particularly suitable for satisfying their constant needs in a comparable way. Or they might opt to continue consuming the same products or services.

If a sufficient number of consumers switched to the extent of making the price increase unprofitable because of the resulting loss of sales, those additional substitutes would be included in the relevant market definition. This would be done until a set of products or services was identified, for which a permanent increase in the relative price would not induce a sufficient substitution in demand, so the price increase would be profitable. In that scenario, those additional products or services would be excluded from the relevant market definition[97].

Generally, the price to take into account will be the prevailing market price, bearing in mind that it might have already been substantially increased when the undertaking holds a dominant position[98]. In that regard, it should be taken into account the Cellophane Paradox, that is one of the constraints that the SSNIP test presents. Namely, although the test is generally accepted and used in the field, it suffers from some constraints, such as the paradox previously mentioned. It refers to the case where companies that hold a dominant position, raise their prices to the level where further

[95] Commission, 'Commission notice on the definition of relevant market' (n 90), para 13; Case T-177/04 *EasyJet v Commission* [2006] ECR II-1931, para 99.
[96] Commission, 'Commission notice on the definition of relevant market' (n 90), paras 13 and 14; Jiménez Latorre and Cañizares Pacheco, 'Dificultades para la definición del mercado relevante' (n 92) 36, para 6 and 37, para 3.
[97] ibid, paras 15-18; ibid 36, para 4.
[98] Commission, 'Commission notice on the definition of relevant market' (n 90), para 19.

increases in prices are not profitable. Applying the aforementioned test, it would result that in response to an increase in those prices made by dominant companies, their consumers would be willing to switch towards products or services that they would not consider as substitutes in case the prices were placed at the competitive level. Hence, it might seem that these substitutes should also be included in the relevant market, when the truth is that consumers do not consider them substitutes. Accordingly, the relevant product market would be defined too broadly, diluting artificially the market power of the company in question[99].

1.1.1.2. Supply substitution

Supply side substitutability may also be bear in mind when defining markets in those situations in which its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy.

When a company markets a wide range of qualities or grades of one product, the different qualities will be grouped into one product market under the following circumstances, even if for a final customer different qualities of the product cannot be substitutable (*e.g.* standard writing papers and high quality papers to publish art books would not be substitutable in demand for the majority of consumers). If an undertaking (*e.g.* a paper plant) makes small and permanent changes in relative prices of a product and most of the potential competition suppliers are able to offer and sell those various qualities immediately and without the significant increases in costs described above, the relevant product market will encompass, besides all products that are substitutable in demand, also those that are substitutable in supply. And the current sales of those various qualities will be aggregated to estimate the total value and volume of the market[100].

Therefore, when the effects of supply side substitutability are equivalent to those of demand substitution in terms of effectiveness and immediacy, it is appropriate to take into account the supply substitutability to define the market. The above, due to the following two reasons. Firstly, a market definition based strictly on the demand substitutability might not make sense. For example, a consumer will not consider shoes of the size 42 substitutes for those of size 40. In the same vein, female and male clothes are not substitutes from the demand viewpoint. However, it would not make sense to conclude that there would be a different market for shoes of different sizes and different markets for female and male clothes. Nevertheless, bearing also in mind the supply side substitutability, markets would be defined as the market of shoes and the market of clothes. That, because probably manufacturers would dispose of enough tools (technology, image, distribution network etc.) to market immediately and without incurring in additions costs and risks, additional sizes of shoes and clothes for both genders.

[99] Jiménez Latorre and Cañizares Pacheco, 'Dificultades para la definición del mercado relevante' (n 92) 40, paras 3-6.
[100] Commission, 'Commission notice on the definition of relevant market' (n 90), paras 20-22.

Secondly, it is also appropriate to take into account the supply side substitutability to avoid the risk of defining excessively narrow markets, when the competition authorities give crucial importance to the magnitude of market shares[101].

When supply side substitutability would entail the need to adjust significantly existing tangible and intangible assets, additional investments, strategic decisions or time delays, the effects of supply side substitutability will not be considered at the stage of market definition, but at a later stage. In the area of consumer products, usually the supply side substitution did not induce the Commission to enlarge the market, in particular for branded beverages. For instance, albeit bottling plants may in principle bottle different beverages, there are costs and lead times involved (in terms of advertising, product testing and distribution) before the products can actually be sold. In that case, other beverages would not be included in the relevant market[102].

1.1.1.3. Potential competition

As it was mentioned before, the third source of competitive constraint is the potential competition, but it is not taken into account when defining markets. That, because the conditions under which potential competition would actually represent an effective competitive constraint depend on the analysis of specific factors and circumstances related to the conditions of entry. If required, this analysis is only carried out at a subsequent stage, in general once the position of the companies involved in the relevant market has already been ascertained, and when such position gives rise to concerns from a competition point of view[103].

1.1.2. The relevant geographical market

The definition of the geographical market, as the one of the product market, calls for an economic assessment. The geographical market can be defined as the territory in which the objective conditions of competition to market the products or services that compound the relevant market, are similar or sufficiently homogeneous and differentiated from the nearest geographical areas[104]. That territory might be the internal market or a substantial part of it. According to settled case law, the territory of a Member State over which a dominant position extends is capable of constituting a substantial part of the common market[105].

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[101] Jiménez Latorre and Cañizares Pacheco, 'Dificultades para la definición del mercado relevante' (n 92) 37, fn 5.
[102] Commission, 'Commission notice on the definition of relevant market' (n 90), para 23.
[103] ibid, para 24.
[104] *United Brands* (n 94) [44]; *Michelin* [ECJ, 1983] (n 93) [26]; Case C-247/86 *Alsatel v Novasam* (ECJ, 5 October 1988), para 15; *Tetra Pak* [CFI, 1994] (n 93) [91]; Jiménez Latorre and Cañizares Pacheco, 'Dificultades para la definición del mercado relevante' (n 92) 38, para 1.
[105] *Michelin* [ECJ, 1983] (n 93) [28]; Case C-323/93 *Centre d'Insémination de L· Crespelle* [1994] ECR I-05077, para 17.

The principles for the definition of the geographic market area are the same as those described for the definition of the relevant product or service market, that is, the demand and supply substitutions. Namely, the questions to be answered would be the following.

Firstly, if an undertaking that markets a certain product or service in a given geographical area made a hypothetical small but permanent relative price increase, would a sufficient number of consumers switch to suppliers located elsewhere (in neighbouring geographical areas), to such the extent of making the price increase unprofitable because of resulting loss of sales? If they would, additional areas will also be included in the relevant geographical market. This would be done until a set of geographical areas was identified, for which a permanent increase in the relative price would not induce a sufficient substitution in demand, so the increase would be profitable (demand substitution)[106].

And secondly, if an undertaking that markets a wide range of qualities or grades of one product increased prices, would competing companies (from neighbouring geographical areas) decide to enter to compete in the area where the aforementioned company operates? If they would, the different geographic areas would be grouped to define the relevant geographical market (supply substitution)[107].

1.2. Holding a dominant position

According to the traditional analysis, having defined the relevant market, the next step is to determine whether the undertaking holds a dominant position on the relevant market.

1.2.1. Dominant position definition

The idea of 'dominant position' is equivalent to what in economic theory is known by the term 'market power', a concept that does not enjoy unanimity. In US, the concept is clearly linked to the ability of a company to control prices[108]. Thus, a company has market power or holds a dominant position if it has the power to increase its profits by raising the price of its products (or decreasing the volume of its supply) to unacceptably high (low) levels, without suffering the punishment of the relevant market[109]. Namely, if the undertaking is capable of profitably increasing prices above the competitive level for a

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[106] Commission, 'Commission notice on the definition of relevant market' (n 90), paras 17 and 18.

[107] Jiménez Latorre and Cañizares Pacheco, 'Dificultades para la definición del mercado relevante' (n 92) 38, para 2.

[108] Cani Fernández, 'Cuota de mercado y poder de mercado' (Second Seminar on Law and Economics of Antitrust Law organized by the Rafael del Pino Foundation, Madrid, 18 October 2005) [paper] 61, 63, paras 3 and 4 <https://espacioinvestiga.org/wp-content/uploads/2015/09/DE006-03_Cuota_mercado_poder_mercado-Fernandez.pdf> accessed 17 January 2019.

[109] Jesús Alfaro Águila-Real, *El abuso de posición dominante*, MS, no date, para 1, in relation to the definition of 'market power' given by William M. Landes and Richard A. Posner, 'Market Power in Antitrust Cases' (1981) 94 Harvard Law Review 937, 939 ('the ability to raise price and gain more from the increased margin than is lost from sales not made at the higher price').

significant period of time, it is considered that it does not face sufficiently effective competitive constraints and can thus generally be regarded as dominant.

Nevertheless, at the EU level, the concept of market power is broader. Hence, it is not disputed that a dominant position must be defined as a position of economic strength enjoyed by an undertaking which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave, to an appreciable extent, independently of its competitors and customers and ultimately of consumers[110]. Although that independence will be reflected, in many cases, in prices, it can also be noted in other types of actions, such as linked sales or tying[111].

There exists a consensus on the fact that the analysis of market power should be based on a global evaluation of several factors, being the market share one of the important ones. On that regard, the Commission[112] states that 'the existence of a dominant position cannot be established on the sole basis of large market shares' and that 'the existence of high market shares simply means that the operator concerned might be in a dominant position'. Therefore, it reckons that competition authorities 'should undertake a thorough and overall analysis of the economic characteristics of the relevant market before coming to a conclusion as to the existence of significant market power'. Therefore, by way of example, it lists several criteria that could also be used as measure: overall size of the undertaking, control of infrastructure not easily duplicated, technological advantages or superiority, absence of or low countervailing buying power, easy or privileged access to capital markets/financial resources, product/services diversification (*e.g.* bundled products or services), economies of scale, economies of scope, vertical integration, a highly developed distribution and sales network, absence of potential competition and barriers to expansion.

1.2.2. Relevant factors

All in all, the factors that should have taken into account to assess if an undertaking holds a dominant position are its structure, market share and the existence of barriers to competitors entering the market[113].

1.2.2.1. Undertaking's structure

The structure of the undertaking refers to various characteristics. For instance, whether it is vertically integrated to a high degree that guarantees its commercial stability and wellbeing. That is to say, it should be analysed if at the production stage, the undertaking

[110] See *United Brands* (n 94) [65]; Case C-85/76 *Hoffmann-La Roche* (ECJ, 13 February 1979), para 38; *Michelin* [ECJ, 1983] (n 93) [30]; Case C-311/84 *Télémarketing* [1985] ECR I-3261, para 16.
[111] Fernández, 'Cuota de mercado' (n 108) 64, paras 1 and 2.
[112] Commission, 'Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services' (2002) OJ C165/6, para 78.
[113] *United Brands* (n 94) [67].

can comply with all the requests which it receives. And also, whether at the stage of packaging and presentation on its premises, the company has at its disposal factories, manpower, plant and material which enable it to handle the goods independently[114].

It might be also relevant to study if in the field of technical knowledge and as a result of continual research, the undertaking keeps on improving the productivity to the extent that competing firms cannot develop research at a comparable level. And therefore, in this respect, they are at a disadvantage compared with the undertaking in question[115].

On the same vein, if would be an important indicator the fact the distributor could not afford not to offer its product to consumer, because company's constant marketing and promoting activity of its brand led it to that privileged position on the relevant market. At the selling stage, this distinguishing factor ensures that the company has regular customers and consolidates its economic strength[116].

1.2.2.2. Market share

As it was aforementioned, competition authorities should bear in mind all the relevant factor to assess whether the undertaking holds a dominant position. For example, in *United Brands*[117], the ECJ took into account all the factors to determine if the company held a dominant position, because only the market share did not allow to get that conclusion, being necessary to analyse the other factors too. Nevertheless, in subsequent cases (see *Hoffmann-La Roche*[118] and *AKZO Chemie*[119]), it attached particular importance to the market share, using the additional two factors (the structure and barriers to entry) only to confirm that the undertaking held a dominant position based on its market share[120].

What is relevant is that from these two cases, the 'presumption of dominance' based on market shares of undertakings in question, was raised[121]. In *Hoffmann-La Roche*[122], the ECJ stated that '[..] very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position [...]'. In the same vein, in *CMB and SETCA*[123], the Court of First Instance (CFI) stated that 'a dominant position may be the outcome of a number of factors which, considered separately, would not necessarily be determinative. However, in the absence of exceptional circumstances, extremely large market shares are in themselves evidence of the existence of a dominant position'.

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114 ibid [69]–[81].
115 ibid [82]–[84].
116 ibid [85]–[94].
117 ibid [67]–[129].
118 (n 110).
119 (n 93).
120 Fernández, 'Cuota de mercado' (n 108) 67, para 1, 68, para 1.
121 ibid 64, paras 1 and 2.
122 (n 110) [41].
123 Case T-2/97 *CMB and SETCA* (CFI, 6 March 1997), unpublished, paras 22 and 76.

The existence of the presumption triggers the inversion of the burden of proof, corresponding then to the company in question to prove that despite its high market share, it lacks market power – an *iuris tantum* presumption. However, having the antitrust procedure a sanctioning nature and basing on the accusatorial principle, the Commission should be the one providing evidences[124].

The appropriate method for calculating market shares depends on the case in hand. Usually sales data by value and by volume are both informative. Often value data will be more informative, for example, where goods are differentiated. There are also other indications to calculate market shares that can offer useful information, depending on the specific products or industry in question. For example, capacity, the number of players in bidding markets, units of fleet as in aerospace, or the reserves held in the case of sectors such as mining[125].

However, once the market share is calculated, there are no market share thresholds established – regarding both the percentage and the period of time – for presuming that an undertaking holds a dominant position, in the absence of evidence to the contrary. In that regard, the ECJ in *AKZO Chemie*[126], considered a market share of 50% held for 3 years to be a very large persistent share that constituted an evidence of the existence of dominant position.

Curiously, the CFI in *British Airways*[127] concluded that the undertaking's market share (39.7%) in the total of air tickets sales handled by the Billing and Settlement Plan for the United Kingdom (UK) was large. And also, that it invariably constituted a multiple of the market shares of each of its five main competitors on the UK market for air travel agency services. That is an example of how the ECJ grants a great importance to the comparative analysis of market shares of the potential dominant company and of its (existing) competitors.

For the purpose of analysing the market power, it is useful to refer to the guidelines of the Office of Fair Trading[128] – referring to the British Competition Act of 1998 – published after the first ruling on *British Airways* –, where it 'considers that it is unlikely that an undertaking will be individually dominant if its share of the relevant market is below 40%, although dominance could be established below that figure if other relevant factors (such as the weak position of competitors in that market and high entry barriers) provided strong evidence of dominance'.

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[124] Fernández, 'Cuota de mercado' (n 108) 68, paras 2 and 3.
[125] Commission, 'Commission notice on the definition of relevant market' (n 90), paras 53-55; 'Assessment of Market Power. Understanding Competition Law' (Office of Fair Trading 2004) 13, para 4.7 <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/284400/oft415.pdf> accessed 17 January 2019.
[126] (n 93) [59] and [60].
[127] Case T-219/99 *British Airways v Commission* [2003] ECR II-05917, para 211. It was confirmed by the Case C-95/04 P *British Airways v Commission* [2007] ECR I-02331.
[128] 'Assessment of Market Power' (n 125) 7, para 2.12.

1.2.2.3. Barriers to entry and expansion

An undertaking with a persistently high market share may not necessarily have market power where there is a strong threat of potential competition (with very low entry barriers). Therefore, it might not be profitable for the undertaking in a market to sustain prices above competitive levels because this would attract new entry which would then drive the price down – if not immediately, then in the long term. However, an undertaking with a large market share in a market protected by significant entry barriers is likely to have market power. Hence, entry barriers would allow the undertaking to profitably sustain supra-competitive prices in the long term, without being more efficient than its potential rivals[129].

Entry barriers arise when an undertaking has an advantage (not solely based on superior efficiency) over potential entrants from having already entered the market and/or from special rights (*e.g.* to production or distribution) or privileged access to key inputs. There are many ways in which different types of entry barrier can be classified, but it is useful to distinguish between the following factors which, depending on the circumstances, can contribute to barriers to entry, making new entry to be less likely or less rapid[130].

Firstly, the sunk costs of entry that are those costs which must be incurred to compete in a market, but which are not recoverable on exiting the market (as if it was a non-refundable deposit). Therefore, entry will occur only if the expected profit from being in the market exceeds any sunk costs of entry. Nevertheless, the mere existence of sunk costs in any particular industry does not necessarily mean that entry barriers are high[131].

If potential competition suppliers are able to offer and sell products immediately and without the significant increases in costs, there will be a supply side substitution (that will be taken into account to define the relevant product/service and geographical market) and not new entry. On the contrary, if potential rivals are only able to enter the market slowly and with a big sunk investment (new entry), it will be considered that an entry barrier exists[132].

Secondly, entry barriers may arise where the access to key inputs or distribution outlets are poor or scarce, and where an incumbent obtains an advantage over a potential entrant due to privileged access to essential facilities or special rights (IPRs) to those inputs or outlets[133].

Although the assessment of whether a particular facility is essential must be on a case by case basis, a facility will only be viewed as essential where it can be demonstrated that

[129] ibid 9, para 3.3, 15, paras 5.3 and 5.4.
[130] ibid 15, paras 5.5 and 5.6.
[131] ibid 16, paras 5.8, 5.9 and 5.11.
[132] ibid 21, fn 37.
[133] ibid 17, para 5.12.

access to it is indispensable in order to compete in a related market and where duplication is impossible or extremely difficult owing to physical, geographic or legal constraints (or is highly undesirable for reasons of public policy). Accordingly, not always difficulties accessing inputs or resources that constitute an entry barrier will be defined as essential facilities[134]. Therefore, the decisive factor must be whether the undertaking in question is the only possible source of supply for the products which are produced on the primary market and are necessary in order to carry on business on the secondary market[135]. If it is not the only source, there will be no entry barriers of that type, so other barriers to entry and factors (company's structure and market share) should be bear in mind to evaluate the dominance.

As regards IPRs, it is common ground that an undertaking does not hold a dominant position merely because it owns and exercises an IPR. Namely, when an IPR does not prevent others from competing in the relevant market, it will not normally be a barrier to entry.

Notwithstanding, under certain circumstances, IPRs may constitute a barrier to entry. For instance, that occurs when IPRs relate to specific products (*e.g.* registered design for the front wings of a specific car) and the only products that can be substituted for them need to incorporate the IPRs in question. Hence, no substitutable goods exist that do not encroach upon the IPRs, which means that in the long term, a rival undertaking is not able to overcome the IPR by its own innovation[136]. The only way for competitors to market the substitutable products is obtaining licenses to use the IPRs. If IP owners refuse to grant them and rivals use them anyway, as soon as proprietors enforce their IPRs, the substitutable products cannot longer be produced.

Nevertheless, the fact that IPRs constitute a barrier to entry does not always imply that IP owners hold a dominant position, not even when the IPR is a SEP[137] (see Section 5.2.2.1. of Chapter 3). The possession and exercise of IPRs would contribute to a dominant position, that is, they will serve to establish or to reinforce the dominant position[138], as

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[134] ibid 17, paras 5.13 and 5.14.

[135] Case C-26/75 *General Motors Continental* (ECJ, 13 November 1975), para 9; Case C-22/78 *Hugin* (ECJ, 31 May 1979), paras 9 and 10; *Télémarketing* (n 110) [16]–[18]; Case C-226/84 *British Leyland* (ECJ, 11 November 1986), paras 5 and 9.

[136] 'Assessment of Market Power' (n 125) 17, para 5.15.

[137] Anne Layne-Farrar and Jorge Padilla, 'Assessing the Link between Standard Setting and Market Power' (2010) SSRN Electronic Journal <www.ssrn.com/abstract=1567026> accessed 25 July 2018; Commission, 'Communication from the Commission — Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements' (n 7), para 269 ('even if the establishment of a standard can create or increase the market power of [IPR] holders possessing IPR essential to the standard, there is no presumption that holding or exercising [IPR] essential to a standard equates to the possession or exercise of market power. The question of market power can only be assessed on a case by case basis'); Case C-170/13 *Huawei v ZTE* (ECJ, 16 July 2015), Opinion of AG Wathelet, fn 21 and para 57.

[138] Case C-24/67 *Parke, Davis & Co* (ECJ, 29 February 1968), p 72, para 5 (the ECJ states that the use made of patent rights contributes to a dominant position); Case C-238/87 *Volvo* (ECJ, 5 October 1988), Opinion of AG Jean Mischo, para 40.1; Case C-457/10 P *AstraZeneca* (ECJ, 6 December 2012), para 186 ('[...] although the mere possession of intellectual property rights cannot be considered to confer such a

long as the assessment of other factors (company's structure, market share and other entry barriers) also leads to that same conclusion. The ECJ already held in various cases[139] that for the proprietor of an IPR to hold a dominant position, it must be in a position to prevent the maintenance of effective competition over a considerable part of the relevant market, having regard in particular to the existence and position of any producers or distributors who may be marketing similar goods or goods which may be substituted for them and their market share.

Thirdly, regulation may also be a barrier to entry, when, for instance, it limits the number of undertakings that can operate in a market through the granting of licences. In the same vein, when health and safety regulations, among others, set objective standards, they may also constitute a barrier to entry if they do not apply equally to all undertakings. That might happen when incumbents lobby for standards that are relatively easy for them to meet, but harder for a new entrant to achieve[140].

Fourthly, economies of scale and economies of scope may in some circumstances, constitute barriers to entry. In the first scenario, the average costs fall as output rises, so when the demand of the product increases, the price should decrease. And in the second one, the efficiencies are formed by variety, not volume. Hence, it costs less to produce two types of products together than to produce them separately. Economies of scale and economies of scope may have similar implications, as a potential entrant would prefer to enter the market with many as opposed to few products, what would require relatively large sunk costs and might be more likely to attract an aggressive response from the undertaking in question[141].

Fifthly, network effects might also create barriers to entry. As opposed to economies of scale, network effects occur where users' valuations of the network increase as more users join the network. For example, as new customers enter a telephone network, they will be benefited from being connected to more people on the same network, avoiding the incompatibility with other networks. In consequence, as opposed to economies of scale, if the demand of the product increases, the price should rise. Network effects, just like economies of scale, may make new entry harder where the minimum viable scale (*e.g.* in terms of users of the network) is large in relation to the size of the market, because the incumbent will have a well-established network, while the competitor has to establish its own one[142].

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position, their possession is none the less capable, in certain circumstances, of creating a dominant position, in particular by enabling an undertaking to prevent effective competition on the market').

[139] Case C-40/70 *Sirena v Eda* (ECJ, 18 February 1971), para 16; Case C-78/70 *Deutsche Grammophon v Metro SB* (ECJ, 8 June 1971), para 16; Case C-51/75 *EMI Records v CBS United Kingdom* (ECJ, 15 June 1976), para 36.

[140] 'Assessment of Market Power' (n 125) 18, paras 5.16 and 5.17.

[141] ibid 18, para 5.18 and fn 32.

[142] ibid 19, paras 5.21 and 5.22.

And sixthly, exploitative and exclusionary behaviours (see Section 1.3. of this Chapter) may also create barriers to entry[143].

In addition to barriers to entry, barriers to expansion – that can be analysed in a similar way – must be also taken into account. They refer to factors that make it harder for existing competitors to become more forceful competitors or that even lead to the elimination of an existing competitor. Many of the factors discussed above that may make entry harder, they might also make it harder for undertakings that have recently entered the market to expand their market shares and hence their competitive impact[144]. For instance, exclusionary behaviours consisting of subscribing exclusive long-term contracts or granting discounts of a loyal nature[145] may constitute barriers to expansion.

1.3. The abuse of dominance: abusive behaviours

As the ECJ holds[146], to apply the prohibition stated in Article 102 TFEU, it is necessary that once the relevant market has been defined, three elements shall be present together (cumulatively): the existence of a dominant position, the abuse of this position and the possibility that trade between Member States may be affected by the abusive conduct.

The concept of an abuse of a dominant position within the meaning of Article 102 TFEU is an objective concept relating to the behaviour of an undertaking in a dominant position which, on a market where the degree of competition is already weakened precisely because of the presence of the undertaking concerned, through recourse to methods different from those governing normal competition in products or services on the basis of the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition[147].

As it was already mentioned, in accordance with the case law, it is not in itself illegal for an undertaking to be in a dominant position and such a dominant undertaking is entitled to compete on the merits. However, the undertaking that holds a dominant position has a special responsibility not to impair, by conduct falling outside the scope of competition on the merits, genuine undistorted competition in the internal market[148]. The scope of its special responsibility has to be considered in light of the specific circumstances of the

[143] ibid 16, fn 24.
[144] ibid 22, para 5.37.
[145] Fernández, 'Cuota de mercado' (n 108) 72, para 2.
[146] *Parke, Davis & Co* (n 138).
[147] *Hoffmann-La Roche* (n 110) [91]; *AKZO Chemie* (n 93) [69]; C-549/10 P *Tomra v Commission* (ECJ, 19 April 2012), para 17; *AstraZeneca* [ECJ, 2012] (n 138) [74].
[148] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (2009) OJ C45/7, para 1; *Michelin* [ECJ, 1983] (n 93) [57]; Case C-209/10 *Post Danmark A/S v Konkurrencerådet* (ECJ, 27 March 2012), para 23; *AstraZeneca* [ECJ, 2012] (n 138) [134].

case[149] and at the time when the abusive conduct takes place[150]. That is to say, the undertaking concerned cannot behave abusing its dominant position without objective justification. Therefore, it must often refrain from conduct which might otherwise be legal were it carried out by a non-dominant firm (*e.g.* pricing below cost or providing fidelity-inducing rebates)[151].

In addition, the illegality of abusive conduct under Article 102 TFEU is unrelated to its compliance or non-compliance with other legal rules and, in the majority of cases, abuses of a dominant position consist of behaviour which is otherwise lawful under branches of law other than competition law[152].

In that regard, it is important not to lose sight of the fact that the primary purpose of Article 102 TFEU is to prevent distortion of competition – and in particular to safeguard the interests of consumers – rather than to protect the position of particular competitors[153], to achieve an integrated internal market. Accordingly, that Article prohibits abusive practices which may cause damage to consumers directly, but also those which are detrimental to consumers through their impact on competition[154]. Furthermore, the fact that a dominant undertaking's abusive conduct has adverse effects on a market distinct from the dominated one does not preclude the application of Article 102 TFEU[155].

As aforementioned before, the Article 102 TFEU only makes reference to a non-exhaustive list of behaviours that may be abusive, so the practices mentioned there are merely examples of abuse of a dominant position[156]. Therefore, other non-listed behaviours may also be considered to be abusive. As it will be analysed down below, in general terms, abusive behaviours are divided into three different categories: exploitative, exclusionary and discriminatory abuses.

The structure I will follow when studying each behaviour will be the following. First, I will describe the conduct. Second, I will mention the factors that are of particular importance in determining *prima facie* whether a given unilateral behaviour is abusive or not. And third, in order to confirm the above conclusion, it is necessary to examine the claims of the dominant undertaking assuring that its conduct is justified, demonstrating that is objectively necessary or that produces substantial efficiencies which outweigh any anti-competitive effects on consumers. If the conduct in question is indispensable and proportionate to the goal allegedly pursued by the dominant undertaking, the conduct will

[149] Joined Cases C-395/96 P and C-396/96 P *Compagnie Maritime Belge Transports and Others v Commission* [2000] ECR I-1365, para 114; Case C-52/09 *TeliaSonera* [2011] ECR I-527, para 84.
[150] *AstraZeneca* [GC, 2010] (n 56) [379], confirmed on appeal in *AstraZeneca* [ECJ, 2012] (n 138).
[151] 'Abusing a dominant position–overview' (n 86), para 16; Case T-111/96 *ITT Promedia NV* [1998] ECR II-2937, para 139.
[152] *AstraZeneca* [ECJ, 2012] (n 138) [132].
[153] Case C-7/97 *Bronner* [1998] ECR I-7791, Opinion of AG Jacobs, para 58.
[154] *TeliaSonera* (n 149) [24].
[155] Case C-333/94 P *Tetra Pak* [1996] ECR I-5951, para 25.
[156] Case T-201/04 *Microsoft* [2007] ECR II-3601, para 860; Case C-280/08 P *Deutsche Telekom v Commission* [2010] ECR I-9555, para 173; *TeliaSonera* (n 149) [26].

not be considered abusive. If it is not (and only then), the conduct in question can be legally construed as an abuse[157]. Therefore, in those conducts where the claims of the dominant undertaking are likely, I will also refer to them. Note that although the burden of proof for the existence of circumstances that constitute an infringement of Article 102 TFEU is borne by the Commission, it is for the dominant undertaking to raise any plea of objective justification and to support it with arguments and evidence. It then falls to the Commission, where it proposes to make a finding of an abuse of a dominant position to show that arguments and evidence relied on by the undertaking cannot prevail and, accordingly, that the justification put forward cannot be accepted[158].

1.3.1. Exploitative abuse

According to Article 102(a) TFEU, an abuse by an undertaking of a dominant position may consist in directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions. Through exploitative abuses, dominant firms can negatively affect rivals (and thereby, harm consumers indirectly) or they can harm consumers directly.

The most common abuse consists of demanding or charging excessive prices to competitors or consumers – prices that are far in excess of both the dominant company's costs and comparable products. Nevertheless, in practice, the concern regarding excessive pricing is rarely enforced by the authorities as it involves a stipulation of the 'right' competitive price (or the tricky issue of determining what is 'fair' or 'unfair') and thus effectively entails price regulation[159].

However, in the framework of SEP licenses, it is not rare that SEP owners that hold dominant positions demand unreasonable terms – excessive royalties – to license their patents. As this anti-competitive behaviour may be performed in different manners, usually they are classified under three categories: 'holdup', 'patent ambush' and 'royalty stacking'. Accordingly, SEP owners' competitors sue them for abuse of dominant position. Nevertheless, SEP implementers might also cause a holdup problem in the opposite direction[160], when they force SEP owners to accept royalties that are lower than the value of the contribution of their technologies to a standard, a conduct known as a 'reverse holdup'. Moreover, implementers may also refuse to take licenses on reasonable terms or delaying doing so, a behaviour known as 'holdout'.

While US Courts are more used to define prices, in the EU the ECJ is more reluctant to do it. Therefore, when in *Huawei v. ZTE* it had the chance to pronounce about the issue of whether the fact of bringing infringement actions by SEP owners constituted an abuse

157 'Abusing a dominant position–overview' (n 86), para 28.
158 *Motorola* Commission Decision (n 7) [422].
159 'Abusing a dominant position–overview' (n 86), paras 19 and 20.
160 Scott F. Kieff and Anne Layne-Farrar, 'Incentive Effects from Different Approaches to Holdup Mitigation Surrounding Patent Remedies and Standard-Setting Organizations' (2013) 9(4) Journal of Competition Law & Economics 1091, 1097, fn 18.

of a dominant position, the Court argued that it was not a case about abusive exploitation, but abusive exclusion. The above, probably because it is not in favour of letting antitrust enforcers interfere with the price system, and believes that the national courts system adequately deals with such issues in the context of FRAND setting proceedings[161].

1.3.1.1. Holdup

When SSOs select a patented technology as relevant to a standard – so it becomes a SEP –, the market power of patent holders' increases. That is, their technology has been locked-in to the completed standard, so the existing competition between different available solutions for the same problem, ceases. Thus, the *ex ante* royalty price of the selected technology – before the standard is set – will be lower than the *ex-post* royalty, because patent owners will want to exploit their increased bargaining power.

However, when the increase of patent holders' market power leads to them to demand excessive royalties relative to the *ex ante* benchmark, manufacturers would be facing a holdup situation. Namely, SEP owners behave opportunistically taking advantage of manufacturers' position. Potential licensees do not have any comparable substitute available on the market (*i.e.* technologies that support interconnectivity and interoperability) and they have already sunk irreversible costs implementing the SEP. Thus, holdup requires two conditions: difficulty to shift to another technology and opportunism on the part of the SEP owner. Authorities have found this distortion problematic on the basis of competition analysis, because the *ex post* increase of SEP owners' market power is not the direct result of competition on the merits[162].

If a manufacturer is facing a holdup situation, it would have five choices to choose from[163]: (i) accept the SEP owner's royalties above the reasonable rate; (ii) refer the dispute concerning the determination of reasonable terms to conflict resolution mechanisms (judicial or ADR procedures); (iii) make an inefficient investment which will lead to a lack of improvement in product quality (*e.g.* employ an outdated technology in his product in order to avoid paying the excessive royalties); (iv) proceed to a vertical backward integration (purchasing all of the necessary SEPs), although some are of the opinion that vertical integration can generate holdup problems for rivals[164]; or (v) infringe the SEP, assuming the risk of getting involved in expensive litigations. Basically, the cost of any of the choices will be passed on to consumers, resulting in higher prices for the devices; or it will be absorbed by profit margins, reducing the research and development budgets for future rounds of innovation. Those five tough options would be then played

[161] Nicolas Petit, 'Huaweï v. ZTE: Judicial Conservatism at the Patent-Antitrust Intersection' (2015) 10(2) Competition Policy International Antitrust Chronicle, 5, paras 2-6 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2681377> accessed 26 July 2018.
[162] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 11, paras 3 and 4.
[163] Alexander Galetovic, Stephen Haber and Ross Levine, 'An Empirical Examination of Patent Hold-Up' (2015) 11(3) Journal of Competition Law & Economics 549, 557, para 3.
[164] Marie-Laure Allain, Claire Chambolle and Patrick Rey, 'Vertical Integration as a Source of Hold-up' (2016) 83(1) Review of Economic Studies 1.

out across the entire industry of which this manufacturer is a part of, raising costs in the short run, and reducing market entry potential, competition, and the incentives to innovate in the long run.

Although in theory the essential nature of SEPs may lead to a holdup situation, there is a debate among economists and legal scholars about whether, in practice, holdup constitutes a systemic problem or not. A large theoretical literature[165] asserts that SEPs allow their owners to holdup innovation by charging fees that exceed their incremental contribution to a final product. Some of them[166] reach that conclusion basing on the fact that the threat of an injunction against infringement of a patent, can in certain circumstances, be profitable for the licensor and potentially harmful to consumers. While some others[167], note that there is very little empirical evidence that holdup actually

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[165] Carl Shapiro, 'Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting' (2000) 1 Innovation Policy and the Economy 119; Daniel G. Swanson and William J. Baumol, 'Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power' (2005) 73(1) Antitrust Law Journal 1; Joseph Farrell and others, 'Standard Setting, Patents, and Hold-Up' (2007) 74(3) Antitrust Law Journal 603; Joseph Scott Miller, 'Standard Setting, Patents, and Access Lock-In: Rand Licensing and the Theory of the Firm' (2007) 40(2) Indiana Law Review 351; Mark A. Lemley and Carl Shapiro, 'Patent Holdup and Royalty Stacking' (2007) 85(7) Texas Law Review 1991; Mark A. Lemley, 'Ten Things to Do About Patent Holdup of Standards (and One Not to)' (2007) 48(1) Boston College Law 149; Douglas Lichtman, 'Patent Reform: Damages' (2009) SSRN Electronic Journal <https://ssrn.com/abstract=1618991> accessed 3 August 2018; Carl Shapiro, 'Injunctions, Hold-Up, and Patent Royalties' (2010) 12(2) American Law and Economics Review 280; 'The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition' (Federal Trade Commission 2011), 58, para 2 <http://www.ftc.gov/os/2011/03/110307patentreport.pdf> accessed 3 August 2018; Colleen V. Chien and Mark A. Lemley, 'Patent Holdup, the ITC, and the Public Interest' (2012) 98(1) Cornell Law Review 1; Suzanne Munck, 'Standard Essential Patent Disputes and Antitrust Law' (Statement of the Federal Trade Commission, Washington, D.C., July 30, 2013) <https://www.ftc.gov/sites/default/files/documents/public_statements/prepared-statement-federal-trade-commission-concerning-standard-essential-patent-disputes-and/130730standardessentialpatents.pdf> accessed 3 August 2018; Colleen V. Chien, '"Holding Up" and "Holding Out"' (2014) 21(1) Michigan Telecommunications and Technology Law Review 1; Edward J. Egan and David J. Teece, 'Untangling the Patent Thicket Literature' (2015) Working Paper Tusher Center for Management of Intellectual Capital No. 7 <http://innovation-archives.berkeley.edu/businessinnovation/documents/Tusher-Center-Working-Paper-7.pdf> accessed 3 August 2018; Rudi Bekkers, 'Concerns and Evidence for Ex-Post Hold-Up with Essential Patents' (2015) SSRN Electronic Journal <https://ssrn.com/abstract=2663939> accessed 3 August 2018; Francois Leveque and Yann Ménière, 'Licensing Commitments in Standard Setting Organizations' (2016) 67(HS1) Revue Économique 125; Daryl Lim, 'Patent Holdups' in Roger D. Blair and Daniel D. Sokol (eds), *The Cambridge Handbook of Antitrust, Intellectual Property, and High Tech* (Cambridge University Press 2017).

[166] Koren Wong-Ervin and Joshua D. Wright, 'Intellectual Property and Standard Setting' (2016) 17(3) The Federalist Society Review 52, 57, para 3.

[167] Damien Geradin and Miguel Rato, 'Can Standard-Setting Lead to Exploitative Abuse? A Dissonant View on Patent Hold-Up, Royalty Stacking and the Meaning of FRAND' (2007) 3(1) European Competition Journal 101; Damien Geradin, Anne Layne-Farrar and Jorge Padilla, 'Competing Away Market Power? An Economic Assessment of Ex Ante Auctions in Standard Setting' (2008) 4(2) European Competition Journal 443; Damien Geradin, 'What's Wrong with Royalties in High Technology Industries?' (2009) TILEC Discussion Paper Series No. 2009-043 <https://ssrn.com/abstract=1104315> accessed 3 August 2018; Damien Geradin and Miguel Rato, 'FRAND Commitments and EC Competition Law' (2010) 6(1) European Competition Journal 129, 133-137; Kieff and Layne-Farrar, 'Incentive Effects' (n 160) 1123, para 2; Anne Layne-Farrar, 'Patent holdup and royalty stacking theory and evidence: where do we stand after 15 years of history?' DAF/COMP/WD(2014)84 (OECD) <http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD%282014%2984&doclanguage=en> accessed 3 August 2018; Damien Geradin, 'Moving Away from High-Level

occurs, taking into account that prices of SEP-reliant products (*e.g.* smartphones) have fallen at rates that are fast compared with non-SEP reliant products (*e.g.* cars)[168]. In that sense, there are those who[169] challenge the view that patent holdup and patent ambushes (see below) are serious problems in practice and they consider that are rather SEP owners who face reverse holdup and holdout problems, that will be analysed subsequently, in Section 1.3.1.4.

There is also another category named 'government holdup'[170] that may arise when market actors have to interact with the government. However, I will not refer to it because this type of patent holdup is neither reflected in judicial decisions nor in antitrust cases of competition authorities that compose the subject matter of this research.

1.3.1.2. Patent ambush

When SSOs choose a standard, it might occur that patents essential to its implementation are not subject to any SSO licensing rules. In consequence, they might exploit implementers forcing them to pay excessive royalties, threatening them with being sued for patent infringement otherwise. Thusly, they would create barriers to entry that distort competition within the market[171].

To prevent SEP owners from behaving opportunistically, it is crucial that SSOs establish rules which ensure fair, transparent procedures and *ex ante* disclosure of relevant patents. As it was mentioned in the introduction, two types of disclosure exist, the negative and the specific disclosures.

In the negative disclosure, patent owners uniquely identify patents they intend not to license under the commitment requested by SSOs (*e.g.* FRAND terms). However, they

Theories: A Market-Driven Analysis of FRAND in the Context of Standardization' (2014) 59(2) Antitrust Bulletin 327;
Jonathan M. Barnett, 'From Patent Thickets to Patent Networks: The Legal Infrastructure of the Digital Economy' (2014) 55(1) Jurimetrics 1; Douglas H. Ginsburg, Koren Wong-Ervin and Joshua D. Wright, 'The Troubling Use of Antitrust to Regulate FRAND Licensing' (2015) 10(1) Competition Policy International Antitrust Chronicle < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2674759> accessed 3 December 2018; Gregory J. Sidak, 'The Antitrust Division's Devaluation of Standard-Essential Patents' (2015) 104 Georgetown Law Journal Online 48, 61, fn 49 (collecting studies) < https://georgetownlawjournal.org/articles/161/antitrust-division-s-devaluation-of> accessed 3 August 2018.

[168] Galetovic, Haber and Levine, 'An Empirical Examination' (n 163) 551, para 3, 565-569, Figures 1-5 and 572, para 2; Alexander Galetovic and Stephen Haber, 'The Fallacies of Patent Holdup Theory' (2017) 13(1) Journal of Competition Law & Economics 1.

[169] Damien Geradin, 'Reverse Hold-Ups: The (Often Ignored) Risks Faced by Innovators in Standardized Areas' in Swedish Competition Authority, *The Pros and Cons of Standard Setting* (Edita Västra Aros AB, 2010); Mario Mariniello, 'European Antitrust Control and Standard Setting' (2013) Bruegel Working Papers No. 2013/01 <http://bruegel.org/2013/02/european-antitrust-control-and-standard-setting/> accessed 4 August 2018; Chien, '"Holding Up" and "Holding Out"' (n 165).

[170] Richard A. Epstein, Scott F. Kieff and Daniel F. Spulber, 'The FTC, IP, and SSOs: Government Hold-Up Replacing Private Coordination' (2012) 8(1) Journal of Competition Law & Economics 1; Kieff and Layne-Farrar, 'Incentive Effects' (n 160) 1092, para 2.

[171] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 47, para 4.

are also requested to declare they will license all non-declared patents that turn out to be essential, under the commitment requested by SSOs. Therefore, under this disclosure the patent ambush is not feasible.

Nevertheless, under the specific disclosure patent owners identify patents that might be relevant to the standard, so SSOs are aware of what technology solutions are or not be patented – while in the negative disclosure, SSOs do not know if technologies available on the market are patented or not. Thus, they have enough information to make a technically efficient choice, having the certainty that the chosen technology will be licensed under reasonable terms. However, patent owners may opt not to declare all relevant patents they own with the aim of demanding excessive royalties to license them (patent ambushing competitors), in case the technology protected by them is chosen to be the standard in the industry.

All in all, albeit the specific disclosure helps to clarify the landscape of patented technologies before selecting the standard, if patent owners do not declare some relevant patents, it fails to flag them as not available at committed terms. However, as it was also aforementioned when explaining the background at the beginning of the thesis, due to the antitrust-based fear of being accused of patent ambush and to better leverage them in future cross licensing negotiations, participants in SSOs tend to over-declare potentially essential patents. Hence, patent ambush is not a common practice[172].

Moreover, when SSOs' rules do not sufficiently protect against the risk of patent ambush during their standard-setting procedures, they might be also acting anti-competitively. Precisely, the EC also conducted an antitrust investigation against ETSI, because its rules were not enough protective against the aforementioned risk. Nonetheless, the investigation was finally closed without imposing any penalty to the SSO, because the Commission reckoned that ETSI's change in its rules minimized that risk[173].

The EC dealt for the first and only time with a patent ambush behaviour performed by *Rambus*[174], opening an antitrust investigation against it. It was accused of abusing its dominant position, engaging in intentional deceptive conduct in the context of the standard-setting process, by not disclosing the existence of patents – under the specific disclosure – which later (after the standard was set) claimed were relevant to the adopted standard and claiming unreasonable royalties. The Commission argued that without its patent ambush, Rambus would not have been able to charge the royalty rates it currently did, since the patent would have been declared essential and it should have been licensed on FRAND terms, as it was requested by the SSO who developed the standard. At the end, although the Commission recognized that Rambus abused its dominant position, no

[172] Ménière, 'Fair, Reasonable and Non-Discriminatory' (n 10) 21.
[173] Commission, 'Competition: Commission welcomes changes in ETSI IPR rules to prevent 'patent ambush' IP/05/1565.
[174] Commission, 'Antitrust: Commission confirms sending a Statement of Objections to Rambus' MEMO/07/330.

fines were imposed, considering that the commitments offered by the undertaking – royalty free licenses for five years regarding some patents and maximum royalty rates for others[175] – were an appropriate remedy to such an abuse.

The patent ambush behaviour might be also conducted by patent holders who do not take part in SSOs' standardization processes – outsiders[176] –, so they are not constrained by SSOs' rules about disclosure or licensing terms. It is called the 'external' ambush, in contradistinction to 'internal' ambush (*e.g. Rambus* case). When there are patents held by outsiders, there is not a way for the SSO to find out at reasonable cost whether a chosen solution would infringe on some of those patents. Therefore, it might happen that the chosen standard would inadvertently infringe on unknown patents held by outsiders, leaving implementers exposed to royalty demands that are not reasonable[177].

1.3.1.3. Royalty stacking

In technology complex industries, products such as laptops, tablets, or smartphones, use multiple technologies covered by complementary patents owned by different, independent owners. The alluded complementarity is double: the complementarity between SEPs reading on different aspects of a specific standard (*e.g.* Wi-Fi) and the complementarity between SEPs reading on different standards which must all be implemented within a given device (*e.g.* smartphones). It should be recalled that in the absence of a standard, there is competition among substitute technologies. Hence, if a patent owner raises royalties, manufacturers might get a license from a different patent owner. However, once a standard has been agreed upon, manufacturers will need to access the specific technology for which there are no comparable substitutes. Therefore, in those cases, in order to produce a final product manufacturers necessarily have to get licenses of multiple patented technologies (hundreds or thousands of SEPs[178]). This phenomenon of a dense web of overlapping IPRs, where a company must hack its way through in order to actually commercialize new technology, it is known as 'patent thicket'[179].

Consequently, licensees have also to pay multiple royalties at the rates required by SEP owners (when setting the royalties, patent holders with large and high quality patent portfolios will not be constrained by the threat of litigation to challenge the validity of the patents[180]). When patent owners do not coordinate their royalties, it is said that these

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[175] *Rambus* (Case COMP/38.636) Commission Decision 2010/C 30/09 [2009] OJ C30/17.
[176] Jorge L. Contreras, 'When a Stranger Calls: Standards Outsiders and Unencumbered Patents' (2016) 12(3) Journal of Competition Law & Economics 507, 534, para 4 ('[this study] demonstrates that the assertion of SEPs by Outsiders constitutes a material segment of all SEP assertions, and that Outsiders are willing to assert SEPs even when they are encumbered by FRAND and other licensing commitments').
[177] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 14, para 4 and 15, para 1.
[178] Galetovic, Haber and Levine, 'An Empirical Examination' (n 163) 557, para 2.
[179] Shapiro, 'Navigating the Patent Thicket' (n 165) 120, para 4.
[180] Gerard Llobet and Jorge Padilla, 'The Inverse Cournot Effect in Royalty Negotiations with Complementary Patents' (2016) IP² Working Paper No. 16012, 3, para 3 < https://hooverip2.org/wp-content/uploads/ip2-wp16012-paper.pdf> accessed 21 January 2019.

royalties form a harmful 'royalty stack'[181] for licensees (excessive total royalties), that results in excessively high end-product prices and a reduction in the incentives to invest and innovate in product markets[182].

The arguments supporting that royalty stacking, they rely on theoretical models which reformulate the well-known Cournot complements problem in a licensing framework. According to Cournot[183], consumers are better off when all products complementary from a demand viewpoint are produced and marketed by a single firm.

In industries where each single product is covered by multiple patents owned by independent firms, a patent holder that is considering the royalty to charge, it may not fully take into account that an increase in that royalty is likely to result in a cumulative royalty rate that may be too high according to other licensors, the licensees, and their customers. Since this negative externality (or Cournot effect) is ignored by all patent holders, the royalty stack may prove inefficiently high[184]. Furthermore, they ignore the fact that lowering the price of their licenses would increase the demand for others, due to the complementarity. However, if SEPs were owned by the same patent holder, that company would recognize that lowering the price of SEP 1, it will benefit from greater licenses of SEP 2. In consequence, the sum of individual payments requested by different patent owners is higher, than the payment that a single owner would request if it owned all the complementary SEPs, because the incentives to raise prices are smaller[185].

All in all, if patent holdup is systematic, it will imply that SEP owners – being unconstrained by each others' licensing policies – impose collectively a royalty stack on downstream industries, and consumers[186]. Accordingly, royalty stacking will be a much more important problem for SEPs than for other patents, as long as the holdup problem is relevant for the industry in question[187]. The above, because manufacturers do not have the option to get licences from other companies, in case SEP owners contribute to the royalty stacking problem.

[181] Lemley and Shapiro, 'Patent Holdup and Royalty Stacking' (n 165) 1993, para 2.
[182] Llobet and Padilla, 'The Inverse Cournot Effect' (n 180) 2, para 1.
[183] Antoine Augustin Cournot, *Researches into the Mathematical Principles of the Theory of Wealth* (Macmillan 1838) (Nathaniel T. Bacon tr, 1987).
[184] Llobet and Padilla, 'The Inverse Cournot Effect' (n 180) 2, para 2.
[185] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 15, paras 2 and 4 and 16, para 2; Pentheroudakis, Baron and Thumm, 'Licensing Terms of Standard Essential Patents' (n 45) 8.
[186] Bowman Heiden and Nicolas Petit, 'Patent "Trespass" and the Royalty Gap: Exploring the Nature and Impact of Patent Holdout' (2017) 34(2) Santa Clara High Technology Law Journal 179, 181, para 2.
[187] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 16, para 2.

There is a theoretical literature[188] stating that royalty stacking is happening regarding SEP licenses, while some others[189] challenge that conjecture, considering that royalty stacking is merely a theoretical problem.
The empirical literature[190] is rather thin due to the general methodological difficulties of identifying royalty stacking on the basis of market data – observing the change in royalty rates. However, in the mobile phone industry, it does not show evidence of royalty stacking.

Outside of the academic literature, there seems to be some contradictory evidence coming from the recent litigation experience. On the one hand, some[191] reckon that high stacks,

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[188] Lemley and Shapiro, 'Patent Holdup and Royalty Stacking' (n 165); Jorge L. Contreras, 'Standards, Royalty Stacking and Collective Action' (2015) 1(March) Competition Policy International Antitrust Chronicle <https://www.competitionpolicyinternational.com/assets/Uploads/ContrerasMar-152.pdf> accessed 3 August 2018.
[189] Geradin and Rato, 'Can Standard-Setting Lead to Exploitative Abuse?' (n 167); Damien Geradin, Anne Layne-Farrar and Jorge Padilla, 'The Complements Problem within Standard Setting: Assessing the Evidence on Royalty Stacking' (2008) 14(2) Boston University Journal of Science and Technology Law 144, 145, para 1 ('[…] the relevant question is […] whether royalty stacking is […] common enough and costly enough in actuality to warrant policy changes'); Einer Elhauge, 'Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?' (2008) 4(3) Journal of Competition Law & Economics 535; Gregory J. Sidak, 'Holdup, Royalty Stacking, and the Presumption of Injunctive Relief for Patent Infringement: A Reply to Lemley and Shapiro. Minnesota Law Review' (2008) 92(3) Minnesota Law Review 714; Geradin, 'What's Wrong with Royalties' (n 167); Geradin and Rato, 'FRAND Commitments' (n 167) 137-141; Kirti Gupta, 'The Patent Policy Debate in the High-Tech World' (2013) 9(4) Journal of Competition Law & Economics 827; Geradin, 'Moving Away from High-Level Theories' (n 167); Barnett, 'From Patent Thickets to Patent Networks' (n 167) 4, para 3 and 5; Gregory J. Sidak, 'The meaning of FRAND, part II: Injunctions' (2015) 11(1) Journal of Competition Law & Economics 201; Richard J. Stark, 'The Royalty Stacking Supposition' (2015) 1(March) Competition Policy International Antitrust Chronicle <https://www.competitionpolicyinternational.com/assets/Uploads/StarkMar-151.pdf> accessed 3 August 2018; Keith Mallinson, 'Smartphone Revolution: Technology Patenting and Licensing Fosters Innovation, Market Entry, and Exceptional Growth' (2015) 4(2) IEEE Consumer Electronics Magazine 60; Gregory J Sidak, 'What Aggregate Royalty to Manufacturers of Mobile Phones Pay to License Standard-Essential Patents?' (2016) 1 The Criterion Journal on Innovation 701 < https://www.criterioninnovation.com/volumes/1/> accessed 3 August 2018.
[190] Damien Geradin, Anne Layne-Farrar and Jorge Padilla, 'Royalty Stacking in High Tech Industries: Separating Myth from Reality' (2007) Center for Economic Policy Research Discussion Paper No. DP6091 <https://cepr.org/active/publications/discussion_papers/dp.php?dpno=6091>accessed 3 August 2018; Alexander Galetovic and Kirti Gupta, 'Royalty Stacking and Standard Essential Patents: Theory and Evidence from the World Mobile Wireless Industry' (2017) SSRN Electronic Journal <https://ssrn.com/abstract=2790347> accessed 3 August 2018; Alexander Galetovic, Stephen Haber and Lew Zaretzki, 'An Estimate of the Average Cumulative Royalty Yield in the World Mobile Phone Industry: Theory, Measurement and Results' (2018) 42(3) Telecommunications Policy 263; Alexander Galetovic, Stephen Haber and Lew Zretzki, 'Is There an Anti-commons Tragedy in the Smartphone Industry?' (2018) IP² Working Paper No. 17005 < https://hooverip2.org/working-paper/wp17005/> accessed 3 August 2018.
[191] Ann K. Armstrong, Joseph J. Mueller and Tim Syrett, 'The Smartphone Royalty Stack: Surveying Royalty Demands for the Components Within Modern Smartphones' (2014) SSRN Electronic Journal 2, para 3 ('The data show that royalty stacking is not merely a theoretical concern. Indeed, setting aside off-sets such as "payments" made in the form of cross-licenses and patent exhaustion arising from licensed sales by component suppliers, we estimate potential patent royalties in excess of $120 on a hypothetical $400 smartphone—which is almost equal to the cost of device's components. Thus, the smartphone royalty stack across standardized and non-standardized technology is significant, and those costs may be undermining industry profitability—and, in turn, diminishing incentives to invest and compete') <https://ssrn.com/abstract=2443848> accessed 4 August 2018; Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 17, para 3 and 18, para 5 and fn 20 ('We have ourselves seen demands

due to the level of royalties demanded by some SEP owners, would imply very large total royalties for a single standard, if these royalties were applied proportionally to all declared SEPs. On the other hand, some others[192] suggest that the total stack is in fact rather limited because these are far lower – specifically, less than 5% for all mobile-related standards. In between, others[193] consider that being still so much ongoing litigation, it is too early to get reliable estimates on the extent of likely royalty stacking. That, because they understand that current actual payments are likely underestimate what the total stack will effectively be once litigation is concluded.

1.3.1.4. Reverse holdup and holdout

As it was already mentioned, SEP implementers might also cause a holdup problem in the opposite direction[194]. Namely, taking advantage of the fact that SEP holders are locked-in to the standard and have sunk research and development investments[195], they might act in an opportunistic manner. These behaviours are known as 'reverse holdup' and 'holdout'.

Reverse holdup refers to the situation when licensees use their leverage to obtain rates and terms below what is reasonable, namely, when they force SEP owners to accept royalties that are lower than the value of the contribution of their technologies to a standard. Theoretically, it seems difficult that SEP holders face reverse holdup situations because by the time licensing agreements are discussed (once the standard has been developed), implementers have to worry about competition on the downstream market for devices. The opposite happens for SEP holders who are no longer exposed to competition from other patent owners (hence, the holdup risk). Therefore, if a SEP owner demands royalties that are not reasonable to all implementers who use the SEP for producing a device that they all compete with, they could refuse to get licenses for the sake of forcing the SEP owner to relent and lower the royalties below what was expected *ex ante* for a successful innovation (group dynamics[196]). In that case, the effect might be that SEP owners reduce the future incentive for investment in research and development, depriving consumers of future consumption opportunities. However, there is a strong incentive for an individual implementer to deviate from this common posture and accept the initial royalties to ensure that he is first to market (the incentive to deviate is stronger,

that – if applied proportionally across all SEPs – would have generated a stack higher than 30% of the price of a smartphone for only two mobile standards').

192 Layne-Farrar, 'Patent holdup and royalty stacking theory and evidence' (n 167) (Her empirical study shows that there is no evidence that either holdup or royalty stacking emerges in practice in anything more than isolated instances); Keith Mallisson, 'Cumulative mobile-SEP royalty payments no more than around 5% of mobile handset revenues' (*IP finance*, August 19, 2015) < http://www.ip.finance/2015/08/cumulative-mobile-sep-royalty-payments.html> accessed 24 August 2018.

193 Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 19, para 1.

194 Kieff and Layne-Farrar, 'Incentive Effects' (n 160) 1097, fn 18.

195 Layne-Farrar, 'Patent holdup and royalty stacking theory and evidence' (n 167) 5.

196 Joseph Farrell, 'Tools to prevent "hold-up"' (Federal Trade Commission's workshop 2011) 243, para 3 <https://www.ftc.gov/sites/default/files/documents/public_events/tools-prevent-patent-hold-ip-rights-standard-setting/transcript.pdf> accessed 4 August 2018.

the stronger the downstream market is). However, if there was only one implementer, the bargaining power would shift towards him (mitigating the holdup problem for implementers and making it larger for SEP owners – reverse holdup –), so he could simply refuse to accept, because without his implementation the SEP owner would not be able to obtain royalties[197]. Nevertheless, as it will be studied in Chapter 4 (see, in particular, Section 4.6.1.), the Framework provided in *Huawei v. ZTE* by the ECJ might lead to a reverse holdup behaviour by the SEP implementer.

Holdout refers to the scenario where licensees either refuse to take licenses on reasonable terms or delaying doing so. Thus, they do not pay reasonable royalties during a long-term, while they are infringing SEPs[198], until they are forced to do so by a court or an arbitrator. In practice, blanket refusals are not common. Instead, holdout takes various forms. For instance, the threat about going to court based on offering royalties that are not reasonable, combined with the challenge of validity and essentiality of SEPs. Or the demand for negotiating each SEP separately. Also endless litigation and appeals and similar practices[199]. I am not aware of any empirical study about whether holdout is a real problem in the sense of occurring to a significant extent, because it is very hard to know it. What is perceived by one party as delaying tactics, is interpreted by another as resisting royalties that exceed reasonable rates. Besides, even if some implementers may be pursuing a holdout strategy, there is also the question about its effects[200].

The first effect is that holdout leads to lower incentives for firms to invest in standard related innovations, which might be true in the following two cases. One, when SEP owners are cash constrained entities, so the fact of not being paid promptly but after a judge or an arbitrator orders to do so (including back interest), it might cause them not to invest in further research, because the costs of financing increase with lower cash flows. An option to avoid that effect is for small SEP holders to monetise disputed SEPs, selling the rights to a larger SEP holder or to NPEs, given the fact that patents are increasingly highly liquid assets. Two, when the delay is such that the implementer goes into bankruptcy, so he may not be able to pay past royalties and interest. Nevertheless, judicial systems – in Europe and US – have mechanisms to avoid that situation. For example, SEP owners can seek for preliminary injunctions arguing that if they wait until the decision on the merits, they would suffer an irreparable harm not receiving royalties or interest, because there is a significant probability to be implementers bankrupt by then. It is also common that court requires the licensee to put royalty payments into an interest-bearing escrow account until a final court decision or settlement is reached. In that case, SEP owners would suffer effects on innovation incentives only if they are cash constrained entities, since otherwise, the appropriate payments will be made eventually.

[197] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 20, paras 2 and 3.
[198] David Long, 'ITC finds Nokia does not infringe InterDigital patents, so does not address FRAND issues (337-TA-613)' (*Essential Patent Blog*, August 31, 2015) para 18 <https://www.essentialpatentblog.com/tag/reverse-holdup/> accessed 4 August 2018.
[199] Régibeau, De Coninck and Zenger, 'Transparency, Predictability' (n 22) 20, para 4.
[200] ibid 20, paras 5 and 6, 21 and 22, paras 1-4.

The second effect that holdout might cause is the increase of litigation costs for all parties, when they increase with the length of delay to an agreement. This problem is of little importance for innovators with large patent portfolios and implementers who use large numbers of patents, because litigation is only on a small subset of patents, so that litigation costs can be spread over a large number of patents.

And the third one, is that holdout may lead to an unfair competitive advantage of implementers engaged in holdout, over implementers who have decided to pay the required fees. This argument can only hold if royalty payments are dependent on the output of the licensee, namely, if royalties are set as percentage of the output or the price and when implementers – who are holding out – behaviour in certain ways. As royalties are not the same for all implementers, those who are holding out might have an advantage because as they are not paying any royalties, they can low prices and sell more unities that implementers who are already paying royalties. However, implementers who are holding out should consider that each additional unit of the downstream device sold, will generate higher royalty payments in the future (when the payments are imposed by a judge or an arbitrator), so they should behave as if they were already paying the fees that will eventually come due. Nevertheless, implementers who are holding out may decide not to behave that way – as if they were already paying fees – for several reasons, so competition distortions would arise. For instance, to have lower cost of raising capital and therefore investments costs (lowering the risk to go into bankruptcy). Or since there is a significant probability of going bankruptcy or just because they are acting with an economically short horizon. Regarding the last two cases though, the already mentioned rules (preliminary injunctions and depositions of royalties in interest-bearing escrow accounts) would be applicable to prevent unfair competitive advantages.

All in all, only SEP holders with financial constraints would have difficulties to finance further innovation due to holdout. Solely owners with small patent portfolios would suffer the increase of litigations costs, because they could not be spread across a large number of patents. And just implementers who are financially weak, for whom bankruptcy is a real possibility, could enjoy an unfair competitive advantage lowering their investment costs. Therefore, there would not be serious effects associated with holdout when the financial position of implementers and SEP owners is extremely good. Although there might be other cases where the effects of holdout might be of relevance, in many jurisdictions they would be mitigated by legal rules.

1.3.2. Exclusionary abuse

Exclusionary abuses conducted by dominant undertakings aim to prevent competitors from entering or remaining active (expansion) in a given market, thus limiting production, markets or technical development to the prejudice of consumers [Article 102(b) TFEU]. Unlike exploitative abuses that may target competitors and consumers directly, exclusionary abuses only target rivals directly. Thereby, they only harm consumers indirectly, who could not benefit from competition through lower prices (excluding competitors, the dominant firm is in a position to profitably increase prices above the competitive level), better quality and a wider choice of new or improved goods and services[201]. Accordingly, it would be wrong to conclude automatically that all exclusionary behaviours that will be studied below are abusive. What is relevant is to analyse if they are capable of preventing the entry or hindering expansion of competitors, even of those that are equally efficient in comparison with the dominant undertaking.

The idea behind the prohibition of exclusionary abuses is that undertakings that hold dominant positions, cannot exclude their competitors by other means than competing on the merits of the products or services they provide. Therefore, it is important to protect an effective process and not simply to protect competitors[202].

1.3.2.1. Exclusive dealing: exclusive purchase, conditional rebates and exclusive supply

A dominant undertaking may try to foreclose its competitors by hindering them from selling to customers through use of exclusive purchasing obligations or conditional rebates, together referred to as exclusive dealing[203].

An exclusive purchasing obligation requires a customer on a particular market to purchase exclusively or to a large extent only from the dominant undertaking. Certain other obligations, such as stocking requirements, which appear to fall short of requiring exclusive purchasing, may in practice lead to the same effect[204]. For example, in *Van den Bergh Foods*[205] the obligation to use coolers exclusively for the products of the dominant undertaking was considered to lead to outlet exclusivity.

In order to convince customers to accept exclusive purchasing, the dominant undertaking will have to compensate them, in whole or in part, for the loss in competition resulting from the exclusivity. If it is likely that consumers as a whole (including those currently not purchasing from dominant undertaking and the final consumers) will not benefit from the exclusive purchasing obligations, they might constitute an exclusionary abuse because they have the effect of preventing the entry or expansion of competing undertakings. This will be the case in the following scenario[206].

The starting point is that without existing exclusive purchasing obligations, potential or existing competitors are not able to compete for the full supply of the customers. That might be because the dominant undertaking is an unavoidable trading partner for all or

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[201] 'Abusing a dominant position–overview' (n 86), paras 17-19; Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 5.
[202] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 6.
[203] ibid, para 32.
[204] ibid, para 33.
[205] Case T-65/98 *Van den Bergh Foods* v *Commission* [2003] ECR II-4653, para 160.
[206] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 34.

most customers on the market (*e.g.* because its brand is a 'must stock item' preferred by many final consumers). Or because the capacity constraints on the other suppliers are such that a part of demand can only be provided for by the dominant supplier. In consequence, when the dominant undertaking imposes exclusive purchasing obligations (even if they are of short duration), they are generally likely to hamper effective competition because even without these obligations, competitors were not able to compete on equal terms for each individual customer's entire demand.

Notwithstanding, whether competitors were able to compete for the full supply of the customers, exclusive purchasing obligations would not result in anti-competitive foreclose, unless the switching of supplier by customers was rendered difficult due to the duration of the exclusive purchasing obligation[207].

With reference to conditional rebates (also named loyalty rebates), they are discounts granted to customers to reward them for a particular form of purchasing behaviour, with the aim of attracting more demand. For instance, if a consumer's purchase over a defined reference period exceeds a certain threshold, the rebate might be granted either on all purchases (retroactive rebates) or only on those made in excess of those required to achieve the threshold (incremental rebates). When such rebates are granted by a dominant undertaking, they can also have actual or potential foreclosure effects similar to exclusive purchasing obligations. However, it is important to bear in mind that unlike predation (see below) that always entails a sacrifice for the dominant undertaking, conditional rebates may constitute an exclusionary abuse without necessarily entailing a sacrifice[208].

As it was mentioned regarding exclusive purchasing obligations, if actual or potential competitors are not able to compete on equal terms for the entire demand of each individual consumer, it is likely that the system of conditional rebates is liable to result in anti-competitive foreclosure. That, because the dominant undertaking already has a 'non contestable' portion of the demand of each customer, that is, customers thaw will purchase from it in any event. And then, there is the 'contestable' portion of demand, customers who may prefer and be able to find substitutes. Accordingly, the conditional rebate may enable the dominant undertaking to use the 'non contestable' portion of the demand of ach customer as leverage to decrease the price to be paid for the 'contestable' portion of demand, with the aim of making less attractive for customers to switch the contestable amount of demand to an alternative supplier[209]. In consequence, the dominant undertaking may end controlling the entire demand of each individual consumer, creating a maximum loyalty enhancing effect[210].

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[207] ibid, para 36.
[208] ibid, para 37.
[209] ibid, para 39; Case T-203/01 *Michelin* v *Commission* [2003] ECR II-4071, paras 162 and 163; *British Airways* [CFI, 2003] (n 127) [277] and [278].
[210] *Hoffmann-La Roche* (n 110) [89] and [90]; Case T-288/97 *Irish Sugar* v *Commission* [1999] ECR II-2969, para 213; *British Airways* [CFI, 2003] (n 127) [7]–[11] and [270]–[273].

The notion of exclusive dealing also includes exclusive supply obligations or incentives with the same effect, whereby the dominant undertaking tries to foreclose its competitors by hindering them from purchasing from suppliers. That conduct may be in principle abusive if the exclusive supply obligation or incentive ties most of the efficient input suppliers, and customers competing with the dominant undertaking, are unable to find alternative efficient sources of input supply[211].

If it is concluded that *prima facie* the dominant undertaking's behaviour is abusive, its claims will be taken into account to confirm that conclusion. That is to say, it will be checked whether the dominant firm has an objective justification to exclusive dealing. The argument it will employ is that consumers as a whole benefit from the exclusive dealing. For instance, it will allege that rebate systems achieve transaction-related cost advantages which are passed on to customers[212], especially with standardised volume targets rather than with individualised volume targets. Another argument that it could use is that incremental rebate schemes give resellers an incentive to produce and resell a higher volume than retroactive schemes[213]. It could also be considered as evidence demonstrating that exclusive dealing arrangements result in advantages to particular customers, if those arrangements are necessary for the dominant undertaking to make certain relationship-specific investments in order to be able to supply those customers[214].

1.3.2.2. Tying and bundling

An exclusionary abuse may also consist in making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts [Article 102(d)]. Depending on what the supplementary obligations entail, the dominant firm will be tying or bundling competitors.

'Tying' refers to situations where customers that purchase one product (the tying product) are required also to purchase another product from the dominant undertaking (the tied product). Tying can take place on a technical or contractual basis. Technical tying occurs when the tying product is designed in such a way that only works properly with the tied product (and not with the alternatives offered by competitors). And contractual tying occurs when the customer who purchases the tying product, undertakes also to purchase the tied product (and not the alternatives offered by competitors)[215].

'Bundling' refers to the way products are offered and priced by the dominant undertaking and it can be pure or mixed. In the case of pure bundling, the products are only sold jointly

[211] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), fn 23.
[212] *British Airways* [ECJ, 2007] (n 127) [86].
[213] *Michelin* [CFI, 2003] (n 209) [56]–[60], [74] and [75].
[214] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 46.
[215] ibid, para 48.

in fixed proportions (at a discount). In the case of mixed bundling (often referred to as a multi-product rebate), it exists the option to buy the bundled products separately. However, the sum of the prices of the products when sold separately is higher than the bundled price[216].

Before considering *prima facie* that tying or bundling are abusive conducts, the following conditions must be fulfilled. First, the undertaking should be dominant in the tying market (the product market of a tie), though not necessarily in the tied market. However, in the special case of tying in after-markets, the undertaking must be dominant in the tying market and/or the tied after-market. In bundling cases, the undertaking needs to be dominant in one of the bundled markets[217]. And second, the tying and tied products must be distinct products[218]. Two products are distinct if, in the absence of tying or bundling, a substantial number of customers would purchase or would have purchased the tying product without also buying the tied product from the same supplier, thereby allowing stand-alone production for both the tying and the tied product[219].

In order to assess if the tying or bundling practice is likely to be abusive, the following factors are generally of particular importance: the duration of the tying or bundling strategy, if the company holds a dominant position regarding various products in the bundle, whether the multi-product rebates are large, the lack of competitors in the tied market, the substitutable nature of tying and tied products, if the prices of the tying market are regulated and the complementary nature of the tied product.

Firstly, if the dominant company makes its tying or bundling strategy a lasting one, the risk to exclude competitors is greater. For example, technical tying is costly to reverse and it also reduces the opportunities for resale of individual components[220].

Secondly, if the undertaking have a dominant position for more than one of the products in the bundle, the greater the number of such products in the bundle, the stronger the likely anti-competitive foreclosure, particularly if the bundle is difficult for a competitor to replicate, either on its own or in combination with others[221].

Thirdly, if the multi-product rebates are so large that equally efficient competitors offering only some of the components cannot compete against the discounted bundle, bundling may be anti-competitive on the bundling or bundled market. The effect of the rebate is assessed by examining whether the incremental price that customers pay for each of the dominant undertaking's products in the bundle, remains above or below the long-

[216] ibid, para 49.
[217] ibid, paras 50, 52 and fn 34.
[218] *Microsoft* [CFI, 2007] (n 156) [842], [859]–[862], [867] and [869].
[219] ibid [917], [921] and [922]; Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 51.
[220] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 53.
[221] ibid, para 54.

run average incremental cost (it is the average of all the variable and fixed costs that a company incurs to produce a particular product[222]) of the dominant undertaking from including that product in the bundle. If it remains above, it will not be considered that the multi-product rebates exclude competitors, because an equally efficient competitor with only one product should in principle be able to compete profitably against the bundle. However, if it is below, even an equally efficient competitor may be prevented from expanding or entering[223].

Fourthly, if there is not a sufficient number of customers interested in buying the tied product alone (the majority would buy it together with the tying product), there will not be competitors of the dominant undertaking in the tied market. Consequently, the tying can lead to those customers facing higher prices because there will be less or no competition for them[224].

Fifthly, when a dominant undertaking markets two distinct products (the customer would only buy one or the other) that can be used in variable proportions as inputs to a production process, they are demand side substitutes. Accordingly, if the firm increases the price of one of them, customers may react by increasing their demand for the other product, while decreasing the demand for the product that increased its price. Therefore, to avoid that substitution and to be able to raise its prices, the dominant company may decide to tie the two products[225]. Hence, tying may have exclusionary effects in both the tying and tied markets at the same time.

Sixthly, if the prices the dominant undertaking can charge in the tying market are regulated, tying may allow the dominant undertaking to raise prices in the tied market in order to compensate for the loss of revenue caused by the regulation in the tying market[226]. Accordingly, tying might exclude competitors from the tied market.

And seventhly, if the tied product is an important complementary product for customers of the tying product (so, most of the customers will buy the tying and tied products together, not being interested in buying the tied product alone), the entrance to the tying market alone may be more difficult[227]. Therefore, tying may lead to anti-competitive foreclosure in the tying market and in the tied market at the same time.

In case tying or bundling are considered to be *prima facie* abusive, it is time to confirm that conclusion examining the claims that the dominant undertaking would make to justify its behaviour. Commonly, it will state that its tying and bundling practices may lead to savings in production or distribution that would benefit customers. Also, that such

[222] ibid, fn 18.
[223] ibid, paras 59 and 60.
[224] ibid, para 55.
[225] ibid, para 56.
[226] ibid, para 57.
[227] ibid, para 58.

practices reduce transaction costs for customers, who would otherwise be forced to buy the components separately and that they enable substantial savings on packaging and distribution costs for suppliers. It might also argue that combining two independent products into a new, single product might enhance the ability to bring such a product to the market to the benefit of consumers. In the same vein, another justification might be that these practices allow the supplier to pass on efficiencies arising from its production or purchase of large quantities of the tied product[228].

1.3.2.3. Predatory pricing

The predatory conduct alludes to when a dominant undertaking deliberately incurs losses or foregoes profits in the short term, that could have been avoided. That is to say, as it was already aforementioned when referring to conditional rebates, the conduct must constitute a sacrifice for the dominant undertaking. And in order to consider the conduct to be abusive, its aim must be to exclude existing competitors or potential entrants. Hence, the dominant undertaking will strengthen or maintain its market power and will be able to charge supra-competitive prices and/or degrade its offering without consequences, thereby causing consumer harm[229].

Sometimes, it is possible to rely upon direct evidence consisting of documents from the dominant undertaking which clearly show a predatory strategy[230] or evidence of concrete threats of predatory action[231]. However, when that is not the case, to assess whether *prima facie* the predatory conduct pursues the exclusion of competitors from the market, the following factors are borne in mind.

For a dominant undertaking to incur losses in the short term, it can charge a lower price for all or a particular part of its output or it can expand its output when there is not such a demand. To asses if the firm incurred avoidable costs, the average avoidable cost (it only includes fixed costs) will be taken into account. Hence, if a dominant undertaking charges a price below the average avoidable cost for all or part of its output, it is not recovering the costs that could have been avoided by not producing that output. Accordingly, in most cases that conduct will be viewed as a clear indication of sacrifice[232], because the conduct shows that the dominant undertaking cannot be interested in applying such price, because each sale generates a loss that could be avoided[233].

A dominant undertaking foregoes profits in the short term when it gets lower net revenues than those it could have been expected from an economically rational and practicable

[228] ibid, para 62.
[229] ibid, para 63; 'Abusing a dominant position–overview' (n 86), para 18.
[230] *Tetra Pak* [CFI, 1994] (n 93) [151] and [171].
[231] *AKZO Chemie* (n 93) [76]–[82], [115] and [131]–[140].
[232] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 64.
[233] *AKZO Chemie* (n 93) [71].

alternative conduct (the conduct that would take into account the market conditions and business realities facing the dominant undertaking). Therefore, it incurs a loss that it could have avoided if it chose an alternative conduct. Accordingly, if a dominant undertaking engaged in a conduct taken in a good faith, because it reasonably expected that it was going to be more profitable (*ex ante*) and it turns out that it incurred losses (*ex post*), the dominant undertaking should not be penalised[234].

Once it is *prima facie* determined that the predatory conduct is abusive, in order to confirm that, it is necessary to take into account if the conduct would create efficiencies. The dominant undertaking may argue that the low pricing enables it to achieve economies of scale or efficiencies related to expanding the market[235]. For example, a dominant undertaking can make sales promotions – sales below costs – to introduce its product to new consumers, in the hope that they will be willing to continue buying the product at a higher price.

1.3.2.4. Margin squeeze

A vertically-integrated undertaking that is dominant in an upstream market for the supply of an essential input, may supply it to wholesale customers who are also retail competitors, so they are competitors in the downstream market. Holding a dominant position, it may exclude these competitors squeezing their margins, that is, the gap between the cost of its required inputs and the price it can achieve on the downstream market. The dominant firm can achieve that by charging a high wholesale price, a low retail price or a combination of both[236]. In consequence, that conduct does not allow even an equally efficient competitor to trade profitably in the downstream market on a lasting basis. As it was mention regarding the multi-product rebates, to determine the costs of an equally efficient competitor, the long-run average incremental cost of the downstream division of the integrated dominant undertaking will be taken into account[237].

1.3.2.5. Refusal to deal

In general terms, any undertaking, whether dominant or not, has the freedom to choose with whom it conducts business and to dispose freely of its property. Even when the dominant firm is a vertically integrated one, that is, it is dominant in an upstream market for the supply/ownership of an essential facility, input of IPR. Accordingly, it has also the right to decide whether it wants to deal with its competitors on the downstream market or prefers to refuse to deal[238].

[234] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 65 and fn 43.
[235] ibid, para 74.
[236] 'Abusing a dominant position–overview' (n 86), para 18.
[237] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 80.
[238] ibid, para 75; 'Abusing a dominant position–overview' (n 86), para 18.

The concept of refusal to deal covers a broad range of practices, such as a refusal to supply goods or services, a refusal to grant access to an essential facility or a refusal to license IPRs. All of these types of possibly unlawful refusal to supply will be studied in Chapter 2, giving particular relevance to refusal to grant IP licenses[239].
The refusal may cause a disruption of previous supply, namely, the refused input had been already traded by the dominant firm and with the refusal, the supply arrangement terminates. Or a *de novo* refusal to supply, when the dominant company never had a supply relationship with the competitor[240]. Therefore, it is sufficient that there is demand from potential purchasers and that a potential market for the input at stake can be identified[241], not being necessary for the refused product to have been already traded.

Likewise, it is not necessary for there to be actual refusal on the part of a dominant undertaking, so the 'constructive' refusal is sufficient (see Section 3.1. of Chapter 5). For instance, it might take the form of unduly delaying or otherwise degrading the supply of the product or involve the imposition of unreasonable conditions in return for the supply[242].

In order to consider that a refusal to deal might *prima facie* constitute an abuse, the following circumstances must be present. First, the refused input is objectively necessary in order to manufacture a product or provide a service by dominant undertaking's competitors and thus, to be able to compete effectively on the downstream market. Second, the refusal is likely to lead to consumer harm. And third, the refusal is likely to lead to the elimination of effective competition on the downstream market[243].

Once ensured that the aforementioned three elements are fulfilled, it is necessary to asses if the dominant undertaking behaviour is objectively justified or it is an arbitrary refusal. For instance, if a dominant undertaking has previously supplied the input in question, this can be relevant for the assessment of any claim that the refusal to supply is justified on efficiency grounds[244]. Although at the same time, the fact that the owner of the essential input in the past has found it in its interest to supply, it might be an indication that supplying the input does not imply any risk that the owner receives inadequate compensation for the original investment. Therefore, it would be up to the dominant company to demonstrate why circumstances have actually changed in such a way that the continuation of its existing supply relationship would put in danger its adequate compensation[245].

[239] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 78.
[240] ibid, paras 79 and 84.
[241] Case C-418/01 *IMS Health* [2004] ECR I-05039, para 44.
[242] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 79.
[243] ibid, paras 76 and 81.
[244] ibid, para 90.
[245] ibid, para 84.

1.3.2.6. Enforcing patent rights

The dominant undertaking whose IPRs have been violated, has the right to enforce them, even when it owns SEPs. Therefore, it can bring actions for a prohibitory injunction and the recall of products in SEP infringing proceedings.

However, as it was briefly explained in the Section 'Statement of the problem' of the Introduction – and it will be deeply analysed in Chapters 3 and 4 –, the EC and the ECJ reckon that in certain circumstances, the aforementioned SEP owners' conduct may amount to an abuse. That is to say, when the conduct does not pursue the defence of IPRs, but the exclusion of competitors. Accordingly, they treat the issue as a specific and novel category of abuse within the meaning of Article 102 TFEU.

Nevertheless, the aim of this research is to defend that SEP owners' conduct should have been qualified as a 'constructive' refusal to deal – to grant SEP licenses – that would be remedied with compulsory licenses (see Chapter 5), instead of as a novel category of abuse.

1.3.3. Discriminatory abuse

The abuse of a dominant position may also consist in applying dissimilar conditions (prices or other terms) to equivalent transactions with other trading parties, where that difference cannot be justified, thereby placing them at a competitive disadvantage [Article 102(c)][246].

Although some[247] defend that there are three types of abuse in Article 102 TFEU (the exploitative, the exclusionary and the discriminatory) – as it was explained so far –, I consider that discrimination constitutes either an exploitative abuse or an exclusionary abuse[248]. Namely, when a dominant undertaking charges different prices (usually, excessive prices) or compels some customers to buy under unfair terms, it is exploiting them. In the same vein, when the dominant firm refuses to deal with a specific competitor (discriminating it against others), it is excluding it from the market.

1.4. Effects on trade between Member States

The last legal element of Article 102 TFEU to conclude that the abusive conduct is prohibited as incompatible with the internal market, it requires that the abuse of a dominant position may affect trade between Member States. The purpose of that condition is to define, in the context of the law governing competition, the boundary between the areas respectively covered by EU law and the law of EU Member States,

[246] 'Abusing a dominant position–overview' (n 86), para 21.
[247] John Temple Lang, 'Article 82 EC - The Problems and the Solution' (2009) FEEM Working Paper No. 65, 2, para 5 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1467747> accessed 16 December 2018.
[248] Alfaro Águila-Real, *El abuso de posición dominante* (n 109), para 103.

because the EU competition rules are not intended to remedy situations which are purely internal to a Member State.

It follows from the case law that for that requirement to be fulfilled, the following three elements must be present.

First, trade between Member States must be affected. The concept of trade is not limited to traditional exchanges of goods and services across borders, but covers all cross-border economic activity. In addition, it also encompasses practices affecting the competitive structure of the internal market by eliminating or threatening to eliminate a competitor operating within the territory of the European Union (EU)[249].

Second, a practice must be capable of having an effect on trade between Member States. This notion implies that it must be foreseeable with a sufficient degree of probability on the basis of a set of objective factors of law or fact that the practice in question may have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States. Where a dominant undertaking engages in abusive conduct in more than one Member State, such abuse is normally, by its very nature, capable of affecting trade between Member States[250].

Third, the effect on trade between Member States must be appreciable. This is assessed primarily with reference to the position of an undertaking on a relevant product market. The stronger the position of an undertaking, the more likely it is that the effect on trade between Member States of a practice will be appreciable. Moreover, when the holder of a dominant position obstructs access to the market by competitors, it makes no difference whether such conduct is confined to a single Member State, as long as it is capable of affecting patterns of trade and competition on the common market[251].

2. Enforcement of competition law: Regulation 1/2003

Article 105(1) TFEU states that the EC shall investigate cases of suspected infringement of Articles 101 (collusive practices) and 102 (abuse of dominant position) TFEU and propose appropriate measures to bring it to an end, that are provided for in Regulation 1/2003[252]. As it will be studied below, these measures are divided into three categories: remedies, sanctions and binding commitments. At the same time, remedies are classified

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[249] Joined Cases 6/73 and 7/73 *Commercial Solvents* [1974] ECR I-223, paras 32 and 33; Joined Cases T-24/93 and others *Compagnie Maritime Belge Transports and Others v Commission* [1996] ECR II-1201, para 203.

[250] *United Brands* (n 94) [201] and [202]; *Hoffmann-La Roche* (n 110) [125]; *Hugin* (n 135) [17]; *Michelin* [ECJ, 1983] (n 93) [104]; Case C-41/90 *Höfner and Elser* [1991] ECR I-01979, para 32; *Irish Sugar* (n 210) [170]; Case C-5/69 *Franz Völk v Établissment J. Vervaecke* [1969] ECR I-295, paras 5-7; Commission, 'Commission Notice — Guidelines on the effect on trade concept contained in Articles 81 and 82 of the Treaty' (2004) OJ C101/81, para 75.

[251] *Franz Völk* (n 250) [5]–[7]; Case T-65/89 *BPB Industries and British Gypsum v Commission* [1993] ECR II-389, para 138; *Michelin* [ECJ, 1983] (n 93) [103].

[252] Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1 (Regulation 1/2003), Art 4.

as behavioural and structural remedies. And sanctions are sorted as fines and periodic penalty payments.

In addition, the competition authorities of Member States[253] – acting on their own initiative or on a complaint – and the national courts[254] have also the power to apply Articles 101 and 102 TFEU in individual cases, imposing the same antitrust measures that the Commission is empowered to order, as well as any other penalty provided for in their national law. Furthermore, under Article 3(1) of Regulation 1/2003, where a National Competition Authority or national court applies national competition law to any conduct that would also be illegal under Article 102, it must also apply Article 102 TFEU[255].

2.1. Remedies

In accordance with Article 7(1)[256] of Regulation 1/2003, if the Commission, acting on a complaint or on its own initiative, finds there is an infringement of Article 101 or 102 TFEU, it may impose any behavioural or structural remedies which are proportionate to the infringement committed and necessary to bring the infringement effectively to an end. According to the ECJ[257], it means the Commission has the power not only to prohibit 'the continuation of certain action, practices or situations which are contrary to the Treaty', but also to 'include an order to do certain acts or provide certain advantages which have been wrongfully withheld'. In the same vein, the ECJ[258] and the CFI[259] expressly acknowledged that the Commission must be able to exercise the right to take decisions conferred upon it, in the most efficacious manner, best suited to the circumstances of each given situation.

In addition, Article 8(1) of Regulation allows the Commission, in cases of urgency due to the risk of serious and irreparable damage to competition, to order interim remedies on the basis of a *prima facie* finding of infringement.

It is important to bear in mind that unlike fines (see below), remedies are not intended to punish, but to restore competition in the sense of eliminating the consequences of the infringement, for instance, of the abuse of a dominant position. Besides, in contrast with

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[253] ibid, Art 5.
[254] ibid, Art 6.
[255] Slaughter and May, 'An Overview of EU Competition Rules' (2016), 15, para 3 <https://www.slaughterandmay.com/media/64569/an-overview-of-the-eu-competition-rules.pdf> accessed 4 August 2018.
[256] Ex Article 3(1) of Council Regulation (EEC) 17/62 of 21 February 1962 Regulation No 17: First Regulation Implementing Articles 85 and 86 of the Treaty [1962] OJ 13/204.
[257] *Commercial Solvents* (n 249) [45]; Joined Cases C-241/91 P and C-242/91 P *Magill* [1995] ECR I-743, para 90; *Irish Sugar* (n 210) [298]; Case T-128/98 *Aéroports de Paris v Commission* [2000] ECR II-3929, para 82.
[258] Case 792/79 R *Camera Care* (ECJ, 17 January 1980), para 17; Joined Cases*,* 228 and 229/82 R *Ford v Commission* (ECJ, 29 September 1982).
[259] Case T-44/90 *La Cinq* [1992] ECR II-00001.

fines, the imposition of remedies does not require a finding of negligence, let alone intent[260].

2.1.1. Behavioural remedies

Behavioural remedies try to redress specific conducts in a context where incentives remain essentially unchanged. They can be subdivided into conduct remedies and performance remedies.

Conduct remedies oblige to act in a certain way or prohibit a certain conduct. For instance, when Article 102 TFEU is violated because the dominant undertaking abused its dominant position for refusing to deal (Chapter 2), it is common to impose a conduct remedy that consist in the general obligation to do what the dominant undertaking refused to do (to oblige to deal). Bearing in mind that the concept of refusal to deal covers a broad range of practices, the conduct remedies also impose different obligations to fulfil them on a non-discriminatory basis. Hence, when the dominant company refused to supply goods or services, it will be ordered to supply third parties with them. If the dominant firm refused to grant access to an essential facility or network, the conduct remedy will consist in imposing the obligation to provide third parties with access to them. In the same vein, whether the dominant undertaking refused to license IPRs, the conduct remedy will consist in the obligation to grant licenses (the so-called compulsory license, that will be analysed in detail in Section 5 of Chapter 2, because it constitutes the main measure to remedy the refusal to license IPRs).

And performance remedies directly prescribe or prohibit certain market outcomes. Such remedies would include, for instance, production level maintenance, price control, production increases or export increases. The Commission, in its past practice in antitrust, has generally not used these types of remedies that seem to amount more to a regulatory approach, than to that of an antitrust enforcement agency.

In contrary to structural remedies (see below), the compliance with behavioural remedies has to be monitored and enforced[261].

2.1.2. Structural remedies

In light of Recital 12 of Regulation 1/2003, structural remedies are aimed at changing the structure of an undertaking by a transfer of property rights regarding tangible or intangible assets, including the transfer of an entire business unit. The most common one is the divestiture of an existing business in merger cases.

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[260] Maier-Rigaud, Hellström and Wenzel Bulst, 'Remedies in European Antitrust Law' (n 80) 50, para 2.
[261] Delegation of the European Commission to the Competition Committee, 'Roundtable on remedies and sanctions in abuse of dominance cases' DAF/COMP/WD(2006)34 (OECD), paras 38-42 <http://ec.europa.eu/competition/international/multilateral/2006_june_remedies_sanctions.pdf> accessed 4 August 2018.

Structural remedies can only be imposed either where there is no equally effective behavioural remedy or where any equally effective behavioural remedy would be more burdensome for the undertaking concerned than the structural remedy. If both types of remedies are considered 'equally effective', the least 'burdensome' remedy for the undertaking has to be chosen[262]. However, it is not obvious *prima facie* that these categories of remedies (behavioural and structural) are more or less burdensome in terms of fundamental rights. While behavioural remedies bear upon the freedom to conduct a business, including the freedom to contract, structural remedies may have a bearing on property rights if, for instance, a sale of assets is required. As a result, even in those rare cases where behavioural and structural remedies are equally effective, structural remedies cannot automatically be considered more burdensome[263].

2.2. Sanctions

2.2.1. Fines

According to Article 23(2) of Regulation 1/2003, the Commission may impose fines on undertakings where, either intentionally or negligently: (i) infringe Articles 101 or 102 TFEU; or (ii) contravene a decision ordering interim measures under Article 8 of Regulation 1/2003; or (iii) fail to comply with a commitment made binding by a decision pursuant to Article 9 of Regulation 1/2003 (see below the 'binding commitments').

Unlike remedies, fines cannot be considered as an instrument capable of restoring competition because their aim is to punish. So far, the ECJ has not ruled out other objectives that remedies – in a broad sense – may also pursue, such as deterrence, compensation, or punishment. However, fines do not either constitute a perfect deterrent. Otherwise, remedies would be unnecessary[264].

2.2.2. Periodic penalty payments

In accordance with Article 24(1) of Regulation 1/2003, the EC might also impose periodic penalty payments for each day of delay in compliance to compel undertakings, among others: (i) to put an end to an infringement of Articles 101 or 102 TFEU; (ii) to comply with a decision ordering interim measures; or (iii) to comply with a commitment made binding.

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[262] On the concepts of 'equally effective' and 'burdensome', see Michael Adam and Frank P. Maier-Rigaud, 'The Law and Economics of Article 82 EC and the Commission Guidance Paper on Exclusionary Conduct' (2009) ZWeR online 131 <https://www.zwer-online.de/heft-1-2009/zwer-2009-131-the-law-and-economics-of-article-82-ec-and-the-commission-guidance-paper-on-exclusionary-conduct/> accessed 4 August 2018.

[263] Maier-Rigaud, Hellström and Wenzel Bulst, 'Remedies in European Antitrust Law' (n 80) 47, para 3.

[264] ibid 44, para 2, 45, para 1, 46, para 1 and 48, para 3.

2.3. Binding commitments

When the Commission intends to adopt a decision requiring that an infringement be brought to an end, the undertakings concerned may offer commitments to meet the concerns expressed to them by the Commission in its preliminary assessment. Accordingly, the Commission may – by decision – make those commitments binding based on Article 9 of Regulation 1/2003. Such a decision may be adopted for a specified period and shall conclude that there are no longer grounds for action by the Commission.

However, the Commission may also, upon request or on its own initiative, reopen the proceedings: (i) where there has been a material change in any of the facts on which the decision was based; (ii) where the undertakings concerned act contrary to their commitments; or (iii) where the decision was based on incomplete, incorrect or misleading information provided by the parties.

The commitment decisions do not state that there was not an abuse of a dominant position or that, if these commitments are met, the existence of competition law infringements can be excluded. The only thing that they establish is that, if the commitments are fulfilled, the Commission will not impose fines for the investigated conducts. And in case of non-compliance, this will generate the same consequences that would be applicable if the decision would have declared the existence of an abuse of a dominant position. In that case, the Commission would not have to proof the existence of the abuse[265].

Conclusion

In order to conclude that a conduct is abusive according to Article 102 TFEU, it is necessary to begin from defining the relevant market that consists in identifying the relevant products or services and the geographical location where they are offered (sometimes, it may also be relevant to define the temporal time in which they are marketed). In summary, the relevant market comprises all those goods or services considered substitutes from the demand perspective. That is to say, if when a firm increases prices its customers are in a position to switch easily to available substitute products or to supplier located elsewhere, those effective alternative sources of supply, in terms both of products/services and of geographic location of suppliers, will compound the relevant market. And under certain circumstances, the market could be expanded by attending to considerations of substitutability from the point of view of the supply.

Then, it must be determined if the undertaking in question holds a dominant position. That is to say, competition authorities or courts have to determine whether it behaves, to an appreciable extent, independently of its competitors and customers and ultimately of consumers. In that regard, the EC has applied the ECJ's case law that establishes a 'presumption of dominance' according to which very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position.

[265] Alfaro Águila-Real, *El abuso de posición dominante* (n 109), para 282.

Nevertheless, it should be emphasised that although market share may provide an indication of dominance – and sometimes a very strong indication –, in the end a full economic analysis of the overall situation (*e.g.* undertaking's structure and barriers to entry) is necessary. For instance, it is unlikely that an undertaking with a persistently large market share holds a dominant position, if it is a market with very low entry barriers, because it is constantly threatened by potential competitors. While an undertaking with a large market share in a market protected by significant entry barriers is likely to have market power.

Focusing on those dominant undertakings that own SEPs (that may make their owners to be powerful in the market), due to the divergent interests among members of SSOs that develop interface standards, organizations usually request them to commit that they will license their patents under FRAND terms, to prevent them from behaving opportunistically. However, that mechanism does not prevent that their conducts may be abusive. Regarding exploitative abuses, there is still an ongoing debate among economists and legal scholars about the existence, in practice, of systematic holdup and royalty stacking. Nonetheless, the exclusionary conduct of bringing actions for a prohibitory injunction and the recall of products is the subject matter of the following chapters. And specifically, their aim is to defend that this conduct should be treated as a 'constructive' refusal to deal – to grant SEP licenses – and not as a novel category of abuse in the framework of Article 102 TFEU.

To confirm the conclusion that *prima facie* a specific conduct is abusive, it is relevant to assess the claims of the dominant undertaking to determine if the conduct may be justified, demonstrating that is objectively necessary or that produces substantial efficiencies which outweigh any anti-competitive effects on consumers.

The last legal element to take into account to find an infringement according to Article 102 TFEU, is that the abuse of a dominant position may affect trade between Member States.

Once the existence of the infringement is determined, the competent authority – based on the Regulation 1/2003 – could impose remedies or/and fines to the dominant undertaking or make commitments binding by a decision.

CHAPTER 2. REFUSAL TO DEAL. REFUSAL TO LICENSE IPRs

Introduction

As it was explained before – Section 1.2.2.3. of Chapter 1 –, the existence of IPRs may constitute an entry barrier, when they are essential in order to market goods or services by competitors. In the same vein, exclusionary behaviours, such as the refusal to deal and more specifically, the refusal to license IPRs, may also create barriers to entry. Accordingly, these barriers to entry will be taken into account to determine if the undertaking holds a dominant position.

Whereas in this chapter, it will be analysed whether the refusal to license IPRs constitutes an abuse of dominant position. To that end, it is appropriate to take as a starting point, the principle of freedom of the parties to arrange their own affairs. Moreover, it is also important to refer to the range of practices that the concept refusal to deal covers, apart from the refusal to license IPRs. In fact, I am referring to the refusal to supply goods or services and the refusal to grant access to an essential facility. Accordingly, generally speaking, the required circumstances to determine if a refusal to deal is abusive are common to all range of practices. First, the refused input is objectively necessary in order to manufacture a product or provide a service by dominant undertaking's competitors and thus, to be able to compete effectively on the downstream market. Second, the refusal is likely to lead to consumer harm. Third, that the refusal is arbitrary. And fourth, the refusal is likely to lead to the elimination of effective competition on the downstream market.

However, as the subject of study of this chapter is the refusal to license IPRs, I will focus on the specific circumstances that must be present to consider that behaviour to be abusive. In order to do that, firstly, I will briefly describe the case law that deals with the refusal to grant IP licenses and also the procedural framework of each case for a better understanding.

Secondly, I will analyse together (referring to all the cases subject of study), some of the elements of the antitrust infringement required by Article 102 TFEU, that is to say, the relevant market definition, the dominance position and the effects on trade between Member States. However, the element regarding the abuse of dominance will be studied in respect of each case, because each of them uses different criteria to determine if a refusal to grant IPRs is abusive. In general terms, the above causes an uncertainty about the required circumstances to assess if the behaviour is abusive or not, so a proposal to avoid the inconsistency is necessary, as it will be explained in Chapter 5, where I defend the following. That SEP owners' behaviour of bringing infringement actions should have been treated as a 'constructive' refusal to deal – to grant IP licenses –, based on a revised version of the case law that causes the inconsistency. Nevertheless, the ECJ in *Huawei v. ZTE* (Chapter 4) treated that behaviour as a specific and novel category of abuse within the meaning of Article 102 TFEU.

With reference to the enforcement of competition law, out of the six cases that will be deeply studied in this chapter, only in two of them is considered – on the merits – that the refusal to grant IP licenses is abusive. And in a third case, the behaviour is also considered abusive but only at *prima facie* (not being confirmed by the decision on the merits). In the three cases, the measure (the interim one, included) imposed to remedy the anti-competitive infringement is the compulsory license, for being the most appropriate one. Consequently, thirdly, I will specifically refer to that behavioural remedy in general terms and later on, I will develop the particularities that the measure presents in each case studied.

1. The principle of the freedom of the parties to arrange their own affairs

The right to choose one's trading partners and freely to dispose of one's property, that is, the freedom to contract, are generally recognised principles in the laws of the EU, Member States and US, as a fundamental aspect of freedom of trade. And in some cases, even with constitutional status. Therefore, incursions on those rights require careful justification. This is why, as it will be explained below, a dominant undertaking may be obliged to contract only in exceptional circumstances. That, because the general rule is that the dominant undertaking is free to decide that does not want to contract, because for example, it wants to choose the company's client or to improve efficiency[266].

According to the US courts and the ECJ, one of those exceptional circumstances is justified in terms of competition policy. In that regard, they state that a dominant undertaking might be compelled to enter a binding contract when the refusal to supply goods or services or to grant IP licenses entails the elimination or substantial reduction of competition. And in consequence, it may lead to higher prices or decrease of the quality of services or goods – in relation to price – to the detriment of consumers.

2. Types of abusive refusal to deal

The concept of refusal to deal covers a broad range of practices, such as the refusal to supply goods or services, the refusal to grant access to an essential facility and the refusal to license IPRs.

2.1. Refusal to supply goods or services

In two early cases (*Commercial Solvents* and *United Brands*), the ECJ made it clear that the cutting off of supplies to an existing customer might constitute an abuse relying on Article 102 TFEU, when the behaviour of the dominant undertaking does not respond to a business strategy, but it aims to reserve the downstream market for itself, eliminating all the competition from it. And subsequently, in another case (*Télémarketing*), basing on *Commercial Solvents*, the ECJ extended that conclusion to cases where the dominant

[266] *Bronner* AG (n 153) [56].

undertaking conditioned the supply of a service, to the acceptance of an unfair contractual condition. The EC also considered instances of refusal to supply in a long line of cases.

In *Commercial Solvents*[267], the Court held that an undertaking in a dominant position as regards production of a raw material, could not cease supplying an existing customer who manufactured derivatives of the raw material, simply because it decided to start manufacturing the derivative itself and wished to eliminate its former customer – one of the principal manufacturers of the derivative – from the downstream market.

Similarly, in *United Brands*[268], the ECJ held that an undertaking in a dominant position marketing a specific brand of bananas (known to and valued by consumers), could not stop supplying a long standing ripener-distributor, only because it also began promoting another brand of bananas and taking less care in the ripening of dominant company's bananas. As it was already aforementioned, a dominant undertaking is allowed to protect its own commercial interests if they are attacked (the principle of the freedom of the parties to arrange their own affairs). However, the aim of the dominant undertaking was to send a message to other ripener/distributors, discouraging them from supporting the advertising of other brand names if they wanted to continue being supplied by it. Namely, the goal was to eliminate competing banana brands from the downstream market. Therefore, the Court understood that that behaviour could not be countenanced.

In *Télémarketing*[269], a broadcasting company that run a television station and its subsidiary company that was its exclusive agent for television advertising, held a dominant position on the specific market of television advertising. During a year, a company that operated in the telemarketing activity concluded an agreement to conduct telemarketing operations on the television station. The telephone number shown to television viewers was that of the company in question, which made its telephone lines and team of telephonists available to advertisers and to the television station. However, on the expiry of that agreement, the dominant company stated that would no longer conclude agreements unless the telephone number used was that of the subsidiary company. As the refusal was not justified by technical or commercial requirements relating to the nature of the television, the broadcasting company's aim with that behaviour was to reserve to its subsidiary the telemarketing activity, excluding competitors from the market, what would enable it to raise prices to advertisers.

The ECJ reckoned that the reasoning developed in *Commercial Solvents* with respect to the cut off of goods, it was applicable to the case of a dominant undertaking who conditioned the supply of a service to the acceptance of an unfair contractual conditions, a service that was indispensable for the activities of another undertaking on another market. Therefore, the Court[270] stated the principle that an undertaking holding a

[267] (n 249) [25]
[268] (n 94) [182], [189] and [192].
[269] (n 110) [19], [20], [25] and [26].
[270] ibid [27].

dominant position on a particular market commits an abuse where without any objective justification refuses to supply a service and hence, eliminating all competition on a on neighbouring but separate market (*i.e.* television telemarketing).

All in all, according to the case law on refusal to supply goods or services, the following elements must be present to consider that it is an abusive behaviour. The good or service must be essential in order to manufacture a product or provide a service by dominant undertaking's competitors. The refusal is likely to lead to consumer harm (*e.g.* less offer or higher prices). And the refusal is likely to lead to the elimination of effective competition on the downstream market, to reserve it for itself.

Albeit I will not go into a detailed analysis, it is worth mentioning that the EC also considered instances of refusal to supply goods and services in a long line of cases, pushing the dominant party to supply them, as long as they were essential to offer goods and services in the market. Examples include the following cases. The Commission issued a Statement of Objections (SO) against International Business Machines (IBM) for refusing to supply certain software installation services to users of non-IBM central processing units, although the Commission finally suspended the proceedings because the company agreed to supply[271]. The Commission also started an investigation into a possible abuse of a dominant position by Polaroid for refusing to supply instant film without any guarantee as to where the film would be resold. However, as it also agreed to supply, the Commission closed the file on the case[272]. The Commission also investigated the refusal to supply industrial sugar to a producer of refined sugar, by reducing the price difference between retail and industrial sugar to a point at which the margin for an independent producer of retail sugar was inadequate[273]. And also the refusal by an airline to allow a competing airline access to a computer reservation system, in order to put pressure on the other airline to raise fares or withdraw from a route[274]. Or the refusal to interline (to issue tickets on behalf of another airline), when another airline began to compete on a route[275].

2.2. Refusal to grant access to an essential facility

Although neither the General Court (GC) or the ECJ have never referred in their case law to the 'essential facilities doctrine' that has its origins in US antitrust law, some commentators[276] have seen the rulings in *Commercial Solvents, Télémarketing* and

[271] Commission, 'Averting the Danger of an Abuse of a Dominant Position: the IBM Case' (1984) 17(No 7/8) Bulletin of the European Communities 7, 7-9 (there was no published decision by the EC, only this note in the EC Bulletin).

[272] Commission, 'Article 86 applied to abuse of dominant position. Termination of refusal to sell. *Polaroid/SSI*' (1984) Thirteenth Report on Competition Policy, p 95, paras 155-157.

[273] *Napier Brown v British Sugar* (Case IV/30.178) Commission Decision 88/518/EEC [1988] OJ L284/41.

[274] *London European v Sabena* (Case IV/32.318) Commission Decision 88/589/EEC [1988] OJ L317/47.

[275] *British Midland v Aer Lingus* (Case IV/33.544) Commission Decision 92/213/EEC [1992] OJ L96/34.

[276] Among others, Albertina Albors-Llorens, 'The "Essential Facilities" Doctrine in EC Competition Law' (1999) 58(3) The Cambridge Law Journal 490, 491-492; Mats A. Bergman, 'The Role of the Essential Facilities Doctrine' (2001) 46 The Antitrust Bulletin 403, 406, para 3; Sébastien J. Evrard, 'Essential

especially *Magill* (see below) as endorsements by the ECJ and the CFI of that doctrine. According to it, a company that holds a dominant position in the provision of facilities – that are essential for the supply of goods or services on another market –, abuses its dominant position if without objective justification refuses access to them. Accordingly, in certain cases, a dominant undertaking must not merely refrain from anti-competitive actions, but must actively promote competition by allowing potential competitors access to the facilities it owns[277].

Nevertheless, that doctrine has increasingly employed by the Commission in its decisions. Its first express reference to the 'essential facilities doctrine' was made in *B&ILine plc v. Sealink Harbours Ltd and Sealink Stena Ltd*[278] and *Sea Containers v. Stena Sealing*[279], where it imposed two interim measures. In both cases, the port operator held a dominant position on the market in port services and it also operated in the secondary market offering ferry services. When potential competitors requested access to the port of Holyhead to offer ferry services, the dominant company refused access without objective justification, even though that access was essential for potential competitors to provide ferry services. Therefore, the dominant undertaking used its power in the main market (port services) in order to protect or strengthen its position in the ancillary market (ferry services), so competitors could not provide ferry services to their customers.

In deciding whether a facility is essential, the Commission estimated the extent of the handicap and whether it was permanent or merely temporary. The test to be applied was described by Temple Lang[280], as whether the handicap resulting from the denial of access was one that could reasonably be expected to make competitors' activities in the market in question either impossible or permanently, seriously and unavoidably uneconomic. If so, that would be an insurmountable barrier to entry. If competitors had an economic alternative, no such barrier to entry would be created or raised, and there would no duty to provide access.

The reason why some scholars understood that the ECJ and the CFI tacitly endorsed this doctrine in their judgments is because the Commission – who expressly referred to the 'essential facilities doctrine' in the aforementioned two decisions – based the statement of the law concerning the access to the port of Holyhead, on the previous rulings of the

Facilities in the European Union: *Bronner* and beyond' (2004) 10 Columbia Journal of European Law 491, 491, para 4; James Turney, 'Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: The Primacy of Securing Optimal Innovation' (2005) 3(2) Northwestern Journal of Technology and Intellectual Property 179, 187, para 29 and 188, para 33; Cliodhna O'Connell, 'Evolution and Development of the Essential Facilities Doctrine in a European Competition Law Context' 2, para 2 and 3, para 3 <https://sjeldraft.files.wordpress.com/2014/05/evolution-and-development-of-the-essential-facilities-doctrine-in-a-european-competition-law-context.pdf> accessed 31 July 2018 (unpublished).

[277] *Bronner* AG (n 153) [34] and [45].

[278] (Case IV/34.174) Commission Decision [1992].

[279] (Case IV/34.689) Commission Decision 94/19/EC [1993] OJ L15/8.

[280] John Temple Lang, 'Defining legitimate competition: companies' duties to supply competitors, and access to essential facilities' (1994) 18(2) Fordham International Law Journal 437, 488, para 1.

ECJ in *Commercial Solvents*[281] and *Télémarketing*[282] and on the judgment of the CFI in *Magill*[283] (see below).

2.3. Refusal to license IPRs

After ruling on the cases of refusal to supply goods and services, the ECJ dealt with the issue of whether a refusal to grant IP licenses by a dominant company might constitute an abuse. So far, the objects of the refusal were goods or services, but not IPRs. Hence, factors such as cutting off of supplies to an existing customer (*Commercial Solvents* and *United Brands*) or conditioning the supply of the service to the acceptance of an unfair contractual condition (*Télémarketing*) were no present.

As it will be analysed below, the issue of determining under which circumstances a refusal to grant IP licenses might be abusive is a very controversial one. Therefore, first of all, it is convenient to explain the statement of the problem and to summarize the background of the decisions and judgments of the EC and the ECJ, as well as their procedural framework. That is to say, how the case got to the CFI or the ECJ. Either through a reference for a preliminary ruling, an action for annulment of Commission decision or a combination of both (preliminary ruling and action for annulment). As it will be explained, the procedural framework of *IMS Health* requires special attention due to its complexity.

3. Refusal to license IPRs: the case law

3.1. Statement of the problem

The problem that arises before the ECJ, first, in *Volvo* and *Renault*, and afterwards in *Magill* and in the cases subsequent to it (*Tiercé Ladbroke*, *IMS Health* and *Microsoft*) – where the same line of argument applies –, is the following. Whether a holder of an IPR, who refuses to grant a license, abuses its dominant position because that conduct limits production, the market or technical development to the prejudice of consumers, insofar as it may affect trade between Member States, according to Article 102 (b) TFEU·

This issue emerges when the IP owner holds a dominant position within the internal market or in a substantial part of it and refuses to grant a license to its competitor to use the IPR in question. In consequence, the competitor is not able to offer its product and compete in the same (downstream or secondary) market where the dominant company also operates, because the use of the protected invention or creation is essential for it.

[281] (n 249).
[282] (n 110).
[283] Case T-69/89 *Magill* [1991] ECR II-485 (RTE company); Case T-70/89 *Magill* [1991] ECR II-00535 (BBC company); Case T-76/89 *Magill* [1991] ECR II-575 (ITP company).

Accordingly, parties' interests conflict with each other. The owner has the right to the legitimate exert of its IPR [Articles 16 and 17(2) of the Charter[284]]. And given the case, the competitor will be protected by the right to conduct a business under conditions of free competition (Article 119 and Protocol No 27 of TFEU and Article 16 of the Charter).

3.2. Case briefs and procedural framework

3.2.1. *Volvo* and *Renault*

The High Court of Justice of England and Wales (in *Volvo*[285]) and the *Tribunale Civile e Penale* of Milan (in *Renault*[286]), brought before the ECJ requests for preliminary rulings on the interpretation of Article 102 TFEU, that was relevant to solve their pending IP infringement proceedings.

By virtue of the questions submitted, the Court was essentially confronted by the following problem. Whether, under Article 102 TFEU, motor vehicle manufacturers were abusing their dominant position when refusing to grant licences, even in return for reasonable royalties. Specifically, they did not want to grant licenses of protected rights in respect of front wings models (in *Volvo*) and ornamental designs (in *Renault*) of bodywork components for vehicles manufactured by them. The aim of the refusal was to prevent the marketing of copies of original bodywork components, by independent traders (in *Volvo*) or producers (in *Renault*).

3.2.2. *Magill*

Most television viewers in Ireland and Northern Ireland could receive at least six television channels that were broadcasted by three companies: Radio Telefis Eireann Authority (RTE), the British Broadcasting Corporation (BBC) and Independent Television Publications Ltd (ITP). In the framework of their television broadcasting activities, each of them prepared weekly programme listings for their channels indicating the channel, the dates and times of the transmissions and the titles of the programmes, that were protected by copyright at the national level. Therefore, they enjoyed the exclusive right to reproduce and market their respective individual weekly programme listings in their own television guides, that typically also contained programme summaries, comments, background articles and so forth.

In addition, the daily and weekly newspapers received advance weekly listings together with any programme summaries free of charge on request from the three companies. However, the publication of the listings by newspapers was subject to certain conditions. In principle daily newspapers were permitted to publish listings for a period of 24 hours,

[284] (n 58) Art 16 (freedom to conduct a business) and Art 17 (right to property).
[285] Case C-238/87 *Volvo* (ECJ, 5 October 1988), paras 2-4; *Volvo* AG (n 138) [2].
[286] Case C-53/87 *Renault* (ECJ, 5 October 1988), paras 1-2; Case C-53/87 *Renault* (ECJ, 5 October 1988), Opinion of AG Jean Mischo, para 1.

or 48 hours at weekends. And weeklies were allowed to publish 'highlights' of the programmes to be broadcast during the following week.
As a consequence, unlike in other Member States, in Ireland and Northern Ireland there were not television guides containing all weekly programme listings for the channels (comprehensive weekly television guides), because of the refusal of the three companies to grant licences permitting third parties to publish their weekly programme listings without restrictions (channel, day, time and title of programmes).

Magill was a publishing company that published a weekly newspaper that complied with the licensing conditions required by the three companies. However, it wanted to publish a comprehensive weekly television guide, but it could not do it due to the refusal of the three companies. Therefore, Magill lodged a complaint with the EC claiming that television broadcasting companies were abusing their dominant position on the market by refusing to grant licences. The Commission in its decision[287] decided in favour of Magill, stating that companies abused their dominant positions[288] according to Article 102 TFEU and it imposed on them the obligation to grant licenses to third parties (as a permanent measure), to remedy the aforementioned abuse.

Accordingly, IP owners applied for annulment of Commission decision, but the CFI[289] ruled in favour of the Commission, dismissing the action for annulment. The judgment of the CFI was appealed by two (RTE and ITP) of the three infringing companies before the ECJ[290], who dismissed the appeal against the opinion of the Advocate General Gulmann[291].

3.2.3. *Tiercé Ladbroke*

The French Pari Mutuel Urbain (PMU) was an economic interest grouping set up by the principal French *sociétés de courses* that organized horse races in France and it had exclusive responsibility for organizing off-course betting in France. Besides, PMU had also exclusive rights to take bets abroad on races organized in France and bets in France on races organized abroad. In addition, the *sociétés de courses* granted the right to market television pictures and sound commentaries on horse races organized by them in France (hereinafter referred to as 'French sound and pictures' protected by copyrights) to PMU. The scope of the right for the commercial exploitation of French *sociétés de courses*' copyrights referred to: broadcasting in real time over PMU bet-taking network in France and retransmission in Germany and Austria.

[287] *Magill* (Case IV/31.851) Commission Decision 89/205/EEC [1988] OJ L78/43.
[288] *Magill* [CFI, 1991 (RTE)] (n 283) [2]–[14].
[289] ibid [17]–[85] (annulment of EC's whole decision) and [86]–[110] (annulment of Article 2 of EC's decision); *Magill* [CFI, 1991 (BBC)] (n 283) [15]–[67] (annulment of EC's whole decision) and [68]–[79] (annulment of Article 2 of EC's decision); *Magill* [CFI, 1991 (ITP)] (n 283) [14]–[66] (annulment of EC's whole decision) and [67]–[83] (annulment of Article 2 of EC's decision).
[290] *Magill* [ECJ, 1995] (n 257) [105.1].
[291] Joined Cases C-241/91 P and C-242/91 P *Magill* [1995] ECR I-743, Opinion of AG Gulmann.

Pari Mutuel International (PMI), a French company in which PMU was the majority shareholder, exploited outside France televised pictures and information on horse races organized in France. As PMU assigned the right to market French sound and pictures to PMI, PMI opted to grant Deutscher Sportverlag Kurt Stoof GmbH & Co. – a German company specialized in publishing horse-racing newspapers covering, among other things, French races –, the exclusive right to exploit French sound and pictures in Germany and Austria ('the licensed territory').

Tiercé Ladbroke, whose business consisted in admitting in Belgium individual bets on horse races run abroad, asked principal French *sociétés de courses* to grant rights for the commercial exploitation of their French sound and pictures in Belgium, but they refused to grant copyright licenses. Therefore, Tiercé Ladbroke lodged a complaint with the EC asking to bring to an end the infringement of Article 102 TFEU committed by principal French *sociétés de courses*. However, by a decision[292], the Commission rejected Ladbroke's complaint against French racing companies that held copyrights, on the grounds that they did not infringe Article 102 TFEU[293].

Accordingly, Tiercé Ladbroke applied for annulment of Commission decision before the CFI[294] who ruled in favour of the Commission, so Tiercé Ladbroke appealed the judgment before the ECJ[295], although later on, the appeal was removed from the register[296].

3.2.4. *Bronner*

Unlike the previous cases, *Bronner* is a case about a refusal to supply a service (newspapers' home-delivery system) and not about a refusal to grant an IP license. Nevertheless, the interest of its analysis lies in the fact that the ECJ examined whether the undertaking (Bronner) seeking access to the service could successfully rely on *Magill* case. This would imply to broaden the scope of application of *Magill* to any refusal to deal, regardless of the property right (tangible or intangible) that would constitute its object.

Having nuanced the above, the facts of the case in question were the following. The company Mediaprint published two Austrian daily newspapers: *Neue Kronen Zeitung* and *Kurier*. The marketing and advertising business of those newspapers was carried through its two wholly-owned subsidiaries. For the distribution of its newspapers, Mediaprint established a nationwide home-delivery scheme, put into effect through one of those

[292] *Tiercé Ladbroke* (Case IV/33.699) Commission Decision [1993], unpublished.
[293] Case C-300/97 P *Tiercé Ladbroke* (ECJ, 12 June 1997), paras 1-26.
[294] Case T-504/93 *Tiercé Ladbroke* [1997] ECR II-923.
[295] *Tiercé Ladbroke* [ECJ, 1997] (n 293).
[296] 'Appeal brought on 20 August 1997 by Tiercé Ladbroke SA against the judgment delivered on 12 June 1997 by the Second Chamber (extended composition) of the Court of First Instance of the European Communities in Case T-504/93 between Tiercé Ladbroke SA and the Commission of the European Communities, supported by the *Societe d'encouragement et des steeple-chases de France* and others' (Case C-300/97 P), OJ C318/7 (removal date: 11 February 1999).

intermediaries. The scheme consisted of delivering the newspapers directly to subscribers in the early hours of the morning.

The Bronner company, whose object was the editing, publishing, manufacture and distribution of the Austrian daily newspaper *Der Standard*, it asked Mediaprint to include its newspaper in its home-delivery scheme paying a reasonable remuneration. Nevertheless, Mediaprint refused to supply the service, so Bronner brought an action against the owner of the service before the national court, claiming that Mediaprint was abusing its dominant position on the ground that such refusal deprived it of a means of distribution that it judged as essential for the sale of its newspaper. That is, by reason of *Der Standard*'s small circulation, Bronner alleged that was unable either alone or in cooperation with other publishers to set up and operate its own home-delivery scheme in economically reasonable conditions[297].

In the framework of that proceedings, the Higher Regional Court (*Oberlandesgericht*) of Vienna brought before the ECJ a request for a preliminary ruling on the interpretation of Article 102 TFEU. The referred question was whether the refusal by a newspaper group – that held a substantial share of the market in daily newspapers in Austria – to allow the publisher of a competing newspaper to access to its home-delivery network (the only one nationwide), it constituted an abuse of a dominant position contrary to Article 102 TFEU[298].

3.2.5. *IMS Health*

Intercontinental Marketing Services (IMS) Health was a company that provided a broad range of market research, marketing, and sales management services to the pharmaceutical industry. In particular, it provided, through its German subsidiary, regional wholesaler data report services to interested pharmaceutical companies in respect of sales of pharmaceutical products by pharmacies throughout Germany. The services were based on a 'brick structure' that divided a country into artificially designated geographic areas or bricks that were used to report and measure sales of individual pharmaceutical products[299].

The IMS Health brick structure segmented Germany into 1860 or its derivatives – 2847 or 3000 – geographical areas, generically referred to as the '1860 brick structure'. It was copyrighted in Germany as a database and it was created by taking account of various criteria, such as the boundaries of municipalities, postcodes, population density, transport connections and the geographical distribution of pharmacies and doctors' surgeries. In the development process of the '1860 brick structure', IMS Health set up a working group in which undertakings in the pharmaceutical industry – that were its clients –, participated

[297] Case C-7/97 *Bronner* [1998] ECR I- 7791, paras 2-9.
[298] ibid [10], [11], [37] and [42]; *Bronner* AG (n 153) [1].
[299] Case T-184/01 R *IMS Health* [2001] ECR II-02349, para 1.

making suggestions for improving and optimising market segmentation[300]. In consequence, the German brick-structure-based information services soon constituted the central feature of IMS Health.

Moreover, IMS Health knew that in order to implement its strategy, it had to take into account the network effect. That is, when the demand of the product increases, the price should rise (as opposed to economies of scale), because as the size of the network increases, so does the market share[301]. Therefore, IMS Health was aware that in order to convince consumers that its structure would become the standard, it had to develop a large customer base (note that the value of the product for each consumer increases, as it does the number of users of the product)[302]. Accordingly, IMS Health did not only sold its brick structure, but it also distributed it free of charge among pharmacies and medical offices[303]. However, the sales promotions – sales below costs – are not predatory *per se* (see Section 1.3.2.3. of Chapter 1). The aim of IMS Health was to make the structure known, in the hope that consumers were going to be willing to continue buying the product at a higher price[304].

Therefore, these practices helped the '1860 brick structure' to become the *de facto* industry standard in Germany, to which its clients adapted their information and distribution systems, as it was recognized by pharmaceutical companies[305]. Namely, those laboratories made exceptional organisational and financial efforts in order to acquire the studies on regional sales of pharmaceutical products presented on the basis of the protected structure. Consequently, knowing that the brick structure was copyrighted, they placed themselves in a situation of technical dependency regarding it.

Although IMS Health also induced pharmaceutical companies to that situation, that behaviour could not be classified as abusive according to Article 102 TFEU. It is true that these companies organized their establishments and activities in accordance with the brick structure of IMS Health, with whom they had a long-term commercial relationship. Hence, a reorganization could only be accomplished with great damages for the dependent company[306]. Nonetheless, it would be difficult to sustain the existence of that infringement, because IMS Health 'placed' the pharmaceutical companies in that situation using legal means (*i.e.* setting up a working group and free of charge distribution). In case these companies had celebrated contracts whereby IMS Health

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[300] *IMS Health* [ECJ, 2004] (n 241) [5].
[301] Stan J. Liebowitz and Stephen E. Margolis, 'Causes and Consequences of Market Leadership in Application Software' (1999) SSRN Electronic Journal 6, para 2 <https://ssrn.com/abstract=165069> accessed 31 July 2018.
[302] Xavier Vives, 'Dimensión empresarial y competencia' (1999) 17(82) Economistas 14.
[303] *IMS Health* [ECJ, 2004] (n 241) [6].
[304] Phillip Areeda and Donald F. Turner, 'Predatory Pricing and Related Practices under Section 2 of the Sherman Act' (1975) 88(4) Harvard Law Review 697, 713.
[305] *IMS Health* [ECJ, 2004] (n 241) [4]–[6].
[306] Marta Zabaleta Díaz, 'La explotación desleal de la dependencia económica en Alemania. Eventual incorporación de sus conclusiones al Derecho español' (2002) 245 Revista de Derecho Mercantil 1379, 1408.

placed them in the situation of technical dependency through illegal practices, they should have included the protection they considered convenient in their agreements, to address the abuse according to contract law[307].

On the German market, there were two competitors: AzyX Deutschland GmbH Geopharma Information Services (AzyX) and Pharma Intranet Information AG (PII), whose founders were former managers of IMS Health. Both companies were also engaged in tracking sales of pharmaceutical products, but they started selling services based on alternative structures. However, potential clients manifested reticence towards them, claiming that the data was not usable unless it could be presented within the format of Germany's industry standard (the '1860 brick structure'). Therefore, competitors started using copies of the protected structure owned by IMS Health[308].

As a consequence, IMS Health commenced copyright infringement proceedings in Germany before the Regional Court (*Landgericht*) of Frankfurt am Main, who granted an interlocutory order prohibiting PII from using the '1860 brick structure'. The order was later on confirmed by the judgment of the Higher Regional Court (*Oberlandesgericht*) of Frankfurt am Main. During the aforementioned copyright infringement proceeding, National Data Corporation (NDC) acquired PII, who requested a licence from IMS Health to use the '1860 brick structure' in return for an annual licence fee. But IMS Health refused to enter into negotiations arguing that it was not essential for NDC to use the structure to compete on the German market. Therefore, NDC lodged a complaint with the Commission alleging that IMS Health refusal to licence constituted an infringement of Article 102 TFEU. Subsequently, in respect of NDC, the Regional Court issued the same aforementioned prohibition regarding the use of the protected structure, by an interlocutory order[309].

The EC found in favour of NDC through the Decision 2002/165/EC[310], concluding that the three elements required by the case law to impose a compulsory license (together with a periodic penalty payment) as an interim measure in the course of a competition investigation – see Section 5.4.2.1. of this Chapter –, were present. Among them, the one concerning that legal and factual elements showed a reasonably strong prima facie evidence of the existence of an abuse of a dominant position by IMS Health (*fumus delicti commissi*).

Right after Commission's decision, the interlocutory order prohibiting NDC from using the protected structure was also confirmed by the Higher Regional Court of Frankfurt am Main. Due to the contradiction between the provisional measure ordered by the Commission (compulsory license) and the Regional Court's prohibition, the same day the court on which the Higher Regional Court confirmed the order, the Regional Court

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[307] Alfaro Águila-Real, *El abuso de posición dominante* (n 109), para 104.
[308] *IMS Health* [ECJ, 2004] (n 241) [7].
[309] ibid [9] and [10].
[310] *IMS Health* Commission Decision [2001] (n 89).

decided to stay the copyright infringement proceedings. And it was referred to the ECJ for a preliminary ruling the question of whether the refusal to grant IP licenses constituted an abuse of a dominant position, on the interpretation of Article 102 TFEU. Thereby, the ECJ addressed for the first time a case that involved an IPR (copyright) that protected a creation that became a *de facto* industry standard. The reason of the reference is to ensure the uniform application of EU competition law. According to Article 16 of Regulation 1/2003 and settled case law[311], if a Member State court rules on facts that later on can be subject of a Commission decision on the implementation of Article 102 TFEU, the national court must avoid giving judgments which would conflict with a decision contemplated by the Commission in proceedings it has initiated. To that effect, the national court may assess whether it is necessary to stay its proceedings. Namely, national courts remain free to decide lawsuits pending before them as long as EU law is respected. This prohibition is based on the duty of cooperation provided for in Article 4(3) of the Treaty on European Union (TEU)[312] and on the binding force of Commission decisions.

Then, IMS Health requested the annulment of the Commission Decision 2002/165/EC or, alternatively, the annulment of the compulsory license. And, as a provisional measure, it requested the suspension of the application of the Decision. The President of the CFI[313] ordered the temporal suspension of the application of that Decision, so IMS Health and NDC did not have time to enter into a license agreement. Later on, issuing another Order[314], it suspended its application permanently, until the CFI delivered judgment in the action for annulment. The suspension was based on the following two arguments.

Firstly, on the consideration that basing on the *Magill* case, the Commission – in its *prima facie* assessment that IMS Health infringed Article 102 TFEU– did not correctly interpret what circumstances had to be present to consider that a refusal to grant IP licenses constituted an abuse of a dominant position. Namely, according to *Magill,* the refusal to grant IP licenses must prevent the emergence of a new product and the aim of the refusal must be to reserve a secondary market. Whereas in *IMS Health* (see Sections 4.5.2.1. and 4.5.3. of this Chapter)*,* the EC considered that IMS Health abused its dominant position when the refusal prevented the appearance of a product that was already offered by the IP owner (so it was not a new product) on another stage of production (instead of on a market separate from that on which the undertaking in question was dominant).

And secondly, because the interim measure was inappropriate since it did not preserve the previous *status quo* in order to ensure the effectiveness of the final decision to be given in the main action. Instead, it altered that status by forcing IMS Health to negotiate licences with its competitor who, as it was found by the Regional Court of Frankfurt am Main in its *prima facie* assessment, it was actually infringing its copyright. That is to say,

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311 Case C-234/89 *Delimitis* [1991] ECR I-935; Case C-344/98 *Masterfoods* [2000] ECR I-11369, paras 49, 50, 52.
312 (n 76).
313 *IMS Health* [CFI Order, Aug. 2001–temporarily] (n 299).
314 Case T-184/01 R *IMS Health* [2001] ECR II-3193.

the Commission required IMS Health to legitimise the IP infringement[315]. Therefore, the application of the compulsory license would cause an immediate, serious, enduring and potentially irreparable damage to the IP owner[316].

Accordingly, NDC appealed against the latter Order (the one that suspended the application of Commission's decision permanently) before the ECJ[317], but it was dismissed as inadmissible in part, and unfounded in part. Consecutively, the annulment procedure was also suspended[318] until the ECJ decided about the preliminary ruling regarding the interpretation of Article 102 TFEU.

In these circumstances, the Commission adopted the Decision 2003/741/EC[319] that withdrew the Decision 2002/165/EC on interim measures. The EC did not rule on the merits, that is, on whether IMS Health abused its dominant position or not. That, because there was a material change in circumstances – *i.e.* in the status of competition – in which the first decision was based on, so there was no longer any urgency to impose an interim measure. First, NDC began to provide a data service based on a new structure that did not infringe any IPR of IMS Health. Consequently, its market share increased. And second, AzyX – the other competitor –, also created a new structure to access the German market. Nonetheless, it experienced losses that were not assumable, so it ceased its activities. Therefore, the Commission did not withdraw its first decision as a result of changing its initial position as regards the existence of a reasonably strong *prima facie* case establishing an abuse of a dominant position.

Notwithstanding, regardless of the material change in circumstances and that the EC considered it was not necessary to take a position on the likely outcome of the pending proceeding, the Commission should have ruled on the merits in accordance with the principles of consistency and legal certainty. Moreover, the Decision 2002/165/EC on provisional measures caused the Regional Court of Frankfurt am Main to bring a request for a preliminary ruling. And the content of the question submitted by the German court was the same as that of the Commission's investigation. In that regard, it is appropriate to mention the case *Motorola* (it will be studied in Section 3.2. of Chapter 3) about the abuse of dominant position by a SEP owner (Motorola) who brought an action seeking a prohibitory injunction, where the status of competition had also changed before the Commission adopted the decision. Namely, the status improved from the moment the Commission sent to Motorola the SO, until the antitrust investigation was closed, because Motorola and Apple signed a licensing agreement ('Settlement Agreement'). Despite this, the Commission opted to rule on the merits, concluding that the SEP owner abused its dominant position. However, it did not follow the same line in *IMS Health*. Therefore, in

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[315] *IMS Health* Commission Decision [2001] (n 89) [217].
[316] *IMS Health* [CFI Order, Aug. 2001–temporarily] (n 299) [16] and [25].
[317] Case C-481/01 P (R) *IMS Health* [2002] ECR I-3401.
[318] Case T-184/01 R *IMS Health* (CFI, 26 September 2002).
[319] *IMS Health* (Case COMP D3/38.044) Commission Decision 2003/741/EC [2003] OJ L268/69, paras 13-16.

order to analyse – according to the Commission – under what circumstances the refusal of IMS Health to grant licenses constituted an abuse, we only have its *prima facie* assessment.

After the Decision 2003/741/EC of the Commission, the ECJ[320] – following the proposal of the Advocate General Tizzano[321] – gave a preliminary ruling on the interpretation of Article 102 TFEU, based on the facts provided by the German court, that were prior to the modification of the status of the competition (to which Commission referred in that decision).

Subsequently, the CFI[322] declared that the action for annulment of the Decision 2002/165/EC – that imposed provisional measures –, had become without object. As IMS Health did not justify why it retained an interest in the prosecution of annulment proceedings – when the decision was already withdrawn –, the CFI stated there was no longer any need to give a decision in the annulment procedure.

In conclusion, to analyse – in Section 4.5. of this Chapter – if the refusal to grant copyright licenses by IMS Health constituted an abuse of a dominant position, there are several relevant decisions to take into account. For instance, the Decision 2002/165/EC, because the Commission considered that legal and factual elements showed a reasonably strong *prima facie* case establishing an abuse of a dominant position by IMS Health. In addition, the Commission did not modify its assessment in the subsequent Decision 2003/741/EC (that withdrew the first decision). Equally relevant are the Orders[323] from the President of the CFI about suspending the application of the Decision 2002/165/EC, based on the fact that the Commission interpreted erroneously the circumstances that should be present to consider IMS Health's conduct as abusive. And also the preliminary ruling of the ECJ, that along with previous cases (*Volvo*, *Renault*, *Magill*, *Tiercé Ladbroke* and *Bronner*), constitutes settled case law on refusal to grant IP licenses.

3.2.6. *Microsoft*

Microsoft designed, developed and marketed a wide variety of software products for different kinds of computing devices. These software products included, in particular, operating systems for client personal computers (PC) and operating systems for work group servers. The latter was used by office workers in their day-to-day work for three sets of distinct services: sharing files stored on servers, sharing printers, and the administration of the manner in which users and groups of users could access network services. That operating system was designed and marketed to deliver those three sets of services collectively to a relatively small number of client PC linked together in a small to medium-sized network.

[320] *IMS Health* [ECJ, 2004] (n 241).
[321] Case C-418/01 *IMS Health* [2004] ECR I-05039, Opinion of AG Tizzano.
[322] Case T-184/01 *IMS Health* [2005] ECR II-817.
[323] *IMS Health* [CFI Order, Aug. 2001–temporarily] (n 299) [24]; *IMS Health* [CFI Order, Oct. 2001–permanently] (n 314) [102] and [105].

As Sun Microsystems also supplied operating systems for work group servers, it asked Microsoft to disclose to it the information necessary to allow interoperability between Windows client PC operating systems and its server operating systems ('client-to-server interoperability'). It specifically asked for the so-called Interoperability Information that is the complete and accurate specifications for all the Protocols, for the purpose of developing and distributing products competing with Microsoft's own products on the work group server operating system market. Protocols are set of rules of interconnection and interaction between various instances of Windows Work Group Server Operating Systems and Windows Client PC Operating Systems running on different computers in a Windows Work Group Network[324]. Therefore, the disclosure of protocols did not entail a transfer of the essential value of the Windows operating system, because they only described what was expected from the software in question, in contrast to 'implementations' constituted by the running of the code on the computer. Accordingly, a competitor wishing to write a server operating system that understood Microsoft's protocols would have to write a code in its product that implemented the specifications. Two programmers implementing the same protocol specifications would not write the same source code and the performances of their programmes would be different[325]. Consequently, without the requested technology, Sun could not compete on the work group server operating system market. However, Microsoft refused to license its copyright. And thus, consumers' purchasing decisions in respect of work group server operating systems were channelled towards Microsoft's products.

As a consequence, Sun Microsystems lodged a complaint with the Commission and after various exchange of correspondence between the EC and Microsoft, the Commission adopted a decision[326] considering that Microsoft abused its dominant position according to Article 102 TFEU and Article 54 of the Agreement on the European Economic Area (EEA)[327]. To remedy and sanction that conduct, the Commission imposed on Microsoft, as permanent measures, the obligation to grant licenses to third parties and a fine.

Accordingly, Microsoft applied for suspension of Articles 3 and 5 of the decision that imposed the fine and the compulsory license respectively, due to the impact they were going to cause on the exercise of Microsoft's IPRs and trade secrets, but it was dismissed in its entirety by the CFI[328]. Microsoft also applied for annulment of the Commission decision and alternatively, it also applied for annulment of or a substantial reduction in the fine. Nevertheless, the action for annulment was also dismissed by the CFI[329].

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[324] *Microsoft* (Case COMP/C-3/37.792) Commission Decision 2007/53/EC [2004] OJ L32/23, Article 1(1) defines the term 'Interoperability Information' and Article 1(2) defines the term 'Protocol'.
[325] ibid [24], [25], [698] and [719]–[722].
[326] *Microsoft* Commission Decision [2004] (n 324), [560]–[791] (description of the conduct) and Article 2(a) (the statement of being abusive).
[327] Agreement on the European Economic Area [1994] OJ L1/3 (it has the same content as Article 102 TFEU, although the contracting parties are, in addition to the 28 Member States, also the 3 EFTA States – Iceland, Liechtenstein and Norway).
[328] Case T-201/04 R *Microsoft* [2004] ECR II-4463, paras 324, 476 and 478.
[329] *Microsoft* [CFI, 2007] (n 156).

4. Refusal to license IPRs: elements of the antitrust infringement

In order to determine whether a refusal to license IPRs constitutes an anti-competitive behaviour according to Article 102 TFEU, first it is necessary to define the relevant market. And once it is done, it must be analysed if the undertaking in question held a dominant position, if it abused that position and whether the trade between Member States might be affected by the refusal. All these elements, except for the abuse, were already deeply explained in Section 1 of Chapter 1. Accordingly, in Sections 4.1. to 4.3. of this Chapter, I will focus on mentioning how those three elements were present in the aforementioned case law on refusal to license IPRs.

The controversial element when determining if a refusal to license IPRs constitutes an abuse of a dominant position is indeed the abuse, that is, the definition of the circumstances that must be present to consider that the undertaking abused its dominant position. Therefore, in Sections 4.4. to 4.6., I will analyse the different criteria considered in the case law to assess the abusive nature of the refusal. In this regard, three blocks can be clearly differentiated. Firstly, the criteria used in *Volvo* and *Renault*, where competitors wanted to use the protected IPRs to manufacture duplicated products. Secondly, the criteria set in *Magill*, where the aim of the competitor was to use the copyright to manufacture a new product. And thirdly, the use of the *Magill* test in cases where the facts were different, for instance, when competitors' goal was to use the IPR to offer the service that the IP owner already offered.

4.1. Relevant market definition

In *Volvo* and *Renault*, the relevant product market was defined as the market for spare parts for the cars which they produced.

In *Magill,* it was concluded that television broadcasting companies held dominant positions on the Irish and British (Northern Ireland) market for television guides giving weekly listings.

Where the definition of the relevant market was most contested was in *Tiercé Ladbroke.* The Commission analysed whether the relevant product market was the market in the transmission of pictures and sound commentaries of horse races in general, or the one of French sound and pictures. Basing on the percentages of the bets placed and the races retransmitted in the Belgian and German markets[330], it took the view that transmission of French sound and pictures were substitutable for the transmission of sound and pictures of other races (German, British, French), in terms of the conditions of competition and the structure of supply and demand on the market in question.

[330] See the argumentation in *Tiercé Ladbroke* [CFI, 1997] (n 294) [27], [82], [83] and [87].

With regard the conditions of competition, the Commission analysed the extent to which the transmission of sound and pictures of races had particular characteristics influencing the choice of customers (bookmakers). And it concluded that the choice made by them – as to the races transmitted in their betting outlets – did not derived solely, as Tiercé Ladbroke maintained, from the supposed wish of bettors to see only the races on which they bet retransmitted. The choice made by German bookmakers as between sound and pictures of different origins was also based on other factors such as the terms of the licensing agreements and/or whether there were other betting outlets offering other sound and pictures[331].

Concerning the structure of supply and demand, the Commission compared the market shares of betting on the various horse races and the market shares of sound and pictures of such races. And it concluded that demand on the German market in sound and pictures was subject to continual variations as compared with demand on the betting market. In consequence, it stated that the substitutability of the various race transmissions existed because the demand of the transmission was not constant.

To define the relevant geographical market, the CFI declared that conditions of competition existing on the market in sound and pictures had to be considered in relation to betting outlets, that were the demand side for sound and pictures for retransmission to final consumers (the bettors). The conditions in which the main betting market operated were characterized by close geographical links between bettors and betting outlets, in so far as the mobility of bettors was necessarily limited and marginal (the cross-frontier betting market between Belgium and France was marginal, because in general, bettors bet in their national countries). Therefore, the competition between the various betting outlets developed essentially within national geographical areas. In conclusion, unlike what was sustained by Tiercé Ladbroke – who considered that the relevant geographical market was the Community market or a market comprising at least France, Germany and Belgium –, the EC reckoned that it was confined to Belgium, because the market in sound and pictures of horse races was divided into national markets[332]. All in all, the CFI found that the Commission had correctly identified the relevant market as the Belgian market in sound and pictures of horse races in general[333].

In *Bronner,* as the Commission pointed out, it was for the national court to define the relevant market. In that regard, only if the court would maintain that a separate market in home-delivery schemes existed and that Mediaprint held a dominant position in that market (in order to do that, the court should also take account of the possible existence of regional home-delivery schemes), its refusal to include Bronner in that network might constitute an abuse. However, it seems more reasonable to define the relevant market as the Austrian daily newspaper market, because apart from the home-delivery scheme, other methods of distributing daily newspapers such as sale in shops or at kiosks or

[331] ibid [66].
[332] ibid [12], [21], [30], [102]–[104].
[333] ibid [123].

delivery by post, seem sufficiently interchangeable with it, as to take them into account also to define the relevant market (substitutability from the demand viewpoint)[334].

In *IMS Health,* the CFI found that the EC had correctly identified the relevant market as the German regional sales data services[335]. The relevant geographic market was considered to be Germany, the one with the largest market for regional sales data services in Europe, because the data in question related to fundamental aspects which differed from one Member State to another, such as the name of the drug, the packaging, the product code, the therapeutic category and the method of reimbursement[336].

In *Microsoft,* the EC concluded that by reason of their specific characteristics and the lack of realistic substitutes on the demand and supply side, the client PC operating systems and the work group server operating systems formed two distinct relevant product markets. For instance, for work group server operating systems, there were no substitute products from the demand side perspective, among others, because Microsoft's work group server operating system was the only interoperable one with its client PC operating system[337]. With regard to the geographical aspect, the Commission found that the relevant geographic market was worldwide[338].

4.2. Holding a dominant position

As it was already mentioned in the previous chapter, the factors that should be borne in mind to assess if an undertaking holds a dominant position are its structure, market share and the existence of barriers to competitors entering the market. Nevertheless, the EC has traditionally followed the approach of the ECJ of giving much importance to the market share, considering it as the conclusive factor to assess if an undertaking holds a dominant position. As explained below, clear examples thereof are the cases of *Magill, IMS Health* (in the *prima facie* assessment) and *Microsoft.*

In *Magill,* the Commission stated that by force of circumstance, RTE, BBC and ITP enjoyed a *de facto* monopoly over the information used to compile listings for the television programmes received in most households in Ireland and 30% to 40% of households in Northern Ireland. Accordingly, IP owners were in a position to prevent effective competition on the market in weekly television magazines. That conclusion was confirmed by the CFI and the ECJ[339].

In *Tiercé Ladbroke,* that company considered that the *sociétés de courses* occupied a joint dominant position on the Belgian market in the sound and pictures of French races.

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[334] *Bronner* (n 297) [29] and [34].
[335] *IMS Health* Commission Decision [2001] (n 89) [56].
[336] ibid [54], [55] and [60].
[337] *Microsoft* Commission Decision [2004] (n 324) [324]–[401].
[338] ibid [427].
[339] *Magill* [ECJ, 1995] (n 257) [47].

However, as it was previously stated, the relevant product market was defined as the sound and pictures of horse races in general.

In *Bronner,* in order to determine whether Mediaprint held a dominant position, the national court should take account of the existence of other regional home-delivery schemes. And if there was an insufficient degree of interchangeability between Mediaprint's nationwide scheme (the only one in Austria) and other regional schemes, the national court could determine that Mediaprint was *de facto* in a monopoly situation in the relevant market, and thus held a dominant position[340].

As in *Magill,* in *IMS Health* and *Microsoft* there was also considered that IP owners held a dominant position on the relevant markets, relying on their market share. To reach that conclusion, in the first case, the market shares of the existing three providers (IMS Health, NDC and AzyX) were taken into account[341]. And in the second one, the EC declared that Microsoft held a dominant position in the client PC operating system market – more than 90% of market share (considered as 'super-dominant') – and on the work group server operating system market – at least 60% of market share. In order to confirm that statement, the Commission also took into account other factors, such as the maintenance of the market shares over time. And also the existence of numerous barriers to entry, attributable to the fact that Windows was not only a dominant product on the market for client PC operating systems but, in addition, it was the *de facto* standard for those systems[342].

4.3. Effects on trade between Member States

Once the relevant market is defined and it is determined that the undertaking holds a dominant position on it, in order to consider if the refusal to license IPRs is abusive, the other legal element provided for in Article 102 TFEU requires that the refusal may affect trade between Member States.

The potential effect on trade between two or more Member States may be determined by reference to the potential level of trade in products potentially manufactured by the competitor using the IPR. Namely, whether those products would be also demanded in another Member State.

For example, in *Magill,* if Magill was to publish a comprehensive television guide that were the best-selling magazines in Ireland, it was obvious that there would be a demand for such a guide also in Northern Ireland (UK), where viewers could receive the same programmes as in Ireland. Therefore, the CFI found that television broadcasting companies' conduct of eliminating a competitor modified the structure of competition in

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[340] *Bronner* (n 297) [34] and [35].
[341] *IMS Health* Commission Decision [2001] (n 89) [58] and [62].
[342] *Microsoft* Commission Decision [2004] (n 324) [430]–[435], [448]–[452] and [472]–[499].

the market for television guides in Ireland and Northern Ireland and thus affected potential trade flows between two Member States[343].

In *Bronner,* the national court – before referring the question to the ECJ for a preliminary ruling – considered that Mediaprint might hold a dominant position in the Austrian home-delivery scheme, so the refusal to that scheme could have the effect of completely excluding Bronner from the daily newspaper market. And as Bronner also sold abroad its Austrian daily newspaper, it considered that the refusal may have affect trade between Member States[344]. However, after the ECJ judgment, it would seem more reasonable to define the relevant market as the Austrian daily newspaper market where Mediaprint would not probably hold a dominant position. In any case, with regard to the effect on trade between Member States, the Commission and Mediaprint argued that the facts were confined to Austria and that Bronner distributed fewer than 700 copies of its newspaper abroad daily, amounting to less than 0.8% of the newspaper's total circulation[345].

In *Microsoft,* the Commission[346] based its conclusion regarding that the refusal to supply interface information had an appreciable effect upon trade between Member States, on the case *United Brands*[347]*,* where the ECJ stated the following. If the occupier of a dominant position established in the common market aims at eliminating competitors also established in the common market, it is immaterial whether this behaviour relates directly to trade between Member States once it has been shown that such elimination will have repercussions on the patterns of competition within the common market. Indeed, in the case in question, the Microsoft refusal brought about a risk of elimination of competition on the worldwide market for work group server operating systems.

4.4. The abuse of dominance: different criteria

Focusing now on the core element of the prohibition stated in Article 102 TFEU – the abuse –, it will be analysed when the behaviour of refusing to license IPRs by dominant undertakings may constitute an abuse of that position. It is important to emphasize that the refusal to grant IP licenses does not imply an abuse of a dominant position *per se.*

Coinciding with EC's conclusion, the ECJ concluded that the refusal to license IPRs was abusive in *Magill* and according to the CFI, also in *Microsoft*. In *IMS Health,* the Commission also considered that the dominant undertaking abused its dominant position, in the *prima facie* assessment it made in order to adopt interim measures. Nevertheless, that decision was later on withdrawn. And the ECJ in the preliminary ruling on the interpretation of Article 102 TFEU, it concluded that the refusal to license the IPR was not an anti-competitive behaviour in that specific case (in *IMS Health*).

[343] *Magill* [CFI, 1991 (RTE)] (n 283) [51] and [77]; *Magill* [CFI, 1991 (BBC)] (n 283) [36] and [65].
[344] *Bronner* (n 297) [10].
[345] ibid [15].
[346] *Microsoft* Commission Decision [2004] (n 324) [991]–[993].
[347] (n 94) [201].

4.4.1. The refusal as a legitimate exercise

As mentioned, IPRs proprietorship is not of itself sufficient to automatically create a dominant position, so *a fortiori*, its exercise by a dominant undertaking cannot either amount to abuse of such a position *per se*[348]. IPRs represent the fruit of substantial investment and generally their exercise will restrict competition for a limited period, in contrast with monopolies over tangibles goods that may in certain cases lead to a permanent exclusion of competition on a related market. The fact that IPRs are not granted permanently involves to carefully balance the conflicting interests, that is, the free competition with that of providing an incentive for research and development and for creativity. In that regard, if the refusal is considered to be abusive, the interest in protection of free competition will prevail over the protection of IPRs and the economic freedom of their owners.

According to settled case law, the exercise of an IPR consisting of refusing to grant IP licenses in return for the payment of a reasonable royalty, with a view to prevent third parties from manufacturing and selling or importing products incorporating that right, it constitutes the very subject-matter of the IP owner's exclusive right. So, even if it holds a dominant position, the refusal cannot in itself constitute an abuse of that position[349].

Nevertheless, as the right to property or the freedom to conduct business are not absolute rights but they are subject to public interest restrictions[350], the refusal to license IPRs may be abusive but only if it pursues an aim manifestly contrary to the objectives of Article 102 TFEU. That is to say, when it pursues to exclude competition, to the prejudice of consumers, preventing the emergence of a new or an existing product for which the use of IPRs is essential[351]. And not because the refusal restricts competition, because that is precisely the aim of IPRs.

On that regard, the case law determines different criteria to assess the existence of an antitrust infringement. In essence, the ECJ bases on two different legal arguments, depending on what is the purpose of the competitor who requests the license. Namely, if it is to simply duplicate products that are already offered by the IP owner on the market (*Volvo* and *Renault*), the refusal might be abusive if it involves certain abusive conduct. If on the contrary, the aim is to produce a new product for which there is a potential demand on the part of consumers, the refusal might be abusive if exceptional circumstances are present, even in the absence of abusive additional conduct. Those exceptional circumstances were mentioned in *Magill* for the first time but they were not wholly clear and they continued to develop up to the *Microsoft* case. As it will be analysed below, the discussion regarding the exceptional circumstances revolved around

348 *Renault* (n 286) [15]; *Renault* AG (n 286) [56], [65] and [69].
349 *Volvo* (n 285) [8]; *Renault* (n 286) [11]; *Magill* [ECJ, 1995] (n 257) [49]; *IMS Health* [ECJ, 2004] (n 241) [34].
350 Case C-308/04 P *SGL Carbon* [2006] ECR I-05977, para 108.
351 *Renault* AG (n 286) [60]; *Magill* [ECJ, 1995] (n 257) [35].

determining the scope of some of them and around whether they were alternative or cumulative.

4.4.2. Manufacturing of duplicated products

In *Volvo*[352] and *Renault*[353], the aim of competitors was to use the registered designs of car bodies to manufacture spare parts similar to those already manufactured by the IP owners. The ECJ understood that their refusal to grant IP licenses did not constitute an abuse of their dominant positions, unless the refusal involved certain abusive conduct that was liable to affect trade between Member States. And by way of example, it mentioned three of them: (i) the arbitrary refusal to supply spare parts to independent repairers; (ii) the fixing of prices for spare parts at unfair level; or (iii) a decision no longer to produce spare parts for a particular model, even though many cars of that model were still in circulation.

4.4.2.1. Arbitrary refusal

If the IP owner refuses to grant IP licenses to allow manufacturing by independent repairers and it also refuses arbitrarily to supply them spare parts, it is excluding competitors. This behaviour limits other companies to enter the market in order to drive down prices, which prejudices consumers. That goes within the meaning of subparagraph (b) of the second paragraph of Article 102 TFEU, that states that the abuse of a dominant position may consist in 'limiting production, markets or technical development to the prejudice of consumers'.

4.4.2.2. Unfair pricing

If the dominant undertaking, in addition to refusing to grant IP licenses, fixes prices for spare parts at unfair level, it is exploiting competition within the meaning of subparagraph (a) of the second paragraph of Article 102 TFEU, that provides that the abuse of a dominant position may consist in 'directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions'. Actually, independent producers of spare parts maintained that bodywork components produced by Volvo and Renault were sold by their concessionaires at exaggeratedly high prices[354].

However, with reference to the difference in prices between components sold by the manufacturer and those sold by independent producers, it should be noted that the ECJ holds[355] that a higher price for the former than for the latter does not necessarily constitute an abuse. That, because the IP owner is entitled to recover not only his production costs in the strict sense and a reasonable profit margin, but also his research and development expenditure. Nevertheless, when assessing the prices of bodywork components of cars sold as spare parts by IP owners, national courts should take into account the fact that part

[352] (n 285) [9].
[353] (n 286) [16].
[354] *Renault* AG (n 286) [61]; *Volvo* (n 285) [5].
[355] *Parke, Davis & Co* (n 138) 70, [3] and [4].

of the research and development expenditure has probably already been recovered from the sale of new cars[356].

4.4.2.3. Cessation of production

If the dominant company refuses to grant IP licenses and also adopts the decision no longer to produce spare parts for a particular model, even though many cars of that model are still in circulation, that behaviour also goes within the meaning of the aforementioned subparagraph (b), because it limits the production with the aim of excluding competitors in prejudice of consumers, who own that particular model of car.

4.4.3. Manufacturing of a new product

On the contrary in *Magill*, the objective of the third party was to create a new product (a comprehensive weekly television guide) that was not offered on the market. The ECJ[357] – confirming the analysis conducted by the EC and the CFI – concluded that dominant undertakings' refusal that prevented the emergence of a new product was abusive if four cumulative circumstances were present (the so called *Magill* test). First, that the IPR in question was objectively necessary in order to manufacture a product or provide a service by dominant undertaking's competitors and thus, to be able to compete effectively on the downstream market. Second, that the refusal prevented the emergence of a new product, from which consumers would likely benefit. Third, that the refusal was arbitrary. And fourth, that the refusal was likely to lead to the elimination of effective competition on the downstream market.

In *Magill*, the ECJ concluded that television broadcasting companies infringed subparagraph (b) of the second paragraph of Article 102 TFEU, in so far as they used their copyrights as an instrument of abuse to prevent the introduction of a new product on the market for television guides, where they held dominant positions. Hence, the refusal excluded competitors from the market, limiting it, to the prejudice of consumers.

Accordingly, for the first time, the ECJ determined that the refusal to license IPRs that prevented the emergence of a new product, might also be abusive if exceptional circumstances were present, even in the absence of abusive additional conducts mentioned in *Volvo* and *Renault*.

4.4.3.1. Essentiality

According to *Magill*, the first[358] circumstance to evaluate the abusive nature of the refusal is to determine if the IPR is objectively essential or indispensable for the exercise of

[356] *Renault* AG (n 286) [63].
[357] *Magill* [ECJ, 1995] (n 257) [57].
[358] ibid [52].

competitor's activity and be able to compete effectively on the market, in the sense that there is no real or potential substitute of the protected IPR in question.

In *Magill*[359], the basic information on programme scheduling protected by copyrights – owned by television broadcasting companies – constituted the indispensable raw material for Magill to compile weekly television guides.

4.4.3.2. Emergence of a new product

The second[360] circumstance set in *Magill* is that the refusal prevents the emergence of a new product for which there is a potential, constant, specific and regular demand on the part of consumers. Consequently, consumers would be harmed, because that impediment had an adverse impact on their welfare in the form of reducing their choice. By 'new product', the ECJ understood a product that was not limited essentially to duplicate the product already offered on the secondary market by the IP owner.

Accordingly, what it must be examined is whether, for consumers, the likely negative consequences of the refusal to license IPRs in the relevant market outweigh over time the negative consequences of imposing an obligation to license. If they do, normally it will be considered that the refusal impacts on consumer welfare[361].

In *Magill*, this circumstance constituted the essence of the case, where television broadcasting companies were preventing the emergence of comprehensive weekly television guides, for which there was a potential demand. The existing comprehensive daily listings published by newspapers were only to a limited extent substitutable by the new product in terms of the information they provided to consumers, because they were permitted to publish listings only for a period of 24 hours, or 48 hours at weekends. The fact that many consumers were prepared to purchase one or more of the weekly television guides published individually by television broadcasters, when information on a daily basis was available in newspapers (albeit with temporal limitations), demonstrated the demand for more advance information, that is, for the new product that Magill wanted to offer (a comprehensive weekly television guide).

4.4.3.3. Arbitrary refusal

According to *Magill,* the third[362] circumstance required is that the refusal is arbitrary, that is to say, a refusal not justified by requirements of secrecy, research or development or other objectively verifiable considerations[363]. Namely, in order to consider that the refusal is justified, the dominant undertaking must demonstrate that the refusal is objectively

[359] ibid [53].
[360] ibid [54].
[361] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 86.
[362] *Magill* [ECJ, 1995] (n 257) [55].
[363] *Magill* [CFI, 1991 (RTE)] (n 283) [47].

necessary or that produces substantial efficiencies which outweigh any anti-competitive effects on consumers, because the refusal is indispensable and proportionate to the goal allegedly pursued by the dominant undertaking.

In *Magill*, there was no justification either in the activity of television broadcasting or in that of publishing television magazines, to refuse to authorize Magill and other potential competitors to enter into the weekly television magazine market. Hence, the aim of the refusal was merely to prevent the emergence of a competing product on that market.

4.4.3.4. Reservation of the secondary market

The fourth[364] circumstance considered in *Magill* refers to the fact that the dominant IP holder must be present in both the main and the ancillary markets and the refusal is liable to, or is likely to, eliminate, immediately or over time, all effective competition in the downstream market (the marginal presence in certain niches on the market cannot be suffice). Therefore, it is not necessary to demonstrate that all competition on the market would be eliminated. Thus, the refusal would pursue the aim of reserving the secondary market, preventing the entry or survival of competitors on the downstream market in order to maintain the monopoly enjoyed.

The likelihood of effective competition being eliminated as a result of the refusal is generally greater in the following scenarios: the higher the market share of the dominant undertaking in the downstream market; the less the capacity of the dominant undertaking is constrained relative to competitors in the downstream market; the closer the substitutability between the dominant undertaking's output and that of its competitors in the downstream market; the greater the proportion of competitors in the downstream market that are affected; and when the more likely it is that the demand that could be served by the foreclosed competitors, would be diverted away from them to the advantage of the dominant undertaking[365].

In *Magill,* the purpose of the refusal by television broadcasting companies was to exclude one of their competitors – Magill – from the publishing market of weekly programme listings.

4.5. The *Magill* test subsequently applied to diverging facts: modification of the 'original' circumstances

Although *Magill* could be seen as quite a narrow precedent because it referred to a specific and wholly-new product[366], the decision-making bodies decided to apply the criteria set

[364] *Magill* [ECJ, 1995] (n 257) [56].
[365] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 85.
[366] Michael J. Reynolds and Christopher Best, 'Article 102 and innovation: the journey since Microsoft' (39th Annual Fordham Conference on International Antitrust Law and Policy, New York, 20-21 September, 2012) 7, para 3

in that case to subsequent cases, where facts were divergent, being possible to differentiate three distinct categories. The *Magill* test was applied when the object of the refusal was not the licensing of an IPR, but the supply of a tangible property, that is, a service and a good (*Bronner*[367] and *Microsoft*[368], respectively). Also to cases where the aim of the refusal was to prevent the emergence of existing products – no new products –, that were already offered by the IP owner (*Tiercé Ladbroke*[369], *IMS Health*[370] and *Microsoft*). And likewise, when the IP owner was not presence in a secondary market, but in a vertically related one (*IMS Health*). In order to apply the test to these diverging facts, it was necessary to adapt the 'original' circumstances defined in *Magill*.

Consequently, the EC, the CFI and the ECJ issued decisions and judgments that were not entirely consistent among them, regarding the required circumstances to determine that a refusal to license IPRs was abusive. That, because as said previously, they did not agree about the scope of some circumstances and nor about their alternative or cumulative nature.

Before analysing the use of the *Magill* test in subsequent cases, it should be underline that as in *Magill*, also in *IMS Health* (as a *prima facie* assessment) was considered that the dominant undertaking abused its dominant position because the refusal limited the market. Note that this conclusion was not confirmed in the decision on the merits since there was a material change in the status of competition. In *Microsoft*, the refusal was also considered abusive but due to the fact that the refusal limited the technical development (among others, it impeded the interoperability[371]). Whereas in *Bronner* and *Tiercé Ladbroke*, it was concluded that property owners did not abuse their dominant positions, because their refusal did not prejudice consumers.

4.5.1. Refusal to supply a service/good

The first category in which the *Magill* test was applied was to cases where the object of the refusal was not the licensing of an IPR, but the supply of a tangible property (service/good).

Specifically, the test was used in *Bronner*[372], where the object of the refusal was the supply of the home-delivery scheme service. And also in *Microsoft*, where the EC[373] was

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<http://www.allenovery.com/SiteCollectionDocuments/Global%20Trends%20in%20Antitrust%20PDFs/Article_102_and_innovation.PDF> accessed 31 July 2018.

367 (n 297) [39]–[41].

368 *Microsoft* [CFI, 2007] (n 156) [323]–[335].

369 *Tiercé Ladbroke* [CFI, 1997] (n 294) [130]–[132].

370 *IMS Health* [ECJ, 2004] (n 241) [35]–[38].

371 Mehmet Bilal Ünver, 'Turning the crossroad for a connected world: reshaping the European prospect for the Internet of Things' (2018) 26(2) International Journal of Law and Information Technology 93, 112, para 3.

372 (n 297).

373 See the EC argumentation in *Microsoft* [CFI Order, 2004] (n 328) [173] (copyright) and [177] and [178] (patent).

of the opinion that the Interoperability Information (the complete and accurate specifications for all the Protocols), unlike software, it was not protected by copyright. However, the Commission finally presumed that it was covered by the IPR and therefore, it applied the *Magill* test. Precisely already in *Magill*[374], the Commission stated that its analysis of the abuse of copyright regarding information about television programmes, it was applicable also to situations different from that at issue in that case, in the area of computer software for example.

In both cases (*Bronner* and *Microsoft*), the decision of applying the *Magill* test was taken because it was more favourable to IP owners, than the case law on refusal to supply services and goods. That is, the use of the criteria set in *Magill* involved the presence of more circumstances to consider that the service/good owner abused its dominant position, compared to those required in *Commercial Solvents*[375] and *Télémarketing*[376] – that specifically dealt with the refusal to supply goods and services, respectively. As it was already stated in Section 1.3. of Chapter 1, the primary purpose of Article 102 TFEU is to prevent distortion of competition – and in particular to safeguard the interests of consumers – rather than to protect the position of particular competitors[377]. Therefore, if the case law establishes different requirements depending on whether the refusal to deal concerns a tangible or an intangible property, decision-making bodies might be overprotecting owners of services/goods when they apply them the *Magill* test that deals specifically with IPRs. And that might prejudice consumer welfare.

In that regard, it is worth mentioning that although the intangible assets in *Magill* (television programme listings) and *IMS Health* ('1860 brick structure') were protected by copyright, it was a matter of discussion whether they were the result of great creative effort and considerable investment[378]. For instance in *IMS Health*, the structure was based to a large extent on the borders of the German postal codes and was brought into existence thanks to the decisive contribution of the pharmaceutical industry[379]. Nevertheless, that debate was out of the scope with regard to the issue of whether the refusal to license IPRs constituted an abuse of dominant position.

Notwithstanding, as was it will be explained below, the great contribution of *Bronner* was that the ECJ clarified how to determine whether a 'potential substitute' – to which the first circumstance of *Magill* refers –, exists or not. Namely, in *Magill* was considered that an IPR was essential for the exercise of competitor's activity if there was no real or potential substitute of the protected IPR in question.

[374] *Magill* [CFI, 1991 (RTE)] (n 283) [50]; *Magill* [CFI, 1991 (ITP)] (n 283) [33].
[375] (n 249) [25].
[376] *Télémarketing* (n 110) [26].
[377] *Bronner* AG (n 153) [58].
[378] ibid [62]–[64].
[379] *IMS Health* AG (n 321) [39.1].

4.5.1.1. Definition of 'potential substitute'

The ECJ had to conclude if the home-delivery scheme owned by Mediaprint was essential for the exercise of Bronner's activity or not, in the sense that there were no real or potential substitutes. In order to do that, firstly, the ECJ concluded that other methods of distributing daily newspapers, such as by post and through sale in shops and at kiosks, even though they might be less advantageous, they represented equivalent actual alternatives to home-delivery offered by Mediaprint. Therefore, there were actual substitutes in existence for that distributing scheme[380].

The ECJ could have ceased the analysis regarding the essentiality of the Mediaprint distributing system at that point, not being necessary to analyse the existence of potential substitutes. It would have been more appropriate if the 'potential substitute' concept would have been defined in *Magill*, where real substitutes did not exist. Nonetheless, the ECJ in *Bronner* decided to define that concept as follows. If there were any technical, legal or economic obstacles capable of making impossible or even unreasonably difficult for other publishers of daily newspapers (competitors of Mediaprint) to establish their own nationwide home-delivery scheme, it would be considered that no potential substitutes existed. When assessing the presence of these obstacles to determine the existence of potential substitutes, different entry barriers (see Section 1.2.2.3. of Chapter 1), such as sunk costs or regulation, that are taken into account to determine if the undertaking holds a dominant position, they might be considered as economic or legal obstacles.

The obstacle that Bronner claimed existed was the economical one. To consider that Bronner was facing that obstacle, it would be necessary at the very least to establish, that it was not economically viable to create a second home-delivery scheme for the distribution of daily newspapers with a circulation comparable to that of the daily newspapers distributed by the existing scheme owned by Mediaprint. Therefore, it was not enough Bronner's argument that it was not economically viable by reason of the small circulation of the daily newspaper or newspapers to be distributed[381]. Therefore, as none obstacles were present in that case, the ECJ concluded that there were not only real substitutes, but also potential alternatives to the refused home-delivery scheme service. In consequence, the access to the existing system was not indispensable for the exercise of Bronner's activity.

The existence of the aforementioned obstacles was analysed in *IMS Health,* where the '1860 brick structure' protected by copyright was considered to be essential by the EC in its *prima facie* assessment, because there were no real or potential substitutes. It considered that was evident that there were not real substitutes for the protected brick structure owned by IMS Health, because it constituted the *de facto* industrial standard,

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380 *Bronner* (n 297) [43].
381 ibid [44]–[46].

mainly because pharmaceutical companies – the clients of IMS Health –, participated in its elaboration.

In addition, when analysing the existence of potential substitutes, the Commission took the view that there were several obstacles for competitors that made unreasonably difficult – although not impossible – to create alternative structures in which regional data services could be formatted and marketed in Germany. Firstly, there were technical obstacles because to build the structure, competitors would need to use the parameters that were in the public domain and fixed, but without infringing the IMS Health copyright. For instance, postcode boundaries, location of pharmacies and doctors or sociodemographic data. Secondly, they would also have to face legal constraints, avoiding to infringe: (a) the German data protection law, because by the creation of a second brick structure it would be possible to compare its data with that in the '1860 brick structure', being possible to identify information about individual pharmacies; and (b) the IMS Health copyright. And thirdly, pharmaceutical companies became 'locked-in' to that *de facto* standard, so to switch away from it to buy sales data formatted in a non-compatible structure, whilst theoretically possible, would be an unviable economic proposition due to the exceptional organizational and financial efforts that laboratories would have to make[382]. Therefore, competitors might be obliged to offer their alternative structures on terms that would rule out any economic viability of business on a scale comparable to that of IMS Health that controlled the protected structure[383].

In conclusion, the Commission concluded that the '1860 brick structure' was indispensable to compete on the relevant market. It was not a realistic possibility for undertakings that wished to offer regional sales data services in Germany, to employ another structure that would not infringe IMS Health copyright.

Nevertheless, it is striking that NDC – the complainant competitor –, parallel to Commission's investigation and legal proceedings, managed to celebrate contracts based on an alternative structure it created, even with some of the 20 largest pharmaceutical companies. The other competitor (AzyX) was not so successful and ceased its activities due to the losses experienced with its structure. Accordingly, the Commission withdrew the decision that stated *prima facie* that IMS Health abused its dominant position, because there was no longer any urgency to impose interim measures.

I ignore how the status of competition changed from considering the existence of technical, legal and economic obstacles that made unreasonably difficult the marketing of substitutes, to considering the increase of competitor's market share. A possible argument could be that actually, these obstacles did not make unreasonably difficult the marketing of substitutes, but they make it merely difficult. And accordingly, the Commission interpreted the concept 'essential' too broadly. As a consequence, the IPR

[382] *IMS Health* Commission Decision [2001] (n 89) [71]–[123] and [138].
[383] *IMS Health* [ECJ, 2004] (n 241) [29].

was considered essential for the exercise of competitor's activity, when potential substitutes existed – *i.e.* the structure developed by NDC. Hence, inefficient rivals were protected, damaging therefore the productive efficiency.

In *IMS Health*, competitors did not have market power so their only way to take customers from the dominant company was improving the efficiency of their alternative structures[384]. Instead of working on improving them, competitors might have considered easier to sell studies based on the structure of IMS Health, so they did it without getting licenses to use it. Once IMS Health sued them for IP infringements, competitors requested IMS Health to grant them licenses, but it refused to do so. When the Regional Court of Frankfurt am Main issued prohibitory injunctions against competitors, prohibiting them to use the protected structure, one of the competitors (NDC) filed a complaint with the Commission, alleging that IMS Health abused its dominant position, refusing to grant licenses. The aim of the complaint might have been that the Commission's investigation ended imposing IMS Health the obligation to grant licenses to third parties. Hence, NDC could use the protected structure without infringing copyrights, instead of working to improve the efficiency of its own structure.

In that regard, it is important to highlight that when a dominant firm's competitors desire to use a protected IPR in their own products, they are entitled to compete in the market with their own assets, not with protected ones unless they get licenses for it[385]. Hence, decision-making bodies should conduct a detailed analysis to conclude whether the IPR in question is essential or not. Namely, the ability of a determined rival to compete around the protected facility – with resulting benefits to consumers – has often been underestimated, particularly with respect to fast moving technologies, where technological and market developments can present multiple opportunities to work around a competitor's IP[386].

Note that in a given case, the opposite may also occur, namely, that the 'essential' concept is interpreted too narrowly. Accordingly, even though potential substitutes do not exist, the IPR is not considered essential. Thus, efficient rivals will be excluded, which could cause effects totally contrary to those initially envisaged: foster investment and the economic development reinforcing competition in the market[387].

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[384] Alfaro Águila-Real, *El abuso de posición dominante* (n 109), para 93.

[385] Glen O. Robinson, 'On Refusing to Deal with Rivals' (2002) 87(5) Cornell Law Review 1178, 1191, para 2.

[386] Derek Ridyard, 'Compulsory access under EC competition law – A new doctrine of 'convenient facilities' and the case for price regulation' (2004) 11 European Competition Law Review 669, 673, para 2 ('By requiring compulsory access to a facility without which it is inconvenient (rather than essential) for rivals to do business, the Commission has in effect declared an ability to micromanage competition in a way that goes well beyond the "last resort" intervention that normally characterises compulsory access cases'); Jorge Padilla, Douglas H. Ginsburg and Koren Wong-Ervin, 'Antitrust Analysis Involving Intellectual Property and Standards: Implications from Economics' (2019) SSRN Electronic Journal 25, para 1 <https://ssrn.com/abstract=3119034> accessed 23 February 2019.

[387] Alfaro Águila-Real, *El abuso de posición dominante* (n 109), para 198.

4.5.2. Emergence of existing products

The second category in which the *Magill* test was applied was to cases where the refusal prevented the emergence of existing products, that were already offered by the IP owner. Namely, in *Tiercé Ladbroke*, *IMS Health* and *Microsoft*, the purpose of competitors was not the manufacture of new products. Therefore, the second circumstance foreseen in *Magill*, that the refusal prevents the emergence of a new product for which there is a potential, constant, specific and regular demand on the part of consumers, was not present in those cases. That circumstance was required in *Magill* because it referred to a specific and wholly-new product (a comprehensive weekly television guide), that was not the case in *Tiercé Ladbroke*, *IMS Health* and *Microsoft.* Nonetheless, the decision-making bodies applied the *Magill* test.

Accordingly, in order to overcome the lack of presence of the second circumstance of *Magill*, they adopted different solutions to determine if the refusal was abusive. In some cases, they challenged the indispensability of the second circumstance. Namely, they considered that the presence of that circumstance was an alternative one along with the first circumstance about the essentiality (the CFI in *Tiercé Ladbroke*). And they also stated that the second circumstance was not necessary at all (the ECJ in *Bronner* and the EC in *IMS Health*). Whereas in some other cases, they broadened the concept of 'new product' compared to the definition given in *Magill* (CFI in *Tiercé Ladbroke* and the EC and the CFI in *Microsoft*).

4.5.2.1. The indispensability of the second circumstance challenged

In *Tiercé Ladbroke*, although both the Commission and the CFI agreed on concluding that the refusal to grant IP licenses was not abusive, they relied on different legal arguments.

The Commission[388] understood that in order to determine the existence of the abuse, the four circumstances required in *Magill* had to be present. Namely, that the IPR was essential for the exercise of competitor's activity (the first circumstance); that the refusal prevented the emergence of a new product for which there was a potential demand (the second circumstance); that the refusal was arbitrary (the third circumstance); and that the objective of the refusal was to exclude competition from a secondary market (the fourth circumstance).

On the contrary, the CFI[389] considered that the first circumstance about the essentiality and the second one set in *Magill* were alternatives, so that it was sufficient that either of them were present, together with the third and fourth circumstances. In order to conclude that, the CFI alluded to the judgment of the ECJ in *Magill.* Consequently, it might be understood that the CFI interpreted that the ECJ considered both circumstances as

[388] *Tiercé Ladbroke* Commission Decision (n 292).
[389] *Tiercé Ladbroke* [CFI, 1997] (n 294) [131].

alternative in *Magill.* Nevertheless, I understand that in *Magill*, the ECJ confirmed the analysis conducted by the EC and the CFI, who considered that dominant undertakings' refusal that prevented the emergence of a new product, was abusive if four cumulative circumstances were present. However, there are those[390] that in the same vein of the CFI in *Tiercé Ladbroke*, are of the opinion that in *Magill*, the ECJ did not state that each of the factors that previously the CFI had identified were necessary conditions for an overall finding of exceptional circumstances. And in consequence, they understand that the ECJ appeared to leave open the possibility of other points being taken into account.

Accordingly, first, the CFI[391] in *Tiercé Ladbroke* stated that the license to broadcast French sound and pictures was not essential for the exercise of Ladbroke's activity consisting in taking of bets, because the transmission was not indispensable since it took place after bets were placed (the first circumstance was not present). And consecutively, as the first and second circumstances were alternatives and the IPR was not essential, it analysed whether the second one was present, that is, if the refusal prevented the emergence of a new product.

Nevertheless, bearing in mind the general principle of the freedom of the parties to arrange their own affairs, it seems unreasonable to oblige the IP owner to grant licenses of the IPR when there are not essential for the competitor's activity.

In *IMS Health*, the Commission in the Decision 2002/165/EC[392] on provisional measures, considered *prima facie* that it was not necessary the presence of the second circumstance regarding the emergence of a new product. Note that the Commission considered the opposite in *Tiercé Ladbroke*, that is to say, that the presence of the four circumstances was necessary. In that regard, when the President of the CFI[393] in *IMS Health* suspended the application of the aforementioned Decision, he based his order on the fact that the Commission misinterpreted the circumstances that had to be present in order to consider that a refusal to grant IP licenses was abusive. Therefore, the President stated that the second circumstance had to be always present. The ECJ[394] in the preliminary ruling – and following the opinion of the Advocate General Tizzano[395] –, shared the opinion of the President of the CFI, forwarding the determination of the existence of the second circumstance to the Member State court. That is to say, it stated that it was clear from the previous judgments in *Magill* and in *Bronner* – paragraph 40 –, that the presence of the four circumstances was necessary.

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390 Reynolds and Best, 'Article 102 and innovation' (n 366) 7, para 3.
391 *Tiercé Ladbroke* [CFI, 1997] (n 294) [132].
392 *IMS Health* Commission Decision [2001] (n 89) [69] and [70].
393 *IMS Health* [CFI Order, Aug. 2001–temporarily] (n 299) [24]; *IMS Health* [CFI Order, Oct. 2001–permanently] (n 314) [102] and [105].
394 *IMS Health* [ECJ, 2004] (n 241) [37], [38], [49] and [52].
395 *IMS Health* AG (n 321) [66].

Notwithstanding, I do not think that in *Bronner*[396] the ECJ considered that the presence of the four circumstances was necessary. Precisely, I understand that it considered that the second circumstance was unnecessary. My conclusion derives from reading paragraph 41 of the judgment, together with paragraph 40. Namely, as it was aforementioned before, in paragraph 40, the ECJ indicated that according to *Magill*, four cumulative circumstances had to be present to determine if a refusal was abusive. Nevertheless, when in paragraph 41 the ECJ applied these circumstances to the case that concerned it, it omitted to mention the second circumstance regarding the emergence of a new product.

Besides, it was precisely on that judgment of the ECJ in *Bronner*, where the Commission based[397] its aforementioned Decision 2002/165/EC in *IMS* Health, where it stated that the second circumstance was not required. Due to these two arguments is that I consider that in *Bronner* the ECJ stated that the presence of the second circumstance was not required. Nevertheless, there are those[398] who take the opposite view, that is, that the ECJ stated that the four circumstances of *Magill* had to be present – *i.e.* the second circumstance included. But in order to reach that conclusion, they take into account only the paragraph 40 – as the ECJ did in *IMS Health* –, but not the following one that applies the *Magill* test to the specific facts of the case.

In any case, I am of the opinion that the presence of the second circumstance – about the emergence of a new product –, together with the first one – regarding the essentiality – is indispensable. However, as it will be argued in Chapter 5, I consider necessary to broad the scope of the second circumstance and define it as follows. The refusal must prevent the emergence of a product. And the impossibility of that emergence, it must prejudice consumer welfare whether, for instance, in the form of higher prices, less choice or lack of interoperability.

Otherwise, if the second circumstance would not be required, the refusal that prevents the emergence of a product already offered by the IP owner – which absence does not prejudice consumer welfare in the form of higher prices nor less choice –, it might be considered abusive. Accordingly, competition rules would limit the exercise of specific IPRs by its owner in pursuit of enabling competitors to enter the market with a similar product. That, in order to allow the driving down of prices, which is an important goal of competition law, but not of IPRs. Nonetheless, whether the second circumstance is understood to be fundamental, the limitation would pursuit the goals of competition law and it would also encourage innovation, that is an overall goal shared with the broader system of IP[399].

[396] (n 297) [41].
[397] *IMS Health* [ECJ Order, 2002] (n 317) [17].
[398] Reynolds and Best, 'Article 102 and innovation' (n 366) 8, para 1.
[399] ibid 7, para 2 and 9, para 1.

4.5.2.2. Broadening the concept of 'new product'

In *Tiercé Ladbroke*, the CFI besides stating that the first and second circumstances set in *Magill* were alternatives, it also considered appropriate to modify the concept of 'new product' contained in the second circumstance. In *Magill,* the 'new product' was defined as the one that is not limited essentially to reproduce or duplicate the product (goods or services) already offered on the secondary market by the owner of the IPR. Instead, the CFI[400] described it as one that is a far more suitable for consumers. That is, the second circumstance would require that the refusal to license IPRs impeded the appearance of a far more suitable product for consumers in the ancillary market, for which there is a potential, constant, specific and regular demand on the part of consumers. It is striking that the CFI did not justify in any way the broadening of the concept, especially when even doing that, the sound and pictures could not be considered a new product for bettors.

In *Microsoft*, the Commission[401] and the CFI[402] also broadened the concept of 'new product' given in *Magill*, because according to the original definition, the second circumstance would not be present, because the purpose of competitors was to use Microsoft's IP to essentially replicate the functionality of existing Microsoft products. Therefore, to consider a product as 'new', they considered sufficient that it contained substantial elements contributed by the licensee's own efforts.
Thereby, if Microsoft had licensed the Interoperability Information to its competitor Sun Microsystems – who also supplied operating systems for work group servers –, it would have implemented it in order to be its products interoperable with Windows client PC operating systems. And as that implementation could take very different forms, there would exist significant possibilities for product differentiation that could enhance competition and benefit consumers. Hence, Microsoft's competitors' products would implement the same set of protocols as Windows work group server operating systems did, but they would differ widely in terms of performance, security and functionality. Therefore, according to the broadened concept of 'new product', Sun Microsystems' products would be considered as new ones[403].

To broaden that concept, the Commission and the CFI argued that the second circumstance relating to the emergence of a new product, as envisaged in *Magill* and *IMS Health*, could not be the only parameter which determined whether a refusal to license an IPR was capable of causing prejudice to consumers. According to Article 102 TFEU, such prejudice might arise where there was a limitation not only of production or markets – as in *Magill* and *IMS Health* –, but also of technical development – as in *Microsoft.*

400 *Tiercé Ladbroke* [CFI, 1997] (n 294) [121].
401 *Microsoft* [CFI, 2007] (n 156) [626].
402 *Microsoft* [CFI Order, 2004] (n 328) [190].
403 *Microsoft* Commission Decision [2004] (n 324) [24], [25], [693]–[701], [782] and [702]–[708]; *Microsoft* [CFI, 2007] (n 156) [643]–[665].

4.5.2.3. Outcome

As explained before, in *IMS Health* and *Microsoft* (the two cases where together with *Magill*, it was concluded that the refusal to license IPRs was abusive) the problem lied on the lack of presence of the second circumstance regarding the emergence of a new product. That, because the refusal prevented the emergence of products that duplicated those already offered by the IP owner, while in *Magill* the refusal prevented the emergence of a wholly-new product. Nevertheless, the decision-making bodies applied the *Magill* test in both cases, employing different arguments to overcome that absence.

In *IMS Health*, the Commission directly considered that the presence of the second circumstance was not necessary. Otherwise, it could not have concluded that the refusal was abusive, because it prevented the emergence of a product that duplicated the one offered by it. Besides, even broadening the concept of 'new product', it could not have been considered a new one.

Whereas in *Microsoft*, it was already established that the specifications for Microsoft's communications protocols were essential[404] to ensure the functionality of an independently-created work group server operating system by a competitor. Consequently, the Commission and the CFI chose to consider the presence of the second circumstance necessary, but broadening the concept of 'new product'. In that way, the implementation of the Interoperability Information made by Microsoft's competitor (the licensee) would be considered to be a new product, because it would contain substantial elements contributed by it.

Thusly, the *ad hoc* modifications made by the decision-making bodies enabled the application of the *Magill* test in cases where the second circumstance was not present. And accordingly, they could conclude that in both cases (*IMS Health* and *Microsoft*) IP owners abused their dominant positions.

4.5.3. Presence in a vertically related market

The third category in which the *Magill* test was applied was to a case where the IP owner was not present in a secondary market, but in a vertically related one. Namely, according to the fourth circumstance of *Magill,* the dominant IP owner must be present in both the main and the ancillary markets and the refusal is liable to, or is likely to, eliminate, immediately or over time, all effective competition in the downstream market.

However, in *IMS Health*, the IP owner was not present in two different markets, but in a vertically related one. Namely, the refusal to grant copyright licenses by IMS Health caused the exclusion of competitors from the downstream production stage, aiming to reserve the upstream stage of production to itself. Consequently, the fourth circumstance

[404] *Microsoft* [CFI, 2007] (n 156) [369]–[436].

foreseen in *Magill* – that the refusal aimed to reserve a secondary market where competitors operate –, was missing. In order to overcome that absence to be able to apply the *Magill* test, the Commission in the Decision 2002/165/EC[405] and the ECJ[406] in the preliminary ruling, broadened the scope of that circumstance.

The Commission took the following view. The fact that *Magill* involved two markets did not preclude the possibility that the refusal to license by IMS Health might be abusive, so in order for a refusal to be considered abusive, it was not essential for there to be two distinct markets. Hence, it submitted that it was not necessary for the infrastructure in question to be in a separate market and that is sufficient that it is at an upstream production stage. To get that conclusion, it focused its attention on the fact that as in *Magill* the information about television programmes was an indispensable input, so it was the use of the '1860 brick structure' in *IMS Health.* And also on the important distinction between the product, which was regional sales data services, and the brick structure in which data used to create these services was formatted. Namely, it recognized the absence of two different markets and the existence of two different stage production in the vertical market.

In the same vein, the ECJ stated that was not necessary to identify a separate market, being sufficient that a potential market or even hypothetical market could be identified. And applying that statement to the case in question, it reckoned sufficient that the IMS Health refusal caused the exclusion of competition in a vertically related market, that is, in a downstream production stage. Hence, it was not required the existence of two separate markets, being sufficient to exist two different stages of production interconnected, inasmuch as the upstream product ('1860 brick structure') was indispensable for the supply of the downstream product (regional sales data services).

Consequently, while the Commission and the ECJ did not share the opinion about the indispensable presence of the second circumstance set in *Magill* (it was not necessary for the Commission, but for the ECJ), they did agree on broadening the scope of the fourth circumstance.

4.5.4. Recap about the required circumstances

To sum up, in some cases the decision-making bodies understood that in order to determine if a refusal to grant IP licenses was abusive, it was necessary the presence of the four circumstances established in *Magill* by the EC[407], that was confirmed by the CFI[408] and the ECJ[409]. Namely, the IPR must be essential for the exercise of competitor's activity (first); the refusal shall prevent the emergence of a new product for which there is a potential demand (second); the refusal must be arbitrary (third); and it has to pursue

[405] *IMS Health* Commission Decision [2001] (n 89) [184]; *IMS Health* [ECJ, 2004] (n 241) [33].
[406] *IMS Health* [ECJ, 2004] (n 241) [44]–[47]; *IMS Health* AG (n 321) [56]–[59].
[407] *Magill* Commission Decision (n 287).
[408] *Magill* [CFI, 1991 (RTE)] (n 283); *Magill* [CFI, 1991 (BBC)] (n 283); *Magill* [CFI, 1991 (ITP)] (n 283).
[409] *Magill* [ECJ, 1995] (n 257).

the aim of excluding competition from a secondary market or a vertically related market (fourth). In some cases, they directly applied the original circumstances set in *Magill* (the Commission[410] in *Tiercé Ladbroke*). Although in most of the cases, in order to apply the *Magill* test, they made some *ad hoc* modifications of the original circumstances in order to adapt them to the facts that were divergent with respect to those in *Magill.*

Thus, in some cases, they extended the concept of 'new product' regarding the second circumstance of *Magill* (the CFI[411] in *Tiercé Ladbroke*; and the Commission[412] and the CFI[413] in *Microsoft*). In some other cases, they broadened the scope of the market object of reservation, concerning the fourth circumstance of *Magill* (the Commission[414] and the ECJ[415] in *IMS Health*).

Whereas in other cases, they stated that the presence of the four circumstances established in *Magill* was not indispensable to determine if a refusal to grant IP licenses was abusive. That is to say, they considered that the first and second circumstances were alternatives (the CFI[416] in *Tiercé Ladbroke*), or even that the presence of the second circumstance was not necessary at all (the ECJ[417] in *Bronner*; and the Commission[418] in *IMS Health*, whereas the President of the CFI[419] and the ECJ[420] considered the presence of the fourth circumstances necessary).

Wherefore, the only circumstance from those originally set in *Magill* that did not suffer any clarification or alteration was the third one, the one relating to the arbitrary nature of the refusal. An example of an objectively justified refusal was the one of *sociétés de courses* in *Tiercé Ladbroke*[421] in respect of sound and pictures*,* where this third circumstance was developed in deep. It was considered that the refusal to the applicant was commercially justified, because licences in respect of sound and pictures constituted promotional back-up for bet-taking by their commercial agent (PMU) in France and Switzerland. Accordingly, it was natural that *sociétés de courses* refused to grant licences to competitors operating in the same markets as their commercial agent. Whereas an example of an unjustified refusal was the one in *Microsoft*[422], where the dominant undertaking unsuccessfully tried to proof that the refusal was justified by the need to protect its incentive to innovate, when in fact, it was based on economic reasons.

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[410] *Tiercé Ladbroke* Commission Decision (n 292).
[411] *Tiercé Ladbroke* [CFI, 1997] (n 294) [121].
[412] *Microsoft* [CFI, 2007] (n 156) [626].
[413] *Microsoft* [CFI Order, 2004] (n 328) [190].
[414] *IMS Health* Commission Decision [2001] (n 89) [184]; *IMS Health* [ECJ, 2004] (n 241) [33].
[415] *IMS Health* [ECJ, 2004] (n 241) [44]–[47]; *IMS Health* AG (n 321) [56]–[59].
[416] *Tiercé Ladbroke* [CFI, 1997] (n 294).
[417] *Bronner* (n 297) [41].
[418] *IMS Health* Commission Decision [2001] (n 89) [69] and [70].
[419] *IMS Health* [CFI Order, Aug. 2001–temporarily] (n 299) [24]; *IMS Health* [CFI Order, Oct. 2001–permanently] (n 314) [102] and [105].
[420] *IMS Health* [ECJ, 2004] (n 241) [37], [38], [49] and [52].
[421] *Tiercé Ladbroke* [CFI, 1997] (n 294) [118].
[422] *Microsoft* Commission Decision [2004] (n 324) [219].

When assessing if a refusal to license IPRs is arbitrary or not, it is important to bear in mind that the infringement of IPRs by competitors does not constitute a justified refusal as it became clear in *IMS Health*. In that case, even though it was incumbent on IMS Health to address any perceived harm it had suffered through alleged copyright infringement through appropriate lawful means, it could not address it by attempting to eliminate competition on the relevant market. In the same vein, it also became clear in that case, that the fact that the competitor offered only a nominal sum for a licence, it did not constitute an objective justification, because IMS Health could have made a counter-proposal, suggesting a quantity that it considered acceptable[423].

All in all, from the previous analysis it emerges that on the whole, the interpretation considering that the four circumstances must be present cumulatively is the one that predominates in the case law. Therefore, the threshold for intervention of competition law is lower, but also uncertain (see below, Section 4.6.1.) due to the lack of unanimity between the decision-making bodies with regard to the required circumstances, their definition and scope. In consequence, the uncertainty makes it difficult to determine what level of harm to the consumer welfare (in the form of innovation, prices, offer...etc.) is required to trigger the intervention of competition law[424].

4.6. Consequences of adopting *ad hoc* modifications: non-compliance with general principles of law

In order to apply the *Magill* test to facts that were diverging with regard to those in that case, decision-making bodies made *ad doc* modifications of some circumstances of the test in order to adapt them to the case in question. From that fact, derived several consequences that result in the non-compliance of the decision-making bodies with some of the general principles of law. Thus, as it will be explained below, it exists legal uncertainty about the required circumstances to assess if the refusal to license IPRs is abusive. And some of the decisions and judgments lack motivation or reasoning.

4.6.1. Legal uncertainty: a proposal to avoid the inconsistency

Although the criteria set in *Magill* proved sufficient to solve that specific case, it was not formulated to be applicable – in a consistent manner – to subsequent similar cases. This is why when decision-making bodies applied the *Magill* test to subsequent cases making *ad hoc* modifications, their decisions and judgments caused legal uncertainty[425], with

[423] *IMS Health* Commission Decision [2001] (n 89) [172] and [173].
[424] Ariel Ezrachi and Mariateresa Maggiolino, 'European competition law, compulsory licensing, and innovation' (2012) 8(3) Journal of Competition Law & Economics, 595, 602, para 4.
[425] Damien Geradin, 'Limiting the Scope of Article 82 of the EC Treaty: What Can the EU Learn from the Us Supreme Court's Judgment in *Trinko* in the Wake of *Microsoft*, *IMS*, and *Deutsche Telekom*' (2004) 41(6) Common Market Law Review 1519, 29, para 4 ('Unfortunately, in IMS, the ECJ seems to have expanded the circumstances where dominant firms could be forced to give access to essential facilities to rival firms. Moreover, the standards set by the ECJ to determine when a dominant firm's refusal to give access to facilities protected IPRs should be considered as an abuse of dominance are not entirely clear, thereby creating considerable uncertainty') (of the version available at <https://ssrn.com/abstract=617263> accessed 31 July 2018).

regard to the required circumstances to determine if a refusal to grant IP licenses was abusive. That, because they were not clear or precise and sometimes they were even contradictory. For instance, in *IMS Health*, the EC considered that the second circumstance established in *Magill* was not necessary, whereas it was for the ECJ. Therefore, the legal implications could not be foreseeable with all the consequences it implies, especially when measures to remedy the antitrust infringement involved compulsory licenses (see below, Section 5).

According to the Commission's[426] statement in *Microsoft*, that legal uncertainty would not exist because it considered that did not exist an exhaustive checklist of exceptional circumstances that should be applied to any refusal to deal. That, because to assess whether a refusal to supply was abusive, the case law took into account different exceptional circumstances (*i.e.* in *Commercial Solvents, Télémarketing* and *Volvo*). Accordingly, the Commission considered necessary to analyse the entirety of the circumstances surrounding a specific instance of a refusal to supply and take its decision based on the results of such a comprehensive examination. Hence, applying that statement to the specific refusal to license IPRs, when determining if it was abusive or not, it would be necessary to analyse the entirety of the circumstances surrounding that conduct, that might be the same as those identified in *Magill* and *IMS Health* – the *Magill* test –, or not. That, because the automatic application of that test would be problematic.

On this basis, in that specific case (*Microsoft*), the Commission[427] pointed to three exceptional circumstances, in addition to those of the *Magill* test: (i) the refusal concerned interoperability in the software industry, to which the Commission legislature attached particular importance; (ii) Microsoft used its extraordinary market power in the client PC operating systems market to eliminate competition in the market for work-group server operating systems, which it had rapidly risen to dominate; and (iii) the refusal involved disruption of previous supplies.

However, the CFI arrived at the conclusion of abuse by simply applying the *Magill* test, because it did not see the need to examine other special circumstances[428]. Accordingly, it did not confirm or deny if a refusal to grant IP licenses might be abusive when other exceptional circumstances (apart from those of the *Magill* test) were present. Moreover, the Commission had already taken the same view previously in *Tiercé Ladbroke* and *IMS Health*, where it directly applied the *Magill* test, making the *ad hoc* modifications of the circumstances when it considered it appropriate.

It is true that Article 102 TFEU is considered as a flexible instrument, designed to deal with complex factual scenarios, and to intervene where the conduct of dominant

[426] *Microsoft* Commission Decision [2004] (n 324) [555], [558] and [573]–[584].
[427] *Microsoft* [CFI, 2007] (n 156) [317].
[428] John Vickers, 'A Tale of Two EC Cases: *IBM* and Microsoft' (2008) 4(1) Competition Policy International 3, 19, para 2.

companies has an effect on competition which is contrary to the Treaty[429]. Therefore, it offers a dynamic interpretation of what constitutes an abuse of a dominant position. However, I do not agree with Commission's view because legal certainty is needed regarding what circumstances must be present in a refusal conduct in order to be considered as abusive. The above, without prejudice that as the antitrust infringement assessment is done case by case, the entirety of the facts surrounding the specific refusal must be taken into account. Otherwise, the result would be inconsistent decisions and judgments as occurred regarding the case law on refusal to license IPRs.

Therefore, in my view, to avoid that inconsistency about the required circumstances established in *Magill* – as decisive to determine the abusive nature of a refusal to licence IPRs –, they should have been reviewed in *IMS Health*. Besides, as it will be explained in Chapter 5, I consider that the *Magill* test – in its reviewed version –constitutes the appropriate legal criteria to assess whether SEP owners abuse their dominant positions when they bring infringement actions seeking a prohibitory injunction or the recall of products. Moreover, given the case, the compulsory license would emerge as the most effective measure to remedy that infringement.

The fact that *Magill* was the first case establishing what circumstances had to be present to consider that a refusal to grant IP licenses was abusive, it does not mean that they cannot be reviewed to be applied to other similar cases of refusal. Therefore, before proceeding to automatically apply a certain legal approach (in this case, the criteria set in *Magill*), it is convenient to first analyse all the circumstances of the case in detail. And then, determine whether it is opportune to use the existing legal approach, or if it would be more appropriate to adapt it to the case in question or to suggest a different one. In any case, the Commission and the ECJ should always justify the adopted choice precisely.

4.6.2. Lack of reasoning

In line with the above, there were cases about refusal to license IPRs, where decision-making bodies did not expressly motivate the reason why they employed specific legal arguments in their decisions and judgments.

In *Bronner*, where the subject matter of the case was a refusal to supply a service, the ECJ applied the criteria set in *Magill*, where the object of the case was a refusal to grant a copyright license, without explicitly justifying why it did so[430]. It can be inferred from the judgment, that the ECJ made that choice to protect the owner of the service (Mediaprint). That, because in order to conclude that a refusal to deal was abusive, the *Magill* test required more circumstances than those required by the case law on refusal to supply services. Something similar happened in *Microsoft*, where the EC was of the opinion that protocols – unlike software –, were not protected by copyright. Notwithstanding, in order to be able to apply the *Magill* test, the Commission finally

[429] *IMS Health* AG (n 321) [34].
[430] *Bronner* (n 297) [41].

considered them as an IP asset, because that test was more favourable to Microsoft than the case law on refusal to supply goods.

Nevertheless, the ECJ should have explicitly mentioned that considered that the criteria set in *Magill* was equally applicable when the object of the refusal were services or goods. For example, in *Télémarketing*[431]*,* the ECJ stated that the legal approach established in *Commercial Solvents* regarding a refusal to supply goods, was likewise usable when dealing with refusals to supply services.

In the following three cases (*IMS Health*, *Tiercé Ladbroke* and *Microsoft*), the Commission, the CFI and the ECJ also omitted to expressly justify why they reviewed the circumstances set in *Magill*.

In *IMS Health*, to conclude the existence of a *prima facie* case of abuse of a dominant position, the Commission (in the Decision 2002/165/EC) considered that the presence of the second circumstance – that the refusal prevented the emergence of a new product for which there was a potential demand – set in *Magill* was not necessary. However, previously (in *Tiercé Ladbroke*) the Commission just took the opposite view. When the President of the CFI suspended the application of the Decision 2002/165/EC, it also considered the presence of the second circumstance necessary. And so did the ECJ in the preliminary ruling. However, the ECJ stated in *Bronner* that its presence was not indispensable. And in *Tiercé Ladbroke*, the CFI considered sufficient the presence of the first – that the IPR was essential for the exercise of competitor's activity – or the second circumstance, alternatively.

In that same case (*IMS Health*), the Commission broadened the scope of the fourth circumstance established in *Magill* – the refusal had to pursue the aim of excluding competition from a secondary market. That is, it considered sufficient that the refusal excluded competition from a vertically related market. That interpretation was also adopted by the ECJ in the preliminary ruling.

In *Tiercé Ladbroke* (the CFI) and in *Microsoft* (the Commission and the CFI)*,* decision-making bodies also broadened the concept of 'new product' with regard to the second circumstance set in *Magill* – that the refusal prevented the emergence of a new product for which there was a potential demand. The 'new product' was originally defined as the one that was not limited essentially to duplicate the product already offered by the IP owner. Nonetheless, they stated that in order to consider a product as 'new', it was sufficient that it was a far more suitable for consumers (in *Tiercé Ladbroke*) or that it contained substantial elements contributed by the licensee's own efforts (in *Microsoft*).

It is not clear why in *Tiercé* Ladbroke, the CFI considered the first (essentiality) and second (new product) circumstances of *Magill* as alternative when in order to oblige an

[431] (n 110) [25] and [26].

IP owner to grant licenses, it is indispensable that the protected right in question is essential. Otherwise, the general principle of the freedom of the parties to arrange their own affairs would devoid of any content. In the same vein, the CFI should have motivated why it broadened the 'new product' concept, because even broadening it, the sound and pictures would not be considered a new one for bettors. Besides, note that just as the second circumstance was not present in *Tiercé Ladbroke*, neither was the fourth one. That is to say, *sociétés de courses* were not present in the Belgian horse race betting market (main market) or in the market for the exploitation of their copyright (ancillary market)[432]. Nevertheless, the CFI did not consider it appropriate to modify it.

However, it can be inferred from the decisions and judgments in *IMS Health* and *Microsoft*, that the *ad hoc* modifications were made in order to protect competitors, whose aim was not to produce a new product, but an existing one (and in *IMS Health,* with the addition that did not exist two separate markets)· Applying the *Magill* criteria as it was originally stated, they would have to conclude that the conduct of IP owners was not abusive. In that sense, as it was established by the Advocate General Jacobs[433] – who based on the authors of the Chicago School, whose approach to the concept of abuse was economic –, it is important not to lose sight of the primary purpose of competition law in general, and of the prohibition of abuse of a dominant position (Article 102 TFEU) more specifically. As aforementioned before (Section 1.3. of Chapter 1 and Section 4.5.1. of this one), that purpose is to prevent distortion of competition – and in particular to safeguard the interests of consumers – rather than to protect the position of particular competitors. This is the approach adopted also by the European legislator in Article 101(3) TFEU[434].

5. Compulsory license to remedy anti-competitive practices

Among the cases studied so far, in addition to *Magill*, in *IMS Health* and *Microsoft* the refusal to license IPRs was also considered to be abusive. Note that in *IMS Health*, the application of the Commission's Decision 2002/165/EC that stated the existence of an anti-competitive infringement in a *prima facie* assessment was suspended and it was subsequently withdrawn.

In these three cases, among the measures imposed – interim measures in *IMS Health* – to remedy the infringement, the compulsory license was always present for being the most appropriate one. Accordingly, in the following sections I refer to that behavioural remedy in general terms, making also reference to the particularities that the measure presents in each of those three cases.

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[432] *Tiercé Ladbroke* [CFI, 1997] (n 294) [117] and [121].
[433] *Bronner* AG (n 153) [58].
[434] Jesús Alfaro Águila-Real, 'Delimitación de la noción de abuso de una posición de dominio' en Santiago Martínez Lage y Amadeo Petitbò Juan (dirs), *El Abuso de la Posición de Dominio* (Marcial Pons 2006), 194, para 3 and 195, para 4.

Besides, as it will be argued in Chapter 5, I consider that compulsory license is also the most effective measure to remedy, given the case, the abuse of dominant position of SEP owners, when they bring patent infringement actions seeking a prohibitory injunction or the recall of products. The above, because I am of the opinion that if specific circumstances are present – *i.e.* those of the *Magill* test, but in a reviewed version as I will propose – the conduct of SEP owners might be considered to be a 'constructive' refusal to patent licensing.

5.1. Concept

As it was mentioned in Section 2.1.1. of Chapter 1, when after a judicial or administrative process – conducted by a Competition Authority –, a practice has been determined to be anti-competitive, a compulsory license might be issued by the court or public authority to remedy that behaviour, who then will lay down the corresponding terms. Hence, compulsory licenses under competition law, are those licenses which undertakings are required to grant by courts or competition authorities on the basis of competition rules[435].

Compulsory licenses are common remedies when the abusive behaviour is related to ways in which IPRs were exercised. For instance, compulsory licenses can be ordered when IPRs are used to charge excessive prices (see Section 1.3.1. of Chapter 1 on exploitative abuse), but also as merger remedies, when IPRs are exercised to strengthen monopoly power through mergers (see Section 5.2. of Chapter 5).

A compulsory license can also be issued to remedy the abusive behaviour that has been studied in this chapter, that is, a refusal to license IPRs that unjustifiably forbids access to protected creations or inventions, thus, excluding competitors from the market. In that case, the compulsory license forces the IP owner to grant licenses of its IPRs to third parties, enabling them to make certain uses of the protected invention or creation, on payment of royalties.

Notwithstanding, note that the compulsory license constitutes an exceptional remedy, because the general rule is that if IP law confers an exclusive right, that must be respected by competition law. That, because IPRs of the Member States have duly balanced the various interests that must be protected by society, including on the one hand, the protection of the interests of the IP owners, and on the other, the undistorted competition (it must not be forgotten that to a certain extent, IPRs also serves to promote competition)[436]. In that regard, Article 345 TFEU provides that 'the Treaties [in our cases, the Article 105(1) TFEU[437]] shall in no way prejudice the rules in Member States governing the system of property ownership'.

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[435] *Magill* AG (n 291) [13].
[436] ibid [13, fn 10].
[437] (n 73) ('Without prejudice to Article 104, the Commission shall ensure the application of the principles laid down in Articles 101 and 102. On application by a Member State or on its own initiative, and in cooperation with the competent authorities in the Member States, which shall give it their assistance, the

Therefore, the possibility of issuing compulsory licenses relies on the fact that although IP law gives IP owners the exclusive right to exploit the protected invention or creation – *i.e.* the right to restrict competition –, it does not confer unrestricted exclusive rights on owners[438]. Hence, one of the limits on the exclusive right is the abusive exercise of it by its owner – a dominant undertaking –, that might result in the imposition of a compulsory license.

Actually, the objective of safeguarding the competitive process is a very high-ranking one since free competition is a basic principle underpinning the EU economic policy according to Article 119 TFEU (as well as Protocol No 27 of TFEU)[439].

5.2. Imposing compulsory licenses: competence and principles

As regards the competence to impose compulsory licenses, a debate arose about whether the EC and competition authorities of Member States (when applying Article 102 TFEU, that requires, among other elements, that the abusive conduct has an effect on trade between Member States) are entitled to impose compulsory licenses of IPRs.

According to Article 7(1) of Regulation 1/2003, where the Commission finds there is an infringement of Article 102 TFEU, it may require the undertakings to bring such infringement to an end. And for this purpose, it may impose on them any behavioural remedy that is proportionate to the infringement committed and necessary to bring the infringement effectively to an end**.** The competition authorities of Member States and the national courts, when applying the aforementioned Articles in individual cases, they also have the power to require that an infringement be brought to an end (Articles 5 and 6 of Regulation 1/2003).

However, although Article 7(1) refers to behavioural remedies, neither the TFEU nor the Regulation 1/2003 expressly refer to compulsory licenses to remedy an anti-competitive behaviour, consisting of forcing a dominant company to grant IP licenses. Therefore, when the ECJ was dealing with a suspension, confirmations or annulment of Commission's decisions that imposed compulsory licenses of IPRs, it was a matter of discussion if Article 7(1) entitled the Commission to impose them or not.

The ECJ addressed that issue confirming that the Commission was empowered to impose compulsory licenses. Besides, the Commission's power with regard to imposing compulsory licenses of patents, in particular, is endorsed by international law. What it is important to highlight is that above all, the compulsory license must comply with proportionality and essentiality principles.

Commission shall investigate cases of suspected infringement of these principles. If it finds that there has been an infringement, it shall propose appropriate measures to bring it to an end').

[438] *Magill* AG (n 291) [11].

[439] Maier-Rigaud, Hellström and Wenzel Bulst, 'Remedies in European Antitrust Law' (n 80) 43, para 3.

5.2.1. ECJ's confirmation

As it was already mentioned before (see Section 2.1. of Chapter 1), according to the ECJ[440], the statement of Article 7(1) means that the Commission has the power not only to prohibit 'the continuation of certain action, practices or situations which are contrary to the Treaty', but also to 'include an order to do certain acts or provide certain advantages which have been wrongfully withheld'. In the same vein, the ECJ[441] and the CFI[442] expressly acknowledged that the Commission must be able to exercise the right to take decisions conferred upon it, in the most efficacious manner, best suited to the circumstances of each given situation.

Therefore, the power of the Commission (and competition authorities of Member States when applying Article 102 TFEU) to order to do certain acts or provide certain advantages which have been wrongfully withheld, it includes the power to order compulsory licenses of IPRs.

In that regard, the Advocate General Mischo in *Volvo*[443] expressly stated that the Commission was empowered under Article 7(1) of Regulation 1/2003 to impose one or more compulsory licenses on the proprietor of the IPR, if it considered that it was the best way of bringing the abuse to an end.

5.2.2. Endorsement of international law

With reference to compulsory licensing of patents to remedy anti-competitive practices, the power to impose that remedy is consistent with the EU's and Member States' international obligations under the Paris Convention[444], administered by the World Intellectual Property Organization (WIPO), that has a total of 177 contracting parties. And also under the TRIPS Agreement, administered by the World Trade Organization (WTO), of which all the WTO members (162 countries – 28 Member States included –) are part.

As it will be explained below, both international treaties allow their members to use compulsory licenses as long as their national law allows to use them. Hence, as Article 7(1) of Regulation 1/2003 empowers the Commission to impose compulsory licenses, it can be concluded that the international law endorses that competence.

Article 5A(2) of Paris Convention provides that 'each country of the Union (countries to which the Convention applies) shall have the right to take legislative measures providing

440 *Commercial Solvents* (n 249) [45].
441 *Camera Care* (n 258) [17]; *Ford* (n 258).
442 *La Cinq* (n 259).
443 *Volvo* (n 285) [2]–[4]; *Volvo* AG (n 138) [31].
444 Paris Convention for the Protection of Industrial Property [as amended on September 28, 1979] of 20 March 1883, TRT/PARIS/001 (1883) (Paris Convention).

for the grant of compulsory licenses to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent'.

Article 8(2) of the TRIPS states that Members may adopt appropriate measures 'to prevent the abuse of IPRs by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology'. And Article 30, specifically establishes that Members may provide limited exceptions to the exclusive rights conferred by a patent, as long as the exceptions do not unreasonably: (1) conflict with a normal exploitation of the patent; and (2) prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.

In the same vein, the first paragraph of Article 40 of the TRIPS states that '[WTO] Members agree that some licensing practices or conditions pertaining to IPRs which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology'. Bearing it in mind, the second paragraph states that nothing in the TRIPS shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of IPRs having an adverse effect on competition in the relevant market. By way of example, it mentions the following practices: exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing. Although it does not refer to the refusal to license IPRs, it might also be an abusive practice according to Article 102 TFEU.

In consequence, in the light of its relevant laws and regulations, the EC may adopt, consistently with the other provisions of the TRIPS – that will be studied below, see Section 5.3. –, appropriate measures to prevent or control the abuse of dominant position when the dominant undertaking refuses to grant IP licenses.

In conclusion, there is nothing in the provisions of the Paris Convention nor TRIPS Agreement to prevent the EC nor the competition authorities of Member States (when they apply Article 102 TFEU) from imposing remedies, such as compulsory licensing of patents, which limit or regulate the exploitation of IPRs held by an undertaking in a dominant position where that undertaking exercises those rights in an anti-competitive manner[445]. The above, as long as compulsory licenses are, according to Article 7(1) of regulation 1/2003, proportionate and necessary (see the next Section 5.2.3.) and they fulfilled the requirements prescribed by the TRIPS Agreement (see also Section 5.3.).

When competition authorities of Member States apply their national competition law (that mostly are modelled on article 102 TFEU), each Member State[446] will decide whether it

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[445] *Motorola* Commission Decision (n 7) [498].

[446] For a complete landscape of countries providing compulsory licenses to remedy anti-competitive practices, see: WIPO, 'Survey on compulsory licenses granted by WIPO Member States to address anti-competitive uses of intellectual property rights' (2011) CDIP/4/4 REV./STUDY/INF/5 <http://www.wipo.int/edocs/mdocs/mdocs/en/cdip_4/cdip_4_4_rev_study_inf_5.pdf> accessed 4 August 2018.

wants to include compulsory licenses to remedy anti-competitive practices or not. And if it does, the regulation of compulsory license in that Member State will be comprised, in addition to national law, of international law, so compulsory licenses will need to respect the aforementioned conditions required by the TRIPS Agreement.

5.2.3. Principles: proportionality and necessity

The Commission's decisions imposing compulsory licenses must meet the exigencies of various principles (*i.e.* no punishment, equal treatment and legal certainty[447]), but mainly the principles of proportionality and necessity that are explicit in Article 7(1) of Regulation 1/2003. As the ECJ has maintained, these principles mean that the charges imposed on market participants must not exceed what is appropriate and necessary to attain the objective sought. Thus, the Commission is empowered to impose obligations on the undertakings concerned, for the sole purpose of bringing the infringement of competition law to an end, namely, the re-establishment of compliance with the rules infringed[448].

Therefore, although it will depend on the specific case, in general terms, a compulsory license imposed to remedy the abusive behaviour of refusing to license IPRs (*e.g. Magill* and *Microsoft*), it is directly proportional to the infringement, because it forces the dominant undertaking to do exactly what it refused to do. And for that same reason, it also constitutes a necessary measure to bring the infringement of Article 102 TFEU effectively to an end, that is, to end with the refusal behaviour.

5.3. Requirements of compulsory licensing of patents under the TRIPS

As it was mentioned before, the TRIPS Agreement does not specifically list the reasons that might be used to justify compulsory licensing of patents, but it referrals to national legislations. Nevertheless, Article 31 states that if the law of a Member allows for the use of compulsory licensing, it shall respect some provisions. Although in general terms most of the requirements are applicable to all compulsory licenses when the IP in question is a patent, there are some particularities that are only relevant for those compulsory licenses granted to remedy anti-competitive practices – what concern us –, as it will be explained below.

In any case, it is worth mentioning that it is not necessary to the user to try first for a voluntary license. Namely, it is not required that (1) the proposed user has made efforts to obtain authorization from the right holder on reasonable commercial terms and conditions; and (2) that such efforts have not been successful within a reasonable period of time[449].

[447] Maier-Rigaud, Hellström and Wenzel Bulst, 'Remedies in European Antitrust Law' (n 80) 50 and 51.
[448] *Magill* [ECJ, 1995] (n 257) [93]; *Microsoft* [CFI, 2007] (n 156) [1276].
[449] TRIPS Agreement (n 67), Art 31(k) in relation to Article 31 (b).

5.3.1. Individual merits

Issuing a compulsory license must be decided case by case, considering the individual merits of each particular case[450].

5.3.2. Limited scope and duration

The scope and duration of the compulsory license shall be limited to the purpose for which it was authorized, that is, to remedy the practice considered to be anti-competitive after judicial or administrative process[451] (*e.g.* the refusal to license patent rights).

5.3.3. Non-exclusivity

The compulsory license shall not be exclusive, so the patent holder can still continue to produce under the patent[452].

5.3.4. Non-assignability

The compulsory licence can only be assigned along with the part of the applicant's business that enjoys the use of the patented invention[453].

5.3.5. Liability

Competent authorities shall have the authority to review the continued existence of the circumstances (*i.e.* the antitrust infringement) which led to the authorization of the compulsory license. If they cease to exist and are unlikely to recur, competent authorities will order termination of authorization. On the contrary, they will refuse termination if the conditions are likely to recur[454].

5.3.6. Remuneration

The right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization. That is, the patent owner has the right to be paid for use under the compulsory licence[455]. Nevertheless, the TRIPS Agreement does not define the concepts of 'adequate remuneration' or 'economic value', but it specifies that the need to correct anti-competitive practices may be taken into account in determining the amount of remuneration[456].

As regards the determination of the due royalties for the compulsory license, a zero-royalty rate will promote the entry of inefficient competitors and have a major negative

[450] ibid, Art 31 (a).
[451] ibid, Art 31 (c).
[452] ibid, Art 31 (d).
[453] ibid, Art 31 (e).
[454] ibid, Art 31 (g) and (k).
[455] ibid, Art 31 (h).
[456] ibid, Art 31 (k).

effect on investment. If the royalty rate is high, however, the compulsory license may not provide meaningful access (of competitors). Sharing a monopoly among several competitors does not in itself increase competition unless it leads to improvements in price and output, otherwise nothing would be achieved in terms of enhancing consumer welfare. Competition would be improved only if the terms upon which access is offered allow the licensing parties to compete effectively with the dominant firm on the relevant market[457].

In any case, the authorities of the country that ordered the compulsory license would decide whether the payment is 'adequate', since the TRIPS Agreement states the patent owner must be given the right to appeal in that country[458].

5.3.7. Reviewability

The legal validity of any decision relating to the authorization to grant a compulsory license shall be subject to judicial review or other independent review by a distinct higher authority in the Member ordering the compulsory license[459].

5.3.8. Linked patents

Where a compulsory licence is granted in order to permit the exploitation of a patent ('the second patent') which cannot be exploited without infringing another patent ('the first patent'), specific additional conditions shall apply[460].

5.3.9. Production for domestic market or exportation

The compulsory license shall be authorized predominantly for the supply of the domestic market of the Member that orders it[461]. However, Members can also issue compulsory licenses to remedy antitrust conducts with the aim of producing products for export[462].

5.4. The compulsory license case by case: the particularities

5.4.1. *Magill*: several equally proportional and effective remedies

In *Magill*, the Commission[463] suggested two alternative measures to bring the infringement to an end, that were subsequently confirmed by the CFI and the ECJ. Hence,

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457 Padilla, Ginsburg and Wong-Ervin, 'Antitrust Analysis Involving Intellectual Property' (n 386) 13, para 4.
458 TRIPS Agreement (n 67), Art 31 (j).
459 ibid, Art 31 (i).
460 ibid, Art 31 (l) requires 3 conditions for the use of linked patents: (i) the invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent; (ii) the owner of the first patent shall be entitled to a cross-licence on reasonable terms to use the invention claimed in the second patent; and (iii) the use authorized in respect of the first patent shall be non-assignable except with the assignment of the second patent.
461 ibid, Art 31 (f).
462 ibid, Art 31 (k) in relation to Article 31 (f).
463 *Magill* Commission Decision (n 287) Art 2.

undertakings were obliged to supply to third parties, on request and on a non-discriminatory basis, the creations protected by copyrights (individual advance weekly programme listings) and to permit their reproduction (without any limits) by such parties.

They could comply with the imperative simply by sending the listings, free of charge and without defining any other terms (supply agreement). Or, by means of licenses which include terms – upon which companies considered third parties should be permitted to publish the advance weekly programme listings –, such as reasonable royalties or other conditions which take account of the parties' legitimate preoccupations (supply under licensing agreement). For instance, the necessary terms to ensure comprehensive, high-quality coverage of all licensors' programmes.

In principle, when several equally proportional and effective remedies are available, there is a role for the infringing undertaking in selecting the appropriate remedy[464]. I do not think the first option was proportional to the infraction committed because it implied a transmission free of charge. However, it was more effective because it would bring the infringement to an end immediately, while in the second alternative, the terms of the license had to be previously approved by the Commission. Bearing in mind that the third party (Magill) – from the moment it requested the license for the first time – was willing to pay a reasonable remuneration, infringing undertakings would have probably opted to grant licenses.

In both scenarios, the Commission limited the scope of application of the measures, stating that the requirement was limited to the listings themselves, without extending it to any additional information. Besides, television broadcasting companies could continue publishing individual television guides on a market where comprehensive television guides were available, if they considered consumers would be best served by their own guides.

It is important to bear in mind that Article 2 of the Commission's Decision did not include any periodic penalty payment – a sanction – (see Section 2.2.2. of Chapter 1) in the event of non-compliance. It merely specified how companies could comply with the obligation to bring the infringement to an end, taking into account the constraints inherent in the specific drawing up of such a licensing system.

5.4.2. *IMS Health*

The EC found in favour of NDC through the Decision 2002/165/EC[465], where it imposed on the dominant a compulsory license as an interim measure, which included a mechanism for determining the remuneration. Hence, IMS Health had to grant licenses to third parties so that they could use the protected structure. Besides, that remedy was imposed together with a periodic penalty payment for each day of delay in its compliance.

[464] Case T-24/90 *Automec Srl* [1992] ECR II-2223, paras 51 and 52.
[465] *IMS Health* Commission Decision [2001] (n 89) [217].

5.4.2.1. Compulsory license as an interim measure

According to the case law[466], three elements must be present to impose a compulsory license as an interim measure in the course of a competition investigation. Firstly[467], the Commission considered that legal and factual elements showed a reasonably strong *prima facie* case establishing an abuse of a dominant position by IMS Health (*fumus delicti commissi*). Secondly[468], it stated there was a likelihood of serious and irreparable harm to competitors and intolerable damage to the public interest, unless protective interim measures were ordered (*periculum in mora*). The Commission understood that unless NDC was granted a licence to the '1860 brick structure', its German operation would go out of business, and that there would be intolerable damage to the public interest. And thirdly[469], there was an urgent need for protective measures, because the refusal of access to the structure was likely to eliminate all competition on the relevant market, because competitors were infringing IPRs.

Nevertheless, the Commission adopted the Decision 2003/741/EC that withdrew the Decision 2002/165/EC[470] on interim measures (compulsory license and periodic penalty payment) due to a material change of circumstances underlying its adoption, namely the state of competition – no because the Commission altered its initial position as regards the existence of a *prima facie* case of abuse of a dominant position. However, the Commission did not rule on the merits (although as it was mentioned in Section 3.2.5. above, it should have done it). In the event the Commission had asserted that IMS Health infringed Article 102 TFEU, it should have withdrawn – as it did it – the compulsory license and the periodic penalty payment. That, because the status of the competition changed, so there would not exist the need to remedy any abuse. And it should have sanctioned the abusive behaviour, imposing a fine.

As it was mentioned previously in the aforementioned section, in the case *Motorola* investigated by the Commission (see Section 3.2. of Chapter 3), the status of the competition had also changed before the EC adopted the decision, because parties achieved to sign a licensing agreement regarding the SEPs (the Settlement Agreement). Despite this, the Commission opted to rule on the merits, concluding that the SEP owner abused its dominant position. However, it did not impose a fine to sanction the infringement, because until that moment, there was no Union decisional practice or case law regarding whether the conduct of SEP holders constituted an abuse of a dominant

[466] *Camera Care* (n 258) [14] and [18]; *Ford* (n 258) [13]; *La Cinq* (n 259) [2].
[467] *IMS Health* Commission Decision [2001] (n 89) [45] and [46] (analysis of the relevant market), [57]–[62] (dominant position), [63]–[174] (the abuse of a dominant position), [175]–[178] (effect on trade between Member States).
[468] ibid [187]–[201].
[469] ibid.
[470] The *IMS Health* Commission Decision [2001] (n 89) was suspended throughout the period of its potential application by the *IMS Health* [CFI Order, Aug. 2001–temporarily] (n 299) and the *IMS Health* [CFI Order, Oct. 2001–permanently] (n 314). And subsequently, it was withdrawn by the *IMS Health* Commission Decision [2003] (n 319) [13]–[16].

position or not. And also because national courts had reached diverging conclusions on the question.

Accordingly, to be consistent with the argument used in *Motorola*, in case the Commission had ruled on the merits in *IMS Health* concluding that the dominant undertaking infringed Article 102 TFEU, it should impose a fine. That, because until that moment, both the Commission and the ECJ had already ruled (in *Volvo, Renault, Magill, Tiercé Ladbroke* and *Bronner*) on the issue of whether the refusal to grant IP licenses was abusive. Otherwise, it might be understood that the argument for the non-imposition of fines when it is concluded that Article 102 TFEU was infringed, it is based on the fact that the status of competition changed in the interim of the investigation, instead of being due to the lack of previous decisions on the matter investigated by the Commission.

In any event, I am of the opinion that even when there is no need to remedy an infringement – because the status of competition changed –, the infringement should always be sanctioned. In so doing, the dominant company assumes the consequences of its behaviour and it may serve as a deterrent measure for potential future infringers.

5.4.2.2. Mechanism for determining the remuneration

When parties do not reach an agreement on the royalties of the licenses that must be granted compulsorily, it might cause that the IP owner does not grant them within the deadline established by the Commission. Therefore, to avoid the non-compliance, it is appropriate that the EC foresees a solution for these cases.

Curiously, such a solution was only adopted in *IMS Health*, in the Decision 2002/165/EC[471] that ordered a compulsory license as an interim measure (note that its application was suspended and subsequently withdrawn by Decision 2003/741/EC[472]). While it was omitted, strikingly, in *Magill* and *Microsoft,* where compulsory licenses were imposed as permanent remedies.

The solution at issue stated that if parties failed to reach a mutual agreement about the royalties to be paid within the deadline set by the Commission, they would be determined by one or several independent experts chosen by agreement of the parties. If they did not reach an agreement on the identity of the expert(s), they would be appointed by the Commission from a list of candidates provided by the parties or, if appropriate, the EC would choose one or several suitably qualified person(s).

In any event, competition authorities and courts are responsible, ultimately, for determining the payable royalties – as well as the other terms of the compulsory license.

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[471] *IMS Health* Commission Decision [2001] (n 89), Art 2.
[472] *IMS Health* Commission Decision [2003] (n 319).

Thereon, it is noteworthy the statement of the US Supreme Court[473], who recognized that this is a ‘role for which they (competition authorities and courts) are ill suited’.

5.4.2.3. Double measure: periodic penalty payment

In order to achieve the aforementioned same objective – that the dominant undertaking grants licenses within the deadline established by the Commission –, it would also be appropriate if the Commission imposed periodic penalty payments together with compulsory licenses. Hence, the dominant undertaking could envisage the consequence of the non-compliance.

In the same vein of the mechanism for determining the remuneration, it is striking that the Commission only issued the two measures combined in *IMS Health*[474], but not in *Magill*. Whereas in *Microsoft* (see below), the periodic penalty payment per day for non-compliance with the obligation to grant licenses, it was imposed once that order was breached, so the sanction did not fulfil its purpose of preventing the non-compliance.

5.4.3. *Microsoft*

In *Microsoft,* the Commission concluded that the company infringed Article 102 TFEU, when refusing to supply the Interoperability Information. To bring that infringement to an end, it ordered Microsoft to make that information available and to allow its use on reasonable and non-discriminatory terms to any undertaking having an interest in developing and distributing work group server operating system products. Notwithstanding, as it was already highlighted, in contrary to what happened in *Magill* or *IMS Health* (interim measure), in *Microsoft* the compulsory license did not have any impact on the exercise of its IPRs (copyrights and patents) and trade secrets, because it was compiled solely to license the protocols to allow the interoperability, not the software products that integrate the Windows Client PC Operating System[475].

As mentioned in the previous chapter (see Section 2.1.1.), in contrary to structural remedies, the compliance with behavioural remedies, such as compulsory licenses, has to be monitored and enforced. Accordingly, in order to oversee Microsoft’s compliance with the imposed obligation of granting licenses of the protected information, the Commission also imposed to the dominant undertaking the obligation to propose a mechanism that assisted the Commission with the monitoring duty.

According to what was stated before, the Commission is empowered to impose compulsory licenses based on Article 7(1) of Regulation 1/2003. However, the additional obligation imposed by the Commission to Microsoft about proposing a mechanism that

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[473] Case *Verizon Communications Inc. v. Law Offices of Curtis v. Trinko, LLP*, 540 U.S. 398, 408 (2004).
[474] *IMS Health* Commission Decision [2001] (n 89), Art 1 (compulsory license) and Art 3 (periodic penalty payment).
[475] *Microsoft* [CFI Order, 2004] (n 328) [173].

included a monitoring trustee to track its compliance, it was considered as an excess of power by the CFI.

In addition to impose the compulsory license to remedy the infringement, the Commission also sanctioned Microsoft's behaviour imposing a fine and a periodic penalty payment.

5.4.3.1. Abuse of power

The EC, in addition to imposing a compulsory license to Microsoft in Article 5 of the Decision 2007/53/EC[476], it also ordered, in Article 7, that the dominant undertaking had to submit a proposal for the establishment of a suitable mechanism assisting the Commission in monitoring its compliance with the imposed obligation. That mechanism had to include a monitoring trustee who had to be independent from Microsoft and of the Commission itself, in so far as he was required to act on his own initiative and upon application by third parties in the exercise of his powers. Besides, he should have full access to the source code of the relevant Microsoft products and all costs of establishment of the monitoring trustee, including a fair remuneration for his activities, should be borne by Microsoft[477].

Accordingly, Microsoft made several proposals, but all of them were considered insufficient by the Commission. Therefore, through the Decision C(2005) 2988 final (the Trustee Decision), the Commission imposed a monitoring mechanism, by providing for the appointment, functions and obligations of a Monitoring Trustee.

In any case, Microsoft had already applied for the annulment of the Commission Decision 2007/53/EC that imposed the compulsory license (Article 5) and the obligation to propose the aforementioned mechanism (Article 7). As regard the compulsory license, the CFI rejected the application as unfounded. However, it did annul[478] the Article imposing the additional obligation about the monitoring trustee, because it did not have a legal basis in Article 7(1) of Regulation 1/2003[479]. Namely, according to the CFI, the Commission had exceeded its powers of investigation and enforcement under that Regulation. It noted that the Commission does not have unlimited discretion when formulating remedies to be imposed on undertakings for the purpose of putting an end to an infringement. Furthermore, the principle of proportionality requires that the burdens imposed on undertakings in order to bring an infringement to an end, do not exceed what is appropriate and necessary to attain the objective sought, namely re-establishment of compliance with the rules infringed.

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[476] *Microsoft* Commission Decision [2004] (n 324), Art 5.
[477] ibid, Art 7 and [1048].
[478] *Microsoft* [CFI, 2007] (n 156) [1268]–[1273] and [1276].
[479] Note that the judgment refers to the Ex Article 3(1) of Regulation 17/62 (n 256).

Therefore, the EC, through the Decision 2010/C 348/08[480], it deleted the Article 7 in question, and it repealed the Decision C(2005)2988 final, in which it appointed the Monitoring Trustee.

5.4.3.2. Triple measure: fine and periodic penalty payment

There is also the possibility that the Commission imposes a compulsory license along with a fine, as it did it in *Microsoft*, punishing the dominant undertaking. Namely, in Article 3 of the Decision 2007/53/EC[481] the Commission imposed a fine of euros (EUR) 497.2 million.

Moreover, as (since March 2004) Microsoft failed to comply with its obligation to make Interoperability Information available to interested undertakings pursuant to the aforementioned Article 5, through the Decision 2008/C 138/07[482] the Commission imposed a periodic penalty payment of EUR 2 million per day. Later on (between June 2006 and October 2007), Microsoft began charging unreasonable prices for access to interface documentation for work group servers, so it continued without complying with the remedy imposed. Therefore, the Commission in the Decision 2009/C 166/08[483], it fixed the definitive amount of the periodic penalty payment in EUR 899 million. Microsoft applied for the annulment of the Decision that fixed the amount and, in the alternative, the cancellation or reduction of the periodic penalty payment imposed. And the GC[484] ended reducing it to EUR 860 million.

Although the Commission had previously imposed compulsory licenses (in *Magill*, as a final measure and in *IMS Health*, as a provisional measure together with a periodic penalty payment – although its application was suspended and subsequently, withdrawn –), it was in *Microsoft* where it imposed the three measures together for the first time: a compulsory license, a fine and a periodic penalty payment. And ever since, the Commission has not opened any other investigation on refusal to grant IP licenses. Accordingly, the triple measure might have had a deterrent effect among dominant companies – even though, in *Microsoft*, the periodic penalty payment was not imposed together with the other two measures, but only once the company did not comply with the order to grant licenses to third parties.

I do not consider that the inexistence of investigations by the Commission during this time, it may be due to the certainty regarding the circumstances that must be present to consider to be abusive a refusal to grant IP licenses. Indeed, the situation is precisely the opposite, it exists a legal uncertainty in that regard. And as it will be argued in Chapter 5, that makes the review of the *Magill* test – applied in *IMS Health* –, necessary.

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480 *Microsoft* (Case COMP/C-3/37.792) Commission Decision 2010/C 348/08 [2009] OJ C348/8.
481 *Microsoft* Commission Decision [2004] (n 324).
482 *Microsoft* (Case COMP/C-3/37.792) Commission Decision 2008/C 138/07 [2006] OJ C138/10, Art 1.
483 *Microsoft* (Case COMP/C-3/37.792) Commission Decision 2009/C 166/08 [2008] OJ C166/20, para 23.
484 Case T-167/08 *Microsoft* (GC, 27 June 2012).

Conclusion

Generally speaking, from the description of the cases previously made, it follows that a company commits an abuse of a dominant position, if without justification, cuts off supplies of goods or services to an existing customer for whom these inputs are essential (*Commercial Solvents* and *United Brands*) or it refuses to supply them to a new customer. But also if it does that to reserve to itself an ancillary activity that might be carried out by another undertaking on a neighbouring but separate market, being possible to eliminate all competition on it, on prejudice of consumers (*Télémarketing*).

Furthermore, an abuse may also consist in an unjustified refusal to grant IP licenses, which are indispensable to allow a new product to come on a secondary market, in competition with the dominant undertaking's own product (*Magill*, *IMS Health* and *Microsoft*). Nevertheless, the definition and scope of the specific circumstances that must be present to consider that that refusal is abusive, they are not harmonized. Accordingly, they vary depending on who is the decision-making body, that is, the EC, the GC or the ECJ.

In my opinion, the presence of the first circumstance set in *Magill* regarding the essential nature of the protected IP for competitor's activity, it is indispensable. Otherwise, it would not be respected the general principle of the freedom of the parties to arrange their own affairs as they consider more convenient. Namely, the dominant undertaking is entitled to exercise its IPRs – the due recompense for its great creative and inventive effort and the considerable investment – as it wishes, for instance, refusing to license them. Therefore, I consider unreasonable to state that its presence and that of the second circumstance about the emerging of a new product, are alternatives, as it did the CFI in *Tiercé Ladbroke.* Moreover, it is important that the assessment of the essential nature is made thoroughly. That is to say, not defining it too narrowly. But neither too broadly, as it might have occurred in *IMS Health*, where the '1860 brick structure' was considered essential for the exercise of competitor's activity, when potential substitutes existed. And consequently, the entrance of inefficient rivals was allowed, although it did not happen in practice, because the application of the Decision imposing the compulsory license as an interim measure was suspended and subsequently, withdrawn. Consequently, there was no time for IMS Health to grant licenses.

In the same vein, I am also of the opinion that the presence of the second circumstance established in *Magill* is indispensable, albeit it is necessary to broad its scope – as it will be argued in Section 4.2.2. of Chapter 5 –, in the sense that the refusal must prevent the emergence of a product. And the impossibility of that emergence, it must prejudice consumer welfare whether, for instance, in the form of higher prices, less choice or lack of interoperability. Otherwise, as it was said before, it would prevail the general principle of the freedom of the dominant undertaking to arrange their own affairs.

Once concluded that Article 102 TFEU was infringed by a dominant undertaking who refused to license IPRs, the measure commonly imposed – as a remedy – is the compulsory license. That obligation imposed upon the proprietor of an IPR to grant licenses to third parties, leads to the owner being deprived of the substance of its exclusive right under national law.

Therefore, it is important not to lose sight of the fact that the general rule is that IP owners cannot be obliged, except in exceptional circumstances, to allow the use of their IPRs by third parties, therefore they cannot be forced to grant licenses. Accordingly, in order for the Commission to impose a compulsory license based on Article 7(1) of Regulation 1/2003, it must constitute a proportionate and necessary remedy to bring the infringement of competition law effectively to an end. Otherwise, it would be manifestly incompatible with Article 345 TFEU that provides that the Treaties shall in no way prejudice the rules in Member States governing the system of property ownership. In consequence, even when the Commission concluded that the refusal to grant licenses was abusive, IPRs might prevent it from imposing a compulsory license when that remedy was not proportional and necessary to bring the infringement effectively to an end.

CHAPTER 3. SEEKING AND ENFORCEMENT OF PRELIMINARY AND PERMANENT INJUNCTIONS IN SEP INFRINGEMENT PROCEEDINGS. *SAMSUNG* AND *MOTOROLA*

Introduction

ECJ's case law on refusal to license IPRs has been carefully analysed in the previous chapter. In this and the following chapters, I focus on the behaviour that constitutes the object of this research. That is, on SEP owners' conduct of bringing infringement actions for a prohibitory injunction and the recall of products in patent infringing proceedings.

Accordingly, it will be studied how the EC (in this chapter) and the ECJ (Chapter 4) treated that behaviour as a specific and novel category of abuse within the meaning of Article 102 TFEU. The Commission analysed the anti-competitive nature of that conduct in two cases, in *Samsung* and *Motorola*. In *Huawei v.* ZTE, the ECJ dealt for the first and only time with the issue and generally speaking, its judgment was very criticised due to different reasons. In my opinion, it missed the long-awaited opportunity to resolve the SEP licensing problem once and for all.

As it will be argued in Chapter 5, I think the ECJ should have treated SEP owners' conduct as a refusal to license, instead of as a novel category of abuse. That, because when specific circumstances concur, it may be understood that the aim of SEP owners' behaviour is to exclude competitors from the market. But instead of directly refusing to grant licenses – which may be considered an abuse of dominant position –, they bring the aforementioned infringement actions. And if the court ordered the prohibitory injunction and the recall of products, infringers – that are SEP owners' competitors – would be excluded from the market. Therefore, SEP owners would achieve their goal, in spite of having committed to license their SEPs on FRAND terms.

Focusing on this chapter, the assessment of the antitrust infringement is the same in *Samsung* and *Motorola* cases, so they will be studied together below, with the nuance that in *Samsung* the assessment included in the SO was preliminary, in contraposition with the one contained in the Prohibition Decision in *Motorola*. Namely, the nature of the decisions adopted by the Commission is diverge in both cases. In *Samsung* the Commission's proceedings ended with a Commitments Decision that made the commitments offered Samsung legally binding. Whereas in *Motorola*, the Commission concluded in its Prohibition Decision that there was an infringement, even though by then, there had been a material change in the status of competition. That is to say, once the SO was sent by the Commission, Motorola and Apple signed the Settlement Agreement. However, the fact that the abusive behaviour has ended during the antitrust investigation, it does not entail that the Commission cannot adopt a prohibition decision finding that an infringement was committed in the past, as long as it has a legitimate interest to do it.

Albeit it is more appropriate to first analyse the assessment of the infringement and then the decision adopted in that regard, I am going to alter the logical order for the sake of a better understanding of how the Commission analysed the abusive nature of SEP owners' behaviour in *Samsung* and *Motorola*. Thus, once I describe the facts of the cases (Section 3), firstly I will refer to the decisions adopted by the Commission (Section 4) and secondly to the antitrust assessment (Section 5).

1. Statement of the problem

As already explained (see Section 'Background' of the Introduction), SEPs protect inventions that have been declared essential to implement a specific industry standard by a SSO. It is not possible on technical (but not commercial) grounds to manufacture products that comply with a certain standard without accessing these patents by obtaining a licence[485]. So, access to those SEPs is a precondition for any company to sell interoperable products in the market. This may give companies owning SEPs significant market power.

As a result, SSOs generally require their members – the owners of patents that are essential for the implementation of a standard – to commit to license theirs SEPs on FRAND terms. This commitment is designed to ensure effective access to the standardised technology for all market players and to prevent holding up users (see Section 1.3.1. of Chapter 1) by a single SEP holder. That is to say, to prevent them from behaving in anti-competitive ways by refusing to license the necessary IP or by extracting excess rents by way of excessive royalty fees thereby preventing effective access to the standard. At the same time, it allows SEP holders – who invested money in inventing and patenting standard-specific technologies – to be fairly remunerated for making their standardised technology available to third parties. However, in order to guarantee undistorted competition and to reap the positive economic effects of standardisation – *e.g.* a wider choice of interoperable products for consumers – it is important that FRAND commitments be fully honoured by SEP owners[486].

When SEP owners and willing licensees cannot agree on the amount of the royalty to be paid, there are implementers who decide to use the SEPs without obtaining licenses. Accordingly, patent owners have the right to enforce their patents bringing infringement actions seeking among other measures, prohibitory injunctions or the recall of products. However, as SEP holders gave commitments to grant licenses to third parties on FRAND terms, it might be considered that they misuse their SEPs to distort competition, contravening the commitment given to the SSO. Namely, while recourse to injunctions is a possible remedy for patent infringements, such conduct may be abusive where SEPs are

[485] ETSI Rules of Procedure. Annex 6: Intellectual Property Rights Policy 2018, para 15(6) <https://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf> accessed 5 March 2019.

[486] Commission, 'Antitrust: Commission accepts legally binding commitments by Samsung Electronics on standard essential patent injunctions' IP/14/490, para 3.

concerned and the potential licensee is willing to enter into a license agreement on FRAND terms.

Due to an absence of express guidance from SSOs' patent policies, there was a considerable degree of uncertainty as to the lawfulness of bringing infringement actions by FRAND-encumbered SEP holders[487]. Consequently, the EC and the ECJ pronounced on the issue, as it will be analysed here below and in the next chapter.

2. Distinguishing elements

Before entering into the analysis mentioned before, it is important to highlight two distinguishing elements with respect to facts and legal standards, between the cases investigated by the Commission (in this chapter) and the one judged by the ECJ (in Chapter 4).

2.1. Facts

The first element regards the facts of the cases. In *Samsung* and *Motorola*, SEP owners brought actions for infringement seeking (and enforcing – in *Motorola* –) injunctions prohibiting the continuation of patent infringements. Such injunctions can be preliminary – as a precautionary measure typically for the time of the assessment of the case on the merits by the court – and also permanent – as a result of the decision on the merits by a court[488].

Whereas in *Huawei v. ZTE*, in addition to the prohibitory injunction, the SEP owner also sought other measures provided by patent law, such as, the recall of products, the rendering of accounts and the award of damages (see Section 'Statement of the problem' of the Introduction). The effect of the recall of products is comparable to that of the prohibitory injunction. Nevertheless, the rendering of accounts in relation to past acts of use of the SEP and the award of damages in respect of those acts of use, do not have a direct impact on products manufactured by competitors appearing or remaining on the market[489]. Therefore, according to Article 102 TFEU, only the lawfulness of bringing infringement actions seeking prohibitory injunctions and the recall of products was under discussion.

2.2. Legal standard

And the second element is related to the legal standard adopted by decision-making bodies within the framework of Article 102 TFEU. In *Samsung* and *Motorola,* the Commission investigated the anti-competitive nature of SEP owners' conduct from two

[487] *Huawei* AG (n 137) [7].
[488] Commission, 'Samsung – Enforcement of ETSI standards essential patents (SEPs)' MEMO/12/1021, 1st question.
[489] *Huawei* (n 35) [72] and [74]–[76].

perspectives. It studied if SEP owners' behaviour of seeking and enforcing injunctive reliefs might constitute an exclusionary abuse, because injunctions prohibit the continuation of the infringement and they generally involve a prohibition of the product infringing the patent being sold. In consequence, such recourse risks excluding products from the market without justification and may distort licensing negotiations unduly in the SEP holders' favour.

And it also analysed whether the threat of seeking injunctions by SEP owners might amount to an exploitative abuse. That is, whether that behaviour allow them to impose royalty rates or other licensing terms, such as broad cross licenses, which a licensee would not agree to, absent the threat of having its products excluded from the market. This may unduly distort licensing negotiations and cause harm to consumers by increasing prices, reducing product choice and stifling differentiating innovation in the markets concerned[490].

Whereas in *Huawei v.* ZTE, the ECJ only analysed whether bringing an action for infringement seeking a prohibitory injunction and the recall of products might constitute an exclusionary abuse.

In any case, both the Commission and the ECJ qualified the conduct of SEP owners as a novel category of exclusionary and exploitative abuse. In particular, they did not consider that the conduct could fit in any existing category of abuse, such as, the 'refusal to license IPRs' category studied in Chapter 2. The consequences derived from the legal standards adopted by decision-making bodies will be studied through this chapter (regarding *Samsung* and *Motorola*) and Chapter 4 (with respect to *Huawei v. ZTE*) – and more systematically in Section 2 of Chapter 5.

3. Case briefs

Basing on Article 105(1) TFEU that states that the EC shall investigate cases of suspected infringement of Articles 102 TFEU, in *Samsung* and *Motorola* cases, the Commission opened two proceedings for abuse of dominant positions against these companies that owned several SEPs. Both Samsung and Motorola were some of the largest SEP holders in the telecommunication industry and they were also active players on the downstream market for the sale of mobile telephones implementing the relevant telecommunication standards, competing against other implementers of those standards, such as Apple.

The facts in *Samsung* and *Motorola* cases are almost identical. The differences lie in the numbers of countries in which SEP owners sought their injunctions. And also in the fact that while Samsung sought preliminary and permanent prohibitory injunctions, Motorola sought and enforced an injunction.

[490] Commission, 'Antitrust: Commission consults on commitments offered by Samsung Electronics regarding use of standard essential patents' IP/13/971, paras 5 and 12.

3.1. *Samsung*

The Samsung company designed, developed, manufactured and sold a wide range of products in the area of electronics and Information Technology (IT), including smartphones and it was present in most countries within the EEA. The company held a worldwide portfolio of SEPs, some of them were declared essential to implement the European third generation wireless (3G) universal mobile telecommunications system (UMTS) standard, a key industry standard for mobile and wireless communications (it ensured, together with other standards, the compatibility and interoperability of telecom networks and devices). Accordingly, Samsung gave the commitment to the ETSI that it would license the SEPs declared essential to the UMTS standard, on FRAND terms. Note that ETSI is one of the three European Standardisation Organisations and it is officially responsible for producing standards and specifications supporting EU and European Free Trade Association (EFTA) policies and enabling an internal market in telecommunications[491].

Nonetheless, Samsung requested before the courts of Germany, France, Italy, the Netherlands and the UK, preliminary and permanent prohibitory injunctions against Apple – a competing mobile device maker[492] – based on alleged infringements of certain of its 3G UMTS SEPs. Although the reason why Samsung sued Apple might have been because they could not agree on the amount of the royalty to be paid for the UMTS SEPs, it might be inferred from the facts that it might also have done it because Apple sued Samsung first since some of Samsung's Galaxy products were infringing certain of its non-SEPs[493].

Accordingly, pursuant to Article 7(1) of Regulation 1/2003, the Commission opened an *ex officio* (in its own initiative) investigation against Samsung to investigate whether seeking preliminary and permanent injunctions against Apple, it failed to honour its irrevocable FRAND commitment in licensing negotiations made to ETSI, which might amount to an abuse of a dominant market position prohibited by Article 102 TFEU and Article 54 of the EEA Agreement. That, because Samsung might have abusively, and in contravention of a commitment given to the SSO, used certain of its SEP rights to distort competition in European mobile device markets. The Commission's preliminary conclusion included in the SO concluded that Samsung's conduct was anti-competitive.

After the sending of the SO to Samsung, it announced[494] unilaterally the withdrawal of preliminary and permanent injunctions against Apple before national courts, although the withdrawal did not prevent Samsung from seeking injunctions based on SEPs in the future. The Commission took note of Samsung's announcement, although that did not

[491] *Samsung* Commission Decision (n 7) [7], [8], [11], [29] and [34].
[492] ibid [12].
[493] ibid [2] and [53].
[494] See Samsung's press statement of 18 December 2012: '[…] Samsung has decided to withdraw our injunction requests against Apple on the basis of our standard essential patents pending in European courts, in the interest of protecting consumer choice'.

alter the Commission's preliminary conclusion included in the SO, who continued with its investigation[495]. Thus, by the time the Commission adopted its Commitments Decision, Samsung's conduct that was considered preliminarily to be abusive, it had already ended.

3.2. *Motorola*

The Motorola company designed and sold wireless network infrastructure equipment and it also produced smartphones and it was present in most countries within the EEA. The company owned the 'Cudak GPRS SEP' that was declared essential to the ETSI GSM/GPRS (Global System for Mobile communications/ General Packet Radio Service) standard – a key industry standard for mobile and wireless communications that together with other standards, it ensured the compatibility and interoperability of telecom networks and devices –, so Motorola committed to license it on FRAND terms[496]. To be more specific, GRPS standard was an integrated part of the digital second generation (2G) GSM standard. Therefore, technology combined with GPRS was sometimes described as '2.5G', that is, a technology between the second (2G) and third (3G) generations of digital mobile telephony[497]. As a note of information, Motorola submitted that in the early 1990s, its practice was to charge a royalty rate of 5% of the price of the relevant end product, that was reduced to 2.25% during the 1990s[498].

Notwithstanding, Motorola sought injunctions against different Apple Inc.'s subsidiaries, before the courts of the Federal Republic of Germany, specifically, in the Regional Court (*Landgericht*) of Mannheim on the basis that Apple was infringing three of its patents, among them, the 'Cudak GPRS SEP', with the view to ordering Apple, inter alia, to cease and desist from selling in Germany any Apple products that implement the asserted patents. Motorola also sought an injunction in the Regional Court of Düsseldorf on the basis of the same three patents, but it finally withdrew its action[499]. Subsequently, Apple asserted three non-SEPs against Motorola in the Regional Court of Düsseldorf, a further three non-SEPs in the Regional Court of Munich and a further non-SEP in the Regional Court of Mannheim[500].

Due to the fact that the *Orange Book* judgment of the German Federal Supreme Court (*Bundesgerichtshof*-BGH) will be studied below – in Section 2.1. of Chapter 4 –, it is appropriate to mention that notwithstanding the differences, that judgment was developed and applied to SEPs in proceedings between Motorola and Apple by lower German Courts (*i.e.* the Regional Court of Mannheim and the Higher Regional Court of Karlsruhe). That is to say, the judgment ruled on the conditions under which a defendant, in a non-SEP infringement case, could rely on a competition law defence under German

[495] Commission MEMO/12/1021 (n 488), 3th question.
[496] *Motorola* Commission Decision (n 7) [5], [6], [95] and [96].
[497] ibid [86] and [87].
[498] ibid [101].
[499] ibid [115] and [116].
[500] ibid [117].

and Union law against an injunction claim. Moreover, the non-SEP read on a *de facto* standard and not on a *de jure* one developed by a SSO, so no FRAND commitments were given[501].

Returning to Motorola and Apple proceedings, the Regional Court of Mannheim granted an injunction against Apple with respect to the Cudak GPRS SEP, because it considered that the SEP had been infringed by Apple (in particular, by the iPhone 4S). Consequently, Apple applied for a stay of the enforcement of the injunction and it also filed an appeal against the judgment of the Regional Court of Mannheim with the Higher Regional Court (*Oberlandesgericht*) of Karlsruhe. Nevertheless, the Higher Regional Court of Karlsruhe handed down a decision in which it rejected Apple's request to stay the enforcement of the injunction, finding inter alia that Apple's Fifth Orange Book Offer was insufficient to meet the requirements of the *Orange Book* judgment, so Apple was not availed of the competition law defence[502]. As Motorola was going to proceed to enforce the injunction (for which it had to deposit a security bond with the Regional Court of Mannheim to secure damages in case Apple’s appeal on the substance of the case would be successful), Apple had the choice of either having its products excluded from the market (which may lead it to incur significant costs due to lost sales and damage to reputation) or accepting the disadvantageous licensing terms requested by Motorola as a condition for not enforcing the injunction.

In the end, on the same day Motorola enforced the injunction, Apple chose, via its Sixth Orange Book Offer – its last licensing offer –, to accept the disadvantageous licensing conditions with a view to availing itself of the competition law defence established by the *Orange Book* judgment. And on the basis of that offer, Apple filed with the Higher Regional Court of Karlsruhe a second application to stay the enforcement of the injunction granted by the Regional Court of Mannheim[503]. Initially, Motorola rejected the Sixth Orange Book Offer and asked the Higher Regional Court of Karlsruhe to dismiss Apple's second motion for suspension of the execution of the injunction. But then, Apple clarified certain terms of the offer to address Motorola’s concerns, in which the rejection was based on[504]. In these circumstances, the Higher Regional Court handed down a decision in which it ruled that Apple’s Sixth Orange Book Offer, as clarified by Apple, met the requirements of the *Orange Book* judgment, so it stayed the enforcement of the injunction for the duration of the appeal[505]. Therefore, the enforcement of the injunction led only to a temporary (few hours) ban on Apple’s online sales. Thus, according to the Higher Regional Court, the implementer could use the competition law defence, because it was a willing licensee, so it would not make sense to enforce the injunction since Motorola was going to be remunerated.

[501] ibid [80]–[84].
[502] ibid [130], [131], [142], [157] and [158].
[503] ibid [144]–[146].
[504] ibid [159] and [161].
[505] ibid [151.

As a consequence, pursuant to Article 7(1) of Regulation 1/2003, acting on a complaint submitted by Apple, the Commission opened an investigation against Motorola to investigate if when seeking and enforcing an injunction against Apple, Motorola failed to honour its irrevocable FRAND commitment given to ETSI. That behaviour might constitute an abuse of a dominant position prohibited by Article 102 TFEU and Article 54 of the EEA Agreement, because it might restrict competition. The Commission's preliminary conclusion included in the SO concluded that Motorola abused its dominant position and that statement was confirmed in the prohibition Decision.

Once the Commission sent the SO to Motorola, Apple and Motorola signed a licensing agreement (the 'Settlement Agreement') that was based on Apple's Sixth Orange Book Offer in its clarified version and it contained disadvantageous licensing terms to Apple[506]. The agreement entailed granting licenses of all German patents and of German parts of European patents declared to be essential for various standards, among others the GSM/GPRS standard, on FRAND terms[507]. And subsequently, following the execution of the Settlement Agreement, Motorola filed a declaration with the Higher Regional Court of Karlsruhe and the Regional Court of Mannheim that the injunction proceedings against Apple were moot. It, however, kept open the proceedings pending before the Higher Regional Court of Karlsruhe with respect to damages for past infringement and accounting in accordance with German law. Apple also filed declarations with the same German courts confirming it also considered the proceedings moot and that subsequent to the Settlement Agreement, it was paying royalties into escrow, in line with the requirements of the *Orange Book* judgment[508]. This portfolio-wide effect of patent litigation – German litigation with respect to one patent – was described by Motorola as a general strategy in the telecoms industry: 'As a result, patent owners typically litigate just a few key patents but with the expectation of ultimately reaching a portfolio-wide, mutually beneficial settlement'[509].

Afterwards, Motorola instituted proceedings before the Regional Court of Mannheim against Apple asking for the setting[510] of the FRAND royalty rate in accordance with the Settlement Agreement and for further damages and rendering of accounts for the use of Motorola's technology[511]. Nevertheless, these facts did not affect the Commission's assessment of the abusive nature of Motorola's conduct contained in the Prohibition Decision.

[506] ibid [266].
[507] ibid [162] and [163].
[508] ibid [164]–[166].
[509] ibid [189].
[510] ibid [174]: Notwithstanding, the Regional Court of Mannheim stayed the rate-setting proceedings and asked the Commission, pursuant to Article 15(1) of Regulation 1/2003, for its opinion on a number of questions concerning the application of the Union competition rules, relevant to the setting of the FRAND rate, in particular, the exact method it should employ to set the FRAND royalty rate in compliance with Article 102 TFEU.
[511] ibid [167]–[176].

4. EC's decisions

4.1. Commitments Decision: *Samsung*

Samsung disagreed with the Commission's assessment set out in the SO in which it reached the preliminary view that Samsung's seeking of preliminary and permanent injunctions against Apple – before the courts of various Member States on the basis of its SEPs covering the UMTS technology without any objective justification –, it was anti-competitive under Article 102 TFEU and Article 54 of the EEA Agreement[512].

Nevertheless, just after Samsung withdrew the injunctions in Europe, it voluntarily offered formal commitments[513] (the 'Initial Commitments') to the EC in accordance with Article 9(1) of Regulation 1/2003. Their purpose was to remedy Commission's concerns and to get the confirmation from the Commission that there were no grounds for further action in relation to its conduct that was under investigation. Note that in the SO, the Commission submits its competition concerns and constitutes a preliminary assessment, which means that the EC intends to adopt a decision requiring that an infringement be brought to an end. And the SO gives the dominant undertaking the opportunity to offer commitments to meet the Commission's concerns[514].

4.1.1. Commitments' content

In essence, for a period of five years from the date of adoption of the Commitments Decision, Samsung offered to abstain from seeking injunctions in the EU and EEA on the basis of any of its SEPs (including all existing and future SEPs) that related to technologies reading on a standard ('Mobile Standard') implemented in smartphones and tables ('Mobile SEPs'), against a potential licensee that agreed to a particular licensing framework for the determination of FRAND terms (the 'Licensing Framework', that will be explained later on, in Section 5.3.4.3.), who would be considered a 'willing licensee'.

The Licensing Framework encompassed either a unilateral licensing agreement covering Samsung's Mobile SEPs or, if either Samsung or the potential licensee so requested, a cross-licensing agreement covering both Samsung's Mobile SEPs and certain of the potential licensee's SEPs or non-SEPs covered by the reciprocity rules of SSOs[515]. Accordingly, Samsung could not make access to its SEPs conditional on the cross-licensing of patents not covered by the reciprocity rules of SSOs, because otherwise, Samsung could force a potential licensee to (cross-) license its patents[516].

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[512] *Samsung* Commission Decision (n 7) [6].
[513] Commission, 'Case COMP/C-3/39.939 – Samsung Electronics Enforcement of UMTS Standard Essential Patents – Commitments Offered to the European Commission' (2013) <http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1301_5.pdf> accessed 27 February 2019.
[514] *Samsung* Commission Decision (n 7) [15].
[515] ibid [77].
[516] ibid [102] and [110].

However, as an exception, the proposed commitments allowed Samsung to seek an injunction against a potential licensee where three cumulative conditions were met[517]: (i) a potential licensee sought an injunction against Samsung on the basis of certain of its Mobile SEPs; (ii) Samsung offered to grant a licence for its own Mobile SEPs on FRAND terms; and (iii) Samsung offered to take a licence on FRAND terms for the Mobile SEPs of the company alleging an infringement by Samsung. This exception to use injunctions defensively[518] only applied in scenarios where Samsung would not be able to claim reciprocity, which means making an offer to license Mobile SEPs on FRAND terms with the condition that the other party will also offer its Mobile SEPs – that read on the same Mobile Standard – in those terms[519].

To conclude, an independent trustee would advise the Commission in overseeing the proper compliance with the commitments.

The Commission invited comments from interested parties on the commitments offered by Samsung. In light of the 18 responses received[520], the Commission informed Samsung of the observations it considered relevant, because not all of the issues raised by certain respondents were considered to be suitable, necessary or proportionate to address its anti-competition concerns, as they will be mentioned below.

Firstly, certain respondents suggested that the commitments should be worldwide in scope, so Samsung could not use its Mobile SEP-based injunctions outside the EEA as leverage for negotiations that have an impact within the EEA. However, in Commission's opinion, there was no evidence that Samsung's seeking of injunctions in jurisdictions outside the EEA had had an appreciable anti-competitive effect in the internal market[521].

Secondly, regarding the product scope of the commitments, some respondents also proposed that the commitments should cover the seeking of injunctions on the basis of Samsung's all SEPs and not only of its UMTS SEPs. That, in order to constrain fully Samsung's ability to seek preliminary and permanent injunctions. Nevertheless, the Commission stated that broadening the scope of the commitments would go beyond what was necessary to remedy the competition concerns[522].

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[517] ibid [79].
[518] Commission, 'Antitrust: Commission seeks feedback on commitments offered by Samsung Electronics to address competition concerns on use of standard essential patents – questions and answers' MEMO/13/910, 6th question.
[519] Commission, 'Case COMP/C-3/39.939 – Samsung Electronics Enforcement of UMTS Standard Essential Patents – Commitments Offered to the European Commission' (2014), p 15 <http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1502_5.pdf> accessed 27 February 2019.
[520] Commission, 'Final Report of the Hearing Officer — Samsung — Enforcement of UMTS standard essential patents' (2014/C 350/07) OJ C350/6, para 7; *Samsung* Commission Decision (n 7) [19] and [20].
[521] *Samsung* Commission Decision (n 7) [92] and [114].
[522] ibid [93] and [115].

Thirdly, in light of the potential length of a FRAND determination, certain respondents also commented that the duration of the commitments should be double, that is, ten years. In Commission's view, taking into account the fast-moving nature of the mobile device sector where new products often being launched at short intervals[523], the important changes that the industry may continue to undergo in the short to medium term, may alter the competitive dynamics. Therefore, it concluded that the established duration was adequate[524].

4.1.2. Decision's nature

Accordingly, based on Commission's suggestions, Samsung offered revised commitments (the 'Final Commitments'[525]) and the Commission concluded[526] that they were suitable, necessary and proportionate in order to address the concerns expressed in its SO. Therefore, pursuant to Article 9(1) of Regulation 1/2003, the Commission brought the proceedings to an end by means of the Commitments Decision[527], making the Final Commitments legally binding (see Section 2.3. of Chapter 1) on Samsung. Note that after the expiry of the commitments, Samsung would remain subject to all contractual obligations entered into during the term of the commitments – *e.g.* the third-party FRAND determination. Accordingly, this would contribute to the effectiveness of the commitments by encouraging potential licensees to sign up to the Licensing Framework[528].

It is important to bear in mind that the decision that makes the commitments binding does not conclude whether or not there has been or still is an infringement of EU antitrust rules, but it states that there are no longer grounds for action and it legally binds the dominant company to respect the commitments offered (Recital 13 of Regulation 1/2003). Therefore, as stated before, the Commission made only a provisional assessment of the antitrust infringement that was included in the SO. However, the commitment decision is without prejudice to the powers of competition authorities and courts of the Member States to find the infringement and decide upon the case. Accordingly, as the Commission did not find any infringement, the imposition of measures (remedies or sanctions) is not appropriate. This is why the aforementioned Recital stated that 'Commitment decisions are not appropriate in cases where the Commission intends to impose a fine'.

Notwithstanding, according to Article 9(2) of Regulation 1/2003, the Commission might, upon the request of Samsung or on its own initiative, reopen the proceedings in three circumstances. Firstly, where there was a material change in any of the facts on which the decision was based. In that regard, Samsung stated in its commitments that in particular,

[523] *Google/Motorola Mobility* (Case COMP/M.6381) Commission Decision 2012/C 75/01 [2012] OJ C75/1, Recital 107.
[524] *Samsung* Commission Decision (n 7) [94] and [166].
[525] Commission, 'Case COMP/C-3/39.939 – Samsung Electronics Enforcement' (2014) (n 519).
[526] Commission IP/14/490 (n 486).
[527] *Samsung* Commission Decision (n 7) [126], [127], Art 1 and Art 2.
[528] ibid [101] and [109].

the Commission might, on the request of Samsung or on its own initiative, reopen the proceedings in light of a judgment delivered by the ECJ regarding the circumstances under which the seeking of an injunction on the basis of a SEP could constitute an infringement of Article 102 TFEU. Samsung was referring to the case *Huawei v. ZTE* that was pending before the ECJ, in case it might be considered that according to its antitrust assessment, Samsung would not have abused its dominant position. However, as it will be analysed in the next chapter, although the ECJ did not base on Commission's antitrust assessment – but on the one developed by it –, Samsung's behaviour would also have amounted to an abuse.

Secondly, if the company broke the binding commitments. In that case, according to Article 23(2) of Regulation 1/2003, the Commission could impose a fine of up to 10% of its annual worldwide turnover without having to find an infringement of the EU antitrust rules. And thirdly, where the decision was based on incomplete, incorrect or misleading information provided by the parties.

As the ECJ has consistently held, the principle of proportionality is one of the general principles of the EU law [it is enshrined in Article 5(4) of the TEU] and the ECJ has interpreted this principle as meaning that measures adopted by institutions of the Union must be suitable and not exceed what is appropriate and necessary for attaining the objective pursued[529]. And when there is a choice between several appropriate measures, recourse must be had to the least onerous, and the disadvantages caused must not be disproportionate to the aims pursued[530].

This principle was examined in Section 5.2.3. of Chapter 2, regarding the specific case of compulsory licenses that may be imposed to remedy the infringement according to Article 7(1) of Regulation 1/2003, as long as they are proportionate to the infringement committed and necessary to bring the infringement to an end.

In the context of Article 9 of Regulation No 1/2003 in which Commission's Commitments Decision bases on, the application of the principle of proportionality requires that commitments must be proportional. That entails for the Commission to assess that the commitments in question address the concerns expressed in its Preliminary Assessment – in the SO – and that the undertakings concerned have not offered less onerous commitments that also address those concerns adequately. And when carrying

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[529] See for instance, Case C-15/83 *Denkavit* [1984] ECR I-2171, para 25; Case C-354/95 *The Queen v Minister for Agriculture, Fisheries and Food, ex parte National Farmers' Union and Others* [1997] ECR I-4559, paras 49 and 50; Case T-260/94 *Air Inter v Commission* [1997] ECR II-997, para 144 and *Van den Bergh Foods* (n 205) [201].

[530] Case C-265/87 *Schräder* [1989] ECR I-2237, para 21; Case C-331/88 *Fedesa and Others* [1990] ECR I-4023, para 13; Joined Cases C-133/93, C-300/93 and C-362/93 *Crispoltoni and Others* [1994] ECR I-4863, para 41; *Magill* [ECJ, 1995] (n 257) [93]; Case C-189/01 *Jippes and Others* [2001] ECR I-5689, para 81; Case C-174/05 *Zuid-Hollandse Milieufederatie and Natuur en Milieu* [2006] ECR I-2243, para 28.

out that assessment, the Commission must take into consideration the interests of third parties[531].

In *Samsung*, the Commission considered that the Final Commitments (not the Initial Commitments, because it took into consideration the interests of respondents) offered by Samsung addressed adequately the competition concerns it expressed in the SO, because they ensured that Samsung would not seek injunctions on the basis of its Mobile SEPs against any potential licensee willing to enter into a licence agreement on FRAND terms. It also stated that Samsung did not offer less onerous commitments. And according to Commission, it also took into consideration the interests of third parties (not only of respondents), because it struck a balance between the fundamental rights (those linked to IP and the right of access to a tribunal) and the freedom to conduct a business, as well as the public interest in maintaining effective competition[532].

4.2. Prohibition Decision: *Motorola*

Albeit Motorola's abusive conduct ended (due to the 'Settlement Agreement' signed between Motorola and Apple) by the time the Commission concluded its investigation, according to Article 7(1) of Regulation 1/2003, the Commission found that Motorola infringed Article 102 TFEU and Article 54 of the EEA Agreement by seeking and enforcing against Apple in the Federal Republic of Germany, an injunction on the basis of the 'Cudak GPRS SEP', for which it gave an irrevocable commitment to license it on FRAND terms to the ETSI (Article 1 of the Prohibition Decision[533]). In particular, the infringement lasted 7 months 3 weeks and 4 days, from the date of Apple's Second Orange Book Offer that provided for full judicial determination of the FRAND royalties – when it was considered that Apple was a willing licensee –, until de declaration by Motorola to the Regional Courts of Mannheim and Düsseldorf pursuant to the German Code of Civil Procedure that the injunction procedures against Apple were moot[534].

Indeed, the Commission may adopt a prohibition decision finding that an infringement was committed in the past, as long as it has a legitimate interest to do it[535]. Particularly in *Motorola*, there were three reasons to do it[536]. First, because the likely anti-competitive effects of Motorola's conduct persisted, as the Settlement Agreement was still in force

[531] Case C-441/07 P *Commission v Alrosa* [2010] ECR I-5949, para 41.
[532] *Samsung* Commission Decision (n 7) [121], [122], [124] and [125].
[533] *Motorola* Commission Decision (n 7).
[534] ibid [543]–[545].
[535] Case C-7/82 *GVL v Commission* [1983] ECR I-483, para 24; Joined Cases T-22/02 and T-23/02 *Sumitomo Chemical Co. Ltd and others v Commission* [2005] ECR II-4065, para 137; Case T-392/08 *AEPI v Commission* (GC, 12 April 2013), para 62; Case T-422/08 *SACEM v Commission* (GC, 12 April 2013), para 80; Case T-432/08 *AKM v Commission* (GC, 12 April 2013), para 66; Case T-373/10 *Villeroy & Boch Austria v Commission* (GC, 16 September 2013), paras 300-306; Joined Cases T-379/10 and T-381/10 *Keramag Keramische Werke a.o. v Commission* (GC, 16 September 2013), paras 249-258; Joined Cases T-23/10 and T-24/10 *Arkema France and ECSC v Commission* (GC, 6 February 2014), paras 111-120; Case T-40/10 *Elf Aquitaine v Commission* (GC, 6 February 2014), paras 389-398.
[536] *Motorola* Commission Decision (n 7) [553]–[556].

and certain of its provisions might affect the FRAND royalty rate and the amount of damages that Apple would be ordered to pay to Motorola. Second, because there was no Union decisional practice concerning the legality of the seeking and enforcement of injunctions by SEP holders. And national courts that dealt with this issue arrived at substantively different outcomes. For instance, regarding the case *Motorola*, on the basis of their interpretation of the requirements of the *Orange Book* judgment, the Regional Court of Mannheim granted the injunction and the Higher Regional Court of Karlsruhe allowed it to be enforced[537]. However, the judgment by the District Court of The Hague in *Koninklijke Philips Electronics N.V. v. SK Kassetten GmbH & Co. KG*[538] explicitly rejected the approach taken by the German *Orange Book* case law. In addition, the Commission adopted the Decision on 29 April 2014, but already on 5 April 2013, a request for a preliminary ruling was lodged by the *Landgericht* Düsseldorf in case *Huawei v. ZTE* (see below, Section 1 of Chapter 4) as a consequence of the apparent contradiction between the legal argument that was going to be applied by the Commission in *Samsung* and *Motorola* and the one used by the German Federal Supreme Court in *Orange Book*. And third, in light of the multitude of on-going disputes over FRAND encumbered SEPs between industry players.

As it was already mentioned in Section 2 of Chapter 1, European competition law offers an array of tools to tackle the consequences of the ascertained antitrust infringement. Namely, remedies – intended to bring the infringement to an end – and fines – meant to deter firms from engaging in unlawful behaviour[539]. In *Motorola*, the infringement had already come to an end. Consequently, the Commission did not order to do any acts or provide certain advantages which were wrongfully withheld or prohibited the continuation of certain acts, practices or situations which were contrary to the Treaty. However, in order to ensure that the Decision was effective, the Commission adopted two remedies[540] to prevent the continuation of the likely anti-competitive effects and the reoccurrence of the same or similar abusive conduct (Articles 2 and 3 of the Prohibition Decision). Both remedies were proportionate to attain the objective sought, namely re-establishment of compliance with the rules infringed.

First, in order to ensure that the Decision was effective, Motorola should bring to an end the infringement found by the Commission insofar as it had not done so. And it should also refrain from repeating any act or conduct having the same or similar object or effect to the conduct identified as abusive[541]. And second, because the likely anti-competitive effects of Motorola's conduct persisted (see below, Section 5.3.3.), Motorola should be

[537] ibid [468], [472], [560] and [561]; Commission, 'Antitrust decisions on standard essential patents (SEPs) - Motorola Mobility and Samsung Electronics - Frequently asked questions' MEMO/14/322, 10th question.
[538] Joint Cases *Koninklijke Philips Electronics N.V. v. SK Kassetten GmbH & Co. KG,* District Court of The Hague of 17 March 2010, No. 316533/HA ZA 08-2522 and 316535/HA ZA 08-2524, para 6.25.
[539] Ezrachi and Maggiolino, 'European competition law, compulsory licensing, and innovation' (n 424) 611, para 3.
[540] *Motorola* Commission Decision (n 7) [557] and [558].
[541] See in that regard, *Commercial Solvents* (n 249) [46]; *Magill* [ECJ, 1995] (n 257) [91]; *Tetra Pak* [CFI, 1994] (n 93) [220] and [221].

required to eliminate them. In particular, the anti-competitive effects resulting from: the definition of Old Products that covered explicitly the iPhone 4S [Section 1(3) of the Settlement Agreement]; Apple's acknowledgement regarding Motorola's claims for damages [Section 4(4)]; and the termination clause if Apple challenged the validity of SEPs [Section 7(1)]. If the Commission had not imposed that second remedy, the anti-competitive effects derived from the Settlement Agreement would not have been eliminated. That, because when the Higher Regional Court of Karlsruhe considered that Apple's Sixth Orange Book Offer – on which the Settlement Agreement was based – met the requirements of the *Orange Book* judgment (so Apple could use the competition law defence because it was a willing licensee), it did not consider that the licensing terms included in the Settlement Agreement were disadvantageous to Apple.

It is remarkable, however, that although Motorola infringed Article 102 TFEU and Article 54 EEA, the Commission opted not to impose upon it, according to Article 23(2) of Regulation 1/2003, a fine of up to 10% of its annual worldwide turnover. Notwithstanding, the Commission has discretion when choosing whether to impose it or not and it may exceptionally decide, based on objective reasons, not to impose a fine. The Commission exercises that discretion in the specific context of each case when assessing whether it is appropriate to impose a fine in order to penalise the infringement found and to protect the effectiveness of competition law[542].

The objective reasons on which the Commission relied not to impose a fine in *Motorola* were the following ones taken in combination[543] – indeed, they constituted one of the reasons why the Commission decided to adopt a prohibition decision finding that an infringement was committed in the past. First, there was no Union decisional practice or case law regarding whether a SEP holder, which gave a commitment to license that patent on FRAND terms, abused a dominant position when it sought and enforced an injunction on the basis of that SEP against a potential licensee, that was not unwilling to enter into a licence agreement on FRAND terms. It is important to take into account that the fact that the Commission and the Union courts have not yet had the opportunity to rule specifically on certain conduct does not, in itself, prevent the Commission from imposing a fine[544]. And second, national courts had reached diverging conclusions on this question.

All in all, Motorola was aware that was committed to license its SEP on FRAND terms, albeit it did not have legal certainty as to whether seeking and enforcing injunctions constituted an abuse of a dominant position under Article 102 TFEU. However, note that the negligent infringement may also result in the imposition of a fine and not only when it is intentional, regardless of whether the dominant undertaking ended the abuse before the Commission handed the Prohibition Decision. The above, because the EC may adopt that decision finding that an infringement was committed in the past and impose a fine,

[542] Case C-499/11 P *Dow Chemical and Others v Commission* (ECJ, 18 July 2013), paras 44-47; Case T-336/07 *Telefonica v Commission* (GC, 29 March 2012), para 357.
[543] *Motorola* Commission Decision (n 7) [561].
[544] *AstraZeneca* [ECJ, 2012] (n 138) [164].

as long as it has a legitimate interest to do it. But if the Commission had fined Motorola, it should also fine Samsung, because both behaved in the same way.

5. Assessment of the antitrust infringement

Note that in *Samsung,* given the provisional nature of the SO[545], the Commission's view was preliminary regarding that the SEP owner's seeking of preliminary and permanent injunctions against Apple before the courts of various Member States was abusive according to Article 102 TFEU and Article 54 of the EEA Agreement. Whereas in *Motorola*, the Commission rendered a Prohibition Decision concluding that there was an infringement. Accordingly, it did not alter but confirmed its preliminary assessment against the SEP owner at a later stage of the proceedings – at the ending.

As it will be studied next, in both cases, the Commission analysed each of the four constituent elements of Article 102 TFEU and Article 54 of the EEA Agreement. That is to say, the relevant market, the dominance, the abuse and the effects on trade between Member States and between Contracting Parties to the EEA Agreement.

5.1. The relevant market

5.1.1. Technology market: demand side substitutability

As it was explained in Section 1.1.1. of Chapter 1, a relevant product market comprises all the products or services which are regarded as substitutable by consumers, by reason of their characteristics, their prices and their intended use[546]. When IPRs are marketed separately from the products to which they relate, the relevant technology market has to be defined as well. Technology markets consists of the technology and the IP protecting that technology and their close substitutes, referring to other technologies and related IPRs which are regarded as interchangeable or substitutable by the licensee, by reason of the technology rights' characteristics, the royalties payable in respect of those rights and their intended use[547].

Hence, the Commission[548] differentiates between: (a) an input market, which is the market for the technology in question; and (b) an output market, which is the market for the downstream products incorporating that technology. In *Samsung* and *Motorola*, the relevant output market comprised the downstream products on which UMTS and GPRS standard-compliant products, such as mobile devices, were sold. However, both cases focused on the input market, that is, the market for the licensing of the technology.

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[545] Commission, 'Antitrust: Commission sends Statement of Objections to Samsung on potential misuse of mobile phone standard-essential patents' IP/12/1448, Recital 6.
[546] Commission, 'Commission notice on the definition of relevant market' (n 90), para 7.
[547] Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the TFEU to categories of technology transfer agreements [2014] OJ L93/17 (Technology Transfer Block Exemption Regulation, TTBER), Art 1(1, k); *Motorola* Commission Decision (n 7) [190].
[548] Commission, 'Communication from the Commission – Guidelines on the application of Article 101 of the TFEU to technology transfer agreements' (2014) OJ C89/3, paras 19 *et seq*.

The methodology for defining technology markets follows the same principles as general product market definition[549], that is to say, demand substitution, supply substitution and potential competition, although as it was mentioned before (see Section 1.1.1. of Chapter 1), the first methodology constitutes the most immediate and effective disciplinary force on the suppliers of a given product[550].

Supply side substitutability may also be taken into account when defining markets in those situations in which its effects are equivalent to those of demand side substitution. However, the competitive constraints arising from supply side substitutability are in general less immediate than those arising from demand side substitution[551]. Both in *Samsung* and *Motorola*, due to the fact that the technologies on which the UMTS SEPs and the 'Cudak GPRS SEP' read were part of the UMTS and GPRS standards, there was a lack of supply side substitutability, because it was impossible for any other holder of SEPs (relating to UMTS, GPRS or any other standards), of non-SEPs or of unpatented technologies, to provide customers with alternatives to the technologies as specified in the aforementioned standards technical specifications that would fulfil the same functions[552].

In technology markets, particular emphasis must be placed on potential competition. If companies which do not currently license their technology are potential entrants on the technology market, they could constrain the ability of the parties to profitably raise the price for their technology[553]. However, potential competition is not taken into account when defining markets, but when the abusive nature of the conduct is being analysed. The same reason exposed above regarding the supply side substitutability is applicable to potential competition.

Accordingly, the Commission only focused on identifying, starting from the technology which was marketed by Samsung and Motorola, those other technologies to which customers could switch in response to a small but non-transitory increase in relative prices by SEP owners, that is to say, on the demand side substitution. The Commission reached the conclusion that for manufacturers of mobile devices in the EEA, there were no substitutes to Samsung's and Motorola's technologies, as specified in the UMTS and GPRS standards technical specifications, on which each of Samsung's SEPs and Motorola's 'Cudak GPRS SEP' read. Namely, for undertakings willing to manufacture mobile devices compliant with the UMTS and GPRS standards in the EEA, there were no substitutes to the technologies as specified in the UMTS and GPRS standards technical specifications that were protected by SEPs.

549 Commission, 'Communication from the Commission — Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements' (n 7), paras 116 and 117.
550 Commission, 'Commission notice on the definition of relevant market' (n 90), para 13; *EasyJet* (n 95) [99].
551 Commission, 'Commission notice on the definition of relevant market' (n 90), paras 14 and 20-23.
552 *Samsung* Commission Decision (n 7) [43]; *Motorola* Commission Decision (n 7) [209]–[211].
553 Commission, 'Communication from the Commission — Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements' (n 7), para 118.

This conclusion was based on the following three elements[554]. Firstly, the UMTS (the standard for 3G mobile telecommunication technology in the EEA) and GPRS (2G/2.5G technology) could not be substituted by mobile standards of other generations. That is to say, the UMTS could not be substituted, for instance, by the GSM (2G) or the Long Term Evolution (LTE, 4G). In the same vein, the GPRS could not be substituted by the UMTS or LTE (among others, due to the geographic and signal coverage). Secondly, due to the fact that UMTS could not be substituted by other 3G standards used in the US or in China. And the GPRS neither could it be substituted by any other 2G standard. And thirdly, because UMTS and GPRS could not be lawfully implemented without having access to each of Samsung's UTMS SEPs and Motorola's Cudak GPRS SEP that read on the standards, that is to say, without infringing them. Samsung and Motorola declared that the technology covered by theirs SEPs was essential and must be implemented in order to comply with the technical specifications of the UMTS and GPRS standards (and indeed, Motorola sought and obtained an injunction in Germany on this basis). Thus, the SEPs could not be designed around when manufacturing UMTS/GPRS standard-compliant products.

All in all, the Commission reached the conclusion that the relevant technology markets encompassed only the technologies as specified in the UMTS and GPRS standards technical specifications, on which each of Samsung's UMTS SEPs and Motorola's 'Cudak GPRS SEP' read, because there were no other viable technologies (from the technical viewpoint) to which licensees could switch in a timely manner in response to a small but permanent increase in relative prices of Samsung's and Motorola's licenses for these patents[555].

5.1.2. Geographical market

As mentioned in Section 1.1.2. of Chapter 1, the relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogenous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas[556].

Both in *Samsung* and *Motorola*, the Commission concluded that the relevant products markets – *i.e.* the licensing market for the technologies, as specified in the UMTS and GPRS standards technical specifications, on which each of Samsung's SEPs and Motorola's 'Cudak GPRS SEP' read – were at least EEA-wide in scope, even though, for instance, the 'GPRS Cudak SEP' was only enforceable in six Member States (it was actually enforced in Germany). The Commission based its conclusion on the following two reasons. Firstly, the SEPs were European patents declared to ETSI as being essential to the UMTS and GPRS standards and secondly, there was a mobile devices market that

[554] *Motorola* Commission Decision (n 7) [193]–[208]; *Samsung* Commission Decision (n 7) [42].
[555] ibid [184], [186], [191], [192], [212] and [213]; ibid [41].
[556] Commission, 'Commission notice on the definition of relevant market' (n 90), para 8.

was EEA-wide, which meant that manufacturers essentially distributed the same handsets to all their customers in the EEA, prices were similar for the same products offered across the EEA, and products were manufactured globally and shipped to customers throughout the EEA[557].

5.2. Dominance

Note that dominance is 'a position of economic strength enjoyed by an undertaking, which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of its consumers'[558]. The existence of a dominant position derives in general from a combination of several factors which, taken separately, are not necessarily determinative[559].

In *Samsung* and *Motorola*, the Commission concluded that SEP owners held a dominant position on the EEA market for the licensing of technologies, as specified in the UMTS and GPRS standards technical specifications, on which Samsung's SEPs and Motorola's 'GPRS Cudak SEP' read. And it reached that conclusion on the basis of two factors, high market shares and the existence of barriers. Namely, apart from the fact that SEP owners held a persistently high market share, there was not a strong threat of potential competition in the market because there were very high entry barriers.

5.2.1. Market share

Once the technologies that comprise the relevant technology market are identified, market shares can be calculated by dividing the licensing income generated by the parties by the total licensing income of all licensors. Note that the turnover achieved with the licensing of the SEPs is different from the turnover achieved with UMTS and GPRS standard-compliant products in the output market[560]. Therefore, in *Samsung* and *Motorola*, the calculation of market shares was not based on the sales of the products incorporating the licensed technology on downstream products markets[561], but on the licensing income.

Due to the fact that UMTS and GPRS were *de facto* the only 3G and 2G/2.5G standards in the EEA (see the reasons below, in Section 5.2.2.) and Samsung owned various SEPs that were essential to the implementation of the UMTS standard and Motorola owned the Cudak SEP essential to implement the GPRS standard, the Commission concluded that Samsung and Motorola held 100% share of the market in each of the relevant markets, *i.e.* the markets for the licensing of the technologies as specified in the aforementioned

[557] *Samsung* Commission Decision (n 7) [44]; *Motorola* Commission Decision (n 7) [214]–[220] and [270].
[558] *TeliaSonera* (n 149) [23]; *Tomra* (n 147) [38].
[559] *United Brands* (n 94) [66].
[560] *Motorola* Commission Decision (n 7) [185].
[561] Commission, 'Communication from the Commission — Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements' (n 7), paras 117 and 118.

standards technical specifications, on which Samsung's and Motorola's SEPs read[562]. According to the ECJ case law[563] (see Section 1.2.2.2. of Chapter 1), it exists the presumption that very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position (the 'presumption of dominance').

Accordingly, taking into account that the antitrust procedure has a sanctioning nature and it bases on the accusatorial principle, in theory, it should be always the Commission the one providing evidences. Nevertheless, in practice, the potential dominant undertaking is who should prove that despite its high market share, it lacks market power. Hence, in *Samsung* and *Motorola*, SEP owners alleged that due to the countervailing buyer power of certain potential licensees of their SEPs (*e.g.* Apple), they did not enjoy a dominant position.

One of the key elements of countervailing buyer power is the buyer's ability (or credible threat) to switch to competing suppliers, which differs from the general bargaining power that refers to the 'negotiation power' of certain other licensees of SEPs[564]. The Commission considered that companies wishing to implement the UMTS and GPRS standards could not switch to other suppliers, because there were no viable substitutes to the technology, as specified in the standards' technical specifications, on which each of Samsung's SEPs and Motorola's SEP read. And there were also no viable substitutes to the UMTS and GPRS standards in the EEA as it was explained above, when analysing the demand side substitutability[565]. Therefore, the Commission concluded that the alleged countervailing buyer power of certain potential licensees was not an effective constraint on Samsung's and Motorola's dominance on the relevant markets.

Albeit the evidence alleged by Samsung and Motorola was not an effective constraint on their dominance – based on their high market shares –, the analysis of market power should be based on a global evaluation of several factors (and not only on the market share). Consequently, the Commission also took into account the existence of barriers to entry and expansion in order to confirm whether Samsung and Motorola enjoyed dominant positions in the relevant markets.

5.2.2. Barriers to entry and expansion

In *Samsung* and *Motorola*, the presence of two factors (or barriers) were of particular importance to confirm the assessment that SEP owners held a dominant position based on their high market share. First, the standards on which Samsung's SEPs and Motorola's

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[562] *Samsung* Commission Decision (n 7) [46]; *Motorola* Commission Decision (n 7) [225].
[563] *Hoffmann-La Roche* (n 110) [41]; *AKZO Chemie* (n 93) [60]; Case T-342/07 *Ryanair v Commission* [2010] ECR II-3457, para 41.
[564] *Motorola* Commission Decision (n 7) [243] and [257].
[565] ibid [237]–[268]; *Samsung* Commission Decision (n 7) [50] and [51].

'Cudak GPRS SEP' read were indispensable for manufacturers of standard-compliant products. And, second, the industry was locked-in to these standards[566].

Both the indispensability and the lock-in derived from the widespread adoption of the UMTS and GPRS standards in the EEA, which resulted in them becoming *de facto* the only 3G and 2G/2.5G standards in the EEA. In the case of UMTS, the widespread adoption occurred due to several facts, but mainly because pursuant the Decision 128/1999/EC[567], ETSI was appointed to develop the European standard needed to deploy UMTS services and Member States were required to implement it. And the widespread adoption of GPRS was mainly due to its inclusion into the GSM standards specifications in GSM Release 97 (and subsequent versions) and the wide implementation of that standard by networks operators in their 2G networks[568]. A common reason for the widespread adoption of both standards was since the commitments to license on FRAND terms given by the owners of UMTS and GPRS SEPs, including Samsung and Motorola, encouraged network operators and device manufacturers to adopt the UMTS and GPRS standards, because these commitments guaranteed the availability of the necessary licences for their implementation[569].

According to the Commission, the fact that UMTS and GPRS became *de facto* the only 3G and 2G/2.5G standards conferred an advantage to Samsung and Motorola over potential entrants, from having privileged access to technologies essential to implement the standards because they owned the SEPs that protected these technologies. Moreover, it also granted an advantage to existing Samsung's and Motorola's competitors from having already entered the market, being locked-in to the standard. And these advantages constituted barriers to entry for other new technology developers that wished to enter in the market, as it will be explained below.

5.2.2.1. SEPs' ownership: the indispensability of standards

Due to the widespread adoption of the UMTS and GPRS standards – they were *de facto* the only 3G and 2/2.5G standards in the EEA, because there were not viable alternatives – , it was indispensable for manufacturers of mobile devices to comply with them[570]. And in order to comply with them, it was indispensable for manufacturers of mobile devices to get SEP licenses that protected technologies specified in the aforementioned standards technical specifications, so that devices could communicate with the network.

566 *Motorola* Commission Decision (n 7) [226].
567 Parliament and Council Decision 128/1999/EC of 14 December 1998 on the coordinated introduction of a third-generation mobile and wireless communications system (UMTS) in the Community [1999] OJ L17/1; *Samsung* Commission Decision (n 7) [35], [36] and [47].
568 *Motorola* Commission Decision (n 7) [228].
569 *Samsung* Commission Decision (n 7) [48].
570 ibid [47]; *Motorola* Commission Decision (n 7) [227]–[230].

As a consequence, albeit the mere ownership (or exercise) of SEPs does not, on its own, confer a dominant position so it must be assessed on the basis of all relevant factors[571], in *Samsung* and *Motorola*, the ownership contributed to that position because it constituted a barrier to entry and expansion in the licensing markets for the technologies as specified in the UMTS and GPRS standards technical specifications. That, because Samsung's UMTS SEPs and Motorola's GPRS Cudak SEP protected technologies that were essential to implement the aforementioned widely adopted standards.

5.2.2.2. Lock-in to standards

As a consequence of the widespread adoption of the UMTS and GPRS standards, industry players invested heavily in UMTS and GPRS infrastructure and had incurred other sunk costs of entry – costs that must be incurred to compete in a market, but which are not recoverable on exiting it. For instance, European operators paid over EUR 100 billion alone for 3G radio spectrum licenses[572]. Thus, industry players were 'locked-in' to the UMTS and GPRS standards on which Samsung's UMTS SEPs and Motorola's 'GPRS Cudak SEP' were relevant for their implementation[573].

Therefore, even if theoretically there were viable substitutes to the aforementioned standards in the EEA, it would be economically unviable for implementers of the standards to switch to other suppliers, due to the exceptional organizational and financial efforts that would have to make. Accordingly, the industry lock-in to standards constituted a barrier to entry and expansion, because it prevented potential competitors from having access to the licensing markets for the technologies as specified in the aforementioned standards technical specifications, or actual competitors from expanding their activities on the relevant technology markets.

5.3. The abuse: the required elements

A patent holder, including a holder of SEPs, is generally entitled to seek and enforce injunctions as part of the exercise of its IPRs. The seeking and enforcement of injunctions cannot therefore, in itself, constitute an abuse of a dominant position[574]. Notwithstanding, as Samsung and Motorola held dominant positions on the EEA markets for the licensing of the technologies, as specified in the UMTS and GPRS standards technical specifications, on which Samsung's SEPs and Motorola's 'Cudak GPRS SEP' read, both SEP owners had a special responsibility to ensure that their conduct in relation to their

[571] Commission, 'Communication from the Commission — Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements' (n 7), para 66; *Motorola* Commission Decision (n 7) [226].
[572] Harald Gruber, 'Radio spectrum fees as sunk costs in the market for mobile telecommunications: The aftermath of European 3G licensing' (2002) , p 2, para 2 <ftp://ftp.zew.de/pub/zew-docs/div/IKT03/Gruber.pdf> accessed 19 March 2019.
[573] *Samsung* Commission Decision (n 7) [49]; *Motorola* Commission Decision (n 7) [231]–[236].
[574] ibid [55]; ibid [278].

SEPs did not impair genuine undistorted competition in the internal market[575] (see Section 1.3. of Chapter 1).

As it was analysed in Chapter 2, according to the ECJ case law, the exercise of an exclusive right by its owner – *i.e.* refusal to grant licenses – might, in exceptional circumstances and absent any objective justification, involve abusive conduct[576] – note that the list of exceptional circumstances was not exhaustive[577]. In order to assess whether the behaviour of Samsung and Motorola constituted an abuse of dominant positions, the Commission took into account the previous statement of the ECJ, because in both cases dominant undertakings were exercising their exclusive rights – SEPs – when seeking and enforcing injunctions against alleged infringers.

Accordingly, the Commission came to the conclusion (preliminarily in *Samsung*) that the exercise of exclusive rights – seeking and enforcing preliminary and permanent injunctions against Apple on the basis of Samsung's UMTS SEPs and Motorola's 'GPRS Cudak SEP' – by Samsung and Motorola, in the exceptional circumstances of both cases and in the absence of any objective justification, it amounted to an abuse of dominant positions under Article 102 TFEU[578]. Therefore, the limitation of SEP owners' right to access a tribunal would be justified.

In order to get that conclusion, the Commission considered necessary the presence of three elements. Firstly, the existence of two exceptional circumstances, that is, the UMTS and GPRS standards-setting context (referring to the widespread adoption of these standards in the EEA) and Samsung's and Motorola's commitments to license their UMTS SEPs and the 'GPRS Cudak SEP' on FRAND terms. Secondly, that SEP owners' conduct caused anti-competitive effects. And thirdly, that SEP owners did not have any objective justification for their behaviour.

5.3.1. The right to access a tribunal

Regarding the behaviour of refusing to license IPRs, in Section 5.3.1. of Chapter 3 was stated that the general principle is that the IP owner has the right both to refuse to license an IPR and to obtain remuneration should it decide to license the IPR.

In the same vein, where a competitor infringes a patent, the patent owner may suffer direct losses due to increased competition by the infringer and the resulting lower revenues from the sales of its patented products. In such a scenario, according to Articles 17(2) – the rights linked to IP – and 47(1) – the right of access to a tribunal – of the Charter, SEP owners whose patents have been infringed, have the right to access a tribunal to obtain an

[575] *Motorola* Commission Decision (n 7) [279].
[576] *Volvo* (n 285) [9]; *Magill* [ECJ, 1995] (n 257) [50]; *Bronner* (n 297) [39]; *IMS Health* [ECJ, 2004] (n 241) [35]; *Microsoft* [CFI, 2007] (n 156) [331].
[577] *Volvo* (n 285) [9]; *Bronner* (n 297) [40]; *IMS Health* [ECJ, 2004] (n 241) [36]–[38]; *Microsoft* [CFI, 2007] (n 156) [332].
[578] *Samsung* Commission Decision (n 7) [3], [52] and [56].

effective remedy, such as an injunction. That is to say, the seeking and enforcement of injunctions by a patent holder will typically be a legitimate exercise of an IPR in order to obtain the removal of infringing products from the market and protect the patent owner from further losses, because it forms part of the specific subject matter of that property[579].

However, according to the Commission, it would be justified to limit SEP owners' fundamental rights to regulate the abusive use of SEPs in order to avoid effects which harm competition when the aforementioned three elements are present. That is to say, when the two exceptional circumstances exist, the seeking and enforcement of injunctions causes anti-competitive effects and there is an absence of any objective justification for that behaviour. Note that on the other hand, according to Article 119 and Protocol No. 27[580] of TFEU and Article 16 of the Charter, implementers are protected by the freedom to conduct a business in a position of free competition.

To get that conclusion, the Commission referred to Article 52(1) of the Charter, according to which fundamental rights may be restricted only if the restriction (i) is provided for by law; (ii) corresponds to objectives of general interest recognised by the Union; (iii) does not constitute a disproportionate and intolerable interference, impairing the very substance of fundamental rights; and (iv) is necessary to protect the rights and freedoms of others. Besides, regarding the rights linked to IP, when interpreting Article 17(2) of the Charter, the ECJ[581] made clear that there is 'nothing whatsoever in the wording of [the Charter] or in the Court's case law to suggest that that [IP] right is inviolable and must for that reason be absolutely protected'.

Consequently, when considering that SEP owners' behaviour constituted an abuse of dominant positions under Article 102 TFEU (first condition), the Commission's decisions fulfilled the aforementioned conditions, because the restriction on SEP owners' fundamental rights corresponded to an objective of public pursued by the Union law, as it is the interest in maintaining effective competition in the internal market (second condition). In addition, the restriction did not involve a disproportionate and intolerable interference, because SEP owners' right to seek and enforce injunctions against unwilling licensees and to seek damages and other alternative measures for an infringement of their SEPs, they would remain untouched because they do not affect the maintenance of competition in markets[582] (third condition). However, the restriction imposed by the Decisions on SEP owners' right to seek and enforce an injunction would prevent dominant undertakings from seeking 'other corrective measures', although the Commission[583] erroneously stated the opposite. That, because as said before (see Section 'Statement of the problem' of the Introduction), all corrective measures provided by

[579] *Motorola* Commission Decision (n 7) [282], [283] and [502].
[580] See also *TeliaSonera* (n 149) [20] and [21].
[581] Case C-70/10 *Scarlet Extended* [2011] ECR I-11959, para 43; Case C-360/10 *SABAM* (ECJ, 16 February 2012), para 41; Case C-314/12 *UPC Telekabel Wien* (ECJ, 27 March 2014), para 61.
[582] *Samsung* Commission Decision (n 7) [72]; *Motorola* Commission Decision (n 7) [510]–[523].
[583] Commission MEMO/12/1021 (n 488), 8th question.

Article 10(1) of the IPRED – the recall of products, their definitive removal from the channels of commerce and destruction –, like preliminary/permanent injunctions [Articles 9(1)(a) and 11] and the provisional measure consisting of the seizure of goods suspected of infringing an IPR [Article 9(1)(b)], they may cause the exclusion of the infringer/competitor from the market, preventing products manufactured by them from appearing or remaining on the market. Therefore, only damages, alternative measures – the pecuniary compensation –, the rendering of accounts and the precautionary seizure of the movable and immovable property of the alleged infringer would be the measures that would not allow SEP owners to exclude competitors' products from the market, so seeking and enforcing them would not infringe Article 102 TFEU.

And lastly, the restriction was necessary to protect willing licensees' freedom to conduct a business and to protect their right to access to a tribunal to challenge the validity and infringement of the SEP in order not to end up paying for invalid or non-infringed patents (fourth condition). Note that in *Motorola*, the enforcement of the injunction led Apple to accept the termination clause. So Apple would be 'forced' to that acceptance if Motorola's right was restricted and no injunction would be granted[584].

All in all, Commission's Decisions' limitation of Motorola's and Samsung's right to seek and enforce injunction stroke a fair balance between the fundamental rights and freedoms at stake[585].

Moreover, the Commission also argued that there was nothing in the provisions of the TRIPS Agreement to prevent the competition authorities of members of the WTO from imposing remedies which limited or regulated the exploitation of IPRs held by an undertaking in a dominant position where that undertaking exercises those rights in an anti-competitive manner[586] (see Section 5.2.2. of Chapter 2). Accordingly, the Commission's conclusion about the infringement of Article 102 TFEU would be consistent with the Union's international obligations.

5.3.2. The exceptional circumstances

According to the Commission in *Samsung* and *Motorola,* the exemption of the general principle regarding the right to access a tribunal is justified on the grounds that the situation is different in the standard-setting context (first exceptional circumstance) where the owner of the patent has voluntarily committed to license its essential patent on FRAND terms (second exceptional circumstance), and where the benefits of the standard-setting process in terms of increased compatibility, interoperability, competition and innovation, lower production and lower sales costs to consumers and business alike, may be endangered by the seeking and enforcement of an injunction on the basis of a SEP by

[584] *Motorola* Commission Decision (n 7) [524] and [525].
[585] ibid [526].
[586] *Microsoft* [CFI, 2007] (n 156) [799] and [1192]; *Samsung* Commission Decision (n 7) [71]; *Motorola* Commission Decision (n 7) [498] and [499].

a dominant undertaking[587]. Namely, if FRAND commitments given during a standard-setting process are not respected, the public interest might be prejudiced.

This is why the EC's concern derives from the existence of these two exceptional circumstances in the specific cases of *Samsung*[588] and *Motorola*[589]: the standards setting context and the associated commitment to license SEPs on FRAND terms[590].

5.3.2.1. The widespread adoption of the UMTS and GPRS standards in the EEA

In *Samsung* and *Motorola*, the Commission referred to the UMTS and GPRS standards-setting process as the first exceptional circumstance. Although specifically, it was alluding to the widespread adoption of both standards in the EEA what made them became *de facto* the only 3G and 2.5G/2G standards in the EEA (see the previous Section 5.2.2., regarding the barriers to entry and expansion).

Due to the widespread adoption of UMTS and GPRS standards – among other reasons, due to the agreement of patent holders to grant access to their SEPs on FRAND terms –, the access to technologies as specified in the standards technical specifications that were protected by Samsung's and Motorola's SEPs, became indispensable for implementers, because there were no other viable substitutes (neither of the technology nor of the standards). Another consequence of the widespread adoption was that the industry became locked-in to these standards. In these circumstances, SEP holders might be able to behave in anti-competitive ways, for example by holding up implementers of the standard after its adoption by demanding excessive royalty fees (see Section 1.3.1.1. of Chapter 1) or by refusing to license the necessary IPRs[591].

5.3.2.2. The FRAND commitments

In *Samsung* and *Motorola*, the Commission (preliminarily in *Samsung*) concluded that the second exceptional circumstance in both cases was Samsung's and Motorola's commitments to ETSI to license their UMTS SEPs and the GPRS Cudak SEP on FRAND terms[592].

In order to ensure effective access to the UMTS and GPRS standards, SEP holders were required by ETSI, as a *quid pro quo* for their patents being included in the UMTS and GPRS standards, to commit to license their SEPs on FRAND terms. Actually, ETSI IPRs Policy does not allow the adoption of a standard that includes technology covered by a patent for which no irrevocable FRAND commitment has been given. That, in order to

[587] *Motorola* Commission Decision (n 7) [284].
[588] *Samsung* Commission Decision (n 7) [56].
[589] *Motorola* Commission Decision (n 7) [281].
[590] Commission MEMO/12/1021 (n 488), 11th question.
[591] *Samsung* Commission Decision (n 7) [57] and [58]; *Motorola* Commission Decision (n 7) [289].
[592] ibid [60] and [61]; ibid [293].

guarantee that a SEP holder does not exploit the market power it enjoys following the inclusion of its patented technology in the standard.

Accordingly, Samsung and Motorola should expect to obtain remuneration for their SEPs by means of licensing revenues rather than using theirs patents to exclude (or exploit) competitors from using it, provided that they were going to be appropriately remunerated for the use of their technology. In that sense, Motorola explicitly recognised that 'where a counterparty is willing to license on FRAND terms, there is no basis for the patentee to seek an injunction'[593].

5.3.2.3. The proposal of the 'essentiality' approach

All in all, the Commission stated that the first element to assess the abusive nature of SEP owners' behaviour was to analyse the existence of the aforementioned two circumstances. Hence, the UMTS and GPRS standardisation context and Samsung's and Motorola's commitment to license theirs SEPs on FRAND terms, constituted exceptional circumstances that distinguished both cases from those where a patent holder seeks to enforce its exclusive right on the basis of a patent that does not read on standardised technology and that is not encumbered by a commitment to license under FRAND terms[594].

In my opinion, the Commission should have defined the first element in the following way: the SEP must be essential for the exercise of implementers' activity. In order to determine that, it might take into account the definition of 'essentiality' given by the case law of the ECJ on refusal to license IPRs. Accordingly, it would be avoided the legal uncertainty posed by that case law when stating that 'the list of exceptional circumstances is not exhaustive', referring to those on the basis of which the exercise of an exclusive right (*i.e.* refusal to grant licenses) might be abusive. Namely, the ECJ nor the Commission defined fixed elements that should be present in order to conclude that a specific exercise of an IPR constitutes an abuse of a dominant position.

Therefore, if the first element was defined in the way I mentioned above (linked to essentiality), that element would be useful to assess the abusive nature of any exercise of an exclusive right, whether refusal to grant licensees, the seek and enforcement of an injunction or any other. So the presence of that first exceptional element would always be compulsory to assess those conducts, which would contribute to legal certainty regarding when they would amount to an abuse of dominant position. On the contrary, keeping the definition given by the Commission in *Samsung* and *Motorola*, there could derive the following consequences.

[593] ibid [59]; ibid [290]–[292], [294] and [297].
[594] *Motorola* Commission Decision (n 7) [300].

The first exceptional circumstance defined by the Commission referred to the existence of a standard that had a widespread adoption and consequently, the access to the SEP related to that standard became indispensable and the industry locked-in to that standard. Therefore, it is not certain whether the assessment of the abusive nature of SEP owners' conduct would be the same if the standard did not have that widespread adoption, but the use of the SEPs in question would be indispensable for competitors' activity. Nevertheless, if the first element was defined as mentioned above (linked to essentiality), it would be applicable regardless of whether the standard was *de facto* the only one in the area or it did not have a widespread adoption at all, because the essential nature of the SEP is what would be relevant.

Moreover, the Commission argued that *Samsung* and *Motorola* cases derived from the associated commitment to license SEPs on FRAND terms (the second exceptional circumstance). So it might be inferred that there would not be any source of concern for the Commission if the dominant company sought injunctions on the basis of non-SEPs, *i.e.* patents for which no commitment to license on FRAND terms had been given in a standardisation context, because that conduct would be within the framework of their right to access a tribunal. However, seeking prohibitory injunctions regarding patents that are not SEPs might also be considered to be abusive, if they were essential or indispensable for the exercise of competitors' activities. Hence, that constitutes another argument to support the definition of the first element as linked to the essentiality, when assessing the abusive nature of SEP owners' behaviour by the Commission.

This proposal will be extensively developed in Chapter 5 – where I defend that SEP owners' behaviour should have been treated as a 'constructive' refusal to deal –, but it was appropriate to raise it already here.

5.3.3. Anti-competitive effects

According to the Commission, the second element that had to be present in order to consider SEP owners' behaviour of seeking and enforcing injunctions abusive, is that it tends to restrict competition or is capable of having that effect[595], regardless of its success. Namely, the fact that an act by an autonomous judicial body (*i.e.* the granting of an injunction by a court) is a precondition for the likely anti-competitive effects resulting from the conduct to materialise cannot affect the abusive nature of the conduct[596]. So for that purpose, it is not relevant whether courts ultimately granted injunctions or not.

Samsung's seeking of preliminary and permanent injunctions against Apple in various Member States on the basis of its SEPs was an autonomous act by the dominant undertaking, which was a prerequisite for the grant of injunctions by courts. Samsung

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595 *Tomra* (n 147) [68].
596 *AstraZeneca* [GC, 2010] (n 56) [377] and [347], confirmed on appeal in *AstraZeneca* [ECJ, 2012] (n 138) [106], [109] and [111]; *Samsung* Commission Decision (n 7) [63] and [64]; *Motorola* Commission Decision (n 7) [308] and [309].

was not required to start the proceedings seeking the injunctions. So when exercising that discretion, Samsung had to ensure that the conduct it elected to pursue was consistent with its obligations – to grant licenses on FRAND terms – under Article 102 TFEU, that prohibits behaviour that tends to restrict competition or is capable of having that effect[597]. The same applies to Motorola's seeking and enforcement of an injunction against Apple in Germany on the basis of the 'GPRS Cudak SEP', which was a prerequisite for the grant of the injunction by the Regional Court of Mannheim and its subsequent enforcement. Accordingly, Motorola was neither required to start or continue – after Apple's Second Orange Book Offer that was a clear indication that Apple was a willing licensee (see below, Section 5.3.4.3. – the proceedings seeking the injunction, nor to enforce the injunction once it was granted[598].

Consequently, the Commission concluded that Samsung's and Motorola's choices regarding the injunction proceedings were capable of causing two anti-competitive effects on Apple – the rival manufacturer of UMTS and GPRS compliant mobile devices – [599]: (i) its exclusion from the market and (ii) to induce it to accept disadvantageous licensing terms. Moreover, in *Motorola*[600], the Commission also understood that dominant undertaking's behaviour was capable of (iii) having a negative impact on standard-setting. All in all, these anti-competitive effects would lead to restrict competition and ultimately, harm consumers who would have less choices and higher prices. Moreover, they would be detrimental to innovation.

5.3.3.1. Exclusion

Firstly, the conduct might provoke the exclusion of Apple from the market, because injunctions involve to end the infringement and generally, they also entail a prohibition of the product infringing the patent being sold. In turn, the elimination of competing products from the market might limit consumer choice and partially eliminate downstream competition.

Particularly in *Motorola*[601], according to the injunction that was granted by the Regional Court of Mannheim, Apple had to cease and desist from offering the infringing GPRS-compatible products for online sales to consumers in Germany. Although the enforcement of the injunction led only to a temporary ban on Apple's online sales – because the Higher Regional Court stayed the enforcement –, as mentioned before, for the purpose of Article 102 TFEU it is irrelevant that the desired result was achieved only for a short period of time. The same would be applicable even if the temporary exclusion had not been achieved at all. Because what matters is that Motorola's behaviour was capable of

[597] *Samsung* Commission Decision (n 7) [63] and [64]; See, to that effect, *Deutsche Telekom* (n 156) [177] *et seq.* and [253] *et seq.*; *TeliaSonera* (n 149) [62] *et seq.*; *Post Danmark* (n 148) [26], [42] and [44]; *AstraZeneca* [ECJ, 2012] (n 138) [109] and [111].
[598] *Motorola* Commission Decision (n 7) [310]; *Deutsche Telekom* (n 156) [84] and [85].
[599] *Samsung* Commission Decision (n 7) [62]; *Motorola* Commission Decision (n 7) [311].
[600] *Motorola* Commission Decision (n 7) [280].
[601] ibid [312]–[319] and [326].

excluding Apple, which could have resulted in significant profit losses due to the fast moving nature of the markets for mobile devices and short product cycles.

5.3.3.2. Exploitation

Secondly, SEP owners' behaviour might also induce Apple to accept disadvantageous licensing terms, compared to those which it may have accepted in the absence of injunctions being sought. That is to say, the threat of injunctions could distort FRAND licensing negotiations and lead to licensing terms that the licensee of the SEP would not have accepted absent SEP owners' threat. Hence, implementers might be compelled to accept excessive or disproportionate royalties, having to face holdup and royalty stacking problems (see Sections 1.3.1.1. and 1.3.1.3. of Chapter 1, respectively). Moreover, these disadvantageous licensing terms are also capable of producing more general anti-competitive effects[602].

Indeed, in *Motorola*, the short duration of the ban on Apple's products was precisely because the enforcement of the injunction by Motorola, led Apple to accept the disadvantageous licensing terms requested by it that were contained in the Sixth Orange Book Offer, on which the Settlement Agreement was based. Had Apple not accepted these terms, the injunction – the ban on Apple's online sales – would have remained in force. It was therefore not the underlying value of the patented technology which drove the negotiation process and the licensing conditions Apple, as an implementer, was ready to agree to, but rather the potential cost of lost sales and damage to reputation[603].

The disadvantageous licensing terms that Apple accepted – capable of having anti-competitive effects – were the following[604]: Motorola's entitlement to terminate the licence if Apple challenged the validity of the SEPs covered by the Settlement Agreement ('the termination clause'); the inclusion of the iPhone 4S in the list of infringing products that were already sold, prior to the signing of the Settlement Agreement ('Old Products'); and Apple's acknowledgment of Motorola's claims for past damages.

I will focus on the number of anti-competitive effects that the termination clause was capable of having, because as it will be studied in Section 4.3. of Chapter 4, that clause was also a debated issue in *Huawei v. ZTE*. First, it might limit Apple's ability to influence the level of FRAND royalties it had to pay to Motorola for the use of the SEPs covered by the Settlement Agreement, because Apple could not initiate invalidity actions that might influence the level of royalties and the resulting level of damages, because that would allow Motorola to terminate the Settlement Agreement and Apple needed a license to Motorola's relevant SEPs in order to lawfully sell GPRS-compliant products[605]. In addition, even in the case of patents where it considered the chances of invalidation to be

[602] ibid [328].
[603] ibid [320], [322], [324], [327] and [412].
[604] ibid [329]–[406].
[605] ibid [336]–[338].

high, the foregone profits from not being able to sell standard-compliant products in Germany would be much larger than any possible gain from reduced royalties after the invalidation. So the termination clause effectively led Apple to refrain from validity challenges for patents under the Settlement Agreement[606]. Moreover, as a result of the termination clause, initiating invalidity actions would entitle Motorola to seek and enforce an injunction against Apple on the basis of any of the SEPs covered by the Settlement Agreement[607]. Consequently, a termination clause in a licensing agreement concerning IP, which is technically essential to implement a standard, amounts to a *de facto* obligation not to challenge the validity of that IPR[608].

Second, the termination clause might lead other potential licensees of the SEPs covered by the Settlement Agreement to pay for invalid IP, which might increase the production costs of standard-compliant products and might be passed on to consumers in the form of higher prices. Therefore, the termination clause was likely to be contrary to the public interest in ensuring effective competition[609], because the 'prohibition' of patent invalidity litigation was capable of generating an undue competitive advantage for Motorola and distorting competition on the merits[610].

Besides, the termination clause would be contrary to ECJ's case law and Commission's Regulation and Communication. In *Windsurf International*[611], the ECJ held that it is in the public interest to eliminate any obstacle to economic activity which may arise when a patent is granted in error. Article 5(1)(b) of the Technology Transfer Block Exemption Regulation (TTBER)[612] excludes the following restriction from the scope of the exemption provided for by it (except in the case of an exclusive license): 'any direct or indirect obligation on a party not to challenge the validity of IPRs which the other party holds in the Union'. In the same vein, the Technology Transfer Guidelines[613] state that 'in the interest of undistorted competition and in accordance with the principles underlying the protection of IP, invalid IPRs should be eliminated. Invalid IP stifles innovation rather than promoting it'.

5.3.3.3. Undermining confidence in the standard-setting process

And thirdly, according to the Commission, Motorola's seeking and enforcement of an injunction against Apple in Germany on the basis of its Cudak GPRS SEP might, in addition, undermine confidence in the standard-setting process and deprive consumers of its benefits[614]. In *Samsung*, the Commission did not consider this consequence as an anti-

[606] ibid [341].
[607] ibid [342].
[608] ibid [375].
[609] ibid [376] and [377].
[610] ibid [383].
[611] Case C-193/83 *Windsurfing International* [1986] ECR I-611, paras 92 and 93.
[612] (n 547).
[613] Commission, 'Communication from the Commission – Guidelines on the application of Article 101 of the TFEU to technology' (n 548), para 134.
[614] *Motorola* Commission Decision (n 7) [415].

competitive effect, but it referred to it as an invalid argument to consider that SEP owner's conduct was objectively necessary (see below, Section 5.3.4.2.).

In view of the standardisation process that led to the adoption of the standard and SEP owner's voluntary commitment to license the SEP on FRAND terms, implementers of the GPRS standard had a legitimate expectation that the SEP holder would grant them a licence, provided they were not unwilling to enter into a licence agreement on FRAND terms. And thus, consumers would enjoy the benefits of interoperability among various operating systems and devices. Therefore, the Prohibition Decision – once parties signed the Settlement Agreement – promoted the proper functioning of standard-setting by ensuring the accessibility of the technology included in the standard enabling implementers to sell lawfully standard-compliant products and by preventing holdup, because Motorola would obtain appropriate remuneration for the use of its SEP since Apple explicitly agreed to enter into a license agreement and be bound by the FRAND royalty rate set by the competent German court[615].

5.3.4. Absence of objective justifications

As it was stated when studying the different types of abusive behaviours (see Section 1.3. of Chapter 1), in order to assess the abusive nature of a conduct, first it must be analysed whether the elements of the specific type of abusive behaviour are present or not (in *Samsung* and *Motorola*, they were the exceptional circumstances and the anti-competitive effects). If they are, it could be determined, *prima facie*, that the conduct is abusive. However, in order to confirm the above conclusion, it is necessary to examine the claims of the dominant undertaking assuring that its conduct is justified, demonstrating that produces substantial efficiencies which outweigh any anti-competitive effects on consumers or that is objectively necessary[616]. If the dominant undertaking does not proof any of the statements, the conduct will be legally construed as an abuse[617]. Ultimately, the evaluation of the presence of objective justifications forms an integral part of the assessment of the abusive conduct under Article 102 TFEU, as if it constituted the last element of the abusive behaviour.

The Commission concluded in *Samsung* (preliminarily) and *Motorola* that SEP owners' behaviour of seeking and enforcement of preliminary and permanent injunctions against Apple on the basis of their UMTS and GPRS SEPs could not be justified, because they did not show any valid objective justification, that is to say, their conduct did not produce possible advantages in terms of efficiencies that also benefited consumers nor it was objectively necessary.

[615] ibid [416], [418] and [420].
[616] See, to that effect, Case C-311/84 *CBEM* [1985] ECR I-3261, para 27.
[617] *Post Danmark* (n 148) [41].

5.3.4.1. Efficiency gains

In order to conclude that the anti-competitive effects of the conduct produce possible advantages in terms of efficiencies, the dominant undertaking has to show that the following four cumulative conditions are met: (i) the efficiency gains likely to result from the conduct under consideration counteract any likely negative effects on competition and consumer welfare in the affected markets; (ii) that those gains have been, or are likely to be brought about as a result of that conduct; (iii) that such conduct is necessary for the achievement of those gains in efficiency; and (iv) that it does not eliminate effective competition by removing all or most existing sources of actual or potential competition[618].

Bearing the above in mind, the Commission[619] concluded that was unlikely that the exclusionary and exploitative effects of Samsung's and Motorola's conduct could be counterbalanced or outweighed by any advantages in terms of efficiency which also benefited the consumer.

Particularly in *Motorola*, the dominant undertaking put forward two alleged advantages in terms of efficiency which it claimed counterbalanced and outweighed any anti-competitive effect produced by the termination clause – that *de facto* prevented Apple from challenging the validity or infringement of the SEPs licensed under the Settlement Agreement. Firstly, the termination clause avoided further litigation between Motorola and Apple. And secondly, termination clauses in general maintained the incentives of licensors to innovate. Notwithstanding, the Commission considered that neither of these alleged advantages provided justification for the termination clause as they did not counteract the likely negative effects of Motorola's conduct (the aforementioned first condition). As it was explained before (see above, Section 5.3.3.2.), the termination clause was capable of having a number of anti-competitive effects. Namely, it might limit Apple's ability to influence the level of FRAND royalties it had to pay to Motorola and it might lead other potential licensees of the SEPs to pay for invalid IP. Besides, the termination clause was not proven to be necessary for the achievement of the alleged efficiency gains (the aforementioned third condition) [620].

5.3.4.2. Objectively necessary

In *Samsung* and *Motorola,* SEP owners advanced various justifications to consider the conduct of seeking and enforcement of injunctions as objectively necessary, but none of them was accepted by the Commission. Both referred to (i) the need to protect their commercial interests. In addition, Samsung also claimed (ii) the need to protect its IPRs; and (iii) the public interest in an effective standardisation process. And Motorola[621]

[618] *British Airways* [ECJ, 2007] (n 127) [86]; *TeliaSonera* (n 149) [76]; *Motorola* Commission Decision (n 7) [480].
[619] *Samsung* Commission Decision (n 7) [70].
[620] *Motorola* Commission Decision (n 7) [481]–[483] and [486].
[621] ibid [424] and [425].

affirmed that (iv) it acted in line with the applicable German case law; and (v) that the ETSI IPR Policy did not prescribe a waiver of the right to seek injunctions.

First, regarding the protection of SEP owners' commercial interests, an undertaking in a dominant position is allowed to take such reasonable steps as it deems appropriate to protect its commercial interests[622]. It must, however, refrain from behaviour the specific purpose of which is to strengthen its dominant position and abuse it[623]. In that regard, the Commission concluded that a SEP holder was entitled to take reasonable steps to protect its interests, by seeking and enforcing preliminary and permanent injunctions against a potential licensee in, for example, the following scenarios: (1) a potential licensee was in financial distress and unable to pay its debts; (2) a potential licensee's assets were located in jurisdictions that did not provide for adequate means of enforcement of damages; or (3) a potential licensee was unwilling to enter into a licence agreement on FRAND terms. The fact is that the corollary of a patent holder committing, in the standardisation context, to license its SEPs on FRAND terms is that a potential licensee should not be unwilling to enter into a FRAND licence agreement for the SEPs in question[624].

The Commission's assessment focused on the third scenario, because the first two scenarios were clearly not present in these cases, because Apple was a US based, financially strong company with substantial assets in the EEA[625]. As it will be studied below (see Section 5.3.4.3.), the Commission also concluded that Apple was not unwilling to enter into a license agreement on FRAND terms for Samsung's UMTS SEPS[626] and Motorola's GPRS SEP.

In that regard, the Commission[627] did not accept Motorola's claim regarding that damages actions did not adequately protect its commercial interests as such actions are slow, expensive and generally only retrospective, due to the fact that they need 'to be conducted on a patent-by-patent basis and can therefore only be brought with respect to a handful of patents'. That, because injunction proceedings also have to be conducted on a patent-by-patent basis. And due to the fact that Motorola was seeking damages and rendering of accounts from Apple in Germany, which showed that Motorola nonetheless considered that such actions do provide it with a certain level of protection of its commercial interests.

Second, with reference to the need to protect Samsung's SEPs, the Commission stated that the mere holding of IPRs could not, in itself, constitute an objective justification for the seeking of an injunction by a SEP holder against a potential licensee that was willing

[622] *United Brands* (n 94) [189].
[623] Joined Cases C-468/06 to C-478/06 *Lelos* [2008] ECR I-7139, para 50; Case C-52/07 *Kanal 5 and TV 4* [2008] ECR I-9275, para 26; Case C-202/07 P *France Télécom v Commission* [2009] ECR I-2369, para 46.
[624] *Samsung* Commission Decision (n 7) [67]; *Motorola* Commission Decision (n 7) [427].
[625] *Motorola* Commission Decision (n 7) [429].
[626] *Samsung* Commission Decision (n 7) [5], [52] and [68].
[627] *Motorola* Commission Decision (n 7) [519].

to enter into a licence agreement on FRAND terms. Otherwise, that justification would be inconsistent with the purpose of the exception with regard to the exercise of IPRs which the case law recognises in favour of free competition (see above, Section 5.3.1.). That is to say, the exception could never be applied, so SEP owners' conduct could never be considered to constitute an infringement of Article 102 TFEU[628]. However, if the potential licensee was unwilling to enter into a license agreement on FRAND terms, the SEP owner's behaviour would be justified for the sake of protecting its SEP.

Third, with regard to the public interest in an effective standardisation process, it is appropriate to mention that it will be effective when FRAND commitments are fully honoured by SEP owners, which would make that implementers have access to the standard and SEP owners would be fairly remunerated for making their standards technology available to third parties. In consequence, the competition would not be undistorted and the positive economic effects of standardisation would be reaped. For instance, consumers would have a wider choice of interoperable products, standards also encourage innovation and lower costs by increasing the volume of manufactured products.

Basing on that, the Commission reached the preliminary conclusion that ensuring that preliminary and permanent injunctions are not sought against potential licensees that are willing to enter into licence agreements on FRAND terms, it safeguards the accessibility of the IP included in the standard (and the SEP owner would be remunerated) and thereby promotes the proper functioning of standard-setting process[629]. And conversely, seeking them against potential licensees that are unwilling, it would also promote the proper functioning of standard setting process, because infringers would cease using SEPs without paying royalty fees.

Fourth, Motorola claimed that was entitled to seek and enforce an injunction against Apple in Germany on the basis of the 'Cudak GPRS SEP' because it was acting in line with the requirements of the *Orange Book* judgment. The Commission did not accept this argument because when a national legislation merely makes it easier for undertakings to engage in autonomous anti-competitive conduct, they remain subject to Article 102 TFEU, because the national legislation does not preclude undertakings from engaging in autonomous conduct which prevents, restricts or distorts competition. A different matter would be if the anti-competitive conduct would be required of undertakings by national legislation or if the latter creates a legal framework which itself eliminates any possibility of competitive activity on their part. In that case, Article 102 TFEU would not be applied because the restriction of competition would not be attributable to the autonomous conduct of the undertakings. Hence, Motorola had full discretion throughout the German proceedings to decide whether to seek an injunction in the first place and whether to

[628] ibid [423]; *Samsung* Commission Decision (n 7) [66]; See, in the same vein, *Microsoft* [CFI, 2007] (n 156) [690], basing on *Magill* [ECJ, 1995] (n 257) and *IMS Health* [ECJ, 2004] (n 241).
[629] *Samsung* Commission Decision (n 7) [69].

enforce the injunction once it was granted by the Regional Court of Mannheim[630]. Moreover, the Commission has to guarantee, subject to the control of the Union judicature, the uniform application of Union competition law – that is in line with the principle of legal certainty –, so it cannot be bound by a decision given by a national court in application of Article 102 TFEU, even if the Commission's decision conflicted with the national court's one[631].

Fifth, Motorola's claim regarding that was entitled to seek and enforce injunctions because the ETSI IPR Policy did not prescribe a waiver of the right to seek injunctions, it was not either taken into account, because as it was already mentioned (see Section 1.3. of Chapter 1), the illegality of abusive conduct under Article 102 TFEU is unrelated to its compliance or non-compliance with other legal rules. So whether or not the ETSI IPR Policy prescribed a general waiver of the right to seek injunctions, it could have no bearing on the existence of an abuse under Article 102 TFEU[632].

5.3.4.3. The 'willing licensee': nature, definition and implementation

Before analysing the definition and implementation of the 'willing licensee' concept in *Samsung* and *Motorola,* I consider it relevant to refer to the nature of the 'unwillingness to enter into a license agreement on FRAND terms'. As I aforementioned before, the evaluation of the presence of objective justifications – such as the fact that the potential licensee is unwilling – forms an integral part of the assessment of the abusive conduct under Article 102 TFEU, as if it constituted the last element of the abusive behaviour, together with the exceptional circumstances (see above, Section 5.3.2.) and the anti-competitive effects (see above, Section 5.3.3.) in the cases of *Samsung* and *Motorola*.

In *Motorola,* the Commission[633] took the same view when it stated that 'the unwillingness to enter into a license agreement on FRAND terms is considered as a potential objective justification the analysis of which forms an integral part of the assessment of the abusive conduct under Article 102 TFEU'. However, subsequently, it[634] stated that 'this Decision has assessed Apple's willingness to enter into a license agreement on FRAND terms and conditions under objective justification and not as part of the assessment of whether Motorola's conduct is liable to be caught by the prohibition under Article 102 TFEU. The notion of abuse is an objective concept, referring to the behaviour of the undertaking in a dominant position, and the general principle of legal certainty requires that the dominant undertaking should be able to assess the lawfulness of its own conduct on the basis of factors known to it and under its control[635]'.

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[630] *Motorola* Commission Decision (n 7) [465]–[468]; *Deutsche Telekom* (n 156) [80] and [82].
[631] *Masterfoods* (n 311) [46] and [48]; *Van den Bergh Foods* (n 205) [197]–[199], confirmed on appeal in Case C-552/03 P *Unilever Bestfoods (Ireland) Ltd v Commission* [2006] ECR I-9091.
[632] *Motorola* Commission Decision (n 7) [473] and [474].
[633] ibid, fn 257.
[634] ibid [434] and [435].
[635] *Deutsche Telekom* (n 156) [198]–[202].

I do not share the latter statement of the Commission, because is indeed the definition of the concept of 'willing licensee' what brings legal certainty, enabling the dominant undertaking to know whether seeking and enforcement of an injunction will be considered to be abusive or not. Accordingly, potential licensee's willingness to enter into a license agreement on FRAND terms is to be assessed under the heading of whether SEP owner's conduct is liable to be caught by the prohibition under Article 102 TFEU. Nevertheless, it is true that both interpretations would lead to the same conclusion as the same legal arguments would in any event be applicable.

The Motorola Prohibition Decision defined the concept of a 'willing licensee', keeping what it already stated preliminarily in the SO[636]. In Commission's view, a potential licensee would be a willing licensee if in the event that bilateral negotiations do not come to a fruitful conclusion, it accepts to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate. As this process would allow for adequate remuneration of the SEP holder, seeking or enforcing injunctions would be no longer justified once a potential licensee accepted such a process, because its right to be appropriately remunerated for the use of its SEPs would be safeguarded by the judicial determination of the FRAND royalties and the possibility to obtain damages for unauthorised use by the implementer through actions before the courts[637].

Moreover, the Commission nuanced that the fact that the potential licensee challenged the validity, essentiality or infringement of the SEP did not make it unwilling, where it otherwise agreed to be bound by the determination of FRAND terms by a third party. It referred to it because in *Motorola*, in the Second Orange Book offer, Apple did not accept Motorola's requirement to include clauses that prohibited Apple to challenge validity and infringement by the iPhone 4S and the acknowledgement of the unconditional liability for damages for past infringement. However, Apple did agree to be bound by a German court's determination of a FRAND royalty rate, whereby both parties could submit their own evaluations, calculations and reasoning for consideration to the competent court – in the First Orange Book Offer, Apple proposed only a limited review by the competent court, so for instance, it would be unable to change or review the method established between parties for the calculation of the royalties[638]. Therefore, the Commission understood that Apple's Second Orange Book Offer was a clear indication that Apple was not unwilling to enter into a license agreement on FRAND terms, despite its initial refusal to agree to the prohibition clauses and damages acknowledgment[639].
That, because Apple's initial reluctance only amounted to its reluctance to accept the disadvantageous licensing terms sought by the SEP owner against the backdrop of its seeking and enforcement of an injunction, but not to unwillingness to enter into a license agreement on FRAND terms. Note that finally, Apple ended accepting both prohibition

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[636] Commission, 'Antitrust: Commission sends Statement of Objections to Motorola Mobility on potential misuse of mobile phone standard-essential patents- Questions and Answers' MEMO/13/403, 4th question.
[637] *Motorola* Commission Decision (n 7) [438].
[638] ibid [302] and [303].
[639] ibid [301]–[307], [433], [439], [440] and [455].

clauses and the liability for past damages in the Sixth Orange Book Offer, upon which the Settlement Agreement between Motorola and Apple was based (see above, Section 5.3.3.2.), following the enforcement of the injunction by Motorola[640].

The reference to the rationale of the statement that licensees should be able to challenge the validity of a SEP, it was already made above, regarding the anti-competitive effects that the termination clause might have (see Section 5.3.3.2.). In that regard, it should be added that licensees should also be able to challenge the essentiality or infringement of a SEP because it is not within SSOs' mandate to check the validity of declared SEPs or their relevance to a standard. Indeed, only a court can decide on the validity and the issue of whether a standard-compliant product infringes a patent that was declared essential to a standard and therefore whether the patent is essential as declared[641] by its owner to the SSO. Accordingly, until a court decides otherwise, a SEP is thus presumed valid, like any other patent[642], and essential to the standard. Consequently, as it is only a presumption, it is in the public interest that licensees should be able to challenge potentially invalid, non-essential or non-infringed SEPs. For instance, as it was mentioned in the aforementioned Section, it is for the benefit of all if a court concludes that a SEP is not valid, because companies, and ultimately consumers, they would not be obliged to pay for patents that were not infringed[643].

By contrast, a potential licensee which remains passive and unresponsive to a request to enter into licensing negotiations or is found to employ clear delaying tactics, it cannot be generally considered as 'willing'.

Note that although the court or arbitration tribunal making the FRAND determination may require a reasonable security in accordance with the applicable rules during the FRAND determination process, where it considers that this is necessary to safeguard the rights of the SEP holder to be adequately compensated for its SEPs, making escrow payments was not considered by the Commission to be a requirement to be a willing licensee[644]. On the contrary, the *Orange Book* judgment did request it (see below, Section 2.1.2.1. of Chapter 4).

As a consequence, the Motorola Prohibition Decision provided a 'safe harbour' for standard implementers who were willing to take a license on FRAND terms. That is to say, if they wanted to be safe from being the subject of injunctions based on SEPs brought by the patent holder, they could demonstrate that they were willing licensees by agreeing

[640] ibid [414].
[641] Under most of the SSOs' IPRs policies, their members have an obligation to inform the SSO about all patents they may hold in a future standard, the so-called specific disclosure (see Section 'Background' of the Introduction).
[642] *AstraZeneca* [GC, 2010] (n 56) [362].
[643] Commission MEMO/14/322 (n 537), 8th question; *Samsung* Commission Decision (n 7) [33] and [34].
[644] *Samsung* Commission Decision (n 7) [95] and [117].

that a court or a mutually agreed arbitrator adjudicated the FRAND terms and to be bound by such a determination[645].

Samsung's commitments implemented in that case the 'safe harbour' concept – that was established in the Motorola Prohibition Decision– in practical terms. Accordingly, a willing licensee would be the one that within 30 days of receipt of an invitation to negotiate agrees to the Samsung's Licensing Framework to settle disputes over FRAND terms.

With the invitation to negotiate, Samsung ought to provide sufficient details of its proposed licensing terms in order to allow potential licensees to assess whether to sign up to the Licensing Framework. For instance, it should provide information about (i) the relevant Mobile Standards; (ii) the Mobile SEPs that Samsung claims are infringed or (iii) the value these Mobile SEPs contribute to the Mobile Standards. Certain respondents – in their observations sent to the Commission – considered that Samsung should also give information about the requested royalty rate, including the underlying calculation method used by Samsung[646]. However, the Commission did not consider necessary for the effectiveness of the commitments to also provide that information, because the rate would, in any event, be the focus of the initial 12 months' negotiation period and the ensuing FRAND determination (see below). Nevertheless, if it wished so, Samsung could provide such information to potential licensees on a case by case basis[647].

The Licensing Framework at issue consists of[648]: (i) a negotiation period of up to 12 months and (ii) if no agreement is reached at the end of the negotiation period, a third party determination of FRAND terms. The third party determination consists of the submission of the dispute to either a court or an arbitrator, as agreed by the parties, in order to determine the FRAND terms of either unilateral licensing or cross-licensing agreement. If the parties could not agree on either submitting to court or arbitration, the dispute would be submitted to court adjudication.

The default venue for FRAND determination was one of the most discussed aspects of the commitments. In the Initial Commitments, Samsung obliged that in case parties did not agree on the venue for a third-party determination, the default option would be arbitration[649]. However, interested parties – the respondents – were of the opinion that the default option should be the courts because otherwise, Samsung could prevent potential licensees from bringing the dispute before a court. Hence, the risk of Samsung withholding its agreement to submit the dispute to a court and force potential licensees into arbitration, it would be eliminated, which would bring several consequences[650].

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[645] Commission MEMO/14/322 (n 537), 4th question, para 1.
[646] *Samsung* Commission Decision (n 7) [87].
[647] ibid [100] and [108].
[648] ibid [16].
[649] ibid [78].
[650] ibid [83], [84] and [106].

Firstly, potential licensees would not be deprived of their right to have the dispute decided by a court and they would not be compelled to give up their right to make invalidity, non-essentiality or non-infringement claims with regard to Samsung's Mobile SEPs before national courts.

Secondly, proceedings before a court are subject to public scrutiny and the produced judgments are public and with precedent value, so the court is a more transparent venue for determining FRAND terms. Besides, courts are better placed to evaluate invalidity or non-essentiality claims. And as courts' finding on invalidity have an *erga omnes* effect, they contribute to the public interest of eliminating any obstacle to economic activity which may arise where a patent is granted in error[651].

So eventually, Samsung made a change in the Final Commitments stating that the default venue for FRAND determination was going to be courts, specifically, Patents Court, High Court of England and Wales or the Unified Patent Court. Nevertheless, if they declined jurisdiction, arbitration by the International Chamber of Commerce or the arbitration centre[652] would remain an option (and obviously, also in case both parties agreed to submit the dispute to arbitration)[653]. The Commission considered the venues provided for by the commitments were sufficient to ensure their effectiveness, without being necessary to extend the list of the court and arbitration tribunals as it was suggested by certain respondents[654].

Moreover, the arbitration tribunal would be composed by individuals from a broad field of specialisation, including those from the IT industry – because mobile devices contain many IT standards – and not only by those with experience in the telecommunications industry. Accordingly, with that subjective scope, any possible bias in favour of parties from the telecommunications industry would be avoided[655].

In addition, although arbitration tribunals' determination of FRAND terms would be confidential, the Commission required Samsung to include in its commitments that non-confidential versions of FRAND determinations by arbitration tribunals – in particular, the method applied to calculate the FRAND rate – would be made public in accordance with the applicable rules of the tribunal. That would contribute to the creation of a body of case law upon which future FRAND determinations could draw[656].

All in all, Samsung commitments provided a 'safe harbour' for all potential licensees of Samsung's Mobile SEPs that submitted to the Licensing Framework provided for by the

[651] *Windsurfing International* (n 611) [92].
[652] The arbitration centre will be established under Article 35(1) of the Agreement on a Unified Patent Court [2013] OJ C175/1 (as of 12 June 2019, the date of entry into force of the intergovernmental treaty is unknown).
[653] *Samsung* Commission Decision (n 7) [98].
[654] ibid [96] and [118].
[655] ibid [91], [104] and [112].
[656] ibid [90], [103] and [111].

commitments, because they would be protected against injunctions sought by Samsung on the basis of such SEPs[657]. Nevertheless, according to Commission, although a potential licensee would choose not to sign up to the Licensing Framework, it could not be automatically regarded as unwilling to enter into a licence agreement on FRAND terms. Rather, the court or tribunal called upon by Samsung to grant injunctive relief would need to evaluate all the circumstances of the case at hand in order to decide whether a potential licensee is indeed unwilling to enter into a licence agreement on FRAND terms. Notwithstanding, if the willing licensee is the one who signs up to the Licensing Framework, I cannot think about a scenario in which the potential licensee is willing to enter into a license agreement – but it does not sign up to – and therefore, the SEP owner's behaviour of seeking injunctions would be considered to be abusive[658].

In conclusion, the Commission defined the concept of 'willing licensee' in the Prohibition Decision in *Motorola*. And *Samsung*'s commitments implemented that concept for that specific case, in practical terms. Namely, they provided a particular licensing framework in order to resolve disputes on SEPs without having recourse to injunctions in a way that could harm competition. Due to the nature of the commitments under Article 9(1) of Regulation 1/2003, Samsung's dispute resolution mechanism was only applicable with reference to Samsung's Mobile SEPs.

5.4. Effects on trade between Member States/Contracting Parties

Article 102 TFEU prohibits an abuse of a dominant position as incompatible with the internal market 'in so far as it may affect trade between Member States' and Article 54 of the EEA Agreement prohibits an abuse of a dominant position as incompatible with the functioning of the EEA Agreement 'in so far as it may affect trade between Contracting Parties'.

The three elements of the effect on trade criterion (see Section 1.4. of Chapter 1) were met in both *Samsung* and *Motorola* cases: (i) the trade between Member States/Contracting Parties must be affected; (ii) a practice must be capable of having an effect on trade between Member States/Contracting Parties; and (iii) the effect on trade between Member States/Contracting Parties must be appreciable.

Namely, the trade between Member States/Contracting Parties was affected because SEP owners' practices affected the competitive structure of the internal market/functioning of the EEA by threatening to eliminate a competitor – Apple – operating within the territory of the EU/EEA (first element). Consequently, the practices were capable of affecting trade between them too (second element). In addition, Samsung and Motorola had a dominant position with regard to UMTS and the GPRS Cudak technology, as specified in the standard technical specifications, on which their SEPs read. The effect on trade resulting from their conduct was therefore appreciable (third element).

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[657] Commission MEMO/14/322 (n 537), 4th question, para 2.
[658] *Samsung* Commission Decision (n 7) [123].

Accordingly, Samsung's and Motorola's conduct affected trade between Member States/Contracting Parties within the meaning of Article 102 TFEU/Article 54 of the EEA Agreement[659].

6. Remarks

In *Samsung* and *Motorola*, the Commission analysed for the first time in the Union the issue of whether seeking and enforcing injunctions by SEP holders might constituted an abused of a dominant position. After analysing both cases, there are several considerations I would like to raise.

6.1. Two novel categories of abuse: exclusionary and exploitative

As already mentioned (see Sections 5.3. and 5.3.1.), the refusal to grant licenses and the seeking and enforcement of injunctions by a patent holder will generally be a legitimate exercise of an IPR – even if it is the act of a SEP owner holding a dominant position –, because these exercises of exclusive rights constitute their very substance. Therefore, these behaviours cannot, in itself, constitute an abuse of a dominant position. However, the exercise of an exclusive right linked to an IPR by the proprietor may, in exceptional circumstances, involve abusive conduct for the purposes of Article 102 TFEU.

In order to assess the abusive nature of seeking and enforcing injunctions, the Commission took as a reference the settled case law of the ECJ on refusal to deal (see Chapter 2), because both conducts constituted exercises of IPRs. Notwithstanding, the Commission should have gone beyond and treat SEP owners' behaviour as a 'constructive' refusal to deal, in the sense that seeking and enforcement of injunctions in SEP infringement proceedings against willing licensees may amount to an effective refusal to deal (that is the approach I defend in Chapter 5).

Instead, the Commission decided to treat SEP owners' conduct as a novel category. More specifically, it developed two new categories of abuse, depending on which anti-competitive effect (see above, Section 5.3.3.) may the seeking (or threatening to seek) and enforcement of injunctions cause: an exclusionary and exploitative abuse. However, the required elements to consider the conduct as one type of abuse or the other, are the same. That is to say, the two exceptional circumstances must be present (see above, Section 5.3.2. – the widespread adoption of the standards and having given FRAND commitments –) and there has to be an absence of objective justifications (see above, Section 5.3.4.).

The exclusionary abuse would derive from the enforcement of the granted injunction, because it usually entails not only to end the infringement, but also a prohibition of the product infringing the patent being sold. Accordingly, the elimination of competing

[659] ibid [74]; *Motorola* Commission Decision (n 7) [540]–[542].

products from the market might limit consumer choice and partially eliminate downstream competition. This behaviour would infringe the paragraph (b) of Article 102 TFEU which states that the abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it that consist in limiting production, markets or technical development to the prejudice of consumers, shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.

And the exploitative abuse would arise from the threatening to enforce the injunction that was granted by the court, because it might induce the infringer to accept disadvantageous licensing terms, compared to those which might have accepted in the absence of injunctions being sought. For example*,* by holding up implementers of the standard by demanding excessive royalty fees or by refusing to license the necessary SEPs. The SEP owner might also exploit implementers of standards insisting that they give up their rights to challenge the validity, essentiality and infringement of its SEP, so they and ultimately consumers might end paying for invalid or non-infringed patents[660]. Note that to consider that conduct as abusive, it would be sufficient that tended to restrict competition or was capable of having that effect. Accordingly, it would not be required that as a consequence of the threat to enforce the injunction, the standard implementer ended by accepting licensing terms that were not FRAND. Such distortion of licensing negotiations would be detrimental to innovation and could harm consumers. Therefore, this conduct would be prohibited according to the paragraph (a) of Article 102 TFEU which states that the abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it that consist in directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions, shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.

From a legal standpoint, it is problematic, and contrary to best administrative practice, to build theories of antitrust liability on the basis of fictional economic assumptions (*i.e.* that the act of seeking an injunction – or the threat of doing so – can induce potential licensees to accept unfair terms)[661]. Moreover, it is also economically inconsistent, because although in theory the essential nature of SEPs may lead to a holdup situation, there is a debate among economists and legal scholars about whether, in practice, holdup constitutes a systemic problem or not (see 1.3.1.1. of Chapter 1) – the theory of holdup has not undergone empirical conclusive testing. Consequently, the novel category of exploitative abuse defined by the Commission should not be applied.

All in all, even though both the refusal to grant IP licenses and the seeking and enforcement of injunctions in SEP infringement proceedings imply, in principle, the legitimate exercise of IPRs, they might constitute abusive conducts when different

[660] Commission, 'Antitrust: Commission finds that Motorola Mobility infringed EU competition rules by misusing standard essential patents' IP/14/489, para 7; Commission MEMO/13/403 (n 636), 8th question.

[661] Nicolas Petit, 'Injunctions for Frand-Pledged SEPs: The Quest for an Appropriate Test of Abuse Under Article 102 TFEU' (2013) 9(3) European Competition Journal 677, 713-716.

elements are present. Namely, when the refusal fulfil the requirements defined by the case law of the ECJ (*Magill* and others), it would be an exclusionary abuse. And when the seeking (or threatening to seek) and enforcement meet the elements established by the Commission in *Samsung* and *Motorola*, the behaviour would be abusive since it might exclude or exploit competitors. Note that subsequently, in *Huawei v. ZTE*, the ECJ dealt with the same issue as the Commission did in *Samsung* and *Motorola*, although the Court did not apply the same legal argumentation defended by the Commission (see Chapter 4).

6.2. The availability of injunctions for SEP holders

In most cases, when a SEP owner seeks and enforces an injunction, it is a patent that read on a standard that had a widespread adoption (first exceptional circumstance), the owner gave FRAND commitments (second exceptional circumstance), the conduct is capable of restricting competition by excluding or exploiting competitors (an anti-competitive effect) and the implementer is a willing licensee (absence of objective justification). Due to that fact, it was posed[662] the issue of whether in *Samsung* and *Motorola* the Commission was generally questioning the use of injunctions by patent holders. That was a very relevant question, taking into account the high importance attached to effective patent protection and an efficient patent system.

According to the Commission, it did not prohibit *per se* the use of injunctions by SEP holders. That, because when those specific circumstances were not present or there were but SEP owner's behaviour was justified, the access to injunctions was not questioned. That is to say, even though the standard on which the SEP read had a widespread adoption and the holder of the SEP gave a commitment to license it on FRAND terms, if the company against which an injunction was sought was unable to pay the royalties or its assets were located in jurisdictions that did not provide for adequate means of enforcement of damages or it was an unwilling licensee, the availability of injunction for SEP holders would not be anti-competitive, for being objectively justified.

Therefore, the Commission stated that its aim was not to eliminate the use of injunctions by patent holders. Rather, it took the view that seeking and enforcement of an injunction for SEPs could constitute an abuse of a dominant position when the exceptional circumstances were present and objective justifications were absent. Accordingly, it concluded that the recourse to injunctive relief was generally a legitimate remedy for patent holders in case of patent infringements.

Nevertheless, in practice, the exceptional circumstances will be present and usually, the implementer will be willing to negotiate a FRAND license, in the sense of accepting to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate in the event that bilateral negotiations did not come to a fruitful

[662] Commission MEMO/13/910 (n 518), 8th question; Commission MEMO/12/1021 (n 488), 4th question; Commission IP/13/971 (n 490), paras 3 and 4; Commission IP/12/1448 (n 545), para 5; Commission MEMO/14/322 (n 537), 6th question.

conclusion. The reason why almost always the implementer will be a willing licensee is because usually the injunction proceedings have their origin in a lack of agreement of what FRAND terms should be (see below, Section 6.3.) and not in the unwillingness of the implementer to enter into a license agreement. That, since access to patents which are standard essential is a precondition for any company to sell interoperable products in the market. In consequence, according to the Commission, it seems that *de facto*, seeking and enforcement of injunctions is prohibited for SEP holders, because in the majority of cases it will constitute an abuse of a dominant position (notwithstanding what was subsequently established by the ECJ in *Huawei v. ZTE*, see Chapter 4). The above, led some scholars[663] to affirm that Commission's approach left SEP owners under protected.

6.3. FRAND terms' definition

Commitments to license on FRAND terms seek to address the issue of market power that can be conferred on SEP holders once a standard has been adopted and implementers (such as smartphone producers) have invested in developing standard-compliant products. However, in practice, there can be disagreement on what FRAND terms should be, which might lead SEP holders to enforce their patents when implementers are using them without paying royalties[664].

Accordingly, the Commission's aim is to prevent SEP holders from using SEP-based injunctions in an anti-competitive way, in order to exclude competitors or to extract licensing conditions that may restrict competition and ultimately harm consumers. But at the same time, SEP holders should be entitled to appropriate remuneration for their SEPs. In *Samsung* and *Motorola*, the Commission concluded that the seeking and enforcement of an injunction by a SEP holder might be anti-competitive when it committed to license its SEPs on FRAND terms and the licensee is willing to take a licence on such terms.

Due to commonly the origin of initiating injunction proceedings is the lack of agreement about what should be FRAND[665] and its determination is relevant to assess whether the implementer is a willing licensee, the following question is arisen: should the Commission define the FRAND terms? The definition could also be useful to consider whether the threat of enforcing a granted injunction provoked the acceptance of anti-competitive licensing conditions by the standard implementer. In that case, the abusive conduct would derive from imposing unfair licensing terms and not from the threat of enforcing an injunction.

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663 For a critical opinion on *Motorola*'s case, see Robin Jacob, 'Competition Authorities Support Grasshoppers: Competition Law as a Threat to Innovation' (2013) 9 Competition Policy International Journal 15, 23-26.

664 Commission MEMO/14/322 (n 537), 3th question.

665 *Huawei* AG (n 137) [9] ('[...] the matters at issue in the dispute before the referring court – the Regional Court of Düsseldorf –, […] in my view, stem largely from a lack of clarity as to what is meant by "FRAND terms" and as to the requisite content of such terms [...]').

When in *Samsung* and *Motorola* the Commission had the opportunity to define FRAND terms, it[666] did not take a position on what a reasonable royalty rate was, because in its opinion, national courts or arbitrators are generally well equipped to do this in cases of disputes. And it added that to the extent they seem necessary, national courts may seek guidance from the Commission on the interpretation of EU competition law. Indeed, in November 2013, the Regional Court of Mannheim asked the Commission a number of questions in relation to the setting of FRAND rates in the SEP dispute between Motorola and Apple. The Commission[667] said it was going to publish the response to these questions on its website in due course, although I am not aware of that publication. Accordingly, so far, the Commission has not taken any position on the reasonableness of the royalty or the royalty base. Hence, the Commission's cases were about the undue leverage against willing licensees which the seeking of injunctions based on SEPs might give to a SEP-holder who gave a commitment to license those SEPs on FRAND terms[668].

As it will be analysed in Chapter 4 (see Section 4.6.), in *Huawei v. ZTE* ruled by the ECJ, this issue of the appropriateness of defining FRAND terms was also under discussion by scholars.

6.4. Lack of legal clarity: the preliminary ruling in *Huawei v. ZTE*

Several times, Joaquín Almunia[669] – the former Commission Vice President in charge of competition policy – said that the Commission decision in *Motorola*, together with the decision to accept *Samsung*'s commitments, 'provides legal clarity on the circumstances in which injunctions to enforce SEPs can be anti-competitive'. Moreover, he considered that the Commission in *Samsung* brought clarity to the industry on what constituted an appropriate framework to settle disputes over FRAND terms in line with EU antitrust rules and he encouraged other industry players to consider establishing similar dispute resolution mechanisms[670]. Note that on the basis of the definition of a 'willing licensee' provided in *Motorola*, the assessment of whether a company is a willing licensee needs to be determined on a case by case basis taking into account the specific facts. Thus, the implementation of the concept is flexible, because the Commission did not establish a specific framework.

Nevertheless, basing on Commission's antitrust assessment in *Samsung* and *Motorola* consisting of the presence of the two exceptional circumstances (the widespread adoption of the standard and FRAND commitments) and the absence of justification, several questions remained unanswered. For instance, what would prevail in case the implementer was unable to pay the royalties or if its assets were located in a non-guarantee jurisdiction, but it was willing to negotiate a FRAND licenses? The first two

[666] Commission MEMO/13/403 (n 636), 6th question.
[667] Commission MEMO/14/322 (n 537), 9th question.
[668] Commission MEMO/13/910 (n 518), 5th question.
[669] Commission IP/13/971 (n 490), para 2; Commission IP/14/489 (n 660), para 2.
[670] Commission IP/14/490 (n 486), paras 2 and 10.

scenarios would be considered objective justifications to seek and enforce injunctions, but not the third one, so the unwillingness would allow the implementer to use the competition law defence.

In the same vein, would it be questioned the seeking of an injunction by a non-SEP holder when the implementer is willing to negotiate a license because the patent is essential for its activity? In that case, the two exceptional circumstances would not be present, because the patent owner did not give FRAND commitments and the patent did not read on a *de jure* standard created by a SSO (but on a *de facto* one). Indeed, those were the facts in *IMS Health* (see Section 3.2.5. of Chapter 2), although it concerned a copyright (instead of a patent) and the investigated conduct was a refusal to license (not the seeking and enforcement of an injunction). In the *prima facie* assessment (before the change in the status of competition), the Commission stated that IMS Health infringed Article 102 TFEU. In both scenarios (in the hypothetical and *IMS Health*), the subject-matter of the dispute is an IPR (patent and copyright) and the conduct of the dominant undertaking derives from the exercise of the IPR (seeking of an injunction and refusal to license).

Taking into account Commission's approach in *Samsung* and *Motorola*, it would not treat the hypothetical case as a 'constructive' refusal to deal (although that should be the approach, see Chapter 5). And as the ECJ judgment in *Huawei v. ZTE* is also not clear on whether its assessment would be applicable to non-SEPs (see Section 3.3.3. of Chapter 4), I assume the Commission would treat the conduct of the hypothetical case as a novel category of abuse.

Moreover, if the legal clarity provided by the Commission in *Samsung* and *Motorola* was such regarding the abusive nature of seeking and enforcement of injunctions by SEP holders, the Regional Court of Düsseldorf would not have requested for a preliminary injunction to the ECJ in the SEP-based litigation between *Huawei* and *ZTE* (on 5 April 2013), that was based on the apparent contradiction between the *Orange Book* judgment ruled by the German Federal Supreme Court and *Samsung/Motorola* cases. That contradiction was not contemplated by the Commission, because in its[671] opinion, its decisions were not in conflict with the *Orange Book* case law on injunctions, because it did not specifically relate to SEPs and was therefore not directly applicable to the cases on which the Commission decided. However, the ECJ shared German court's opinion, because if the legal clarity provided by the Commission was such, the ECJ (on 16 July 2015) would have simply responded by referring to the anti-competitive assessment made by Commission in *Samsung* and *Motorola* (on 29 April 2014). However, it developed a different legal argumentation to determine under what circumstances seeking a prohibitory injunction and the recall of products by a SEP holder constituted an abusive conduct (see Chapter 4).

[671] Commission MEMO/14/322 (n 537), 12th question.

With respect to the *Huawei v. ZTE* judgment, it is relevant to highlight Commission's[672] statement that regarding its investigations in *Samsung* and *Motorola*, it was going to fully take account of any guidance on questions of law by the European ECJ that were of relevance for them. The fact was that before the Commission handed its decisions, the request for a preliminary ruling by the Regional Court of Düsseldorf was already presented. And from that statement, it might be deduced that the ECJ was going to be the first one ruling on the issue. Nevertheless, finally, the Commission's decisions were rendered first. Therefore, in order to explain the link between its decisions and the request for a preliminary ruling, it stated that it provided observations outlining its position to the European ECJ in the pending *Huawei v. ZTE* case and it added that 'the Commission will naturally fully take account of any further guidance by the ECJ'[673]. After *Huawei v. ZTE,* the Commission handed two Communications (in 2016[674] and 2017[675]) where it seems to consider that the judgment did not appropriately solved the conflict between bringing infringement actions and the abuse of a dominant position (see the 'Conclusion' of Chapter 4).

During its investigations, the Commission also alluded to the *Orange Book* judgment, albeit it concerned a non-SEP. And it also referred to the Consent Order adopted by the US Federal Trade Commission (FTC)[676] in its investigation of *Google/Motorola*, although this order only applied to the future seeking and enforcing of injunctions, so it did not cover agreements that were the result of behaviour occurring prior to the Consent Order, such as the one that the Commission was examining in its investigations. Notwithstanding, the Commission's concerns about the potential anti-competitive use of SEPs were similar to those that underlay the proposed Consent Order[677]. The order set out the procedure that Motorola and Google had to follow before a SEP-based injunction against a potential licensee can be sought. Accordingly, it established a framework that protected licensees not unwilling to enter into a FRAND licence on terms set by a US court or arbitral tribunal from SEP-based injunctions. According to the Consent Order, challenging the validity, value, infringement or essentiality of a SEP did not amount to unwillingness on the part of a licensee to enter into a license agreement on FRAND terms. Note that the Commission in *Motorola,* defined the concept of 'willing licensee' on those same terms.

These references made by the Commission were the consequence of the fact that when it was investigating the issue about the abusive nature of seeking and enforcement of

[672] Commission MEMO/13/403 (n 636), 9th question.
[673] Commission MEMO/14/322 (n 537), 13th question.
[674] Commission, 'ICT Standardisation Priorities for the Digital Single Market' COM(2016) 176 final, 13, para 7.
[675] COM(2017) 712 final (n 81) 2, para 7.
[676] 'Motorola Mobility LLC, and Google Inc., In the Matter of' [Doc ID 174] (Federal Trade Commission, July 24, 2013) <https://www.ftc.gov/enforcement/cases-proceedings/1210120/motorola-mobility-llc-google-inc-matter> accessed 29 March 2019.
[677] Commission MEMO/13/403 (n 636), 10th question.

injunctions by SEP owners, there was a lack of previous Union decisional practice and case law and there were diverging judgments by national courts on that issue.

Conclusion

According to the Commission in *Samsung* and *Motorola*, the seeking and enforcement of an injunction by a patent holder, including a holder of SEPs, is generally a legitimate course of action. However, the context is different with regard to the seeking and enforcement of an injunction on the basis of a SEP that read on a standard that has a widespread adoption (first exceptional circumstance) and for which a voluntary commitment to license on FRAND terms has been given by its owner during a standard-setting process (second exceptional circumstance). Note that the essence of the commitment to license on FRAND terms is a recognition by a SEP holder that its SEPs will be licensed in return for FRAND remuneration, in contrast to those patents which do not read on a standard (or that read on a *de facto* standard) and for which no FRAND commitment has been given. In that context, if the SEP owner cannot provide a valid justification (demonstrating that the conduct produces efficiency gains or that is objectively necessary) to seek and enforce and injunction, the behaviour will be abusive because it tends to restrict competition or is capable of having that effect (excluding or exploiting competitors).

In the majority of cases, the debate will revolve around whether SEP owner's behaviour of seeking and enforcing an injunction is objectively necessary in order to be remunerated for the use of its SEPs, because the potential licensee is unwilling to enter into a licence on FRAND terms.

In that regard, the Commission stated in *Motorola* that a willing licensee is who, in the event that bilateral negotiations do not come to a fruitful conclusion, it accepts to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate. An example of the implementation of that concept was provided by Samsung in its commitments, that were made binding by the Commission. The company stated that a willing licensee would be the one that within 30 days of receipt of an invitation to negotiate, agreed to the Samsung's Licensing Framework to settle disputes over FRAND terms. The Licensing Framework at issue consisted of: (i) a negotiation period of up to 12 months and (ii) if no agreement was reached at the end of the negotiation period, a third party determination of FRAND terms.

All in all, the Commission concluded that both Samsung (preliminarily) and Motorola abused their dominant positions by seeking and enforcing an injunction against Apple on the basis of theirs SEPs, because the two exceptional circumstances were present and objective justifications were absent. That behaviour is prohibited by Article 102 TFEU, because such misuse of patents could ultimately harm consumers.

In Commission's opinion, the general implications of *Samsung* and *Motorola* cases for patent protection were that they stroke a fair balance between the interests of SEP holders to be appropriately remunerated for their IP and the interests of implementers of standards to get access to standardised technology on FRAND terms. Although that consideration did not seem to be perceived likewise by national courts and the ECJ, judging from the content of the German court's request for a preliminary ruling and the antitrust assessment established in the preliminary ruling.

CHAPTER 4. ACTIONS SEEKING A PROHIBITORY INJUNCTION AND THE RECALL OF PRODUCTS IN SEP INFRINGEMENT PROCEEDINGS. *ORANGE BOOK* AND *HUAWEI V. ZTE*

Introduction

Before the Commission handed its decisions in *Samsung* and *Motorola* (in 2014), the Regional Court of Düsseldorf had requested for a preliminary ruling to the ECJ in the SEP-based litigation between Huawei and ZTE (in 2013). The preliminary ruling – that was issued after those decisions – is the object of analysis of this chapter.

In *Huawei v.* ZTE, the ECJ dealt for the first and only time (in 2015) with the issue of whether bringing actions seeking a prohibitory injunction and the recall of products in SEP infringement proceedings was abusive according to Article 102 TFEU. What made the German court to request a preliminary ruling was the apparent contradiction between the antitrust assessment preliminarily developed in *Samsung* by the Commission and the one adopted by the German Federal Supreme Court in *Orange Book* (2009) – that was being applied by lower German courts. Therefore, that German case will be also analysed in this chapter (Section 2), in order to better understand the source of the conflict in *Huawei v. ZTE*.

As the Commission did in *Samsung* and *Motorola*, the ECJ also treated the Huawei's behaviour as a novel category of abuse, although it developed a different antitrust assessment in comparison with the one adopted by the Commission (Sections 3 to 7). According to the Court, a SEP owner does not abuse its dominant position, as long as it and the implementer follow the licensing framework established by the Court. Accordingly, national courts are in charge of assessing whether both parties complied with their obligations or not. But in order to do that, the Court does not provide any guidance to national courts on how to implement the licensing framework, which brings massive legal uncertainty. Namely, the national case law implementing it – particularly in Germany – is highly disharmonized, leading to different conclusions depending on the judging court. The above creates confusion and generates a real risk of forum shopping, when the fundamental objective of European competition rules is precisely to prevent distortion of competition. That, is a condition for achieving a free and dynamic internal market and promoting general economic welfare.

All in all, the judgment was very criticised due to different reasons and it also posed several legal gaps, leading national courts to fill them case by case. As it was already mentioned previously, I consider that the ECJ missed the long-awaited opportunity to resolve the SEP licensing problem once and for all. Note that the conduct of SEP holders – who gave a commitment to grant licences to third parties on FRAND terms – had given rise to a plethora of actions before the courts of several Member States and third countries. These various actions, based not only on competition law but also on civil law, gave rise to a number of divergent legal approaches and, consequently, to a considerable degree of uncertainty as to the lawfulness of certain forms of conduct on the part of SEP holders and undertakings – who implemented a standard using the reaching of a SEP[678].

On that score and confining my suggestion to competition law and, in particular, to the question of abuse of dominant position, I think the ECJ should have treated Huawei's conduct as a 'constructive' refusal to license, instead of as a novel category of abuse (this proposal will be studied in Chapter 5).

1. Request for a preliminary ruling: case brief

Huawei, a multinational company active in the telecommunications sector, was the proprietor of a European patent granted by the Federal Republic of Germany, that was declared essential to the LTE standard developed by ETSI, a standard composed of more than 4700 SEPs. Accordingly, Huawei undertook to grant licenses to third parties on FRAND terms. And ZTE was a company belonging to a multinational group that was also active in the telecommunications sector and which marketed, in Germany, products equipped with software linked to that standard[679].

Among the products developed and marketed by ZTE in Germany were base stations with LTE software, that were unquestionably made for use with LTE software and operated on the basis of the LTE standard. Given that the SEP at issue, owned by Huawei, was essential to the LTE standard, ZTE inevitably used that patent.

Accordingly, both parties engaged in discussions concerning the infringement of that SEP and the possibility of concluding a licence on FRAND terms in relation to those products. While Huawei indicated the amount which it considered to be a reasonable royalty, ZTE, for its part, proposed a cross-licensing agreement and the payment of a royalty of EUR 50. However, no offer relating to a licensing agreement was finalised. In consequence, ZTE was using Huawei's SEP without providing it an exhaustive account of past acts of use and without paying the amount of the royalty that the defendant had itself calculated therefrom[680].

After the 'breakdown' of the negotiations for the conclusion of a licensing agreement on FRAND terms, Huawei brought an action for infringement against ZTE before the Regional Court (*Landgericht*) of Düsseldorf, seeking an injunction prohibiting the continuation of the infringement, the rendering of accounts, the recall of products and an award of damages[681].

The referring court stated that ZTE's use of the SEP at issue was unlawful. However, it considered that the decision on the substance in the main proceedings between Huawei

[678] *Huawei* AG (n 137) [7].
[679] *Huawei* (n 35) [21]–[23].
[680] ibid [24]–[26]; *Huawei* AG (n 137) [26] and [27].
[681] *Huawei* (n 35) [27].

and ZTE turned on whether the action brought by Huawei – seeking a prohibitory injunction and the recall of products – constituted an abuse of that company's dominant position on the basis of Article 102 TFEU (the existence of that position was not contested before the referring court by the parties nor it was disputed by the national court[682]).

Nevertheless, it considered that different approaches might be taken in order to determine the point at which the proprietor of a SEP infringed the aforementioned Article[683]. Hence, according to the *Orange Book*[684] judgment issued by the German Federal Supreme Court (*Bundesgerichtshof*-BGH), the German court would have to order the prohibitory injunction and the recall of products. Whereas if it based on the SO sent to *Samsung*[685] by the Commission, Huawei would be regarded as abusing its dominant position. Accordingly, the German Regional Court would consider possible to rely on the mandatory nature of the grant of the licence in order to dismiss the action for a prohibitory injunction[686]. Note that at the time the German Regional Court requested for a preliminary ruling, none of the two investigations against *Samsung* and *Motorola* had ended by final decisions, this is why the national court only referred to the preliminary antitrust assessment established by the Commission in *Samsung*.

In those circumstances, the German Regional Court decided to stay the proceedings and to refer to the ECJ for a preliminary ruling on the interpretation of Article 102 TFEU[687], because it understood that the legal argument used by the *Orange Book* case law and the one preliminarily applied by the Commission in *Samsung*, were contradictory.

2. Apparent contradiction: *Orange Book* and *Samsung*

The German court referred several questions to the ECJ, depending on whether the 'correct' approach would be the one developed by the German case law or the one preliminarily established by the Commission in *Samsung* – that was kept in the Commitments Decision and it was also applied in the Prohibition Decision addressed to Motorola. Before referring to the preliminary questions, it is appropriate to analyse the *Orange Book* judgment.

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682 ibid [43].
683 ibid [29].
684 Case *Orange-Book-Standard,* BGH of 6 May 2009, KZR 39/06, a translation is available here: <https://www.ie-forum.nl/backoffice/uploads/file/IEForum/IEForum Uitspraken/Octrooirecht/EN Translation BGH Orange Book Standard - eng.pdf>.
685 The *Landgericht* Düsseldorf only referred to the following two documents – press releases – of 21 December 2012 concerning a Statement of Objections sent to *Samsung*: (1) Commission IP/12/1448 (n 545); (2) Commission MEMO/12/1021 (n 488).
686 *Huawei* (n 35) [28].
687 ibid [39].

2.1. *Orange Book*

2.1.1. Background: a non-SEP reading on a *de facto* standard

Recordable and Rewritable Compact Disc (CD-R and CD-WR) technology was developed jointly by Philips and Sony, which technical specifications were collected in a document called Orange Book[688]. Philips was a company who owned the German patent that protected that technology. Therefore, if manufacturers wanted to produce CD-Rs and CD-RWs that were interoperable and saleable, they needed to use the technology specified in the standard, obtaining a license from Philips. That standard was not a *de jure* or formal standard adopted by a SSO, but a *de facto* standard, which means it arose from the operation of the market because the technology was generally used.

Accordingly, Philip's patent was not a SEP. It should be recalled that SEPs protect technologies that are essential to implement *de jure* or formal standards and their use is indispensable to all implementers of standards who envisage manufacturing products that comply with them. On the contrary, non-SEPs, usually from the technical point of view, can be circumvented by implementers without compromising any essential function of their product[689]. Notwithstanding, from the competitive effects' standpoint, if the non-SEP covers a technology generally used in the market (a *de facto* standard) and there is not any actual or potential substitute of it, its implementation may become essential to manufacture products by third parties.

The conflict that led to the issue of the *Orange Book* judgment was created because the German company SK Kassetten was manufacturing CD-Rs without having entered into a license agreement with Philips to use its patent, so Philips sued the company for patent infringement, seeking a prohibitory injunction and compensation for damages.

The manufacturer argued that the patent was not infringed and if it was, it was entitled to a compulsory licence since Philips' behaviour amounted to an abuse of its dominant position in the sense of Article 102 TFEU. In a decision of 6 May 2009 (the *Orange Book* judgment), the German Federal Supreme Court held that the patent was infringed, but it accepted that there was a potential 'competition law-based defence'. But to raise the defence and avail itself of a compulsory license, the defendant had to act as a 'true licensee', in the terms that will be explained below.

Note that there are two main differences between the facts in *Orange Book* judgment and those in *Samsung*/*Motorola* and *Huawei v. ZTE*. Firstly, the *Orange Book* judgment related to specifications that had become a *de facto* standard and not to specifications agreed under the auspices of a SSO, so Philips' patent was not a SEP. And secondly, as a consequence of the above, Philips – the holder of the patent over the *de facto* standard

[688] *Motorola* Commission Decision (n 7) [80].
[689] ibid [51]–[53].

– had not made any commitment to license its patent under FRAND terms[690]. Notwithstanding these differences, the Regional Court of Düsseldorf – who requested the preliminary ruling in *Huawei v. ZTE* – (see below, Section 2.3.) and the Commission in *Motorola* (see Section 3.2. of Chapter 3), both referred to the *Orange Book* judgment when assessing the antitrust nature of SEP owners' behaviour of seeking and enforcing injunctions in patent infringement proceedings.

In *Motorola*, the reference was due to the fact that in the German case *Motorola v. Apple* – which gave rise to Commission's investigation – the Regional Court of Mannheim and the Higher Regional Court of Karlsruhe developed and applied the *Orange Book* judgment to the Cudak GPRS SEP owned by Motorola, granting and enforcing an injunction against Apple. They considered that the SEP had been infringed by Apple and that it was not entitled to use the 'competition law-based defence' provided by the *Orange Book* judgment[691].

2.1.2. Antitrust assessment

2.1.2.1. Conditions

According to the German Federal Supreme Court (*Bundesgerichtshof*-BGH), these are the conditions[692] under which a defendant can rely on a competition law-based defence against an injunction claim under German and Union law (Article 102 TFEU) by the proprietor of a patent that protects a technology relevant to implement a de facto standard. Firstly, if the patent owner refuses to conclude a patent licence agreement with the defendant on non-discriminatory and non-restrictive terms.

Secondly, if the defendant has made the patent proprietor an unconditional offer to conclude a licence agreement. The defendant must consider itself bound by that offer and the patent owner cannot reject it without violating the prohibition of discrimination or anti-competitive behaviour. In order to consider that the offer is unconditional, it cannot be limited exclusively to cases of infringement, that is to say, it cannot relate only to the products giving rise to the infringement[693]. If the defendant considers the patent proprietor's licence demands to be excessive or if the patent proprietor refuses to quantify the royalties, an offer to conclude a licence agreement in which the licensor determines the amount of royalties according to its own reasonable discretion meets the requirement of such an unconditional offer.

[690] ibid [83].
[691] ibid [84].
[692] ibid [81] and [82]; *Huawei* (n 35) [30]–[33]; *Huawei* AG (n 137) [31].
[693] In case of portfolio licensing, the licensee must be willing to negotiate its value, and not just for the patents in the litigation. In practice, licenses are usually concluded for entire patent portfolios to avoid any possibility of litigation, and since the parties are aware that many patents could be invalid or inessential, they often consider only a bunch of them when fixing royalties. See Niccolo Galli, 'The FRAND Defense up to Huawei/ZTE' (2016) 7 Bocconi Legal Papers 155, 187, fn 145; Mark A Lemley and Timothy Simcoe, 'How Essential are Standard-Essential Patents?' (2018) Stanford Public Law Working Paper <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3128420> accessed 25 July 2018.

For instance, in the context of patent litigation before the Mannheim Regional Court and the Higher Regional Court of Karlsruhe between Motorola and Apple – which gave rise to the Commission's investigation –, the latter made six Orange Book Offers[694]. Notwithstanding, the Higher Regional Court of Karlsruhe only found that the Sixth offer met the requirements of the *Orange Book* judgment, considering that the previous ones were deficient due to several reasons[695]. For example, the reason to find that the Fifth offer was insufficient was that did not include an explicit right for Motorola to terminate the agreement if, in the future, Apple sought to challenge the validity of the licensed SEPs – it was not included in the second offer either. Therefore, it rejected Apple's request to stay the enforcement of the injunction, so Motorola went on to enforce it. When finding that the Apple's Second Offer did not meet the requirements of the *Orange Book* judgment (when in fact it did meet them), it might be understood that the Higher Regional Court of Karlsruhe was overprotecting Motorola, because the judgment did not require that the offer must include the aforementioned termination clause.

However, the Commission[696] when investigating Motorola's behaviour, it stated that Apple's Second Orange Book Offer was a clear indication that Apple was not unwilling to enter into a licence agreement on FRAND terms. That, because the Second Orange Book Offer gave Motorola the right to set the royalties according to its equitable discretion and according to FRAND principles, without any limitations (other than FRAND and Article 102 TFEU) as regards the royalty rates and the method of calculation of the final amount of royalties. The offer also allowed for a full judicial review of the amount of FRAND royalties, whereby Motorola and Apple could submit their own evaluations, calculations and reasoning for consideration to the court.

As Motorola went on to enforce the injunction, even when Apple had declared in its Second Orange Book Offer that would be willing to be bound by a determination of the FRAND royalties by the German court, the Commission understood that Motorola's behaviour of seeking and enforcing the injunction was abusive, because it was going to be remunerated for the SEP, so there was not need to enforce it[697].

However, these discussions on whether Apple's Orange Book Offers met the requirements of the *Orange Book* Judgment or not, did not affect the Commission's assessment of the abusive nature of Motorola's conduct as established by its Decision, because it developed a different legal argumentation.

Thirdly, the defendant must comply with the obligations that the future licencing agreement imposes in return for the use of the patent. Namely, it has to provide an

[694] *Motorola* Commission Decision (n 7) [188].
[695] ibid [301] and [302] (Apple's First Offer); [126], [303]–[306] (Apple's Second Offer); [142] and [143] (Apple's Fifth and previous Offers).
[696] ibid [307].
[697] Commission, 'Antitrust: Commission sends Statement of Objections to Motorola Mobility on potential misuse of mobile phone standard-essential patents' IP/13/406, para 4.

exhaustive account of past acts of use and pay the amount of the royalty that has itself calculated therefrom. As regards the fulfilment of that payment obligation, the defendant is not required to pay the royalty directly to the applicant. The defendant is at liberty to deposit a security for payment of the royalty at a local court (*Amtsgericht*)[698]. For example, in the aforementioned German case, following the Settlement Agreement signed between Motorola and Apple that was based on Apple's Sixth Orange Offer, Apple was paying a considerable amount of royalties into escrow that was considered to be in line with the requirements of the *Orange Book* judgment[699].

Only if these three circumstances are present cumulatively, the patent proprietor is culpable of abusive behaviour. Otherwise, the court should preclude the defendant from being able validly to rely on the compulsory nature of the grant of the licence and, accordingly, it ought to uphold patent owners' action for a prohibitory injunction.

2.1.2.2. Application to *Huawei*: ordering SEP enforcement measures

In the case *Huawei v. ZTE*, the defendant would not be entitled to use the 'competition law-based defence' because it did not make Huawei an unconditional offer to conclude a license agreement. It only made an offer for a cross-licensing agreement limited exclusively to the products giving rise to the infringement and proposed, but did not pay, a royalty due to Huawei (EUR 50) – regardless of whether or not the amount of the royalty was correctly determined. Moreover, it did not provide an exhaustive account of past acts of use either[700]. Therefore, the second and third circumstances established by the *Orange Book* judgment would not be present. We do not know if Huawei refused to conclude a patent licence agreement with ZTE on non-discriminatory and non-restrictive terms (the first circumstance), but Huawei did indicate ZTE the amount which it considered to be a reasonable royalty. Nevertheless, that does not change the aforementioned conclusion regarding the impossibility of using the 'competition law-based defence' by ZTE, because as said, the three circumstances must be present cumulatively in order to be its application possible.

All in all, the consequence of applying the *Orange Book* judgment to *Huawei v. ZTE* would be that the referring court ought to uphold Huawei's actions and prohibit the continuation of the infringement (the prohibitory injunction) and order to stop the commercialization of the infringing products (the recall of products). That, because the SEP infringer did not fill the requirements that entitled it to use the 'competition law-based defence' provided in that judgment. That defence consisted of pleading that the patent holder was abusing its dominant position when seeking an injunction in patent (non-SEP) infringement proceedings.

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698 *Huawei* AG (n 137) [31 *in fine*].
699 *Motorola* Commission Decision (n 7) [259].
700 *Huawei* AG (n 137) [34]–[36].

2.1.3. Preliminary questions

The Regional Court of Düsseldorf when referring the questions to the ECJ for a preliminary ruling, it firstly[701] asked if the proprietor of a SEP which informed a standardisation body that was willing to grant any third party a licence on FRAND terms, it abused its dominant market position when bringing an action for a prohibitory injunction, for rendering of accounts, recall of products and damages against a patent infringer, when the infringer met the requirements established by the *Orange Book* judgment. Namely, whether an abuse of the dominant market position was to be presumed where the infringer had submitted to the proprietor of the SEP an acceptable, unconditional offer to conclude a licensing agreement which the patentee could not refuse without breaching the prohibition of discrimination or unfairly impeding the infringer (the second requirement of *Orange Book*); and the infringer had fulfilled its contractual obligations for acts of use already performed in anticipation of the licence to be granted (the third requirement of *Orange Book*).

In case the *Orange Book* approach was the 'correct' one according to the ECJ, the referred court also asked about the scope of the requirements contained in the first preliminary question that coincided with the second and third requirements established in the *Orange Book* judgment. With respect to the second requirement, it secondly[702] asked: 'If the submission of an acceptable, unconditional offer to conclude a licensing agreement is a prerequisite for abuse of a dominant market position: Does Article 102 TFEU lay down particular qualitative and/or time requirements in relation to that offer? Must the offer contain all the provisions which are normally included in licensing agreements in the field of technology in question? In particular, may the offer be made subject to the condition that the SEP is actually used and/or is shown to be valid?'

And regarding the third requirement, the third[703] question was: 'If the fulfilment of the infringer's obligations arising from the licence that is to be granted is a prerequisite for the abuse of a dominant market position: Does Article 102 TFEU lay down particular requirements with regard to those acts of fulfilment? Is the infringer particularly required to render an account for past acts of use and/or to pay royalties? May an obligation to pay royalties be discharged, if necessary, by depositing a security?'

[701] *Huawei* (n 35) [39.1.2] and [39.5].
[702] ibid [39.3].
[703] ibid [39.4].

2.2. *Samsung*

2.2.1. Antitrust assessment

2.2.1.1. Criteria

The referring court also noted that, in the press releases No IP/12/1448 and MEMO/12/1021 of 21 December 2012 – concerning a SO sent to Samsung – the EC appeared to regard the bringing of an action for a prohibitory injunction as unlawful (preliminary assessment), under Article 102 TFEU, where that action related to a SEP, the proprietor of that SEP indicated to a standardisation body that was prepared to grant licences on FRAND terms and the infringer was itself willing to negotiate such a licence. Accordingly, in opinion of the referring court, willingness to negotiate would not be affected by the fact that the parties could not agree on the content of certain clauses in the agreement or, in particular, on the amount of the royalty payable, it would be irrelevant[704].

Note that in the press releases concerning a SO sent to Samsung, the Commission had not yet explained in what circumstances an infringer might be regarded as being willing to negotiate[705].

2.2.1.2. Application to *Huawei*: finding an abuse of a dominant position

If the Regional Court of Düsseldorf applied the Commission's approach, it ought to dismiss Huawei's actions for a prohibitory injunction and the recall of products, as constituting an abuse within the meaning of Article 102 TFEU, since according to the referring court, it was common ground that the alleged infringer (ZTE) was willing to enter into a license agreement on FRAND terms[706]. Namely, the willingness to negotiate was apparent from ZTE's written offers to conclude an agreement (which incorporated, in part, Huawei's proposals). Note that ZTE was obliged to use Huawei's SEP in order to be able to place on the market the disputed LTE-compliant embodiments[707]. In consequence, applying the Commission's approach, ZTE could legitimately rely on the compulsory nature of the licence.

2.2.2. Preliminary questions

Firstly[708], the referring court asked whether the proprietor of a SEP – which informed a standardisation body that was willing to grant any third party a licence on FRAND terms – abused its dominant market position if it brought an action seeking an injunction prohibiting that infringement, the rendering of accounts, the recall of products and

[704] ibid [34].
[705] *Huawei* AG (n 137) [33].
[706] *Huawei* (n 35) [35].
[707] *Huawei* AG (n 137) [37].
[708] *Huawei* (n 35) [39.1.1] and [39.5].

damages against a patent infringer, even though the infringer declared that was willing to negotiate concerning such a licence.

Secondly[709], in the event that according to the ECJ, the 'correct' approach was the one preliminarily developed by the Commission in *Samsung,* the Regional Court of Düsseldorf also asked it to define the scope of the 'willingness', in the following terms: 'If abuse of a dominant market position is already to be presumed as a consequence of the infringer's willingness to negotiate: Does Article 102 TFEU lay down particular qualitative and/or time requirements in relation to the willingness to negotiate? In particular, can willingness to negotiate be presumed where the patent infringer has merely stated (orally) in a general way that it is prepared to enter into negotiations, or must the infringer already have entered into negotiations by, for example, submitting specific conditions upon which it is prepared to conclude a licensing agreement?'

2.3. Referring court's and Advocate General's views

Being faced with the apparent contradiction between *Orange Book* and *Samsung* approaches, the referring court's view was aligned with the *Orange Book* approach. Accordingly, it[710] considered that the fact that the infringer (ZTE) was willing to negotiate and the proprietor of the SEP (Huawei) was prepared to grant licences to third parties, ought not be sufficient to constitute an abuse of a dominant position (Commission's approach in *Samsung*).

Nevertheless, recall that according to Article 16 of Regulation 1/2003 and settled case law[711], if a Member State court rules on facts that later on can be subject of a Commission decision on the implementation of Article 102 TFEU, the national court must avoid giving judgments which would conflict with a decision contemplated by the Commission in proceedings it has initiated. Accordingly, in the case *Huawei v. ZTE,* the judgment of the Regional Court of Düsseldorf based on the *Orange Book* approach might conflict with future Commission's decisions adopted in *Samsung* and *Motorola* – who was assessing for the first time in the Union the antitrust nature of SEP owners' behaviour. Therefore, the German court considered necessary to stay its proceedings and referred to the ECJ for a preliminary ruling, because the interpretation of Article 102 TFEU was in question and that was necessary for it to give a judgment.

In opinion of the referring court[712], in assessing whether the conduct of the proprietor of a SEP was abusive, an appropriate and fair balance have to be struck in relation to all the legitimate interests of the parties, which, it must be recognised, have equivalent bargaining power[713]. Hence, their positions ought not to make it possible for them to

[709] ibid [39.2].
[710] ibid [36].
[711] See references in (n 311).
[712] *Huawei* (n 35) [37] and [38].
[713] See also *Huawei* AG (n 137) [59] ('[...] it is necessary, in the light of competition law, to strike a balance between the right to intellectual property and the SEP-holder's (Huawei's) right of access to the courts, on

obtain excessively high royalties (a holdup situation) or excessively low royalties (a reverse holdup situation), respectively. For that reason, but also on the grounds of equality of treatment between the beneficiaries of licences and the infringers in relation to a given product, the German Regional Court added that the proprietor of the SEP ought to be able to bring an action for a prohibitory injunction, so the exercise of a statutory right could not, in itself, constitute an abuse of a dominant position – such characterisation would require other criteria to be satisfied.

Therefore, the referring court did not consider satisfactory to adopt, as a criterion of such an abuse, the notion of the infringer's 'willingness to negotiate' preliminarily established by the Commission in *Samsung*, since this might give rise to numerous interpretations and provide the infringer with too wide a freedom of action. In any event, if such a notion was to be held to be relevant – in the event that the ECJ considered that Commission's preliminary approach in *Samsung* was the 'correct' one to be applied in *Huawei v. ZTE* – , the referring court considered that certain qualitative and time requirements must be imposed in order to ensure that the applicant for the licence was acting in good faith. This is why, it asked to the ECJ how the scope of the 'willingness' should be defined.

Thus, the referring court's view[714] was aligned with the *Orange Book* approach. In that sense, it understood that a properly formulated, acceptable, 'unconditional' request for a licence, containing all the provisions normally found in a licensing agreement, ought to be required to be submitted before the patent concerned was used. As regards, in particular, requests for a licence from operators which have already placed products using a SEP on the market, those operators must immediately comply with the obligations to render an account of use of that SEP and to pay the corresponding royalty. In addition, the Regional Court of Düsseldorf considered that an infringer ought, initially, to be able to provide security instead of paying the royalty directly to the proprietor of the SEP in question. And it added that the possibility of the applicant for a licence leaving the determination of a fair royalty amount to the proprietor must also be envisaged.

The Advocate General shares partially the referring court's view. On the one hand, in view of the significant factual difference between the *Orange Book* and *Huawei v. ZTE* (a non-SEP reading on a *de facto* standard), he is of the opinion that the *Orange Book* standard could not be transposed by analogy to the latter case[715].

And on the other hand, although the press releases regarding *Samsung* deal with SEPs, it seems to him that a mere willingness on the part of the infringer to negotiate (either orally or in writing) in a highly vague and non-binding fashion cannot, in any circumstances, be

the one hand, and the freedom to conduct business which economic operators such as the undertakings implementing the LTE standard (ZTE) enjoy under Article 16 of the Charter, on the other hand. After all, the grant of an injunction sought by an action to cease and desist places a significant restriction on that freedom and is therefore capable of distorting competition').

[714] *Huawei* (n 35) [38].

[715] *Huawei* AG (n 137) [49].

sufficient to limit the SEP-holder's right to bring an action for a prohibitory injunction[716]. It considers necessary to impose far more stringent requirements on the infringer. Note that when the Advocate General released its opinion (on 20 November 2014) – unlike when the referring court requested for a preliminary ruling in 2013 –, the Commission had already handed down the Motorola Prohibition Decision (on 29 April 2014) where it defined the concept of a 'willing licensee'. However, the Advocate General merely refers to what was stated in press releases, that was only a few pages long and did not have legal value. That is to say, they were not binding on the Commission and did not prejudge the outcome of the proceedings to which it referred. Their only objective was to inform the public that a proceeding had been opened against Samsung under Regulation No 1/2003[717].

All in all, to Advocate General's mind, a pure and simple application to *Huawei v. ZTE* of the case law established by the German Federal Supreme Court (*Bundesgerichtshof*-BGH) in *Orange Book* or the press releases concerning a SO sent to Samsung, it would result in the overprotection or under-protection of the SEP-holder, respectively. And that would also affect those using the teaching protected by the patents – the implementers – and consumers. As a consequence, it considered necessary to find a middle path between *Orange Book* and *Samsung*[718].

3. ECJ's antitrust assessment: the abuse

As it was explained in Chapter 1, Article 102 TFEU has four constituent elements: defining the relevant market, establishing dominance (see Section 3.2.), assessing whether the unilateral conduct is abusive or not and determining if the abuse may affect trade between Member States.

In *Huawei v. ZTE*, the referring court only asked the ECJ about the possible abuse of a dominant position on the part of a SEP holder. Accordingly, it establishes that bringing infringement actions seeking a prohibitory injunction or the recall of products (the rendering of accounts and the award of damages do not raise antitrust concerns, see Section 3.1.) by a SEP owner constitutes an exclusionary abuse when the following elements are present. First, if two exceptional circumstances are present, that is, if the patent is essential and if its owner gave FRAND commitments (Section 3.3.). Second, if parties followed the steps established in The Framework, namely, if the patent owner complied with specific obligations and the alleged infringer failed to fulfil his (Section 4). Third, if bringing the aforementioned actions might produce anti-competitive effects, that is to say, if it is liable to prevent products complying with the standard in question manufactured by competitors from appearing or remaining on the market (exclusion) (Section 5).

[716] ibid [50].
[717] ibid, fn 18.
[718] ibid [51] and [52].

If the aforementioned three requirements are present, it could be determined, *prima facie*, that the conduct of the SEP owner is abusive. However, in order to confirm that conclusion, it is necessary to examine the claims of the dominant undertaking assuring that its conduct is justified, demonstrating that produces substantial efficiencies which outweigh any anti-competitive effects on consumers or that is objectively necessary. Nevertheless, the ECJ does not consider whether the behaviour of the SEP owner – that meets the aforementioned three requirements of the abuse – might be objectively justified and if so, in which cases. That should constitute the last element of the abuse (Section 6).

3.1. Prohibitory injunction and the recall of products

The Regional Court of Düsseldorf asked the ECJ whether the SEP owner – who has given an irrevocable undertaking to a SSO to grant licences to third parties on FRAND terms – , abuses its dominant position within the meaning of Article 102 TFEU, by bringing an action for infringement seeking (i) an injunction prohibiting the infringement of its patent; (ii) the recall of products for the manufacture of which that patent has been used; (iii) the rendering of accounts in relation to past acts of use of that patent (in order to determine what use the infringer has made of the teaching of a SEP with a view to obtaining a FRAND royalty under that patent); and (iv) an award of damages in respect of those acts of use.

As it was already referred several times in this research, the effect of the recall of products – a corrective measure – is comparable to that of the prohibitory injunction. Namely, their granting has a direct impact on products manufactured by the infringer appearing or remaining on the market – exclusion. The above, because they entail the cessation of the infringement and the removal from the market of all the products that infringed the IPR in question. Whereas the rendering of accounts and the award of damages do not entail the exclusion of the competition from the market, but accounting and paying obligations, given the sole purpose of such a claim is to compensate the SEP-holder for previous infringements of its patent.

Accordingly, the criteria established by the ECJ[719] to assess whether a SEP owner abuses its dominant position refer only to the behaviour of bringing infringement actions seeking a prohibitory injunction and the recall of products, for being the ones that raise antitrust concerns. Namely, the considerations set out by the ECJ regarding the action for a prohibitory injunction apply *mutatis mutandis* to the corrective measures provided for in Article 10 of the IPRED directive[720].

Consequently, Article 102 TFEU does not prohibit an undertaking in a dominant position and holding a SEP – which has given an undertaking to the standardisation body to grant licences for that patent on FRAND terms – from bringing an action for infringement

[719] *Huawei* (n 35) [44].
[720] *Huawei* AG (n 137) [100].

against the alleged infringer of its SEP, seeking the rendering of accounts in relation to past acts of use of that SEP or an award of damages in respect of those acts of use[721].

According to the ECJ, a SEP owner abuses its dominant position when bringing infringement actions seeking a prohibitory injunction and the recall of products, if the three previously mentioned elements – that will be studied below – are present cumulatively. Hence, in *Huawei v. ZTE*, for the purpose of resolving the dispute in the main proceedings, the referring court – the Regional Court of Düsseldorf – had to determine whether those elements that will be studied below were satisfied in that specific case.

3.2. Assessment of dominance

Before answering the preliminary questions referred by the Regional Court of Düsseldorf, the ECJ alludes to general considerations of the abuse of a dominant position, that have already been tackled in this research. For instance, to the concept of an abuse of a dominant position as an objective concept[722] (see Section 1.3. of Chapter 1). However, the ECJ does not assess if Huawei held or not a dominant position and that silence has been criticized by some scholars[723] – together with the fact that it also does not define the relevant market[724].

In the order for reference, the referring court stated that Huawei 'unquestionably' holds a dominant position, without any further explanation or clarification of that finding. That is to say, it did not state that had arrived to that conclusion after it had examined all the circumstances and the specific context of the case. And the ECJ does not either assess the dominance. Consequently, the reason of the criticism is that the silence of the ECJ might be interpreted as that it presumes that the mere fact of owning a SEP implies to hold a dominant position.

Firstly, the ECJ is right not assessing the dominance, because the preliminary questions posed by the referring court related only to the existence of an abuse, in particular, to the

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[721] ibid [101] and [102]; *Huawei* (n 35) [72] and [76].
[722] ibid [68]; ibid [45].
[723] Suñol, 'Patentes y hold-up' (n 21) 39, para 2; Björn Lundqvist, 'The interface between EU competition law and standard essential patents – from Orange-Book-Standard to the Huawei case' (2015) 11(2-3) European Competition Journal 367, 386, para 2; Galli, 'The FRAND Defense' (n 693) 188, para 1 and 202, para 2; Gabriella Muscolo, 'The Huawei Case. Patents and Competition reconciled?' (2017) 1 Revista Orizzonti del Diritto Commerciale 15, para 6 <www.rivistaodc.eu/media/69987/muscolo.pdf> accessed 25 July 2018; Giuseppe Colangelo and Valerio Torti, 'Filling Huawei's Gaps: The Recent German Case Law on Standard Essential Patents' (2017) 12 European Competition Law Review 538, 3-4 (of the version available at <https://ssrn.com/abstract=3017072> accessed 25 July 2018); Vincenzo Meli, 'The CJEU judgment in the Huawei/ZTE case: getting around the problem of FRAND commitments and competition law' (2017) 1 Revista Orizzonti del Diritto Commerciale 9 <www.rivistaodc.eu/media/69794/meli.pdf> accessed 25 July 2018.
[724] *Huawei* AG (n 137) fn 22 ['It is settled case-law that the definition of the relevant market is of vital significance for the appraisal of dominant position. See Case C-6/72 *Europemballage and Continental Can* v *Commission* (ECJ, 21 February 1973), para 32'].

circumstances under which the conduct of Huawei might be abusive under Article 102 TFEU. Namely, the referring court – Regional Court of Düsseldorf – did not ask the ECJ either about the finding of a dominant position or the criteria for determining the relevant market[725]. Therefore, to be congruent, the ECJ's analysis must be confined to the abusive criterion[726], in the sense of adapting to what was requested by the referring court.

According to the settled case law[727], the ECJ has jurisdiction only to give rulings on the interpretation or the validity of a provision of EU law on the basis of the facts put before it by the national court. In addition, to alter the substance of the questions referred for a preliminary ruling would be incompatible with the Court's role under Article 267 TFEU. And also with its duty, under Article 23 of the Statute of the ECJ of the EU[728], that is to ensure that the governments of the Member States and the parties concerned are given the opportunity to submit observations, given that, under that provision, only the order for reference is notified to the interested parties[729].

Consequently, it was for the referring court to verify and define the elements of Article 102 TFEU (relevant market, dominance and effect on trade between Member States) on a case by case basis[730]. The criteria to define the existence of a dominant position is equally applicable when the undertaking concerned is a SEP holder[731], bearing in mind the following nuance. Until an independent review (legal and technical) establishes that a particular declared SEP is in fact essential, there can be no presumption of market power. That, because SEP are self-declared to SSOs who do not evaluate essentiality, which may change over time as the standard continues through development[732].

And secondly, the interpretation on that the ECJ's silence might constitute a presumption that owning a SEP entails to hold a dominant position, it would be contrary to its settled case law[733] that states the following. The mere fact of owning and exerting IPRs does not imply that their owners hold a dominant position, although they constitute a barrier to

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[725] *Huawei* AG (n 137) [53].
[726] ibid [56]; *Huawei* (n 35) [43].
[727] Joined Cases 141/81 to 143/81 *Holdijk and Others* [1982] ECR I-1299, para 6; Case C-178/95 *Wiljo* [1997] ECR I-585, para 30; Case C-352/95 *Phytheron International* [1997] ECR I-1729, para 14; Case C-412/46 *Kainuun Liikenne and Pohjohlan Liikenne* [1998] ECR I-5141, para 24; Case C-138/08 *Hochtief and Linde-Kca-Dresden* [2009] ECR I-09889, para 22.
[728] Protocol No 3 of TFEU (n 73).
[729] *Huawei* AG (n 137) [55].
[730] ibid [57].
[731] For a discussion on the specific challenges raised by market definition and the assessment of dominance in high-technology markets with a specific focus on technology licensing, see Damien Geradin, 'Abusive Pricing in an IP Licensing Context: An EC Competition Law Analysis' (2007) SSRN Electronic Journal 3-8 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1174922> accessed 25 July 2018; Damien Geradin, 'Pricing Abuses by Essential Patent Holders in a Standard-Setting Context: A View from Europe' (2009) 76(1) Antitrust Law Journal 329, 335-339.
[732] Anne Layne-Farrar and Koren Wong-Ervin, 'Standard-Essential Patents and Market Power' (2016) George Mason Law & Economics Research Paper No. 16-47, 2, para 2 <https://ssrn.com/abstract=2872172 > accessed 25 July 2018.
[733] See references in (n 138).

entry. That, not even when the IPR is a SEP[734], although that fact may contribute to that position (see Sections 1.2.2.3. of Chapter 1 and 5.2.2.1. of Chapter 3). So the finding of a dominant position cannot be based on hypotheses, because although the holding of that position is not in itself prohibited by Article 102 TFEU[735], it imposes on the undertaking concerned a special responsibility not to allow its conduct to impair genuine competition (see Section 1.3. of Chapter 1).

As the AG[736] states, at most, holding a SEP could give rise to an *iuris tantum* presumption that the owner of a SEP holds a dominant position, as it occurs with the high market share (see Section 1.2.2.2. of Chapter 1). That, because anyone who uses a standard set by a standardisation body must necessarily make use of the teaching of a SEP, thus requiring a licence from the owner of that patent. Nevertheless, due to the nature of that presumption, it should be possible to rebut it with specific, detailed evidence.

As a consequence of the above, when national courts applied the *Huawei v. ZTE*, namely, the High Court of Justice of England and Wales in *Unwired Planet v. Huawei*[737] and the Court of Appeal (*Oberlandesgerichte*) of Düsseldorf in *Sisvel v. Haier*[738], they defined relevant markets and determined whether SEP holders held dominant positions.

3.3. Exceptional circumstances

The ECJ alludes to the fact that the exercise of an exclusive right linked to an IPR – in *Huawei v. ZTE*, the right to bring an action for infringement – forms part of the rights of the proprietor of an IPR and it cannot in itself constitute an abuse of a dominant position[739] (see Section 4.4.1. of Chapter 2). However, it also adds that is settled case law[740] that the exercise of an exclusive right linked to an IPR – namely, the refusal to grant IP licenses (studied in Chapter 2) – by the proprietor may, in exceptional circumstances, involve abusive conduct for the purposes of Article 102 TFEU[741].

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[734] See references in (n 137).
[735] *Michelin* [ECJ, 1983] (n 93) [57]; *Post Danmark* (n 148) [21]–[23].
[736] *Huawei* AG (n 137) [58].
[737] [2017] EWHC 711 (Pat), paras 631-646 and 656-670 (the relevant market is that for licences of owner's SEPs, rather than technology. It also analyses whether the SEP owner has the ability to behave independently from customers and competitors).
[738] OLG Düsseldorf of 30 March 2017, I-15 U 66/15, para 182; 'Sisvel v Haier' (*4iPCouncil*), para 3 ('proprietorship of an SEP does not automatically constitute a dominant market position because not all SEPs necessarily influence competition in the downstream product market. […] A dominant market position exists, for example, if it would not be possible to successfully market a competitive product without using the respective SEP, or if compatibility and interoperability under the standard could not be guaranteed') < https://caselaw.4ipcouncil.com/german-court-decisions/olg-dusseldorf/sisvel-v-haier-olg-dusseldorf-1 - _ftn9> accessed 25 July 2018.
[739] *Huawei* AG (n 137) [61]; *Huawei* (n 35) [46].
[740] *Volvo* (n 285) [9]; *Magill* [ECJ, 1995] (n 257) [50]; *IMS Health* [ECJ, 2004] (n 241) [35].
[741] *Huawei* AG (n 137) [62] and [67]; *Huawei* (n 35) [47].

Nevertheless, the ECJ[742] – following the observation of the Advocate General[743] – pointed out that the particular circumstances of *Huawei v. ZTE* distinguish that case from the cases which gave rise to the case law on refusal to license IPRs. These cases are the ones that stated that the exercise of an exclusive right linked to an IPR cannot constitute an abuse *per se*, but under exceptional circumstances. According to the ECJ in *Huawei v. ZTE,* the exceptional circumstances are different regarding those in the case law on refusal to license IPRs. Namely, the object is a SEP which use is essential to implement the standard on which the patent reads on and its owner gave FRAND commitments (see below).

Notwithstanding, in all those cases the antitrust conduct in question is constituted by the exercise of an IPR (in the form of a refusal to license or of bringing infringement actions). Moreover, in the case law on refusal to grant IP licenses, the essentiality also constitutes – albeit not always (see Section 4.5.4. of Chapter 2) – one of the elements to assess the antitrust nature of the conduct.

Due to those two similarities, as it will be defended in Chapter 5, I consider that Huawei's behaviour (as well as Samsung's and Motorola's that were investigated by the Commission, see Chapter 3) should have been treated as a 'constructive' refusal to license IPRs, basing on a revision of the case law on refusal to grant IP licenses – namely, of *IMS Health*. Hence, the abusive nature of the exercise of an exclusive right linked to an IPR consisting in refusing to license or bringing infringement actions seeking for a prohibitory injunction or the recall of products, could be assess applying the same criteria. The fact of having given a FRAND commitment should only be relevant if the SEP owner's behaviour was assessed from the contract law perspective (see Section 3.2. of Chapter 5), but not when it is being analysed from the competition law viewpoint – as in *Samsung*, *Motorola* and *Huawei*.

3.3.1. Essentiality

The first[744] particular circumstance of the case *Huawei v. ZTE* is that the patent at issue is essential to a standard established by a standardisation body, rendering its use indispensable to all competitors which envisage manufacturing products that comply with the standard to which it is linked. That feature – the essentiality – distinguishes SEPs from patents that are not essential to a standard (non-SEPS) and which normally allow third parties to manufacture competing products without recourse to the patent concerned and without compromising the essential functions of the product in question.

As it was mentioned before, according to the ECJ the fact that the patent is essential – together with the second exceptional circumstance (see below) –, distinguishes the case *Huawei v. ZTE* from the cases that gave rise to the case law on refusal to grant IP licenses.

[742] *Huawei* (n 35) [48].
[743] *Huawei* AG (n 137) [70].
[744] *Huawei* (n 35) [49] and [50].

However, in *Magill*, *IMS Health* and *Microsoft*, the IPRs whose license was refused were also considered to be essential for competitors' activity, because there were no real or potential substitutes of the protected IPRs.

The difference is that in *Huawei v. ZTE*, the patent is essential to a standard and the implementation of the standard is necessary to manufacture the product by the competitor, so the use of the SEP is *per se* essential for competitor's activity.

Whereas in the case law on refusal to license IPRs, it was necessary to assess whether the IPR was essential or not. Recall that according to the *Magill* test (see Section 4.4.3. of Chapter 2) and its modified versions (see Section 4.5. of Chapter 2), in general terms, four are the elements that must be present in order to consider that the refusal to license IPRs is abusive. Namely, that the IPR is essential for the exercise of competitor's activity (the first element); that the refusal prevents the emergence of a new product for which there is a potential demand (the second element); that the refusal is arbitrary (the third element); and that the objective of the refusal is to exclude competition from a secondary market (the fourth element). The second and fourth elements refer to the anti-competitive effect of the refusal, that is to say, the exclusion of competitors from the market, provoking that consumers could not enjoy a new product. And the third element alludes to the absence of objective arguments that may justify the IP owner's refusal. Hence, the essentiality nature of the IPR – the first element – constitutes the exceptional circumstance. Focusing specifically on that first element, all the cases that compound the case law on refusal to license IPRs that applied the *Magill* test (see Section 3 of Chapter 2), except the CFI[745] in *Tiercé Ladbroke* that concluded that the aforementioned first and second elements were alternatives, they considered that the essentiality nature of the IPR object of refusal was a *sine qua non* requirement (see Section 4.5.4. of Chapter 2).

Therefore, the difference is that in *Huawei v. ZTE*, the patent is essential *per se* and in the case law on refusal to grant IP licenses, the essential nature of the IPR had to be assessed, concluding that in *Magill*, *IMS Health* and *Microsoft* the IPRs in question were essential. But beyond that, both in *Huawei v. ZTE* and in the case law on refusal to grant IP licenses, the ECJ considers that in order to determine if the behaviour of the IP owner is abusive the IPR in question must be essential because it constitutes the exceptional circumstance. Therefore, it is unclear why in *Huawei v. ZTE* the ECJ[746] states that the fact that the patent at issue is essential to a standard distinguishes it from the cases that compound the case law on refusal to license IPRs.

When comparing the first exceptional circumstance of the case *Huawei v. ZTE* with the one considered as such by the Commission in *Samsung* and *Motorola* (see Section 5.3.2.1. of Chapter 3), they are slightly different, albeit in all these cases the SEP owners' behaviour that was being analysed was the same. According to the Commission, the first

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[745] *Tiercé Ladbroke* [CFI, 1997] (n 294).
[746] *Huawei* (n 35) [48] and [49].

exceptional circumstance is the widespread adoption of the standards in the EEA, which provoked that the access to technologies as specified in the standards technical specifications – that were protected by Samsung's and Motorola's SEPs –, became indispensable for implementers. Therefore, the essential nature of SEPs derives from the widespread adoption of the standards on which they read. In consequence, if a standard does not have a widespread adoption, the SEP that reads on it would not be considered essential, although it would have that feature *per se.* Hence, the first circumstance would not be present. Accordingly, bringing infringement actions seeking and enforcing a prohibitory injunction would not be abusive.

Due to the above, I reckon that the exceptional circumstance about the essential nature of the IPR adopted by the ECJ – on its case law on refusal to license IPRs and in *Huawei v. ZTE* – is more appropriate than the approach established by the Commission – in *Samsung* and *Motorola* – (see, in this regard, Section 5.3.2.3. of Chapter 3). That, because the ECJ bases the essentiality on whether there are real or potential substitutes of the protected IPRs. While the Commission's evaluation depends on the standard's widespread adoption, on which the patent in question reads on.

3.3.2. FRAND commitment

The second[747] exceptional circumstance established by the ECJ in *Huawei v. ZTE* is that the patent obtained SEP status only in return for the proprietor's irrevocable undertaking given to a SSO that it would grant licenses to third parties on FRAND terms. Through that commitment, Huawei did not waive its right to bring actions for prohibitory injunctions against implementers using the teaching protected by the SEP without its consent. But it expresses its willingness to exploit the SEP, not only by using the patent exclusively, but also by licensing it to others. Moreover, Huawei accepts that a royalty fixed on FRAND terms constitutes adequate and fair compensation for the use of that patent by others[748].

The FRAND commitment is required because having the patent obtained that status, its proprietor might decide not to license the SEP to its competitors – for whom its use is essential to implement the standard in the products they manufacture. Thus, its refusal might prevent products manufactured by competitors from appearing or remaining on the market and, thereby, reserving to itself the manufacture of the products in question.

This second circumstance was not present in the case law on refusal to grant IP licenses, because giving FRAND commitments is linked only to SEPs and in those cases, none of the IPRs was a SEP. Accordingly, that exceptional circumstance was also required in *Samsung* and *Motorola* (see Section 5.3.2.2. of Chapter 3). So both the Commission and the ECJ in *Huawei v. ZTE* coincided in establishing the fact of having given FRAND commitments as the second exceptional circumstance.

[747] *Huawei* (n 35) [51] and [52].
[748] *Huawei* AG (n 137) [60].

Nonetheless, as it was already mentioned, I reckon that this circumstance should constitute an exceptional circumstance just if Huawei's behaviour was assessed from the contract law viewpoint, but not when it is analysed from the competition law perspective – as in *Huawei v. ZTE* – (Section 3.2. of Chapter 5).

3.3.3. Essential non-SEPs (*de facto* standard)

The ECJ does not make reference to whether the criteria provided for in *Huawei v. ZTE* is also applicable when the object of the license is a patent that protects a technology that is essential to implement a *de facto* standard (see Section 'Background' of the Introduction). Or, if on the contrary, the criteria is only applicable to SEPs that protect technologies essential to implement *de jure* standards. That question arises because whereas the first exceptional circumstance would be present (essentiality), the second one would be missing, since not being a SEP, its owner did not commit to license the patent on FRAND terms.

If the latter was the case, behaviours regarding non-SEPs should be resolved by applying the existing case law on the matter, that is, the *IMS Health* case ruled by the ECJ (see Chapter 2) or the *Orange Book* judgment solved by the German Federal Supreme Court – *Bundesgerichtshof* – (but only in Germany, see Section 2.1. of this chapter)[749].

However, taking into account that Spanish courts (the Judges of Barcelona Commercial Courts No. 5 and No. 4[750]) – in non-SEP infringement proceedings – issued prohibitory injunctions and recall of products as provisional measures basing on the criteria established in *Huawei v. ZTE*, the aforementioned first interpretation would also be feasible. The issue of these Orders took place during the Mobile World Congress (MWC) that took place in Barcelona regarding infringements of non-SEPs that were essential to implement *de facto* standards.

Besides, the Judges agreed to replace these provisional measures with the deposit of a bond, in order to avoid seriously restricting the potential infringers' commercial activities during the MWC. That is, they allowed the continuation of alleged infringements, as long as alleged infringers lodged guarantees intended to ensure the compensation of right holders, an option provided for in Article 9(1,a) of IPRED[751] (see Section 6.2. of Chapter 5). Courts were aware that the doctrine settled in *Huawei v. ZTE* is not compulsory for non-SEPs, but they considered it provided guidance to make a reasonable and fair assessment of the rights and interests existing between licensees and licensors when

[749] Petit, 'Huaweï v. ZTE: Judicial Conservatism' (n 161) 7, para 3; Lundqvist, 'The Interface' (n 723) 8, para 3.
[750] Auto del Juzgado de lo Mercantil Nº5 de Barcelona de 16 de febrero de 2018, n. 4/2018, *Fractus v. Wiko*, paras 8, 11, 12 and 26; Auto del Juzgado de lo Mercantil Nº4 de Barcelona de 20 de febrero de 2018, *Tot Power Control S.L. v. Xiaomi Inc.*; Auto del Juzgado de lo Mercantil Nº5 de Barcelona de 27 de febrero de 2018, n. 15/2018, *Fractus v. Shenzhen New-Bund Network Technology Co., Ltd.*, paras 6.7 and 6.8.
[751] (n 68).

patent infringement actions are brought, while negotiations for obtaining a license are taking place.

In particular, to issue the aforementioned provisional measures, Spanish judges relied on the obligation imposed to alleged infringers in *Huawei v. ZTE*, that is, that from the moment their first counter-offer is rejected, they must provide an adequate security to guarantee the payment of royalties in relation to the past use of the non-SEP. Thus, Judges considered that while negotiations for obtaining licenses were taking place, the alleged infringers did not, at no time, constitute a security in favour of patent owners, noticing a lack of diligence, loyalty and dilatory intention on their part. For this reason, they reckoned appropriate to allow the lodging of bonds (as substitute), so that alleged infringers would comply with that obligation, showing they were willing to enter into licensing agreements. Bonds would serve as guarantee in case the alleged infringers refused the offers made by patent owners[752].

The application of the *Huawei v. ZTE* in cases where the patent is not a SEP but it is essential to implement a *de facto* standard – so no FRAND commitments are given –, shows that as mentioned before, the essentiality of the IP in question constitutes the core element when assessing the abuse, whereas having given the FRAND commitments is accessory (see also Section 7.3.2. of Chapter 5). That is why although in all the cases concerning the refusal to grant IP licenses that were studied in Chapter 2 the IPRs in question were not the same, the *Magill* test was applied equally.

Inversely, the *Orange Book* judgment – in which the object was a non-SEP essential to implement a *de facto* standard – was applied by German Courts (the Regional Court of Mannheim and the Higher Regional Court of Karlsruhe) in *Motorola v. Apple*, where the object was a FRAND-encumbered SEP essential to implement a *de jure* standard. That case was later on investigated by the Commission (see Section 3.2. of Chapter 3). In addition, the referring court – Regional Court of Düsseldorf – in *Huawei v. ZTE* was also in favour of applying that German judgment, although the patent was a SEP (see Section 2.3. of this Chapter).

4. The Framework and National Courts guidance

Once verified that the aforementioned two exceptional circumstances are present, in order to conclude that bringing infringement actions seeking for a prohibitory injunction or the recall of products is abusive, the national court has to determine whether parties complied with the framework for the negotiation of the licensing of SEPs on FRAND terms ('The Framework') established by the ECJ, basing on Advocate General's opinion[753]. As it will

[752] Miquel Montañá, 'Spain: Recent decisions handed down by the Barcelona Commercial courts within the context of the 2018 Mobile World Congress' (2018) 18 Clifford Chance's Global Intellectual Property Newsletter 37, 39, para 2 <https://www.cliffordchance.com/briefings/2018/06/global_intellecutalpropertynewsletter-18t.html> accessed 27 July 2018.
[753] *Huawei* AG (n 137) [80]–[96].

be studied subsequently, this framework comprises not only mandatory steps – parties' obligations –, but also voluntary ones – FRAND determination by a third party. However, the scope of the obligations established by the Advocate General was not always adopted by the ECJ.

Moreover, some references will also be made to the application of The Framework by national courts[754]. Given the legal gaps posed by *Huawei v. ZTE*, it is necessary to analyse how national courts – mainly, Germans – interpret them, providing more clarity on what is or is not to be considered appropriate behaviour basing on the legal framework provided by the ECJ.

In order to prevent an action for a prohibitory injunction or the recall of products from being regarded as abusive, according to The Framework, the proprietor of a SEP must comply with specific conditions which seek to ensure a fair balance between the interests concerned. Likewise, the alleged infringer may only rely on the abusive nature of an action for a prohibitory injunction or the recall of products, if it has complied with his obligations.

However, in principle, the SEP proprietor has the right to recourse to legal proceedings to ensure effective enforcement of his exclusive rights [Article 17(2) of the Charter, the rights linked to IP; and 47(1), the right of access to a tribunal]. And the user of those rights, if it is not the proprietor, is required to obtain a licence prior to any use[755]. Therefore, the imposition on SEP holders an obligation to comply with specific requirements to exercise their fundamental rights needs a justification.

According to the ECJ, the rationale is based on the irrevocable commitment to grant licenses on FRAND terms given to the standardisation body by the proprietor of a SEP. Thus, the commitment justifies the imposition on that proprietor of an obligation to comply with specific requirements when bringing actions against alleged infringers for a prohibitory injunction or for the recall of products. Consequently, albeit giving FRAND commitments does not negate the substance of the fundamental rights guaranteed to the SEP owner, it conditions their exercise[756]. As referred in Section 3.3.2. above, I am of the opinion that the fact of giving FRAND commitments is relevant only from the contract law perspective, so it should not constitute the basis to constrain the exercise of the right of access to a tribunal.

[754] 'National Courts Guidance' (*4iPCouncil*) <https://caselaw.4ipcouncil.com/guidance-national-courts> accessed 22 April 2019.
[755] *Huawei* (n 35) [55]–[58].
[756] ibid [59].

4.1. Prior alert

4.1.1. ECJ

Before bringing an action for a prohibitory injunction or the recall of products against the alleged infringer, the first[757] obligation of the proprietor of a SEP – who considers that its SEP is the subject of an infringement –, it is to notice or consult with the alleged infringer about the infringement complained about. Specifically, the SEP owner must designate the SEP in question and indicate the way in which it has been infringed. Otherwise, the SEP owner's behaviour consisting of bringing the aforementioned action would infringe Article 102 TFEU.

In ECJ's opinion – aligned with the Advocate General's one – the reason for that requirement is that in view of the large number of SEPs composing a standard, such as that at issue in *Huawei v. ZTE* that concerned the LTE, it is not certain that the infringer of one of those SEPs will necessarily be aware that is using the teaching of a SEP that is both valid and essential to a standard. Huawei itself pointed out that it would be unrealistic in the telecommunications industry to require the SEP user to be the one who makes an offer for a FRAND license on its own initiative before starting to use the standard, given the large number of SEPs and SEP owners and the uncertainty over whether (allegedly) essential patents are valid and whether they have been infringed. For instance, as far as the LTE standard is concerned, it would appear that more than 4 700 patents had been notified to ETSI as essential, and that a large proportion of those might not be valid or essential to the standard[758]. Besides, such a step does not place a disproportionate burden on the SEP holder, as it is one which it would have to take in any event in order to substantiate an action for a prohibitory injunction.

4.1.2. Advocate General

Unlike the ECJ, the Advocate General[759] states that the SEP owner should be released from that obligation if it was established that the alleged infringer was fully aware of the infringement. Besides, he considers necessary to alert the alleged infringer in writing and giving reasons.

4.1.3. National Courts

As it will be analysed below, national courts have provided further clarity on various aspects of SEP owners' first obligation.

[757] ibid [60] and [61].
[758] ibid [62]; *Huawei* AG (n 137) [81] and fn 54.
[759] *Huawei* AG (n 137) [84].

4.1.3.1. Subjects

The ECJ only refers that the SEP owner is obliged to alert the infringer about the infringement. In that regard, the Regional Court of Düsseldorf[760] also states that the notification of infringement can be made by the SEP holder itself, or by any other affiliated company within the same group of companies, especially by the patent holder's parent company.

In relation to the addressee, German courts also nuance that the SEP holder is not obliged to notify the patent infringement to third parties (for instance to suppliers of the implementer), unless third parties submit a request for a license on FRAND terms to the SEP holder[761]. Hence, it is sufficient to address the notification to the parent company of the alleged infringer within a group of companies[762]. However, the view of an Italian court (Tribunale Ordinario di Torino)[763] is different, because it understands that if the SEP holder brings an action only against the SEP implementer, a notification of infringement towards its parent company does not meet the *Huawei* requirement of having notified the implementer of the infringing use of the SEP.

4.1.3.2. Temporal

Regarding the time aspect of the obligation, the ECJ states that SEP holder's notification of infringement has to take place before an action is filed. The Regional Court of Düsseldorf[764] clarifies that at the latest, it has to take place prior to the advance payment on costs by the SEP holder – under German procedural law, proceedings are initiated after the claimant has made the required advance payment on costs.

4.1.3.3. Content

With reference to the content of the notification, the ECJ states that the SEP owner has to designate the SEP infringed and specify the way in which it has been infringed.

In order to consider that the SEP owner complies with its obligation, German courts[765] agree in considering that SEP owner's notification of infringement has to: (i) specify the infringed patent – the name –, including its number; (ii) inform that the implementer uses patent's teachings – the infringing acts of use; and (iii) indicate which technical

[760] Case Unidentified Parties, LG Düsseldorf of 11 July 2018, 4c O 81/17, para 199.
[761] Case *St. Lawrence v. Vodafone*, LG Düsseldorf of 31 March 2016, 4a O 73/14, para 270 *et seq.*; Case *St. Lawrence v. Vodafone*, LG Düsseldorf of 31 March 2016, 4a O 126/14.
[762] Case Unidentified Parties [LG Düsseldorf] (n 760) [199]; Case *IP Bridge v. HTC*, LG Mannheim of 28 September 2018, 7 O 165/16, p 25.
[763] Case *Sisvel v. ZTE*, Tribunale Ordinario di Torino of 18 January 2016, 30308/20215, para 3.
[764] *St. Lawrence v. Vodafone* [73/14] (n 761) [195] *et seq.*; *St. Lawrence v. Vodafone* [126/14] (n 761).
[765] Case *NTT DoCoMo v. HTC*, LG Mannheim of 29 January 2016, 7 O 66/15, paras 65-69; *St. Lawrence v. Vodafone* [73/14] (n 761) [193]; *St. Lawrence v. Vodafone* [126/14] (n 761); Case *Philips v. Archos*, LG Mannheim of 1 July 2016, 7 O 209/15; Case *Philips v. Archos*, LG Mannheim of 17 November 2016, 7 O 19/16, para 77; Case Unidentified Parties [LG Düsseldorf] (n 760) [198].

functionality of the challenged embodiment makes use of the patent – the contested embodiments.

Some of those courts[766] also consider that the notification has to inform that the patent has been declared standard-essential and name the relevant standard, although they add that the level of detail depends on the specific circumstances of the case, particularly the technological knowledge of the implementer (or the availability of external expertise gained by reasonable efforts). However, the information does not need to be as substantiated as facts submitted with a statement of claim in patent litigation. While other German courts[767] do not rule on whether additional information is also required, such as an interpretation of the patent claims or information regarding the part of the standard the patent reads.

As a rule, courts of Germany[768] consider that presenting claim charts (containing the relevant patent claims and the corresponding passages of the standard) to the implementer, which according to commercial practice are also used in licensing negotiations, is an adequate way to give notification of infringement.

In the same vein, the Regional Court of Mannheim[769] concludes that SEP holder's notification of infringement does not have to contain either the original written FRAND declaration, nor proof that a FRAND declaration has been made during the development of the standard, provided that SEP holder leaves no doubt that is bound by a FRAND licensing commitment. The Regional Court of Düsseldorf[770] mentions that a detailed (technical and/or legal) explanation of the infringement is not required and that the SEP user is also not required to inform about the essentiality of the patent to the standard and/or to attach claim charts to the notification. Regarding the latter consideration, the Regional Court of Düsseldorf disagrees with the Regional Court of Mannheim[771] that requested the SEP holder to inform the user about the essentiality of the patent to the standard and/or to attach claim charts to the notification of infringement.

It is interesting what is established by the Regional Court of Düsseldorf[772] who considers that the notification can be made alongside with SEP holder's offer for a FRAND licence to the SEP user (prior to the initiation of court proceedings). It ads that in this case, the second step under the *Huawei* framework – expressing willingness by the alleged infringer (see below, Section 4.2.) – will be skipped, although the SEP user should be granted more time than usual to assess and react to both the notification of infringement

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[766] *NTT DoCoMo v. HTC* (n 765) [65]–[69]; *Philips v. Archos* [209/15] (n 765); *Philips v. Archos* [19/16] (n 765) [77].

[767] *St. Lawrence v. Vodafone* [73/14] (n 761) [193]; *St. Lawrence v. Vodafone* [126/14] (n 761).

[768] *NTT DoCoMo v. HTC* (n 765) [65]–[69]; Case Unidentified Parties, LG Mannheim of 4 March 2016, 7 O 24/14, pp 34-35; *Philips v. Archos* [209/15] (n 765); *Philips v. Archos* [19/16] (n 765) [77].

[769] Case *Pioneer v. Acer*, LG Mannheim of 8 January 2016, 7 O 96/14, paras 109 *et seq*.

[770] Case Unidentified Parties [LG Düsseldorf] (n 760) [198].

[771] *NTT DoCoMo v. HTC* (n 765) [65]–[69]; Case Unidentified Parties, LG Mannheim of 4 March 2016, 7 O 24/14, pp 34-35; *Philips v. Archos* [209/15] (n 765); *Philips v. Archos* [19/16] (n 765) [77].

[772] Case Unidentified Parties [LG Düsseldorf] (n 760) [200].

and the FRAND offer. Taking into account that the telecommunications sector is constantly evolving and that undertakings (and therefore potential infringers) must act quickly in order to bring their products and services to market[773], I consider more efficient if the alert and the submission of the offer by the SEP holder – the third step (see below, Section 4.3.) – would constitute a single step.

The view of the Tribunal de Commerce de Marseille[774] regarding the content of the notification varies from that of German courts. In its view, SEP holder's notification of infringement has to contain the following information: (i) an overview, including each SEP and its filing date; (ii) the parts of the standard implementing the respective patented technology; (iii) an indication of the devices embodying such use; (iv) an indication of the consequences of acts of unauthorized use; as well as (v) information to the recipient about its option to contest both the communicated information and the validity of the patents at issue. The main difference is that the filling date, the consequences and the information about implementer's options are not mentioned in the German case law.

The Court of Appeal of England and Wales[775] is of the opinion that the precise content of such a notification depends upon all circumstances of the particular case. In addition, in line with the Advocate General's view (see above, Section 4.1.2.), it considers that if an implementer is familiar with the technical details and the SEPs it may be infringing, but has no intention of taking a FRAND licence, the SEP holder should not be denied an injunction simply because it had not made a formal notification prior to the initiation of infringement proceedings.

4.1.4. Remarks

This obligation was not required in the *Orange Book* judgment or in *Samsung* and *Motorola*, probably because the German Federal Supreme Court and the Commission assumed that the alleged infringer will always know about the infringement, not being necessary to consider the prior alert as an element of the antitrust infringement. Namely, prior to initiating injunction proceedings, usually, parties will have already been engaged in discussions concerning the infringement of the SEP and the possibility of concluding a licence on FRAND terms in relation to those products, because SEP holder's aim is to be remunerated for the use of its patent. And indeed, the lack of agreement will have led the SEP owner to bring the infringement action. Therefore, it does not seem reasonable that a SEP owner will bring an infringement action without having that discussion before.

From my point of view, the lack of prior alert by the SEP holder might suggest that it does not want to license its SEP. That might be useful in case SEP owners' behaviour was treated as a 'constructive' refusal to license SEPs – the approach I defend in Chapter 5 –, to reinforce the categorization of the behaviour. In the *Orange Book* judgment, the

[773] *Huawei* AG (n 137) [82].
[774] Case *Wiko v. Sisvel*, Tribunal de Commerce de Marseille of 20 September 2016, 2016F01637.
[775] Case *Unwired Planet v. Huawei* [2018] EWCA Civ 2344, para 273.

non-SEP owner's behaviour was not treated as a refusal, but as a novel category of abuse. However, it was stated that the patent owner would abuse its dominant position when bringing infringement actions (so the defendant could rely on a competition law-based defence against the injunction claim) if, in addition to the presence of other two requirements, it refused to conclude a patent licence agreement with the defendant on non-discriminatory and non-restrictive terms (see above, Section 2.1.2.1.). Therefore, according to the German Federal Supreme Court, the refusal in itself constitutes one of the elements of the antitrust infringement.

4.2. Expression of willingness

4.2.1. ECJ

On its part, the alleged infringer has to express its willingness to conclude a licensing agreement on FRAND terms[776]. The ECJ does not give further indications about this requirement. For instance, it does not specify what behaviour should be considered as an expression of willingness, when it must express its willingness or in which form. According to the Regional Court of Düsseldorf – who referred the preliminary questions to the ECJ –, the willingness to negotiate was apparent from ZTE's written offers to conclude an agreement that incorporated, in part, Huawei's proposals. For instance, the fact that the alleged infringer is using the SEP without a licensing agreement, might it be considered as an expression of being willing to become a legal licensee?

Likewise, it is also not clear what would be the consequence of not expressing its willingness at that stage, because the ECJ literally states: 'Secondly, after the alleged infringer has expressed its willingness to conclude a licensing agreement on FRAND terms, it is for the proprietor of the SEP to present to that alleged infringer a specific, written offer for a licence on FRAND terms'[777].

It might be understood that if the SEP owner, before bringing the infringement action, alerted the alleged infringement and subsequently, it did not express its willingness to enter into a license agreement, it did not comply with its obligation. Accordingly, the SEP owner would not be abusing its dominant position and the court ought to prohibit the continuation of the infringement (the prohibitory injunction) and order to stop the commercialization of the infringing products (the recall of products).

However, the Advocate General does not consider the expression of willingness as the prerequisite for the SEP owner to submit the offer[778], because it only makes the following statement[779] that seems to refer more to the economic capacity of the alleged infringer, than to his willingness: 'To the extent that the infringer is and remains 'able' to conclude

[776] *Huawei* (n 35) [63].
[777] ibid.
[778] *Huawei* AG (n 137) [85].
[779] ibid [80].

and comply with a licensing agreement on FRAND terms and, in particular, to pay an appropriate royalty, the SEP-holder must, given the importance of what is at stake, take certain specific steps before bringing an action for a prohibitory injunction in order to honour its commitment and discharge its special responsibility under Article 102 TFEU'. Accordingly, it might be interpreted that the expression of willingness does not constitute a prerequisite, but a mere formality, so even if there is no such expression, the SEP holder must submit an offer.

But bearing in mind the ECJ's concluding statement[780], I understand that the alleged infringer is obliged to express its willingness: 'Article 102 TFEU must be interpreted as meaning that the proprietor of a patent essential to a standard [...] does not abuse its dominant position [...] as long as [...] has, first, alerted the alleged infringer [...] and, secondly, after the alleged infringer has expressed its willingness to conclude a licensing agreement on FRAND terms, presented to that infringer a specific, written offer [...]'.

4.2.2. National Courts

4.2.2.1. Active subject

The Higher Regional Court of Karlsruhe[781] concluded that when a SEP holder requested an injunction against the distributor of devices, the declared willingness of the manufacturer of the same devices to enter into a FRAND license could preclude the granting of an injunction. Note that a patent holder could seek injunction orders against any business in the supply chain of the product that infringes the respective SEP – which includes manufacturers and distributors.

4.2.2.2. The form and content

The Regional Court of Düsseldorf[782] considers that given the circumstances of the specific case, SEP users' declaration of willingness to obtain a FRAND licence can be made even implicitly.

According to the High Court of Justice of England and Wales[783], the *Huawei* requirement of 'willingness to enter into a license' refers to a willingness which is unqualified. In other words, a willing licensee must be one willing to take a FRAND licence on whatever terms are in fact FRAND, unconditionally. Those terms might be settled by negotiation, by a court or by an arbitrator but to insist on any particular term runs the risk that that term is not FRAND.

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[780] *Huawei* (n 35) [77.1].
[781] Case *St. Lawrence v. Deutsche Telekom*, OLG Karlsruhe of 23 April 2015, 6 U 44/15, paras 19 and 21.
[782] Case Unidentified Parties [LG Düsseldorf] (n 760) [208].
[783] *Unwired Planet v. Huawei* [2017[(n 737) [708].

4.2.2.3. Without delay

German courts not only consider that expressing willingness is compulsory, but also doing it promptly, without delay – although the ECJ does not refer to that last point. Nevertheless, the time frame within which the SEP user must declare its willingness must be determined on a case by case basis, albeit the more detailed the infringement notification is, the less time is available to the implementer to express its willingness to conclude a FRAND licensing agreement. Namely, if the SEP holder's notification of infringement contains only the minimum required information, a reaction within a period of five or even three months could be expected. In case the infringement notification contains information going beyond the required minimum, an even quicker reaction could be required from the SEP user under certain circumstances[784].

For instance, the Regional Court of Mannheim[785] concluded that the SEP implementer (manufacturer) was not willing to enter into a license agreement, because after it had become aware of the court action brought by the SEP holder against the distributor of its products (Deutsche Telekom), it took the defendant more than three months to request a license from the SEP holder. In the same vein, the Regional Court of Düsseldorf[786] concluded that the defendant did not comply with its obligation because it took more than five months to react to the notification of infringement made by the SEP holder and then, it only responded asking for proof of the alleged infringement.

So in both cases, SEP proprietors continued the infringement action without violating Article 102 TFEU, but they still had to grant licenses on FRAND terms.

4.3. SEP holder's submission of the offer

4.3.1. The ECJ

The second[787] obligation of the SEP proprietor is to present to the alleged infringer a specific, written offer for a licence on FRAND terms, in accordance with the undertaking given to the standardisation body, specifying, in particular, the amount of the royalty and the way in which that royalty is to be calculated.

In respect of the content of the offer, the ECJ[788] adds that the termination clause – consisting of ending the licensing agreement if the licensee challenges the validity or essentiality of the patent – should not be included in the offer. That, first, because SSOs do not check whether patents are valid or essential to the standard in which they are included during the standardisation procedure. And second, due to the right to effective

[784] Case Unidentified Parties [LG Düsseldorf] (n 760) [207].
[785] Joined Cases *St. Lawrence v. Deutsche Telekom*, LG Mannheim of 27 November 2015, 2 O 106/14 (paras 146-149), 2 O 107/14 and 2 O 108/14.
[786] *St. Lawrence v. Vodafone* [73/14] (n 761) [214]–[220].
[787] *Huawei* (n 35) [63].
[788] ibid [69].

judicial protection guaranteed by Article 47 of the Charter. Thus, the ECJ establishes that an alleged infringer cannot be criticised either for challenging, in parallel to the negotiations relating to the grant of licences, the validity of those patents and/or the essential nature of those patents to the standard in which they are included and/or their actual use, or for reserving the right to do so in the future (see Sections 5.3.3.2. and 5.3.4.3. of Chapter 3, where Commission agrees on it).

The ECJ[789] – basing on Advocate General's[790] observation – states that the rationale to impose that obligation of submitting an offer on the SEP owner, is that if it gave a commitment to the SSO to grant licences on FRAND terms, it can be expected that it will make such an offer. Furthermore, in the absence of a public standard licensing agreement, and where licensing agreements already concluded with other competitors are not made public, the proprietor of the SEP is better placed to check whether its offer complies with the condition of non-discrimination than is the alleged infringer. In addition, the Advocate General adds that such a requirement is not disproportionate, as the SEP-holder has voluntarily undertaken to secure a return on its IP in this manner, thus voluntarily restricting the way in which it exercises its exclusive right.

4.3.2. National Courts

4.3.2.1. Time frame

In general terms, once the alleged infringer expressed its willingness to conclude a licensing agreement, the submission of the FRAND offer by the SEP holder must be made prior to the commencement of infringement proceedings, in order to avoid being liable of infringing Article 102 TFEU. According to the Regional Court of Düsseldorf[791], when the implementer does not express its willingness to conclude a licensing agreement in due time, the SEP holder complies with the *Huawei* requirement to submit a licensing offer on FRAND terms even though the offer is made in the course of the ongoing litigation.

4.3.2.2. Addressee

In view of the Regional Court of Düsseldorf[792], it is not required that SEP holders submit an individual offer to each company within a group of companies, being sufficient to make it only towards the parent company of the SEP implementer. However, the view of an Italian court (Tribunale Ordinario di Torino)[793] is different – in the same vein, see also Section 4.1.3.1. above, regarding the notification of infringement –, because it understands that if the SEP holder brings an action only against the SEP implementer,

[789] ibid [64].
[790] *Huawei* AG (n 137) [86].
[791] *St. Lawrence v. Vodafone* [73/14] (n 761) [222] *et seq.*; *St. Lawrence v. Vodafone* [126/14] (n 761).
[792] Joined Cases *Sisvel v. Haier,* LG Düsseldorf of 3 November 2015, 4a 0 93/14 (paras 96-98 and 125) and 4a 0 144/14 (injunction granted).
[793] *Sisvel v. ZTE* (n 763) [3].

SEP holder's offer for a licensing agreement towards the parent company of the implementer does not meet the *Huawei* requirement.

4.3.2.3. Worldwide portfolio license

It has been criticized by scholars the fact that The Framework proposed by the ECJ in *Huawei* does not seem to take into account many aspects that come into play in practice, when negotiating SEP license contracts. For example, patent pools, cross licensing, portfolio licensing[794], grant-backs of non-SEPs and global licenses[795].

According to national courts, SEP holders' offer for a worldwide portfolio license is in line with the *Huawei* requirement, so it would not be contrary to competition law. In *Unwired Planet v. Huawei*[796], the Judge Birss did not find problematic, in principle, when SEP holders demand licenses broader than the ones strictly required by the activities of the relevant implementer – cross licenses and global licenses –, as long as: (i) they are FRAND; and (ii) SEP owners do not 'insist on them' – they do not constitute a *sine qua non* condition for the grant of the required licenses. What is more, he concluded that the worldwide licence was the FRAND licence for a portfolio like Unwired Planet's and an implementer like Huawei. Therefore, an insistence by Huawei on a licence with a UK only scope was not FRAND. In the same vein, the Court of Appeal of England and Wales[797] stated that there may be circumstances in which only a worldwide licence or at least a multi-territorial licence would be FRAND. Hence, the fact that they concluded that injunctions are appropriate when a licensee refuses to enter into a worldwide license covering SEPs, it might cause SEP owners to be particularly inclined to sue for an injunction in the UK (forum shopping)[798].

The Regional Court of Düsseldorf also considered that offers for worldwide portfolio licenses are, in general accepted, unless the circumstances of the specific case require that licenses take a different approach. For instance, if the implementer limits its market activity to one geographical market, the geographical scope of the licence would have to

[794] Miguel Rato and Mark English, 'An Assessment of Injunctions, Patents, and Standards Following the Court of Justice's Huawei/ZTE Ruling' (2016) 7 Journal of European Competition Law & Practice 103, 112, para 7.
[795] Damien Geradin, 'European Union Competition Law, Intellectual Property Law and Standardization' in Jorge L. Contreras (ed), *The Cambridge Handbook of Technical Standardization Law: Competition, Antitrust, and Patents* (Cambridge University Press 2017) 78, 22, para 1 (of the version available at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2907632> accessed 26 July 2018).
[796] (n 737) [572]; See also Nicolo Zingales, 'The Legal Framework for SEP Disputes in EU Post-Huawei: Whither Harmonization?' (2017) TILEC Discussion Paper No. 2017-032, 26, para 1 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3017102>.
[797] *Unwired Planet v. Huawei* [2018] (n 775) [56].
[798] Matthew G. Rose, Jay Jurata and Emily Luken, 'The UK High Court of Justice issues an injunction prohibiting an undertaking from selling wireless telecommunications products in Britain due to its failure to enter into a worldwide patent license (Unwired Planet / Huawei)' (2017) e-Competitions National Competition Laws Bulletin, 7, para 2 < http://awa2018.concurrences.com/IMG/pdf/article-84684.pdf> accessed 24 April 2019.

be modified[799]. In that regard, it ads that when determining whether the geographical scope of the licensing agreement offered by the SEP holder complies with FRAND, the recognised commercial practice in the relevant sector has to be considered[800].

Taking that into account and what has been mentioned above in respect of the addressee, in view of Regional Court of Mannheim[801], SEP holder's offer for a worldwide portfolio license addressed to the parent company of a group of companies complies with the *Huawei* requirement of offering a FRAND license.

4.3.2.4. Content

The ECJ establishes in *Huawei* that the SEP proprietor has to present to the alleged infringer a specific, written offer for a licence on FRAND terms. With regard to the specific content of the SEP owner's offer, it has to specify, in particular, the amount of the royalty and the way in which that royalty is to be calculated. And in addition, the offer should not include a termination clause.

The Regional Court of Mannheim specified that the offer must contain all essential contractual terms and indicate the conditions in a way that, in order to conclude a licensing agreement, the implementer only has to accept the offer[802]. Thus, with the information provided by the SEP holder, the SEP implementer has to be able to assess the FRAND conformity of the offer[803].

For that reason, in the case of quota license agreements, for example, it is not sufficient to indicate the royalties per unit without substantiating their FRAND character with further explanation. The royalty amount must be made sufficiently transparent, for example, by reference to an existing standard licensing program or by indicating other reference values allowing to deduce the royalty demanded, such as a pool license fee covering patents also relevant for the standard in question[804].

4.3.2.5. FRAND royalty assessment

In *Huawei v.* ZTE, the ECJ does not provide any guidance regarding the FRAND assessment, bearing in mind that a differing view of the parties on what constitutes FRAND is to be expected.

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[799] *St. Lawrence v. Vodafone* [73/14] (n 761) [225] *et seq.*; *St. Lawrence v. Vodafone* [126/14] (n 761); Case Unidentified Parties [LG Düsseldorf] (n 760) [250].
[800] *St. Lawrence v. Vodafone* [73/14] (n 761) [225] *et seq.*; *St. Lawrence v. Vodafone* [126/14] (n 761).
[801] *Pioneer v. Acer* [96/14] (n 769) [118]–[129].
[802] ibid; *NTT DoCoMo v. HTC* (n 765); *Philips v. Archos* [209/15] (n 765); *Philips v. Archos* [19/16] (n 766) [78].
[803] *IP Bridge v. HTC* (n 762), p 27.
[804] ibid; *Philips v. Archos* [209/15] (n 765); *Philips v. Archos* [19/16] (n 765) [84].

According to the Regional Court of Mannheim[805], even if the standard implementer disputes the FRAND character of the offer, it is not the court's business – the court competent for the injunction proceedings – to determine whether the licensing conditions are actually FRAND. Moreover, it considers that a SEP holder meets the *Huawei* requirement, even if its offer lies slightly above the FRAND threshold. However, it would not meet it if under the circumstances of the case and without objective justification, the offered conditions are manifestly less favourable (in an economic sense) than the conditions offered to other licensees. Therefore, the court is only required to determine on the basis of a summary assessment, whether SEP holder's licensing offer evidently violates FRAND.

On the contrary, the Higher Regional Court of Karlsruhe[806] found that the lower court's rulings (*e.g.* those of the Regional Court of Mannheim) were manifestly erroneous with regard to the standard of review. It considered that as stated clearly by the ECJ, the SEP proprietor has to make a licensing offer that qualifies as FRAND – no slightly above FRAND – and it is for the respective court to assess the FRAND quality of the offer. Besides, a reduced standard of review, consisting merely in a summary assessment of whether the offer is evidently non-FRAND, has no basis in *Huawei*.

In *Unwired Planet v. Huawei*[807]*,* the High Court of Justice of England and Wales stated that in each individual case, there is only a single FRAND compliant set of terms (including royalty rates), the so-called 'true FRAND' terms. In the same line as German courts, it concluded that the fact that an opening offered rate is higher than the 'true FRAND rate' does not mean of itself that SEP owner's offer is not FRAND.

In variance with the aforementioned decision of the High Court of Justice, the Court of Appeal of England and Wales[808] understood that in a given set of circumstances, a number of sets of terms may all be FRAND. The court will normally declare one set of terms as FRAND and the patent holder would then have to offer that specific set of terms to the implementer. In case the court finds two different sets of terms as being FRAND, then the SEP holder will satisfy its FRAND undertaking if it offers either one of them to the implementer. Focusing only on royalties, the statement of the Court of Appeal was more in line with the Regional Court of Düsseldorf's[809] one, who considered that FRAND refers to a range of acceptable royalty rates, so as a rule, there is not only a single FRAND-compliant royalty rate.

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805 *Pioneer v. Acer* [96/14] (n 769) [118]–[129]; *NTT DoCoMo v. HTC* (n 765) [58] and [70]–[72].
806 Case *Pioneer v. Acer*, OLG Karlsruhe of 31 May 2016, 6 U 55/16, paras 29-36.
807 (n 737) [152] and [153].
808 *Unwired Planet v. Huawei* [2018] (n 775) [121]–[128].
809 Case Unidentified Parties [LG Düsseldorf] (n 760) [241].

4.3.2.6. Non-discrimination

As the Court of Appeal of England and Wales[810] asserted, SEP holder's non-discrimination obligation does not imply a so-called 'hard-edged' component, obliging the patent holder to offer the same rate to all potential licensees. The FRAND commitment prevents the SEP holder from securing rates higher than a 'benchmark' rate which mirrors a fair valuation of its patents, but it does not prevent the patent holder from granting licences at lower rates.

Moreover, as confirmed by German courts, that obligation applies only to similarly situated users. Hence, for the assessment of the non-discriminatory character of the offer regarding the license fee, information on comparable agreements is needed[811]. These agreements can be subject to 'external-eyes-only' restrictions – just towards external counsels and independent experts – solely in exceptional cases[812].

In addition, when a dominant patent holder chooses to bring infringement actions only against certain, but not all competitors in a downstream market (or their suppliers), this unequal treatment might also result in a discrimination. Such a conduct is discriminatory only if, depending on the overall circumstances of each case, it would have been possible for the SEP holder with reasonable efforts to enforce its patent rights against other infringers too. Especially in the early stages of the implementation of a standard, the SEP holder could lack the means required to enforce its rights against a large number of infringers. In this case, the choice to enforce its rights first only against infringers with market strength would appear reasonable[813].

With respect of relying upon existing comparable licensing agreements that the SEP owner concluded with third parties (that were mentioned before), the SEP proprietor may seek protection of confidential information contained in such agreements, as long as it justifies the existence of confidentiality interests to keep confidential the conditions agreed in comparable licensing agreements[814]. Inversely, according to the Court of Appeal of Paris[815], the disclosure of confidential documents, including comparable licensing agreements, will be ordered only depending on which parts or elements of these documents may affect business secrets.

4.3.3. Remarks

German Federal Supreme Court's view in *Orange Book* was the opposite to that of the ECJ in *Huawei v. ZTE*. According to the German judgment, a defendant can rely on a competition law-based defence against an injunction claim – so the IP owner would abuse

[810] *Unwired Planet v. Huawei* [2018] (n 775) [194] *et seq.*
[811] Case Unidentified Parties [LG Düsseldorf] (n 760) [256] *et seq.*; *IP Bridge v. HTC* (n 762), p 27.
[812] Case *TQ Delta LLC v. Zyxel* [2018] EWHC 1515 (Ch), paras 21-28.
[813] Case Unidentified Parties [LG Düsseldorf] (n 760) [273] and [274].
[814] Case Unidentified Parties, OLG Düsseldorf of 25 April 2018, I-2 W 8/18, paras 23 and 24.
[815] Case *Core Wireless v. LG*, Cour d'appel de Paris of 9 October 2018, 15/17037.

its dominant position – only if the defendant made the patent proprietor an unconditional offer to conclude a license agreement, in addition to the presence of other two requirements (see above, Section 2.1.2.1.). The fact that the obligation is on the infringer and not on the patent owner might be because in that case, the patent was not a SEP, so no FRAND commitment was given by its owner and consequently, it should not be expected the owner to make any offer. Hence, it applies the general principle that is the infringer who must open negotiations with the patent owner with a view to conclude a licensing agreement before committing an infringement[816].

Nevertheless, in order to assess the antitrust infringement, the Commission in *Samsung* and *Motorola* – where SEP owners gave FRAND commitments – did not consider relevant that the SEP holder (nor the alleged infringer) had presented a licensing offer on FRAND terms either.

4.4. Infringer's counter-offer

4.4.1. ECJ and Advocate General

Once the alleged infringer receives the licensing offer that includes all information required for assessing its FRAND conformity[817], it is for it diligently to respond to that offer, in accordance with recognised commercial practices in the field and in good faith, a point which must be established on the basis of objective factors and which implies, in particular, that there are no delaying tactics[818].

According to the Advocate General, the conduct of the alleged infringer cannot be regarded as dilatory if it asks for FRAND terms to be fixed either by a court or an arbitration tribunal when negotiations are unsuccessful. And it ads, that in that event, it would be legitimate for the SEP holder to ask the infringer either to provide a bank guarantee for the payment of royalties or to deposit a provisional sum (which will be fixed by the court or arbitration tribunal) at the court or arbitration tribunal in respect of its past and future use of the SEP[819]. Nor can an infringer's conduct be regarded as dilatory if it reserves the right, after concluding an agreement for such a licence, to challenge before a court or arbitration tribunal the validity of that patent, the supposed use of the teaching of the patent (if the use was legal or illegal, or even the existence of the use) and the essential nature of the SEP in question[820].

In that sense, the Advocate General[821] ads that if during the negotiations the infringer reserves that right, it would be also legitimate for the SEP holder to ask the infringer either to provide a bank guarantee for the payment of royalties or to deposit a provisional

[816] *Huawei* AG (n 137) [77].
[817] Case Unidentified Parties [LG Düsseldorf] (n 760) [267]; *IP Bridge v. HTC* (n 762), p 27.
[818] *Huawei* (n 35) [65].
[819] *Huawei* AG (n 137) [93] and [103.4].
[820] ibid [103.5].
[821] ibid [93] and [94].

sum (which will be fixed by the court or arbitration tribunal) at the court or arbitration tribunal in respect of its past and future use of the SEP. Indeed, as the Commission, the referring court – Regional Court of Düsseldorf – and the Advocate General stated, it is in the public interest for an alleged infringer to have the opportunity, after concluding a licensing agreement, to challenge the validity of a SEP (as ZTE did in *Huawei v. ZTE*). If undertakings supplying standard-compliant products and services cannot call into question the validity of a patent declared to be essential to that standard, not only do they run the risk of paying a royalty which is not due (undertakings which implement a standard do not have to pay for IPRs which they are not using). But it could prove effectively impossible to verify the validity of that patent (which all operators on the market in question are obliged to use) because other undertakings would have no interest in bringing proceedings in that regard, since they do not use the teaching of a patent and challenging the validity of a patent is very costly[822].

If the alleged infringer does not accept the offer, it has to submit to the proprietor of the SEP in question, promptly and in writing, a specific counter-offer that corresponds to FRAND terms[823]. Consequently, not responding to the offer or the mere rejection– without making any counter-offer – or making a counter-offer belatedly or not in writing or not on FRAND terms, it entails that that the alleged infringer cannot rely on the abusive nature of an action for a prohibitory injunction or the recall of products, so the court would uphold the actions brought by the SEP owner. And conversely, if the alleged infringer submits a counter-offer on FRAND terms promptly and in writing, it might use the competition law-based defence. Nevertheless, as it will be explained subsequently in Section 4.5., once it submits it, it is not clear since when or under what circumstances the alleged infringer might use that defence.

According to the Advocate General[824], there are no more obligations that parties have to comply with. Consequently, it is for the referring court to verify whether – and, if so, to what extent – the conduct of parties is in keeping with those guidelines (see Sections 4.1. - 4.4.). Nevertheless, the ECJ provides more guidance (see Section 4.5.).

4.4.2. German Courts

4.4.2.1. Absolute obligation

It has been also questioned whether the alleged infringer is obliged to submit a counter-offer when it rejects SEP owner's offer because it considered it was not FRAND. According to the ECJ, the SEP holder is obliged to submit an offer on FRAND terms, so if it is not FRAND, it should be concluded that it did not comply with his obligation, so it would be abusing its dominant position. In Germany for example, there is not unanimity

[822] ibid [95], [96] and fn 64.
[823] *Huawei* (n 35) [66].
[824] *Huawei* AG (n 137) [90].

among courts on that regard. Some of them[825] are of the opinion that the alleged infringer is bound in any case. Whereas other tribunals[826] have stated the opposite. And halfway, there are courts[827] who understand that in case the SEP holder's offer is evidently not FRAND on basis of a summary assessment, the alleged infringer would no longer be bound to make a counter-offer.

4.4.2.2. Without delay

In respect of the promptness, the ECJ does not specify the time frame for the exchange of offers and counter-offers between the parties or the duration of the licensing negotiations. According to the Advocate General[828], they must be assessed in the light of the 'commercial window of opportunity' available to the SEP holder for securing a return on its patent in the sector in question. In any case, licensing negotiations must be opened (and concluded) quickly, given that the infringer is using the teaching of a SEP (without paying for it). In German courts'[829] words, a potential counter offer needs to be made in due course, which means as soon as possible, taking into account the recognized commercial practices in the field and good faith. But at the same time, the SEP user should be given sufficient time to assess the SEP holder's offer and eventually make a counter-offer, before infringement proceedings are initiated by the SEP owner[830].

For instance, the Regional Court of Mannheim[831] understood that the implementer could not use the competition law-based defence because it did not comply with its obligation of submitting a counter-offer promptly, since it presented the counter-offer a year and a half after receiving the offer from the SEP holder and half a year after being sued for patent infringement.

4.4.2.3. Content

Besides the promptness and being in writing, the ECJ does not demand any additional requirement in regard to the FRAND counter-offer. Nevertheless, German courts have specified the content the counter-offer must have in order to consider it FRAND. Hence, a counter-offer will only be considered to be FRAND if it specifies the amount of royalties. Otherwise, even if the amount could be determined by an independent third

[825] Joined Cases *Sisvel v. Haier* (n 792) [93/14] [98]–[101] and [144/14]; *St. Lawrence v. Deutsche Telekom* [106/14] (n 785) [153]–[160].
[826] Case *Sisvel v. Haier*, OLG Düsseldorf of 30 March 2017, I-15 U 65/15 [23]–[30] (it is the appeal against the *Sisvel v. Haier* (n 792) [144/14]. It refused to grant an injunction and instead, it ordered Haier to pay damages and to render specific sales information).
[827] *NTT DoCoMo v. HTC* (n 765) [59] *et seq.*; Case Unidentified Parties [24/14] (n 768), p 25; *Philips v. Archos* [209/15] (n 765); *Philips v. Archos* [19/16] (n 765) [80].
[828] *Huawei* AG (n 137) [89] and fn 56.
[829] *NTT DoCoMo v. HTC* (n 765) [58] and [70]–[72]; *Philips v. Archos* [19/16] (n 765) [80]; Case Unidentified Parties [24/14] (n 768), p 38.
[830] *IP Bridge v. HTC* (n 762), p 26.
[831] *NTT DoCoMo v. HTC* (n 765) [59] *et seq.*

party, the implementer would not be complying with its obligation in accordance with the provisions set in *Huawei v. ZTE*[832].

In addition, if the alleged infringer distributes products using the SEP in question in more than one geographical market – hence, infringing the SEP in several countries –, SEP implementer's counter-offer would not be FRAND if it was limited to a license for a single market (*e.g.* Germany)[833].

4.5. Uncertainty post counter-offer

Considering that the alleged infringer submitted a counter-offer, the SEP owner might reject it (with/without a counter-offer submission) or might directly not respond. However, the ECJ only refers to the case in which the alleged infringer's counter-offer is rejected. But it does not give any guidance with respect to other ways in which the SEP owner might behave.

In that regard, the ECJ literally states the following: 'Should the alleged infringer not accept the offer made to it, it *may* rely on the abusive nature of an action for a prohibitory injunction or for the recall of products *only if* it has submitted to the proprietor of the SEP in question, promptly and in writing, a specific counter-offer that corresponds to FRAND terms'[834]. And then it ads: 'Furthermore, where the alleged infringer is using the teachings of the SEP before a licensing agreement has been concluded, *it is* for that alleged infringer, from the point at which its counter-offer is rejected, to provide appropriate security in accordance with recognised commercial practices in the field, for example by providing a bank guarantee or by placing the amounts necessary on deposit. The calculation of that security must include, inter alia, the number of the past acts of use of the SEP, and the alleged infringer must be able to render an account in respect of those acts of use'[835].

Firstly, it is not clear why the ECJ makes a special reference to 'the alleged infringer who is using the teachings of the SEP before a licensing agreement has been concluded'. The issue of discussing whether bringing infringement actions seeking for a prohibitory injunction and the recall of products constitutes an abuse of a dominant position, it is because the alleged infringer is implementing the SEP without paying royalties – patent infringement. And due to the essential nature of the patent and the given FRAND commitments, it raises if the defendant is able to defend himself against the claims by pleading that the SEP owner abuses its dominant position on the market.
Moreover, in the telecommunication industry the agreements to license SEPs on FRAND terms are negotiated and concluded *ex post*, that is to say, after the use of the teaching

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[832] *St. Lawrence v. Deutsche Telekom* [106/14] (n 785) [158]–[164]; *St. Lawrence v. Vodafone* [73/14] (n 761) [291] *et seq.*; *St. Lawrence v. Vodafone* [126/14] (n 761).
[833] *Pioneer v. Acer* [96/14] (n 769) [131]–[133]; *St. Lawrence v. Vodafone* [73/14] (n 761) [291] *et seq.*; *St. Lawrence v. Vodafone* [126/14] (n 761).
[834] *Huawei* (n 35) [66].
[835] ibid [67].

protected by the SEP has begun. That, because even large undertakings are unable to verify in advance whether all the patents relating to a standard – which were notified to ETSI – were essential and valid or whether being (allegedly) essential and valid patents, they have been infringed. The administrative and financial burden involved in that assessment would be so onerous and the investment in time so considerable as to make it impossible in practice to use the standard. Huawei itself pointed out that is unrealistic to require a standard implementer to enter into negotiations to secure a licence for any patent declared essential before even making use of that patent[836].

Notwithstanding, later on in the concluding statement, the ECJ[837] assumes that the alleged infringer is using the teachings of the SEP without a licensing agreement, when it states that: 'Article 102 TFEU must be interpreted as meaning that the proprietor of a patent essential to a standard [...] does not abuse its dominant position [...] as long as prior to bringing that action, the proprietor has, first, alerted the alleged infringer of the infringement complained about by designating that patent and specifying the way in which it has been infringed, and, secondly, after the alleged infringer has expressed its willingness to conclude a licensing agreement on FRAND terms, presented to that infringer a specific, written offer for a licence on such terms, specifying, in particular, the royalty and the way in which it is to be calculated; and where the alleged infringer continues to use the patent in question, the alleged infringer has not diligently responded to that offer [...]'.

Secondly, the ECJ's statements lead to divergent interpretations about when the alleged infringer – who continues to use the SEP – may use the competition law-based defence. That is to say, if once the alleged infringer submits the counter-offer or when it provides the appropriate security. It might be interpreted that the alleged infringer may use the competition law-based defence from the moment it submits the counter-offer, being irrelevant the SEP owner's reaction to the counter-offer, that is, whether it rejects it or it does not respond to it. The above, because the ECJ is conditioning the use of that defence to the counter-offer submission ('only if'). Nevertheless, it might be also understood that the obligation to provide appropriate security only arises if alleged infringer's counter-offer is rejected (submitting or not a counter-offer), but not when it does not respond to it. Accordingly, if the SEP owner does not give a response, the alleged infringer – who continues using the SEP – might use the competition law-based defence without providing security. Whereas if the counter-offer was rejected, the provision of the security would be necessary to use that defence. Lastly, if it is considered that the absence of response to the counter-offer after a period of time constitutes an implicit rejection, the conclusion would be that in order to use the competition law-based defence, the alleged infringer would have to provide the appropriate security in any event, regardless of whether the SEP owner rejects the counter-offer explicitly or implicitly.

[836] *Huawei* AG (n 137) fn 54.
[837] *Huawei* (n 35) [71] and [77.1].

According to what the ECJ states in the concluding statement[838] (see above), the first interpretation prevails, because it states that the SEP owner abuses its dominant position if it complied with its obligations (prior alert and offer submission) and 'the alleged infringer has not diligently responded to that offer'. Hence, once it submits the counter-offer, it is allowed to use the competition law-based defence. Consequently, the question arises of why the ECJ refers to the obligation to provide appropriate security if it is not compulsory in order to use the competition law-based defence. It is a mere suggestion (as the voluntary step of being the FRAND terms determined by a third party, see below) and the fact of not being compulsory protects the alleged infringer, who will probably opt not to provide any security.

Nevertheless, the Regional Court of Düsseldorf[839] in *Sisvel v. Haier* and *St. Lawrence v. Vodafone* adopts the second interpretation. Namely, it understands that implementers cannot use the competition law-based defence because they did not comply with their obligation of providing appropriate security in due time – an obligation that arises when the first counter-offer is rejected, regardless of whether further offers and counter-offers are submitted. Indeed, implementers provided adequate securities to guarantee the payment of royalties in relation to past uses of the SEPs more than a month after their counter-offers were rejected. The Court also added that the *Huawei* requirement is also not met, when the implementer only proposes to have the security – if requested by the SEP holder – determined by an arbitration tribunal or by a different court. Moreover, the Regional Court of Mannheim[840] clarifies that the fact that the implementer has allegedly terminated its use of the SEP, does not remove its obligation to provide security for past periods of use.

I am of the opinion that in order to use the competition law-based defence, the alleged infringer always must provide – together with the counter-offer – exhaustive rendering of accounts and deposit the payment of royalties according to its own calculation, because it is using a SEP without paying royalties. With that conduct, it shows willingness to enter into a license agreement and it constitutes an appropriate security for the SEP owner. In addition, in any case, as long as the alleged infringer implements the SEP when manufacturing its products, it will have to pay royalties (whether it is allowed to use the competition law-based defence or not). That suggestion would be in line with the *Orange Book* judgment (see above, Section 2.1.2.1.) and consequently, also with referring court's – Regional Court of Düsseldorf – view (see above, Section 2.3.).

However, the Advocate General[841] is of the contrary opinion, because it does not consider that in cases concerning the use of a SEP – where the patent owner has made a commitment to grant licenses on FRAND terms –, it should be imposed that obligation

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[838] ibid.
[839] Joined Cases *Sisvel v. Haier* (n 792) [93/14] [103]–[111] and [144/14]; *St. Lawrence v. Vodafone* [73/14] (n 761) [267] *et seq.* and [299] *et seq.*; *St. Lawrence v. Vodafone* [126/14] (n 761) [304].
[840] *Pioneer v. Acer* [96/14] (n 769) [124] *et seq.*
[841] *Huawei* AG (n 137) [98].

on the infringer before concluding a licensing agreement, because that obligation will arise only from the future licensing agreement. It considers that is enough that the infringer shows itself to be objectively ready, willing and able (see below, Section 6) to conclude a licensing agreement. And that in those circumstances, the SEP holder may require the provision of a bank guarantee for the future payment of royalties or the deposit of a provisional sum for past and future use of its patent. The Advocate General's suggestion is less vague when he proposes the possibility of requiring that provision of security when the alleged infringer asks to be the FRAND terms fixed either by a court or an arbitration tribunal or when it reserves the right to challenge the validity, the supposed use of the teaching of the patent and the essential nature of the SEP (see above, Section 4.4.1.).

All in all, it can be concluded that once the alleged infringer submits the counter-offer (without providing the appropriate security), the SEP owner is obliged to accept the counter-offer, without being possible to submit an offer in response (although as mentioned above, some German courts consider possible the submission of subsequent offers and counter-offers) or to submit the determination of FRAND terms to a third party – unless the alleged infringer also agrees on the later. That, because from the moment the alleged infringer submits its counter-offer or provides the appropriate security in case it has been rejected, the implementer might use the competition law-based defence and the SEP owner would be liable for abusing its dominant position. The logic behind that argument is that accepting the counter-offer, the SEP owner would be remunerated for the use of its SEP (thus achieving its goal). Notwithstanding, if it does not respond or it rejects it and continues with the patent infringement proceeding seeking for a prohibitory injunction or the recall of products, it would be understood that its purpose is to exclude competitors from the market (the anti-competitive effect, see below Section 5.1.).

4.6. FRAND terms determination by a third party

As mentioned above, if the SEP owner does not accept the alleged infringer's counter-offer (it rejects it or it does not give a response), the alleged infringer may use the competition law-based defence. Nevertheless, parties may continue without having reached a licensing agreement. That will depend on how the national court decides to enforce the competition law, because the ECJ does not give any additional guidance[842].

Consequently, it is not clear why the ECJ[843] states that where no agreement is reached on the details of the FRAND terms following the counter-offer by the alleged infringer, the parties may, by common agreement, request that the amount of the royalty be determined by an independent third party, by decision without delay. Suggesting this voluntary step,

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[842] On the contrary, see Petit, 'Huaweï v. ZTE: Judicial Conservatism' (n 161) 7, para 2 ('[...] if the SEP holder makes a FRAND offer in the upper bound, and the implementer makes a FRAND counter-offer in the lower bound, the parties "may" submit their dispute to third-party determination. But if they disagree over this, the ultimate question is what happens. And on this, the Court gives no guidance').
[843] *Huawei* (n 35) [68].

the ECJ acknowledges that the source of the problem about the lawfulness of bringing infringement actions by SEP owners lies on the lack of clarity as to what is meant by 'FRAND terms'[844]. However, the voluntary nature of the mechanism does not contribute to solve the problem of lack of licensing agreement.

In that regard, scholars criticised the fact that the ECJ did not define the meaning of fair, reasonable and non-discriminatory[845], that is necessary to determine – according to *Huawei v. ZTE* judgment –, if SEP owner's offer and alleged infringer's counter-offer are FRAND. In this respect, it is applicable the argumentation already used to justify why the ECJ was right not defining the relevant market and not assessing the existence of a dominant position (see above, Section 3.2.). That is to say, the Court is called upon to determine whether – and, if so, under what circumstances – an action for infringement brought by a SEP holder who gave a commitment to grant licences on FRAND terms constitutes an abuse of a dominant position. The questions raised by the referring court do not concern the specific terms of a FRAND licence. In AG's[846] opinion, they lie in the discretion of the parties and, where appropriate, the civil courts and arbitration tribunals.

In my opinion, it was not necessary for the ECJ to formally establish a method to calculate FRAND royalties, that should apply in any case. Depending on the circumstances of each case[847] – the SEP in question, the type of standardized market and the SEP holders concerned –, one method[848] may be more appropriate than another. In case of lack of agreement between the parties on royalties, courts and arbitral tribunals are the most appropriate to determine them. In contract law, the use of general terms, such as FRAND is common, so courts are used to interprete them and to determine the due amount[849]. Besides, they may also appoint experts if necessary. For instance, in *Unwired Planet v.*

[844] *Huawei* AG (n 137) [9].
[845] Lundqvist, 'The Interface' (n 723) 400, para 4 ('[…] it is unfortunate that the development of the standardization/intellectual property/competition law interface has developed in ways, which force national courts to become something of pricing authorities'); Galli, 'The FRAND Defense' (n 693) 202, para 2; Rato and English, 'An Assessment of Injunctions' (n 794) 110, para 6; Robin Jacob and Alexander Milner, 'Lessons from Huawei v. ZTE' (4iPCouncil 2016) 2, para 4 <https://www.4ipcouncil.com/news/latest-research-4ip-council-lessons-huawei-v-zte> accessed 26 July 2018; Colangelo and Torti, 'Filling Huawei's Gaps' (n 723) 3 and 4; Geradin, 'European Union Competition Law' (n 795) 21, para 1; Ioannis Lianos, Valentine Korah and Paolo Siciliani (eds), 'Competition Law and Intellectual Property (IP) Rights: Analysis, Cases and Materials' in *Competition Law: text, cases and materials* (Hart 2017), 145, para 15, 146-156 (of the version available at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2863814> accessed 26 July 2018); Meli, 'The CJEU judgment in the Huawei/ZTE case' (n 723) 10-13.
[846] *Huawei* AG (n 137) [40].
[847] Damien Geradin, 'Ten Years of DG Competition Effort to Provide Guidance on the Application of Competition Rules to the Licensing of Standard-Essential Patents: Where Do We Stand?' (2013) SSRN Electronic Journal 20, para 3 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2204359> accessed 26 July 2018; Geradin, 'European Union Competition Law' (n 795) 21, para 1.
[848] Pentheroudakis, Baron and Thumm, 'Licensing Terms of Standard Essential Patents' (n 45) 59-64 and 84-99 (Regarding the royalty rate: the 15 Georgia-Pacific factors, the bottom-up approach or the top-down approach. In relation to the royalty base: the entire market value rule or the smallest saleable patent practicing unit).
[849] Geradin, 'The Meaning of "Fair and Reasonable"' (n 50) 928-930; Galli, 'The FRAND Defense' (n 693) 193, para 1.

Huawei[850], the Judge offers two possible methods to calculate the FRAND royalties, considering they are the most appropriate in that given case.

What is relevant when determining the most appropriate method to calculate FRAND royalties is that they must assure the patent holder at least as much profit as it could have obtained through refusal to license, as well as compensate the licensor for any incremental costs associated with licensing. If the patented technology is clearly superior to other technologies that could have been used to form the standard, this minimum royalty is likely to be significant. At the same time, the FRAND license must offer the licensee an opportunity to profit from the license, if it is able to manufacture the product utilizing the IP at a lower cost than the licensor[851].

4.6.1. Suggestion: mandatory nature

I do not agree with the ECJ when considering that the SEP owner abuses its dominant position if it rejects the counter-offer submitted by the alleged infringer (providing the appropriate security, if necessary), because each of the parties submits an offer and a counter-offer and none of them should prevail over the other, in order to avoid anti-competitive – exploitative – behaviours such as, reverse holdup (see Section 1.3.1.4. of Chapter 1) and holdup (see Section 1.3.1.1. of Chapter 1).

Namely, in *Huawei v. ZTE*, the ECJ opts to protect the alleged infringer over the SEP owner, because alleged infringer's counter-offer on FRAND terms must be accepted by the SEP owner in order to consider that is not abusing its dominant position. Moreover, it is not clear if the alleged infringer is obliged to provide appropriate security to use the competition law-based defence (a strict interpretation of the *Huawei* judgment suggests it is not obliged, while according to German courts it is). That might lead to a reverse holdup behaviour that consists of SEP implementers using their leverage to force the SEP owner to accept royalties that are lower than the value of the contribution of their technologies to a standard – below FRAND.

While the *Orange Book* judgment overprotects the SEP owner, because although it is obliged to accept the unconditional offer – since it cannot reject it without violating the prohibition of discrimination or anti-competitive behaviour –, ultimately, the offer will include that the licensor is who determines the amount of royalties according to its own reasonable discretion. Besides, the defendant who will be using the subject matter of the patent, it has to provide an exhaustive account of past acts of use and pay the amount of the royalty that has itself calculated therefrom. Accordingly, the SEP owner might holdup the alleged infringer demanding it excessive royalties comparing to those it would require

[850] Jorge L. Contreras, 'A New Perspective on FRAND Royalties: Unwired Planet v. Huawei' (2017) University of Utah College of Law Research Paper No. 206, 6, para 2 (the judge offers two possible methods of calculating the FRAND royalty, one based on an analysis of comparable license rates, the other based on a top-down analysis of the total aggregate royalty that should be attributable to the standards and SEPs at issue) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2949449> accessed 26 July 2018.
[851] Alfaro Águila-Real, *El abuso de posición dominante* (n 109) 247, para 4.

ex ante – before the standard was set by the SSO – in breach of its commitment to grant licenses on FRAND terms.

Consequently, in my view – that is halfway between what is stated in *Huawei v. ZTE* and *Orange Book* –, the ECJ should have established that having FRAND terms determined by a third party is compulsory. Accordingly, once the alleged infringer submits its counter-offer in the second round (hence, four offers would be exchanged), within a specific period of time, parties have to submit the FRAND royalties' determination to an independent third party (court or arbitration tribunal) and commit to be bound by its decision. Note that in *Samsung* and *Motorola*, the Commission defined the 'willing licensee' (see also Section 6.2.) as the one that in the event that bilateral negotiations do not come to a fruitful conclusion, it accepts to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate. Ultimately, the aim is for patents to be licensed in FRAND terms, because this is why they have the SEP status.

Hence, in case the SEP owner does not want to submit the determination of FRAND royalties to a third party, it would be abusing its dominant position under Article 102 TFEU. If it is the alleged infringer who refuses to submit it, it would not be allowed to use the competition law-based defence and the court would order the prohibitory injunction and the recall of products. The same would apply if once the third party determines the amount of royalties, the SEP owner does not enable the use of the SEP or the alleged infringer does not pay due royalties.

Some[852] also suggested that the ECJ should have established that if after a period of time parties did not decide to submit the case to a third party, the terms of the license must be determined by the court.

5. Anti-competitive effect

5.1. Exclusion

According to the ECJ, the third element of the abuse refers to the anti-competitive effect that SEP owner's behaviour might cause. It states that bringing actions for a prohibitory injunction and the recall of products might be abusive if those proceedings are liable to prevent products complying with the standard in question manufactured by competitors from appearing or remaining on the market and, thereby, SEP owners would reserve the manufacture of the products in question for themselves[853]. Indeed, the seeking of these measures by the SEP owner is capable of restricting competition, regardless of whether the court finally upholds these actions or not, because they entail to cease the infringement and to recall the products that infringe the SEP from the market.

[852] Geradin, 'European Union Competition Law' (n 795) 19, para 2.
[853] *Huawei* (n 35) [73].

The absence of that anti-competitive effect is the reason why – as mentioned in Section 3.1. – bringing actions for infringement seeking the rendering of accounts in relation to past acts of use of the SEP or an award of damages in respect of those acts of use, are not regarded as an abuse under Article 102 TFEU[854]. Namely, that behaviour does not have a direct impact on the standard-compliant products manufactured by competitors, because in case the court upheld these actions, they would only entail an accounting and payment obligation on the infringer, because the sole purpose of such claims is to compensate the SEP holder for previous infringements of its patent[855].

In *Samsung* and *Motorola*, the Commission defined the exclusionary effect of SEP owners' behaviour in those same terms. However, unlike the ECJ – who configured Huawei's behaviour solely as an exclusionary abuse –, the Commission treated SEP owners' conduct as two different abuses, exclusionary and exploitative (see Sections 5.3.3.1. and 5.3.3.2. of Chapter 3, respectively). Namely, it pointed out that their behaviour might lead either to the exclusion from the market of standard-compliant products or to the acceptance by a potential licensee of unfavourable licensing terms for the future use of a SEP (see Section 6.1. of Chapter 3).

5.2. SEPs owned by NPEs

One of the most extensively discussed issues has been whether the criteria established in *Huawei v. ZTE* is also applicable when SEP holders are NPEs (see Section 'Background' of the Introduction). NPEs are companies that are dedicated solely to license their SEPs to third parties, but do not practice the patented inventions in the market (they do not manufacture or sell any products or processes), because SEP implementers would not be their competitors.

5.2.1. Arguments for and against the application

Some[856] are of the opinion that the same legal standard established in *Huawei* would apply to the seeking of an injunction and the recall of products by a pure licensing entity which is not a competing manufacturer – NPEs –, because the ECJ[857] does not make any special reference to these entities in its judgment. Of that same opinion is the Commissioner for Competition, Vestager[858] and consequently the Commission, who declared that as long as alleged infringers were willing to enter into a license agreement on FRAND terms, all SEP owners – regardless of their nature (NPEs or licensors that are also manufacturers) – should not be able to bring actions for prohibitory injunctions against them. Some

[854] ibid [74]–[76] and [77.2].
[855] *Huawei* AG (n 137) [112].
[856] Galli, 'The FRAND Defense' (n 693) 191, para 2.
[857] Petit, 'Huaweï v. ZTE: Judicial Conservatism' (n 161) 5, para 1 and 8, para 4.
[858] Margrethe Vestager, 'Intellectual Property and Competition' (19th International Bar Association Conference, Florence, 11 September 2015) <https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/intellectual-property-and-competition_en> accessed 26 July 2018; COM(2017) 712 final (n 81) 11, para 5 and 12, para 1 ('PAEs should be subject to the same rules as any other SEP holder, including after the transfer of SEPs from patent holders to PAEs').

others[859] understand that the ECJ leaves this question open, because the reasoning of the judgment refers to 'competitors'.

And on the contrary, there are those[860] who consider that the *Huawei* legal standard would not be applicable to NPEs. Therefore, these entities would not abuse their dominant position when bringing actions for prohibitory injunctions or recall of products, because that conduct would not seek to exclude competitors' products from the market. That, since there would not exist a competitive relationship between the SEP owner – the NPE – and the alleged infringer.

When the ECJ defines the steps required before an injunction or the recall of products can be granted in favour of a SEP owner, it is considering that if the SEP owner does not comply with them, it abuses its dominant position because it understands that the SEP owner brought the actions to exclude competitors from the market and not to remedy the infringement. Consequently, if the SEP owner and the alleged infringer are not competitors, it cannot be concluded that NPEs' behaviour of bringing infringement actions might have an exclusionary effect. Hence, the legal standard established in *Huawei* would not be applicable to NPEs, because the element regarding the anti-competitive effect would be missing. Accordingly, NPEs' conduct of seeking for prohibitory injunctions and the recall of products would not be abusive under Article 102 TFEU.

5.2.2. Potential consequences of non-application

Some scholars[861] have considered that in case the *Huawei* criteria does not apply to NPEs, these entities could be used opportunistically by SEP holders that are licensors and manufacturers. That is to say, as NPEs could not be liable for abusing their dominant positions when bringing infringement actions seeking for prohibitory injunctions or the recall of products, a SEP holder could transfer their SEPs to a NPE, so that it brings the infringement actions against its competitors, in exchange for a pecuniary amount.

In order to assess whether this consequence is negative or not, it would be necessary to raise the debate about the role of NPEs in the patent system, if they have negative or positive effects on innovation society. Namely, whether NPEs' business model dissuades SEP owners from creating new products. Or, if on the contrary, NPEs provide value by serving as intermediaries in the market for inventions, providing liquidity to small and medium-sized companies by acquiring their SEPs.

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[859] James Killick, 'ECJ rips up Orange Book! New standards in Europe for SEP injunctions' (*Kluwer Competition Law Blog*, September 4, 2015), 4, para 5 <http://competitionlawblog.kluwercompetitionlaw.com/2015/09/04/ecj-rips-up-orange-book-new-standards-in-europe-for-sep-injunctions/> accessed 27 July 2018.

[860] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 686, para 4; Nicolas Petit, 'EU Competition Law Analysis of FRAND Disputes' in Jorge L. Contreras (ed), *The Cambridge Handbook of Technical Standardization Law: Competition, Antitrust, and Patents* (Cambridge University Press 2017) 290, 302-303.

[861] Geradin, 'European Union Competition Law' (n 795) 22-23.

It has also been argued that if the legal standard established in *Huawei* is not applicable to NPEs because a competitive relationship would be missing, that same argumentation might be used by SEP holders – that are licensors and manufactures – to avoid being abusing their dominant positions, by bringing infringement actions against SEP implementers' customers – along the supply chain. That, instead of directing the actions towards SEP implementers, with whom SEP owners do have a competitive relationship. Nonetheless, I do not consider that this legal strategy would be widely used by SEP holders, because suing SEP implementers' customers they do not achieve their final objective of excluding from the market all the standard-compliant products manufactured by their competitors – SEP implementers –, since they would not be going against the source of manufacturing.

5.2.3. Unaddressed by national courts

So far, Member State courts have granted prohibitory injunctions in favour of NPEs because infringers did not comply with the obligations imposed in *Huawei v. ZTE*. That is, because either they did not express its willingness to enter into a license agreement on FRAND terms, did not respond to the SEP owner's offer diligently and in good faith or, in the event their counter-offer was rejected, did not provide adequate security to guarantee the payment of royalties. For instance, in *St. Lawrence v. Deutsche Telekom*[862], the Regional Court of Mannheim granted a prohibitory injunction in favour of a NPE, directed not to the manufacturer of mobile phones, but to one of its distributors (Deutsche Telekom). And in *Unwired Planet v. Huawei*[863], the High Court of Justice of England and Wales also granted the injunction in favour of the NPE.

However, national courts have not yet addressed whether the legal standard established in *Huawei* would be applicable when the NPE did not comply with its obligations, whereas the alleged infringer did fulfil its duties. Before bringing an action for a prohibitory injunction or the recall of products, the SEP owner has to alert the infringer of the infringement complained about by designating that SEP and specifying the way in which it has been infringed and it also has to present to the infringer an offer for a licence on FRAND terms.

Accordingly, the national court would have to determine whether the NPE abused its dominant position for not complying with its obligations or not. If the court considered the first, the conclusion would be that the *Huawei* criteria is applicable to NPEs. And on the contrary, if the court granted the prohibitory injunction and the recall of products in favour of the NPE to remedy the infringement, the legal standard established in *Huawei* would not be considered to be applicable to NPEs, because there would not exist a

[862] LG Mannheim of 10 March 2015, 2 0 103/14; (n 781) (it disagreed and suspended the enforcement of the injunction, reverting the case to the LG Mannheim); (n 785).
[863] (n 737).

competitive relationship between the NPE and the infringer, being irrelevant the non-compliance of the SEP owner.

In the event the national court opted for understanding that the *Huawei* legal standard would not be applicable to NPEs, the infringer could defend itself from the infringement actions brought by the SEP holder, in the framework of contract law (but not using the competition law-based defence). That is, as long as it is considered that from the commitment to grant licenses on FRAND terms given by SEP owners to SSOs contractual obligation arises, the infringer could argue that the SEP holder breached the contract in favour of third parties (see Section 3.2. of Chapter 5).

6. The missing element of the abuse: the objective justifications

6.1. Efficiency gains and objectively necessary

As mentioned before in Section 3, the ECJ did not make any reference to the last element of the abuse, that is, to under what circumstances the SEP owner's conduct – that will be *prima facie* abusive if the aforementioned three requirements are present regarding the exceptional circumstances, the Framework and the anti-competitive effect –, would be objectively justified. Namely, the dominant undertaking is entitled to demonstrate that its behaviour of bringing infringement actions produces substantial efficiencies which outweigh any anti-competitive effects on consumers or that is objectively necessary.

In *Samsung* and *Motorola*, the Commission did allude to objective justifications in which SEP owners' behaviour might be based on, although it concluded that none of them was present in those cases (see Sections 5.3.4.1. – efficiency gains – and 5.3.4.2. – objectively necessary – of Chapter 3). In particular, SEP owners claimed that seeking and enforcement of injunctions was objectively necessary, among others, to protect (i) their commercial interests, (ii) their IPRs and (iii) the public interest in an effective standardisation process.

According to the Commission, SEP owners' behaviour would be considered to be objectively necessary to protect their commercial interests, for example, in the following scenarios: (1) a potential licensee was in financial distress and unable to pay its debts; (2) a potential licensee's assets were located in jurisdictions that did not provide for adequate means of enforcement of damages; or (3) a potential licensee was unwilling to enter into a licence agreement on FRAND terms. Commission's assessment focused on the latter case, because the first two scenarios were clearly not present neither in *Samsung* nor in *Motorola*.

6.2. 'Willing licensee': the undefined legal concept

In *Huawei v. ZTE*, the concept of the 'willing licensee' is also present, but unlike in *Samsung* and *Motorola*, in the judgment its definition is missing which generates legal uncertainty.

In Commission's view – embodied in the Motorola Prohibition Decision – a potential licensee would be a willing licensee if in the event that bilateral negotiations do not come to a fruitful conclusion, it accepts to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate (see Section 5.3.4.3. of Chapter 3).

In *Huawei v. ZTE,* the behaviour that according to the Commission would express the willingness of the SEP implementer constitutes the voluntary step of The Framework established by the ECJ (see above, Section 4.6.). Notwithstanding, the fact that the alleged infringer does or does not follow the suggestion made by the ECJ of accepting having FRAND terms determined by a third party, does not entail any consequence with regard to the antitrust assessment or the use of the competition law-based defence.

The ECJ refers to the 'willing licensee' concept when it requires that the alleged infringer – in order to use the competition law-based defence –, it must express its willingness to enter into a license agreement (see above, Section 4.2.). Hence, it is one of the alleged infringer's obligation established in The Framework. Nevertheless, the ECJ does not define it, that is to say, it does not specify what behaviour should be considered as an expression of willingness. According to the Regional Court of Düsseldorf – who referred the preliminary questions to the ECJ –, the willingness to negotiate was apparent from ZTE's written offers to conclude an agreement[864]. Due to the legal gap posed by *Huawei v. ZTE,* it is for national courts to interpret that concept. The following examples in this regard were already given in the aforementioned Section. In view of the Regional Court in *Lawrence v. Deutsche Telekom*[865], the prompt request for a license to the SEP holder constitutes an expression of willingness. According to the Regional Court of Düsseldorf in *St. Lawrence v. Vodafone*[866], reacting – after more than five months – to the SEP owner's infringement notification asking for proof of the alleged infringement, it does not constitute an expression of willingness.

Both in *Samsung/Motorola* and *Huawei v. ZTE*, the consequence of not being a 'willing licensee' is the same, namely, SEP owners would be infringing Article 102 TFEU, so the prohibitory injunction and the recall of products would be upheld by the court (albeit they still would have to grant licenses on FRAND terms). That is to say, according to the Commission, if the alleged infringer was not a willing licensee, seeking and enforcement of injunctions would be justified, so the SEP owner would not infringe Article 102 TFEU (the third element of the abuse, the objective justifications, would be present – the one that is missing in *Huawei v. ZTE* –). Basing on the ECJ's criteria, if the alleged infringer did not express its willingness, it would not have complied with the obligation established in The Framework (the second element of the abuse), so it could not use the competition law-based defence.

[864] *Huawei* (n 35) [35].
[865] (n 785).
[866] *St. Lawrence v. Vodafone* [73/14] (n 761) [214]–[220].

Hence, although the concept of 'willing licensee' forms part of different elements of the abuse defined by the Commission and the ECJ, the difference is that whereas the concept was defined in *Motorola*, it was not in *Huawei v. ZTE.* Therefore, from the judgment, national courts are responsible for defining it. Due to the consequence that entails being considered a 'willing licensee' or not, if the definition given by national courts varies considerably from one court to another, the possibility of forum shopping increases (see the definition I suggest in Section 4.3.2.1. of Chapter 5).

7. Recap of the abuse

It follows from all the foregoing considerations that according to the ECJ, Article 102 TFEU must be interpreted as meaning that the proprietor of a SEP (first exceptional circumstance), which has given an irrevocable undertaking to a standardisation body to grant a licence to third parties on FRAND terms (second exceptional circumstance), does not abuse its dominant position by bringing an infringement action seeking a prohibitory injunction or the recall of products, as long as it has complied with its obligations (to alert about the infringement and submit a FRAND offer). And that at the same time, the alleged infringer has not fulfilled its duties[867] (express willingness and react to the offer).

Namely, the SEP owner prior to bring infringement actions seeking for a prohibitory injunction and the recall of products, has alerted the alleged infringer of the infringement complained about by designating that patent and specifying the way in which it has been infringed. And the alleged infringer has not reacted expressing its willingness to conclude a licensing agreement on FRAND terms. Or having expressed it, the SEP holder has presented to that infringer a specific, written offer for a licence on such terms, specifying, in particular, the royalty and the way in which it was to be calculated. But on its part, the alleged infringer – who continues to use the SEP –, has not diligently responded to that offer.

In case it has submitted a counter-offer, it is not clear if the alleged infringer is also obliged to provide appropriate security from the moment its counter-offer is rejected or not. A strict interpretation of the *Huawei* judgment suggests it is not obliged, so once it has reacted to the SEP owner's offer, the SEP proprietor might be abusing its dominant position. While according to German courts it is obliged, so the lack of the appropriate provision entails that the SEP owner is not liable under Article 102 TFEU and the alleged infringer is not allowed to use the competition law-based defence. I consider it would be more equitable if the alleged infringer was obliged to provide appropriate security from the moment it submits the counter-offer and regardless of SEP owner's reaction to it – not limited to rejection cases.

I am also of the opinion that committing to have FRAND terms determined by a third party, it should be compulsory for both parties and not a mere suggestion. Accordingly, in case the SEP owner did not accept the counter-offer of the alleged infringer, the latter

[867] *Huawei* (n 35) [71] and [77.1].

would only be allowed to use the competition law-based defence if the SEP owner rejected to submit the determination of FRAND royalties to a third party. And vice versa, the SEP owner would not be abusing its dominant position if after that rejection, it accepted to submit the determination of FRAND royalties to a third party, but the alleged infringer did not.

If both parties accepted that FRAND royalties were determined by a third party, they will be bound by such determination. Once the third party establishes the royalties, it might be assumed that the SEP owner will allow the SEP implementer to continue using the patent in question (its ultimate aim is to be remunerated). However, it might happen that the alleged infringer does not pay the due royalties. In that case, the court would uphold the prohibitory injunction and the recall of products in favour of the SEP owner (without prejudicing to award damages).

Conclusion

In the long awaited *Huawei v. ZTE* judgment, the ECJ treats the SEP owner's – Huawei – behaviour as a novel category of exclusionary abuse under Article 102 TFEU, as the Commission did in *Samsung* and *Motorola* – although in these two cases, the Commission also considered that threatening to seek injunctions was likely to constitute an exploitative abuse.

Notwithstanding, unlike the Commission, when the ECJ conducts the antitrust assessment, it does not follow the classic method used in the application of Article 102 TFEU. In particular, when determining whether the competitive damage arising from the exclusionary abuse is present and in which scenarios the SEP owner's behaviour constitutes an objective justification. Its judgment is limited to establish the negotiation framework for SEP licenses in a very formal way. That is, it stipulates the specific steps the SEP holder has to perform and the specific obligations the alleged infringer must comply with, so that the conduct of the SEP holder does or not constitute an exclusionary abuse.

Some may consider that the *Huawei v. ZTE* judgment provides legal certainty to SEP holders who bring actions for patent infringement against those who violate their rights. Notwithstanding, in general terms, the judgment has been widely criticized, in addition to the above, mainly because it does not exhaustively address several aspects that are fundamentals to apply the established Framework by national courts. Consequently, they are clarifying them on a case by case basis. As a consequence, taking into account the international nature of companies involved in patent infringements' issues, we are heading towards dis-harmonization which may lead to the possibility of forum shopping by SEP holders.

In my view – that will be defended in Chapter 5 –, the solution is based on treating SEP owners' behaviour of bringing infringement actions seeking a prohibitory injunction and the recall of products as a ‘constructive’ refusal to license SEPs. By doing so, a more balanced protection of both parties is achieved, unlike what occurs under the approaches of the Commission (in *Samsung/Motorola*) and the ECJ (in *Huawei v. ZTE*) that lead to an overprotection of the SEP implementer, to the detriment of its proprietor; and of the *Orange Book*, that would entail the overprotection of SEP owners.

Applying the Commission criteria, that overprotection of SEP implementers is even greater. That, because it states that if the alleged infringer is willing to enter into a license agreement on FRAND terms – *i.e.* if it in the event that bilateral negotiations do not come to a fruitful conclusion, it accepts to be bound by a third party’s determination of a FRAND royalty rate –, the SEP owner – who gave a commitment to grant license on these terms – abuses its dominant position when bringing an action seeking for a prohibitory injunction. Whereas according to the ECJ, the SEP owner would abuse its dominant position if it does not react to the alleged infringer’s counter-offer – who already expressed its willingness to enter into a license agreement –, regardless of whether the alleged infringer accepts to be bound by a third party’s determination of royalties (see Section 4.6.1. above).

Therefore, what is positively remarkable about the *Huawei v. ZTE* judgment is that the approach taken by the ECJ does not entail, in practice – as the Commission’s one does (see Section 6.2. of Chapter 3) –, that in most of the cases courts will not issue prohibitory injunctions and recall of products. That is to say, it does not fully restrict the availability of these measures for SEP owners. Consequently, the ECJ dissociates a bit from Commission’s argumentation in *Samsung/Motorola*.

After the case *Huawei v. ZTE* (July 2015), the Commission’s position about bringing infringement actions by SEP owners is the following. On the one hand, it considers that the judgment is the new standard to solve the issue in question, because since that judgment, it has not opened any investigation against patentees for seeking prohibitory injunctions and recall of products. Note that according to its criteria, SEP holders would always abuse their dominant position when bringing infringement actions seeking for a prohibitory injunction. Therefore, it might be understood that Commission retreated from its *Samsung/Motorola* criteria. On the other hand, in the aforementioned Communication on Standardisation Priorities for the Digital Single Market (April 2016)[868], the Commission identifies that the uncertainty in enforcement of SEPs should be improved. Also in the Communication on Setting out the EU approach to Standard Essential Patents (November 2017)[869], it reckons that there is an urgent need to set out key principles that foster a balanced, smooth and predictable framework for SEPs.

Consequently, it seems that the Commission shares the opinion of the majority of legal scholars regarding that the approach of the ECJ in *Huawei v. ZTE*, is far from adequately

[868] Commission COM(2016) 176 final (n 674) 13, para 7.
[869] COM(2017) 712 final (n 81) 2, para 7.

resolving the conflict between the protection of IP (bringing infringement actions) and competition (the abuse of a dominant position), both key drivers of innovation and growth. Ultimately, as pointed out by Joaquín Almunia[870] – the former EU Commissioner in charge of Competition Policy –, the objective is to ensure that IP is not misused to the detriment of healthy competition and, ultimately, of consumers.

[870] Commission IP/14/490 (n 486), para 2.

CHAPTER 5. ACTIONS SEEKING A PROHIBITORY INJUNCTION AND THE RECALL OF PRODUCTS, ENVISIONED AS A 'CONSTRUCTIVE' REFUSAL TO DEAL. COMPULSORY LICENSING OF SEPS

Introduction

The lawfulness of the conduct consisting of bringing infringement actions seeking a prohibitory injunction and the recall of products by SEP owners against implementers, it was not questioned by European decision-making bodies until recently. It was in 2012, for the first time, when the Commission decided to initiate antitrust proceedings against Samsung and Motorola (see Chapter 3). And later on, in 2015, the ECJ delivered its judgment on the preliminary ruling regarding the *Huawei v. ZTE* case (see Chapter 4). In all three cases, the conduct was treated as a specific and novel category of abuse within the meaning of Article 102 TFEU. In *Samsung and Motorola*, the seeking and enforcement of injunctive reliefs (preliminary and permanent) was treated as an exclusionary abuse and the threat of seeking them, as an exploitative abuse. In *Huawei v. ZTE*, the seeking of a prohibitory injunction and the recall of products was also treated as an exclusionary abuse, although using different criteria.

During those years when the Commission and the ECJ were mulling their available options before they handed their decisions, an extensive debate took place among scholars regarding what should be the appropriate legal qualification of SEP holders' behaviour, both from the prism of competition law and contract law. Albeit I will make some reference to some legal standards proposed by them (*i.e.* to treat the conduct as an act of abusive litigation), they will not be described or discussed in detail, because that goes beyond the scope of this research.

Its objective – and in particular, of this chapter – is to construe the act of bringing infringement actions seeking and enforcing a prohibitory injunction (preliminary and permanent) and the recall or products, as a 'constructive' refusal to license SEPs, in the sense developed by the ECJ in *Magill*, *IMS Health* and *Microsoft*. Hence, the proposal does not draw a distinction between the acts of seeking interlocutory and permanent injunctions and it is focused only on the act of seeking those measures and their enforcement, excluding the 'threat' of seeking them that the Commission did also investigate.

Thereby, the analysis on refusal to grant IP licenses made in Chapter 2 constitutes the basis to generalize that argument. Qualifying the conduct under that suggested legal standard, the *Huawei v. ZTE* case would be consistent with the case law of the ECJ.

Accordingly, I defend that there was no need to view the seeking of injunctions for FRAND-encumbered SEPs as a *sui generis* or as an 'independent' form of abuse, as the Commission (in *Samsung* and *Motorola*) and the ECJ (in *Huawei v. ZTE*) did.

In *Magill* and *Microsoft* where the refusal to license IPRs was considered to be abusive, the measure imposed to remedy the infringement was the compulsory license (it was also imposed in *IMS Health*, but as an interim measure). Consequently, according to the legal qualification proposed regarding the 'constructive' refusal to deal, the compulsory license emerges as the most proportionate and necessary remedy to end – where applicable – the violation of Article 102 TFEU.

1. The *sui generis* abuse: the 'willing licensee' standard

As it has been analysed in previous chapters, the Commission and the ECJ construed the act of seeking injunctions as a specific and novel category of abuse and also did the German Federal Supreme Court in *Orange Book* regarding non-SEPs – where that category was first introduced. Note that according to their interpretation, it was not relevant whether courts ultimately granted injunctions or not, because the matter was to assess if SEP owners' conduct of seeking and enforcing injunctions was consistent with their obligations – to license on FRAND terms – under Article 102 TFEU[871].

The main element of the antitrust assessment of this novel substantive legal standard revolves around the concept of 'willing licensee'. That is to say, in general terms, SEP owners' behaviour is abusive if it brought actions seeking a prohibitory injunction and the recall of products against a licensee who is willing to enter into a license agreement. In contrast, seeking them against an 'unwilling licensee' would remain lawful.

Nevertheless, it exists several versions of that abuse and the definition given to the 'willing licensee' concept is also divergent. In the German judgment the 'willing licensee' test served as a procedural defence against injunctions and the given definition is the narrower one. While the Commission (in *Samsung* and *Motorola*) and the ECJ (in *Huawei v. ZTE*) viewed SEP owners' conduct as a substantive competition law offense[872]. With respect to the definition of the 'willing licensee', the Commission provided the wider one among the three definitions given and the ECJ adopted a definition that would be between the one adopted by the German court and that by the Commission, although it was more aligned with that provided by the latter.

Below, in Section 4.3.2.1., I will also refer to the concept of the 'willing licensee' that constitutes one of the elements of the abusive 'constructive' refusal to license SEPs – the category of abuse under which I consider SEP owners' behaviour should be assessed. Namely, once it is determined that *prima facie* seeking a prohibitory injunction and the recall of products constitutes an abusive conduct, it must be analysed whether that conduct might be objectively justified. Thus, if dominant undertakings show the presence of valid objective justifications, that provisional conclusion could not be corroborated and consequently, the behaviour in question would not be abusive. Among the available justifications, the fact of being an 'unwilling licensee' would be one of them. Hence,

[871] See references in (n 597).
[872] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 689, para 4.

unlike what occurs when SEP owners' behaviour is treated as a novel category of abuse (as the Commission and the ECJ did), the concept of the 'willing licensee' does not constitute the core element to assess *prima facie* the unlawfulness of the conduct. Because when construing the behaviour as a 'constructive' refusal to license, the essential nature of the IP (see below, Section 4.1.) and the anti-competitive effects (see below, Section 4.2.) constitute the fundamental elements for that assessment.

1.1. German Federal Supreme Court: *Orange Book*

In order to consider that the infringer is a willing licensee under the *Orange Book* approach (see 2.1.2.1. of Chapter 4), (i) the infringer must make an unconditional offer – not limited exclusively to cases of infringement – and the patent owner cannot reject it without violating the prohibition of discrimination or anti-competitive behaviour. In case the infringer considered that the licensor demanded excessive royalties or it refused to quantify them, its offer will be considered unconditional if it states that the licensor will determine the amount of royalties according to its own reasonable discretion. And (ii) the defendant must comply with the obligations that the future licencing agreement imposes in return for the use of the patent. Namely, it has to provide an exhaustive account of past acts of use and pay the amount of the royalty that it has itself calculated therefrom.

Note that to be an unconditional offer, the *Orange Book* judgment does not consider it necessary for the offer to also include the termination clause consisting of an explicit right for the licensor to terminate the agreement if, in the future, the licensee seeks to challenge the validity of the licensed patent. Nevertheless, it seems that in the case *Motorola v. Apple* – in which Commission's investigation against Motorola was based on – the Higher Regional Court of Karlsruhe interpreted that it was necessary, because it rejected Apple's Fifth Orange Book Offer due to the absence of that clause in the offer[873].

Consequently, the *Orange Book* standard might be described as patentee-friendly.

1.2. EC: *Samsung/Motorola*

In the press releases concerning a SO sent to Samsung – in which the Regional Court of Düsseldorf based on to argue its apparent contradiction with the *Orange Book* judgment when it requested for a preliminary ruling in *Huawei v. ZTE* –, the Commission had not yet explained in what circumstances an infringer might be regarded as being willing to negotiate. It was in the Motorola Prohibition Decision – that was adopted before the ECJ's preliminary ruling – where the Commission defined the concept of a 'willing licensee', keeping what it already stated preliminarily in the SO[874]. And then, Samsung's commitments implemented the concept in practical terms (see Section 5.3.4.3. of Chapter 3), stating that a willing licensee would be the one that within 30 days of receipt of an

[873] *Motorola* Commission Decision (n 7) [142].
[874] Commission MEMO/13/403 (n 636), 4th question.

invitation to negotiate, agreed to the Samsung's Licensing Framework to settle disputes over FRAND terms.

In Commission's[875] view, a willing licensee is the one that in the event that bilateral negotiations do not come to a fruitful conclusion, it accepts to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate, being irrelevant in that respect if the potential licensee challenges the validity, essentiality or infringement of the SEP or not.

The view of Regional Court of Düsseldorf in *Huawei v. ZTE* was aligned with the *Orange Book* approach. Therefore, it did not agree with the perspective of the Commission and it considered that the declaration consisting of the mere 'willingness to negotiate' on the part of the infringer might be made very easily and in such a way as to impose little obligation – non-binding nature –, since it might be changed, withdrawn and, if necessary, renewed at any time. Furthermore, it added that 'such a declaration does not include any specific terms, even though the licensing terms must be known in order for it to be possible to determine whether they are fair, reasonable and non-discriminatory. Even where a declaration does include specific terms, it is open to question whether those terms are serious. After all, the infringer may change or withdraw those terms at any time, or propose terms which are manifestly unreasonable'[876].

In the same vein, the ZTE company pointed out in its observations in *Huawei v. ZTE* that placing reliance only on the alleged infringer's mere 'willingness to negotiate' – as it was stated by the Commission – would result in pricing which falls well below the true economic value of the SEP (a reverse holdup situation). Conversely, placing reliance on the case law established by the BGH in *Orange Book* judgment would create the opposite problem, that is, the imposition of excessively high royalties[877] (a holdup situation).

1.3. ECJ: *Huawei v. ZTE*

In the same vein of the Advocate General[878], the ECJ also considered that the definition of 'willing licensee' given by the Commission was not sufficient to limit the SEP holder's right to bring an action for a prohibitory injunction. That standard was too licensee-friendly and in practice, it led to a *per se* rule against preliminary injunctions for SEP owners. For that reason, the ECJ did not keep Commission's standard on that regard.

According to the ECJ, the willing licensee is the one that (i) expresses its willingness to conclude a licensing agreement on FRAND terms once it receives the notification regarding the infringement by the SEP owner; (ii) diligently accepts the FRAND offer made by the SEP holder or submits a counter-offer promptly and in writing; and (iii) from

[875] *Motorola* Commission Decision (n 7) [438].
[876] *Huawei* AG (n 137) fn 19.
[877] ibid, fn 20.
[878] ibid [50].

the point at which its counter-offer is rejected, provides appropriate security in accordance with recognised commercial practices in the field, for example by providing a bank guarantee or by placing the amounts necessary on deposit.

Thus, unlike it was established by the Commission, according to the ECJ the submission of FRAND determination to a third party is not compulsory to consider the implementer as a willing licensee. The possibility of that submission is a mere suggestion for the patent owner and the alleged infringer. Nor it requires that the implementer's counter-offer includes the clause conferring the right to determine the amount of royalties to the SEP owner, according to its own reasonable discretion, as it was demanded in *Orange Book.*

All in all, although the ECJ's view of the 'willing licensee' is halfway between the definitions given by the BGH and the Commission, it is more licensee-friendly – as it was the approach of the Commission. Namely, the standard developed in the preliminary ruling also leads to an overprotection of the SEP implementer, to the detriment of its proprietor due to the following. Once the alleged infringer submits the counter-offer, the SEP owner is obliged to accept it. Because if it does not respond or once rejected the alleged infringer provided the appropriate security, the alleged infringer might use the competition law-based defence and the SEP owner would be liable for abusing its dominant position.

The logic behind that argument is that accepting the counter-offer, the SEP owner would be remunerated for the use of its SEP (thus achieving its goal). Notwithstanding, if it does not respond or rejects it and continues with the patent infringement proceeding seeking a prohibitory injunction or the recall of products, it would be understood that its purpose is to exclude competitors from the market (the anti-competitive effect, see Section 5 of Chapter 4). Consequently, if the SEP owner wants to avoid being liable for abusing its dominant position, it cannot submit an offer in response of the implementer's counter-offer or submit the determination of FRAND terms to a third party in response of that counter-offer – unless the alleged infringer also agrees on the latter – (see Section 4.5. and the 'Conclusion' of Chapter 4).

2. No need for a novel category of abuse

According to some competition economists, new legal standard should be adopted to avoid errors of type I (false convictions, or over enforcement). On FRAND licensing, for instance, the *United Brands* (see Section 2.1. of Chapter 2) standard has been described as unduly prohibitive and too licensee-friendly[879]. Whereas others believe that agencies and courts should develop them to avoid type II errors (false acquittals, or under enforcement). On the seeking of injunctions for SEPs, for instance, it has been stated that the *Magill/IMS Health/Microsoft* (see Section 4 of Chapter 2) test is unduly permissive, and very patentee-friendly[880] (see in this regard, Section 7.1. of this Chapter).

[879] Geradin, 'Pricing Abuses by Essential Patent Holders' (n 731).
[880] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 696, para 4 and 697, para 1.

In mi view, there was no need to view the seeking of injunctions for FRAND-encumbered SEPs as a *sui generis* or as an 'independent' form of exclusionary abuse, as the Commission (in *Samsung* and *Motorola*) and the ECJ (in *Huawei v. ZTE*) did. Instead, it should have been treated as a 'constructive' refusal to deal – to license SEPs – in the sense developed by the ECJ in *Magill*, *IMS Health* and *Microsoft*.

As it was explained in the previous two chapters, there are several negative consequences derived from that new construction based on the 'willing licensee' to assess the legality of SEP owners' behaviour. Nevertheless, it is convenient to mention them again here in a more systematic manner. There is no universally accepted rule to consider when a substantive test of abuse is 'good' or 'bad'. However, rules based on the notion of 'economic welfare', 'legal certainty' and 'consistency' make possible to assess if they derive positive or negative consequences from using the new legal standard. Moreover, there are also other rules on which to base to choose the 'good' legal standard, such as, innovation, efficiency, predictability, fairness or economic freedom[881], albeit they will not be studied here.

Notwithstanding, when selecting the 'best' category of abuse taking into account the criteria of economic welfare and legal certainty, economists and lawyers often disagree amongst themselves regarding what legal standard should prevail. Economists typically praise legal standards that limit decisional errors and promote economic welfare[882] and in contrast, many lawyers prefers tests of abuse that privilege legal certainty[883]. Regarding the latter, it also exists a wealth of conflicting views on whether legal certainty is promoted by 'forms-based' or 'effects-based' standards of abuse.

Those divergences result from the fact that 'economic welfare' and 'legal certainty' are subjective concepts. That is to say, they are the result of educational, ideological, psychological, social and other subjective biases. More specifically, antitrust lawyers and economists often (and justifiably) support tests of abuse that are aligned with their clients' interests (which may coincide with the public interest). And antitrust officials often support tests that promote the interests of their agency (which is often deemed to coincide with the public interest).

Whereas the rule based on the notion of 'consistency' considers that the use of a given legal standard is coherent when it is applied to scenarios that are related from a factual, legal and economic standpoint. Unlike other rules, 'consistency' is objective because it leaves little space for ideology, conflicts of interests, and other sources of bias and

[881] ibid 696-698.
[882] Damien Geradin and Nicolas Petit, 'Judicial Review in European Union Competition Law: A Quantitative and Qualitative Assessment' in M Merola and J Derenne (eds), *The Role of the Court of Justice of the European Union in Competition Law Cases* (Bruylant, 2012), 21.
[883] Jorge Padilla, 'Standards, Essential Patents and Antitrust' (2012) 3(6) Journal of European Competition Law and Practice 509.

prejudice. The concept of consistency is a derivative of general principles of EU law, such as the principle of legal certainty and the rule of protection of legitimate expectations, upheld by the Court in all areas of EU law[884].

2.1. No promotion of economic welfare: overprotection of licensees

The first negative consequence of treating SEP owners' conduct of bringing infringement actions seeking a prohibitory injunctions and the recall of products as a novel category of exclusionary abuse based on the 'willing licensee' concept, it is that overprotects implementers. Consequently, it does not promote economic welfare.

Under the legal standard developed in *Samsung* and *Motorola* by the Commission, the use of injunctions by SEP holders was prohibited *per se*[885], because in practice, the exceptional circumstances – that the standard on which the SEP read had a widespread adoption and that the holder of the SEP gave a commitment to license it on FRAND terms – will be present. Moreover, virtually always, the implementer will be willing to negotiate a FRAND license, in the sense of accepting to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate in the event that bilateral negotiations did not come to a fruitful conclusion. Therefore, in the majority of cases, SEP owners' conduct will constitute an abuse of a dominant position (see Section 6.2. of Chapter 3).

As it was mentioned previously in Section 1.3., the legal standard developed by the ECJ in *Huawei v. ZTE* obliges the owner to accept the counter-offer submitted by the alleged infringer in order to avoid being liable for abusing its dominant position, without the possibility of not responding, of presenting a counter-offer or of submitting the determination of the FRAND terms to a third party. That, because from the moment the alleged infringer submits the counter-offer or provides the appropriate security – in case the counter-offer has been rejected –, it is allowed to use the competition-law based defence.

Accordingly, it might be concluded that under the 'willing licensee' category of abuse, the right to an injunction ceases when a FRAND commitment is given. Namely, it implies that the SEP holder implicitly waives its right to judicial remedies against third parties. However, the forms customarily used for FRAND declarations contain no explicit waiver of injunctive relief, and in the rules of all major SSOs there is no such a waiver (usually, their IP policies say nothing about injunctions). The exception would be the aforementioned patent policy of the IEEE-SA[886] (see Section 'Background' of the Introduction) that since 2015, it limits the use of injunctions to the case the implementer

[884] Nicolas Petit, 'The future of the Court of Justice in EU competition law – New role and responsibilities' (2012) SSRN Electronic Journal, 8, para 4 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2060831> accessed 6 June 2019; Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 696, 697 and 698, paras 2-4.
[885] Padilla, 'Standards, Essential Patents' (n 883) 510.
[886] IEEE-SA Standards Board Bylaws 2017 (n 66).

refuses to accept a third party adjudicated rate. That implied waiver would breach the general principle of law regarding that implied waivers are not allowed, so the novel category of abuse would infringe that general principle of the EU law, so it would not be consistent from a constitutional perspective[887].

As a consequence, SEP owners' incentives to invest in innovation would be diminished, because they could not seek for judicial measures – prohibitory injunction and the recall of products – to protect their SEPs when they are being infringed. Moreover, when licensing their SEPs, although they would recover the production costs, they would not recover the heavy costs that they have to bear in research and development nor gain a reasonable profit, because they would be obliged to accept the counter-offer submitted by the implementer – which terms might be below FRAND –, in order to avoid being liable for abusing their dominant position.

2.2. Legal uncertainty

The second negative consequence is that the legal standard developed by the Commission and the ECJ brings legal uncertainty.

If the legal clarity provided by the Commission in *Samsung* and *Motorola* was such as it was stated by Joaquín Almunia – the former Commission Vice President in charge of competition policy – (see Section 6.4. of Chapter 3), the Regional Court of Düsseldorf would not have requested for a preliminary injunction to the ECJ in the SEP-based litigation between *Huawei* and *ZTE*, that was based on the apparent contradiction between the *Orange Book* judgment ruled by the German Federal Supreme Court and *Samsung* case.

In particular, as it was analysed above, the Framework established in *Huawei v. ZTE* does not exhaustively address several aspects that are fundamentals for its application by national courts, thus creating many legal loopholes that are being clarified case by case by them, which may lead to the possibility of forum shopping by SEP holders. Note that after the case *Huawei v. ZTE,* the Commission – in two Communications[888] – has identified that the uncertainty in enforcement of SEPs should be improved and it has reckoned that there is an urgent need to set out key principles that foster a balanced, smooth and predictable framework for SEPs (see Section 'Conclusion' of Chapter 4).

2.3. Internal inconsistency

The third negative consequence of treating SEP holders' behaviour as a novel category of exclusionary abuse based on the 'willing licensee' concept by the Commission (in *Samsung* and *Motorola*) and the ECJ (in *Huawei v. ZTE*), it is that is not internally consistent with existing law under Article 102 TFEU, in particular, with the legal standard

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[887] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 711, para 5 and 712, para 1.
[888] Commission COM(2016) 176 final (n 674) 13, para 7; COM(2017) 712 final (n 81) 2, para 7.

of 'refusal to license IPRs' (see Section 4 of Chapter 2) developed by them previously. The above, because the case *Huawei v. ZTE* is not a new one – it is not distinguished enough from older ones such as *Magill, IMS Health* or *Microsoft.*

Even if that was the case, the new standard would not be internally consistent either if the Commission or the ECJ would not explicitly reverse the old legal standard and give cogent reasons for such reversal, especially where they seek to avoid existing limiting standards. That was the case regarding the case law on refusal to grant IP licenses (see Section 4.6.2. of Chapter 2). That is the reason why when I suggest that SEP owners' behaviour should be treated as a 'constructive' refusal to grant IP licenses, I consider that a critical review of *IMS Health* jurisprudence is needed (see below, Section 3.1.2.).

All in all, although there was no decisional practice or case-law regarding the lawfulness of SEP owners' behaviour consisting of bringing infringement actions seeking a prohibitory injunction and the recall of products in the EU, it should have been treated on the basis of an existing test of abuse – the refusal to grant IP licenses –, rather than under a novel category of exclusionary abuse as the Commission and the ECJ did. That, because existing legal standards are by definition lawful, practicable and predictable and new standards are not[889].

3. Application of existing legal standards

As aforementioned before, I defend that Huawei's – SEP owner – conduct should have been qualified by the ECJ as an abusive refusal to deal – to grant SEP licenses –, instead of as a novel category of exclusionary abuse within the framework of Article 102 TFEU. Accordingly, when the elements of the antitrust are not present, the prohibitory injunction and the recall of products will be granted. In addition, when the competitive relationship does not exist between the SEP owner and the implementer, the latter might defend itself through the contract law approach (that falls generally under the jurisdiction of the Member States), suing the SEP owner (*i.e.* the NPE) for the breach of the contract based on third-party beneficiary status.

From the competition law perspective, there is a scholar[890] (Petit) who also considers that there was no need for a new legal standard, albeit his argument is different from the one proposed below. In his view, the existing 'abusive or vexatious litigation' is *a priori* applicable to SEP owners' conduct and it should be the relevant legal test in the context of the ongoing global smartphone war. When Motorola was investigated by the Commission[891], the SEP owner was also of the opinion that the 'abusive litigation' was the applicable standard. This abusive behaviour was set out in *ITT Promedia*[892] and the

[889] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 698, para 7 and 699, para 1.
[890] ibid 684, paras 3 and 4, 686, para 5, 687, para 2 and 719, para 2; See more on 'abusive or vexatious litigation' at: Ioannis Lianos and Pierre Regibeau, '"Sham" Litigation. When Can It Arise and How Can It Be Reduced'? (2017) 62(4) Antitrust Bulletin 643.
[891] *Motorola* Commission Decision (n 7) [527]–[534].
[892] *ITT Promedia* (n 151) [55]–[60] and [72]; For a discussion of this case and of its implications in relation

required conditions to find an infringement were nuanced by the GC in *Protégé International* [893] and the CFI in *Tetra Pak*[894]. In order to consider that the behaviour of a SEP owner constitutes an abusive litigation, it would have to be demonstrated that seeking a prohibitory injunction: (i) cannot reasonably be considered as an attempt to establish the rights of the SEP owner and therefore only serves to harass its competitor; and (ii) that it has been conceived in the framework of a plan whose goal is to eliminate competition[895]. Nevertheless, the scholar also recognizes that this is a very restrictive test, since the two cumulative criteria constitute an exception to the fundamental right of access to the courts. So the conditions for its applicability limit the application of 'abusive litigation' to the act of seeking injunctions by SEP owners.

3.1. 'Constructive' refusal to license

3.1.1. General description

The act of bringing infringement actions seeking a prohibitory injunction and the recall of products in court reveals that the SEP holder has not concluded a licence with the defendant. And this will typically occur because the patent holder has offered the defendant a licence to its patents on terms that the defendant does not consider to be FRAND, so it uses the SEP without paying royalties. Against that infringement, the SEP owner may bring infringement actions seeking a prohibitory injunction, the recall of products, the rendering of accounts and damages.

The antitrust concern arises when the aim of bringing the aforementioned actions is not to seek measures against the infringement, but to exclude the competitor – who is infringing its SEP – from the market. The ultimate aim of the SEP owner should be to be remunerated for the use of its SEP. That would occur if the court ordered the payment of FRAND royalties in the form of awarding damages – increased, where appropriate, to stimulate implementers to apply for a license –, as long as the infringer is not in financial distress. However, taking into account the essential nature of the SEP for competitor's activity, if instead of seeking the award of damages the SEP owner seeks a prohibitory injunction and the recall of products, it might be interpreted that its ultimate aim is not to be remunerated but to exclude the competitor from the market.

Namely, the SEP holder has other actions available to fight against patent infringement, such as the action for the rendering of accounts relating to past acts of use of the patent or compensation for damages caused by those acts. These actions keep open the possibility for the parties to conclude a license agreement in the future, since they do not pursue the exclusion of the product of the competitor/infringer from the market.

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to injunctions, see Miguel Rato and Nicolas Petit, 'Abuse of Dominance in Technology-Enabled Markets: Established Standards Reconsidered?' (2013) 9(1) European Competition Journal 1.

[893] Case T-119/09 *Protégé International Ltd v Commission* (GC, 13 September 2012), paras 52 and 57.

[894] *Tetra Pak* [CFI, 1994] (n 93) [151].

[895] Alfaro Águila-Real, *El abuso de posición dominante* (n 109), para 96 *in fine*.

In my view, the fact that a SEP owner committed to grant licenses on FRAND terms means that it cannot refuse to grant them unless it is justified by some objective reason that is verifiable. Consequently, actions seeking a prohibitory injunction and the recall of products may be envisioned as an implied 'refusal to supply', or, to be more accurate, as a 'constructive' refusal to supply. Refusals to license IPRs are categorized as 'refusals to supply' by the Commission[896] and it would be 'constructive' in the sense that there is no 'actual' refusal: at most, only a refusal to grant a licence on terms that the alleged infringer considers not to be FRAND. As the Commission states, the concept of a refusal to deal covers not only situations of pure or straightforward refusal, but also instances of agreement by the dominant company to deal but under unreasonable or uneconomic conditions. Namely, it is not necessary for there to be actual refusal on the part of a dominant undertaking, 'constructive' refusal is sufficient. In the case of SEP owners, 'constructive' refusal would involve the imposition of unreasonable conditions in return for the license, which causes the implementer to infringe the SEP and for the patent owner to bring infringement actions.
On the contrary, there are those who[897] consider that the conduct of SEP holders does not constitute a refusal to grant licenses, but it rather evidences a desire to grant them and it also shows that owners will not tolerate continued infringements anymore. Accordingly, in their view, bringing infringement actions may serve as a tool for the parties to negotiate license agreements.

The refusal to deal – to grant IP licenses – is an existing category of exclusionary abuse developed by the ECJ in *Magill*, *IMS Health* and *Microsoft* (see Chapter 2). Under this case law, a refusal to grant a licence to an IPR can only be abusive in 'exceptional circumstances' that prevent the development of a secondary market. By and large, those circumstances are present if four cumulative conditions are met, namely that the refusal: (i) concerns a product or service 'indispensable' for carrying on a particular business; (ii) prevents the emergence of a 'new product' for which there is potential consumer demand; (iii) is unjustified; and (iv) is such as to exclude any competition on a secondary market which the dominant firm seeks to 'reserve' for itself[898].

Therefore, as it was noted before, I consider that *Huawei v. ZTE* should have been treated as a 'constructive' refusal to license SEPs in the sense developed by the jurisprudence of the ECJ in *Magill*, *IMS Health* and *Microsoft*[899]. Accordingly, the starting point to qualify

[896] Commission, 'Commission note Roundtable on refusals to deal' DAF/COMP/WD(2007)100, para 9; Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), paras 78 and 79.
[897] Rato and English, 'An Assessment of Injunctions' (n 794) 106, para 3 (according to them, injunction requests in respect of SEPs are likely to evidence a desire to grant a license rather than tolerate continued infringement and they can serve as a powerful call to the negotiation table).
[898] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 682, para 5 and 683, para 1.
[899] Cyril Ritter, 'Refusal to Deal and Essential Facilities: Does Intellectual Property Require Special Deference Compared to Tangible Property?' (2005) 28(3) World Competition: Law and Economics Review 281, 13 ('There are at least four more or less strong arguments why IP probably does not deserve 'special deference' compared to tangible property') (of the version available at <https://ssrn.com/abstract=726683> accessed 31 July 2018); Padilla, Ginsburg and Wong-Ervin, 'Antitrust Analysis Involving Intellectual

as abusive the fact of bringing actions for a prohibitory injunction and the recall of products, it is to consider that conduct as a 'constructive' refusal to grant SEP licenses, in consistency with a critical review of *IMS Health* jurisprudence (see below, Section 3.1.2.).

Although the *Magill*/*IMS Health*/*Microsoft* standard has been abundantly commented in the literature, its applicability to the issue of patent injunctions, however, has been less discussed. For instance, basing on Commission's decision in *Google/Motorola Mobility*[900], scholars such as Petit[901] interprets that the *Magill*/*IMS Health*/*Microsoft* does not seem to be the appropriate legal standard to apply to the seeking of injunctions over SEPs. That, because in that decision the Commission expressly accepted that the *Magill* test could apply to the seeking of injunctions over non-SEPs. And in contrast, the decision envisioned a distinct and somewhat unclear legal test in relation to SEPs. On the contrary, Camesasca and others[902] understand that 'a decision to seek an injunction cannot be seen mechanically as a refusal to license, but merely as an option in the context of procedures that balances the incentives of both SEP holder and prospective licensee'. For instance, Jones[903] also shares the opinion of the ECJ, because she understands that the issue in *Huawei v. ZTE* does not correspond to the abusive category established in *Magill*, *IMS Health* or *Microsoft* – *i.e.* refusal to grant IP licenses. So she considers it is preferable to use that category only in generic form to solve the issue raised in *Huawei v. ZTE.*

Emanuelson[904] and Körber[905] – although with distinct arguments – are of the opinion that it would be difficult to apply the four circumstances established in the *Magill* test to SEP owners' behaviour. Accordingly, they suggest to consider that the FRAND commitment in and of itself would qualify as an 'exceptional circumstance'. That is to say, in order to conclude that the behaviour of SEP holders is abusive, the presence of the following two circumstances is sufficient. First, that the SEP owner did not grant licenses on FRAND terms – when being committed to grant them – and second, that it brought the infringement actions against the alleged infringer. However, this truncated refusal to supply approach has been criticised[906] for not being logical, as it would mean that 'whole sectors of industry might find themselves in so-called exceptional circumstances, which

Property' (n 386) 22, para 4 ('Conduct(s) involving IP, including FRAND-assured SEPs, will be analyzed under the same antitrust analysis applied to conduct involving other forms of property, taking into consideration the special characteristics of IPRs, such as ease of misappropriation').

[900] (n 523) [59].

[901] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 684, para 2.

[902] Peter Camesasca and others, 'Injunctions for Standard-Essential Patents: Justice is not Blind' (2013) 9(2) Journal of Competition Law & Economics 285, 286, para 3 and 287, para 4.

[903] Alison Jones, 'Standard-Essential Patents: FRAND Commitments, Injunctions and the Smartphone Wars' (2014) 10(1) European Competition Journal 1, 21, para 2 ('[…] as the seeking of an injunction does not seem to fall squarely within either of these categories of abuse, it might be preferable to rely on these lines of cases more generally […]').

[904] Anna Emanuelson, 'Standardisation Agreements in the Context of the New Horizontal Guidelines' (2012) 2 European Competition Law Review 75.

[905] Torsten Körber, *Standard Essential Patents, FRAND Commitments and Competition Law* (Nomos 2013), 216.

[906] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 705.

could be considered somewhat bizarre'[907]. Nonetheless, their approach – that was suggested before the Commission adopted its decisions in *Samsung/Motorola* – is in line with that sustained by the Commission in those cases. The Commission stated the conduct of a SEP holder was abusive when these three elements were present: the owner had committed to grant licenses on FRAND terms; the alleged infringer was willing to enter into a license agreement to use the SEP on those terms; and the owner's conduct was not objectively justified.

A different view is expressed by Maume[908] who considers that the judgment of the ECJ in *Huawei v. ZTE* is a straight continuation of *IMS Health*, with the difference that the Court did not mention the new product requirement – *i.e.* the second requirement established in the *Magill* test that requires that the refusal prevents the emergence of a new product for which there is a potential demand. Thus, he concludes that the *Huawei* decision should not be considered a typical application of the Essential Facilities Doctrine, but a refusal-to-deal discrimination case, because Huawei refused to grant a license to a specific implementer – ZTE –, excluding arbitrarily its products from the market.

In view of Rato and English[909], once the ECJ stated that the conduct of Huawei could not be qualified as a refusal to grant IP licenses in the sense defined in *Magill*, *IMS Health* and *Microsoft*, it should have concluded that the conduct was not abusive. However, the ECJ relied on two exceptional circumstances – that the patent was essential and the SEP owner committed to license it on FRAND terms – to justify its decision of construing a novel category of exclusionary abuse.

3.1.2. Critical review of *IMS Health*

As it was concluded in Section 4.6. of Chapter 2, the subsequent application of the *Magill* test to diverging facts, as ocurred in *IMS Health* or *Microsoft,* it provoked the modification of the 'original' circumstances established in that test without an appropriate legal reasoning to substantiate these amendments. Consequently, legal standards applied in *IMS Health* and *Microsoft* were not internally consistent[910] with each other nor with the one developed in *Magill.* Thereupon, the above created a legal uncertainty about which were the required circumstances to consider a refusal to license IPRs as an abuse of a dominant position.

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[907] Bo Vesterdorf, 'IP Rights and Competition Law Enforcement Questions' (2013) 4(2) Journal of European Competition Law and Practice 109.
[908] Philipp Maume, 'Huawei ./. ZTE, or: How the CJEU Closed the Orange Book' (2016) 6(2) Queen Mary Journal of Intellectual Property 207, 224, para 1.
[909] Rato and English, 'An Assessment of Injunctions' (n 794) 107, paras 3-5 and 112, para 4.
[910] On the contrary, see Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 701, para 5 (he considers that reviewing requests for injunctions or threats of injunctions under the abusive refusal to supply standard meets the requirement of internal consistency, because that test is rooted in established Article 102 TFEU case law).

Therefore, in order to treat the *Huawei v. ZTE* case as a 'constructive' refusal to license SEPs, it is necessary first to undertake a critical review of the *IMS Health* jurisprudence. The criteria established in *Magill* should have been reviewed in *IMS Health*, where the refusal prevented the emergence of an existing product and the object of the license was an essential copyright to implement a *de facto* standard. Both facts differed from those of *Magill*, where the refusal prevented the emergence of a new product and the object of the license were weekly television programme listings protected by copyright.

With the proposed critical review of the *IMS Health* jurisprudence, a double objective would be achieved. One, it would prevent the GC, the ECJ and the Commission from issuing decisions that are not internally consistent with each other in relation to the circumstances that should be present in order to consider a refusal to grant licenses as an abuse of a dominant position (note that the *Magill* test was subsequently applied in *Tiercé Ladbroke*, *Bronner, IMS Health* and *Microsoft*).

And two, the reviewed legal criteria would be applicable to any refusal to grant IP licenses, whatever the type of IPR. For instance – as it will be broadly analysed in the following Sections from 4 to 7 –, it would be applicable to the 'constructive' refusal to grant SEP licenses, that are relevant to implement *de jure* standards (*e.g. Huawei v. ZTE*). But also when the object of the license is an essential IPR to implement a *de facto* standard (*e.g. Orange Book* – a non-SEP – and *IMS Health* – a copyright).

It would be applicable to IPRs that read on *de facto* and *de jure* standards, because the fact of having granted FRAND commitments – the licensing rule under which SEPs that read on *de jure* standards must be licensed – by the SEP holder does not constitute a relevant circumstance according to the suggested legal standard of 'constructive' refusal to license SEPs, that is based on the critical review of the *IMS Health* jurisprudence (the competition law approach). Recall that the ECJ in *Magill*, *IMS Health* and *Microsoft* considered as abusive the refusal of the owners who did not give any commitment to grant IP licenses. Hence, it may be even more likely to be considered as abusive, the refusal of SEP owners who did commit to grant licenses on FRAND terms[911].

Nevertheless, according to the Commission in *Samsung/Motorola* and the ECJ in *Huawei v. ZTE*, SEP owners' commitments to licence on FRAND terms were considered an exceptional circumstance. According to the proposal studied in this research, the fact of having granted a FRAND commitment and above all, its contractual nature is indispensable only to apply the breach of contract approach (see below, Section 3.2.), but not to assess SEP owners' behaviour from the competition law perspective.

911 Urska Petrovčič, *Competition Law and Standard Essential Patents: A Transatlantic Perspective* (Kluwer Law International 2014) 105 and 106.

As it will be studied in detail below in Section 4, the suggested critical review is based on the following. Firstly, the 'indispensability' requirement – that constituted the first element in *Magill* – remains as it was originally defined.

Secondly, I will refer to the anti-competitive effects that seeking a prohibitory injunction and the recall of products may be capable of causing on competition and consumer welfare. Regarding consumers, I will broadened the second element of the *Magill* test that requires that the refusal prevents the emergence of a 'new product'. Hence, I will consider necessary that the no-emergence of a product may affect consumer welfare on the whole, either because consumers will not be able to enjoy a new product, a more economical one or an interoperable one. Concerning competitors, I will also extend the fourth element of the *Magill* test concerning the 'reservation of the secondary market'. I argue that although it is indispensable the existence of a competitive relationship between the SEP owner and the alleged infringer, it is not needed the presence of two separate markets, being sufficient to exist two different stages of production interconnected, inasmuch as the upstream product is indispensable for the supply of the downstream product.

And thirdly, I allude to the possible objective excuses that the SEP owner may allege to justify its behaviour. In *Magill*, the ECJ referred to the 'arbitrary refusal' as the third element of the test. Thus, albeit *prima facie* the behaviour of the SEP owner may constitute an abuse of a dominant possition according to the antitrust assessment proposed, that conclusion will not be confirmed if the dominant undertaking shows an objective excuse for that conduct.

3.2. Breach of contract

When the competitive relationship does not exist between the SEP owner (*i.e.* a NPE, a pure licensor with no productive activity) and the implementer, the latter might use the contract law approach. That, because the legal standard of 'constructive' refusal to license that I propose would not be applicable, since seeking a prohibitory injunction or the recall of products would not cause the exclusion of a competitor from the market (the anti-competitive effect on competition would be missing).

In order to use that approach as a defence against the patent infringement lawsuit, it must be interpreted that from the commitment to grant licences on FRAND terms given by SEP owners to SSOs, a contractual obligation to license arises, and that the seeking of injunctions breaches that contractual duty. More specifically, the infringer could argue that the SEP holder breached the contract in favour of third parties. Thus, according to the proposal of applying existing legal standards to assess SEP owners' behaviour, as mentioned before (see above, Section 3.1.2.) FRAND commitments are only relevant from the contract law perspective, but not when the conduct is treated as a 'constructive' refusal to license SEPs, where what matters are the anti-competitive effects.

Indeed, several are of the opinion that when SEP owners give a FRAND commitment, they actually sign a license agreement, because it is not just an obligation or commitment to license and negotiate the terms afterwards[912]. Consistent with that view, multiple US courts[913] have adopted the general theory of liability that patent holders – who make FRAND commitments to an SSO – may be liable in contract. In addition, US courts perform more actively in determining the licensing terms when negotiations are deadlocked.

In the same vein, in the EU, the Advocate General Wathelet[914] and some scholars[915] consider that in any case – even when there is a competitive relationship between the SEP holder and the alleged infringer – the matters in *Huawei v. ZTE* could be adequately – if not better – resolved in the context of other branches of law, referring to contract law, relying on the breach of the third-party-beneficiary contract[916].

Albeit most of the scholars base their argument on the breach of the third-party-beneficiary contract, there are some[917] who rely on the breach of the plaintiff's duty to perform in good faith. That is to say, if the plaintiff is obliged to grant a license under competition law and the defendant has declared that it will accept reasonable licensing conditions, the defendant can argue that it contradicts good faith and constitutes an abuse

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912 Geradin and Rato, 'FRAND Commitments and EC Competition Law' (n 167) 145, para 2; Suñol, 'Patentes y hold-up' (n 21) 17, para 2.

913 Case *Research In Motion Ltd. v. Motorola*, *Inc*., 644 F. Supp. 2d 788, 797 (N.D. Tex. 2008); Case *Microsoft Corp. v. Motorola, Inc*., 854 F. Supp. 2d 993, 999 (W.D. Wash. 2012) ('The court agrees with Microsoft that through Motorola's letters to both the IEEE and ITU, Motorola has entered into binding contractual commitments to licence its essential patents on RAND terms'); Case *Apple, Inc. v. Motorola, Inc.,* 886 F. Supp. 2d 1061, 1083 (W.D. Wis. 2012) ('In this case, the combination of the policies and bylaws of the standard-setting organizations, Motorola's membership in those organizations and Motorola's assurances that it would licence its essential patents on fair, reasonable and nondiscriminatory terms constitute contractual agreements'); Case *In re Innovatio IP Ventures, LLC Patent Litig*., 921 F. Supp. 2d 903, 923 (N.D. Ill. 2013) (N.D. Ill. 2013) ('The longstanding rule in Illinois, and elsewhere, is that 'the promisee of a third-party-beneficiary contract may bring suit for a breach of that contract and recover damages therefor').

914 *Huawei* AG (n 137) [9].

915 Ginsburg, Wong-Ervin and Wright, 'The Troubling Use of Antitrust' (n 167); Suñol, 'Patentes y hold-up' (n 21) 40, para 4; Delrahim Makan, 'Good Times, Bad Times, Trust Will Take Us Far: Competition Enforcement and the Relationship Between Washington and Brussels' (College of Europe in Brussels, 21 February 2018) <https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-college-europe-brussels> accessed 3 December 2018; Francisco Marcos Fernández, 'Remedios y obligaciones impuestos por las autoridades de defensa de la competencia' (2018) 10(1) Cuadernos de Derecho Transnacional 331, 364, para 104.

916 The AG also referred to the fact that the matters at issue in the dispute before the referring court, could be better resolved by mechanisms other than the rules of competition law, alluding to the intervention of SSOs, see *Huawei* AG (n 137) [9] and [11]: ('[...] it seems clear to me that the risk of the parties concerned being unwilling to negotiate or of the negotiations breaking down could, at least in part, be avoided or mitigated if standardisation bodies were to establish minimum conditions or a framework of 'rules of good conduct' for the negotiation of FRAND licensing terms. Without these, not only actions for a prohibitory injunction but also the rules on abuse of a dominant position, which should be employed only as solutions of last resort, are being used as a negotiating tool or a means of leverage by the SEP-holder or the undertaking which implements the standard and uses the teaching protected by that SEP').

917 Thomas Hoppner, 'Competition Law in Intellectual Property Litigation: The Case for a Compulsory License Defence under Article 102 TFEU' (2011) 7(2) European Competition Journal 297, 306, paras 1 and 2.

of rights to use the IP to ask for an injunction. Basing on the Roman law principle *dolo agit qui petit quod statim redditus est* – that is a general principle of present day private law –, nobody can demand something by way of an injunction which, as a consequence of a counterclaim by the other party, he will immediately have to return (here in the form of the grant of a license). Such an action would infringe the principle of good faith as contained in Member States' and US contract law.

The Advocate General also refers that the issue would be better resolved using mechanisms other than the rules of competition law, that is, with a greater intervention of SSOs. That is to say, he[918] states that if FRAND licensing terms are a matter entirely for the discretion of the parties and, where appropriate, the civil courts or arbitration tribunals, it seems clear for him that the risk of the parties concerned being unwilling to negotiate or of the negotiations breaking down could, at least in part, be avoided or mitigated if standardisation bodies were to establish minimum conditions or a framework of 'rules of good conduct' for the negotiation of FRAND licensing terms.

In that regard, it has also been suggested by some scholars[919] that when licensing negotiations break down, SSOs should adopt the following proposal (instead of SEP owners seeking an injunction against infringers). In case parties would not reach an agreement on royalties, the portfolio royalty rate would be determined through binding arbitration. Specifically, throught baseball-style arbitration, under which each party submits its final offer to the arbitrator, who then must pick one of those two offers.

At any event, the contract law approach will not be subject of further study in this research, that is focused on the competition law perspective.

4. The legal test for the abuse

The aim of this section is to establish the substantive conditions that must be present to find an infringement defined as a 'constructive' refusal to licence SEPs, based on the critical review of the *IMS Health* jurisprudence. Accordingly, it is focused on the test of abuse and it does not analyse the other constituent elements that must be present to find an infringement under Article 102 TFEU – *i.e.* relevant market, dominant position and effects on trade between Member States. For the purpose of suggesting this legal standard based on the aforementioned critical review, the presence of those other elements is presumed. Moreover, the peculiarities that may exist regarding those other elements when the possible antitrust behaviour involves a SEP, they were already studied in Sections 5.1., 5.2. and 5.4. of Chapter 3.

I suggest that in order to consider that bringing actions for a prohibitory injunction or the recall of product constitutes a 'constructive' refusal to license SEPs, the following

[918] *Huawei* AG (n 137) [11].
[919] Mark A Lemley and Carl Shapiro, 'A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents' (2013) 28(2) Berkeley Technology Law Journal 1135, 1138, para 4, 1141, para 2.

circumstances must be present cumulatively. Firstly, the SEP must be essential for the exercise of the competitor's activity. Secondly, actions seeking a prohibitory injunction and the recall of products must be capable of causing anti-competitive effects on competition and consumer welfare. And thirdly, the objective justifications of the SEP owner's conduct must be absent.

4.1. Essentiality

First, the IP in question must be objectively essential or indispensable for the exercise of the competitor's activity and to be able to compete effectively on the market, in the sense that there is no real or potential substitute of the IPR. This requirement remains as it was defined in originally in *Magill* (see Section 4.4.3.1. of Chapter 2). In addition, the definition of the 'potential substitute' concept established in *Bronner* (see Section 4.5.1.1. of Chapter 2) also remains unmodified.

In that regard, according to the ECJ in *Bronner*, if there were any technical, legal or economic obstacles capable of making impossible or even unreasonably difficult for other competitors to create or invent a substitute of the protected creation or invention by the IPR, it will be considered that no potential substitutes exist. When assessing the presence of these obstacles to determine the existence of potential substitutes, different entry barriers (see Section 1.2.2.3. of Chapter 1), such as sunk costs or regulation, that are taken into account to determine if the undertaking holds a dominant position, they might be considered as economic or legal obstacles.

When the IPR in question is a SEP, it does not imply *per se* that there are no other alternative technologies available on the market (real substitutes). Or that there is not a possibility of inventing an alternative to the SEP – of designing around the patent – that does not infringe the protected patent nor compromise the essential functions of the product (potential substitute).

Consequently, it is important that the assessment of the essential nature of the IPR is made thoroughly. That is to say, not defining it too narrowly. But neither too broadly, as it might have occurred in *IMS Health*, where the '1860 brick structure' was considered essential for the exercise of competitor's activity, when potential substitutes existed (see Section 4.5.1.1. of Chapter 2 and the 'Conclusion' of the same one). Indeed, as it was pointed before[920], more often than not, the ability of a determined rival to compete around the protected IPR – with resulting benefits to consumers – has been underestimated, particularly with respect to fast moving technologies, where technological and market developments can present multiple opportunities to work around a competitor's IPR.

Notwithstanding, in most of the cases the SEP in question will be essential because they protect a technology necessary to implement a *de jure* interface standard. Recall that

[920] See references in (n 386).

interface standards address especially the needs for interconnection and interoperability between products in a multi-vendor, multi-network and multi-service environment, which refers to the fact that complex ICT systems must communicate and interwork on all levels[921] (see Section 'Background' of the Introduction). Accordingly, competitors willing to manufacture a product compliant with that standard, will need to use the SEP. Therefore, albeit it might be technically possible to design around the technology protected by the SEP, the manufactured product that implements the alternative technology will not be interoperable for not being compliant with the *de jure* standard. Namely, the election of a technology that reads on a *de jure* standard – protected by a SEP – or that does not read on it – covered by a non-SEP –, it will compromise the interoperable function of the manufacturer's product, which constitutes one of its essential functions.

Subsequently, the potential alternative technology would not be considered as a substitute of the technology protected by the SEP. Thus, the SEP would be regarded as objectively essential or indispensable for the exercise of competitor's activity and to be able to compete effectively on the market.

4.2. Anti-competitive effects

The second element that comprises the reviewed refusal to licence standard is that the refusal – *i.e.* the fact of bringing infringement actions seeking a prohibitory injunction or the recall of products – must be capable of causing anti-competitive effects on competition and consumer welfare.

4.2.1. Competitors' exclusion and market reservation

The refusal – *i.e.* the act of seeking a prohibitory injunction and the recall of products – must be capable of excluding competitors from the market, so that market might be reserved by the IP owner for itself. For the purpose of Article 102 TFEU, it is irrelevant whether the desired result – the exclusion and subsequent market reservation – is finally achieved or not. For example, in SEP cases, the exclusion will be effective only when the court orders the prohibition of the continuation of the SEP infringement and the recall of the goods that it found to be infringing the SEP and the SEP holder enforces them.

In *Magill*, the definition of the market is limited to a secondary, ancillary or downstream market. That is to say, it requires that the dominant IP owner must be present in both the main and the ancillary markets and the refusal is liable to, or is likely to, eliminate, immediately or over time, all effective competition in the downstream market. Accordingly, it required the presence of vertically integrated firms who supply products implementing their technology, because the theory of harm underpinning the aforementioned case law is a 'transfer of power' theory: a firm refuses to license in order

[921] See references in (n 4) and (n 5).

to leverage its dominant position into a secondary, adjacent market[922] (see Section 4.4.3.4. of Chapter 2).

In *IMS Health*, the IP owner was not present in a secondary market, but in a vertically related one, so the refusal was capable of causing the reservation of another stage of production – different from that in which the dominant one was located. Consequently, the ECJ stated in that case that is sufficient that the refusal may cause the exclusion of competition in a vertically related market, that is to say, in a downstream production stage (see Section 4.5.3 of Chapter 2).

In my view, the ECJ should have gone further when broadening this element in *IMS Health*. Thus, in line with the extension of the concept of 'market' established in that case, this element should have been reviewed in the sense of requiring that the refusal – *i.e.* SEP owners' behaviour of seeking exclusionary measures – must be capable of preventing the entry or continuation of competitors: (i) in a secondary market, regarding the one that is dominated; or (ii) in a vertically related market, hindering the entrance of competitors to another stage of production – different from that in which the dominant one is located[923]; or (iii) in a market where the dominant is present[924]. At any event, with the aim of reserving the market from which competitors might be excluded, to itself – to the SEP owner.

Indeed, in standardized markets such as the market for mobile devices, it is common that the patent owner and the implementer compete in the same market with similar products, because the existence of the standard makes necessary the use of the same technology, so they are competing for instance, on the trademark, designs and marketing[925].

4.2.2. Consumer welfare

In addition, the refusal – *i.e.* the act of seeking a prohibitory injunction and the recall of products – must be also capable of harming consumer welfare, because it might hinder the emergence of a product for which there is a potential, constant, specific and regular demand on the part of consumers.

[922] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 683, para 2.
[923] Alfaro Águila-Real, 'Delimitación de la noción de abuso' (n 434) 221, para 2 (' [...] y así se habla de exclusión en el mismo mercado donde está presente el dominante; exclusión en un mercado adyacente a aquel que está dominado y exclusión en un mercado relacionado verticalmente, es decir, la exclusión tiene lugar en el mercado en el que se desarrolla otra fase de la producción distinta a aquella donde se encuentra el dominante [...]').
[924] Fernando Carbajo Cascón, 'La problemática de las patentes indispensables en estándares técnicos y la eficacia de los compromisos de licencia en términos FRAND' (2016) 3 Revista Electrónica de Direito 43, para 1 ('[...] la obstaculización a la competencia no tiene que darse en un mercado derivado o conexo, sino que puede tener lugar en el mismo mercado donde compite el titular de la patente esencial') <https://www.cije.up.pt/revista-red-ultimas-edicoes-search?keys=fernando+carbajo> accessed 31 July 2018.
[925] ibid.

In *Magill,* the ECJ requires that the refusal prevents the emergence of a strictly 'new' product in the sense that it was not limited essentially to duplicate the product already offered on the secondary market by the IP owner. That would happen when the IP owner and the competitor competed for innovation or substitution (see Section 4.4.3.2. of Chapter 2).

In *IMS Health*, the refusal prevented the emergence of a product that duplicated that already offered by the IP owner. In order to apply the *Magill* test overcoming that absence – because otherwise, the refusal would not be abusive –, the Commission reviewed erroneously that element and it considered that was not necessary that the refusal prevented the emergence of a new product. Fortunately, the President of the CFI – who suspended the application of the Commission's decision – and the ECJ – in the preliminary ruling – stated that the element regarding the emergence of a new product established in *Magill* must always be present (see Section 4.5.2.1. of Chapter 2).

Nevertheless, decision-making bodies in *IMS Health* should have gone further and review that element in the sense of requiring that the refusal prevents the emergence of a 'new' product, understood as a different product from that offered by the IP owner, which does not allow the welfare of consumers to increase. In that sense, when a product implements a technology protected by a SEP and its emergence is hindered when the SEP owner brings infringement actions seeking a prohibitory injunction and the recall of products, consumers – who demand the presence of that product in the market – will be harmed. That, because they cannot enjoy the product in question that might be, for instance, a new product, a more economical product or an interoperable product, compared to the product offered by the SEP owner.

As mentioned before, in the market for mobile devices where SEP owners and implementers use the same standardized technologies, they compete for imitation[926] – *e.g.* competing on the design or quality – and not for innovation or substitution. Namely, albeit it would be possible to design around the SEP from the technical viewpoint, the product that implements the alternative technology would not be substitutable by that manufactured by the SEP owner, because its interoperable function – which constitutes one of its essential functions – would be compromised (see above, Section 4.1.).

4.2.2.1. Strictly 'new' and 'new' as different

In non-standardized markets where competitors do not need to use the same technology, consumers could be harmed if they could not enjoy (i) a wholly-new product (competition for innovation) – as it was the case in *Magill* regarding the emergence of comprehensive weekly television guides (see Section 4.4.3.2. of Section 2); (ii) a close substitute of the existing product, that improves it (competition for substitution)[927]; or (iii) a product that

[926] ibid.
[927] ibid.

is likely to contribute to technical development[928]. It is known that technical change (due to product and process innovations) results in rapid increases in productivity and improves standards of living around the world[929].

The latter was the case in *Microsoft*, where the Commission and the CFI considered that albeit Microsoft's competitors' products would implement the same set of protocols as Windows work group server operating systems did – so the product would not be innovative or substitutable –, they would differ widely in terms of performance, security and functionality – the new product would be technically more developed, so the refusal to supply the relevant information limited technical development to the prejudice of consumers[930]. Therefore, it understood that the requirement established in *Magill* and *IMS Health* regarding that the refusal prevented the emergence of a new product, it was present in that case (see Section 4.5.2.2 of Chapter 2).

Whereas in markets where the use of SEPs is indispensable because they cover standardized technologies that all operators need to use, such as the market for mobile devices, it exists a competition by imitation. Namely, competitors manufacture new products compared to those offered by the IP owner, but not in the sense of innovative, substitutable or technically developed products, but 'new' in the sense of different. Hence, duplicated products manufactured by competitors might be different with respect of the design or the quality, for instance. Modern economic research shows that new products, including even small changes in product design, can result in significant increases in social welfare, including significant consumer benefits[931]. Regarding the quality, note that it can mean various things: products that last longer or work better, better after-sales or technical support or friendlier and better service[932].

All in all, in a competitive market, the fact that businesses try to make innovative products, with different designs and better quality from the rest, it results in greater choice for consumers, who can select the product that offers the right balance between price and quality. And consequently, businesses will attract more customers and expand market share[933].

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[928] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 87.
[929] Joel Mokyr, 'Long-Term Economic Growth and the History of Technology', in Philippe Aghion and Steven Durlauf (eds), *Handbook of Economic Growth*, Volume 1B (North-Holland 2005), 1113, 1146, para 3 ('Technological progress increases the rate of return to human capital, induces more people to have more "high quality" (educated) children which provides the positive feedback loop').
[930] *Microsoft* [CFI, 2007] (n 156) [648].
[931] Walter Y. Oi, 'The Welfare Implications of Invention' in Timothy F. Bresnahan and Robert J. Gordon (eds), *The economics of new goods* (University of Chicago Press 1996), 109.
[932] 'Why is competition policy important for consumers?' (Commission), para 3 <http://ec.europa.eu/competition/consumers/why_en.html> accessed 16 May 2019.
[933] ibid, paras 4 and 5.

4.2.2.2. More economical

Consumers could also be harmed if, as a result of the IP owner's refusal to license, they do not have the possibility to afford a more economical product than the one already offered by the right holder[934]. In this regard, it should be recalled (see Section 4.4.2.2. of Chapter 2) that the mere fact that the prices of the product offered by the IP owner are higher than those manufactured by competitors, does not of itself lead to the conclusion that IP holder's refusal constitutes an abuse of a dominant position because consumers cannot enjoy a more economical product. That, because the owner has the right to recover not only the production costs and a reasonable profit, but also the heavy costs that it has to bear in research and development[935].

Accordingly, when determining whether the product manufactured by the competitor is more economical than the one offered by the IP owner, the above must be taken into account. National courts should also bear in mind the fact that part of the research and development expenditure has probably already been recovered from the sale of those products by the IP holder. When the IPR in question is a FRAND-encumbered SEP, it is also relevant to consider that the standardization process carried out by SSOs should suppose increased compatibility, interoperability and competition, lower production and lower sales costs[936].

Indeed, in a competitive market, prices are pushed down. And low prices for all is not only good for consumers – because more people can afford to buy products –, but it also encourages businesses to produce and boosts the economy in general[937].

4.2.2.3. Interoperable

IP owners' refusal to grant licenses might also harm consumers because they could not enjoy a product that is characterized by its compatibility and interoperability with different products. That anti-competitive effect is common in markets where interface standards – *de jure* and *de facto* – protected by patents are present. That, because these interfaces address especially the needs for interconnection and interoperability between products in a multi-vendor, multi-network and multi-service environment.

That was the anti-competitive effect that the refusal of *IMS Health* provoked (according to the *prima facie* assessment, that was not confirmed in the decision on the merits because there was a material change in the status of competition). That is to say, the copyright owner refused to license the protected structure to its competitor who would also offer data report services in respect of sales of pharmaceutical products, but with

[934] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 88.
[935] *Parke, Davis & Co* (n 138) 70, [3] and [4].
[936] *Motorola* Commission Decision (n 7) [284].
[937] 'Why is competition policy important for consumers?' (n 932), para 2.

differentiated features. Consequently, it started selling services based on an alternative structure. However, potential clients manifested reticence towards them, claiming that the data was not usable unless it could be presented within the format of the structure owned by IMS Health, that constituted the *de facto* standard in the industry. Accordingly, IMS Health's refusal prevented the emergence of a product characterized by its interoperability with different products, because it could not implement the standardized structure (see Section 3.2.5. of Chapter 2).

In high standardized markets where technologies are protected by SEPs – as it is the case in *Huawei v. ZTE* –, the 'constructive' refusal of bringing infringement actions seeking a prohibitory injunction or the recall of products, it would harm consumers because competitors could not manufacture interoperable products that complied with *de jure* standards.

4.3. Absence of objective justifications

In *Magill*, the ECJ referred to the 'arbitrary refusal' as the third element of the test, alluding that the refusal could not be justified by requirements of secrecy, research or development or other objectively verifiable considerations (see Section 4.4.3.3. of Chapter 2). That circumstance did not suffer any clarification or alteration in *IMS Health*, where also became clear that the infringement of IPRs by competitors does not constitute a justified refusal, nor the fact that the competitor offered only a nominal sum for a licence (Section 4.5.4. of Chapter 2).

According to the proposed legal standard based on the critical review of the *IMS Health* jurisprudence, once it is determined the presence of the previous two elements – the essentiality of the IPR and the causation of anti-competitive effects –, it could be considered that *prima facie* the refusal to grant IP licenses is abusive. Nevertheless, in order to confirm the above conclusion, it is necessary to examine the claims of the dominant undertaking that assure that its conduct is justified by objectively verifiable considerations (so it is not arbitrary). Either demonstrating that its behaviour produces possible advantages in terms of substantial efficiencies which outweigh any anti-competitive effects or showing that is objectively necessary. In other words, it falls on the dominant undertaking to demonstrate any negative impact which an obligation to license is likely to have on its own level of innovation[938].

4.3.1. Efficiency gains

According to the settled case law[939], in order to conclude that the dominant undertaking's behaviour produces possible advantages in terms of efficiencies, it has to show that the following four cumulative conditions are met: (i) the efficiency gains resulted from the

[938] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), paras 89 and 90.
[939] See references in (n 618).

conduct counteract any likely negative effects on competition and consumer welfare in the affected markets; (ii) that those gains have been, or are likely to be, brought about as a result of that conduct; (iii) that such conduct is necessary for the achievement of those gains in efficiency; and (iv) that it does not eliminate effective competition, by removing all or most existing sources of actual or potential competition.

As the Commission stated in *Samsung* and *Motorola*, it is unlikely that anti-competitive effects of seeking a prohibitory injunction and the recall of products could be counterbalanced or outweighed by any advantages in terms of efficiency which also benefited the consumer (see Section 5.3.4.1. of Chapter 3).

4.3.2. Objectively necessary

With regard to the justifications to consider the conduct of refusing to grant IP licenses as objectively necessary and basing on what the Commission stated in *Samsung* and *Motorola* (see Section 5.3.4.2. of Chapter 3), the IP owner may refer to (i) the need to protect its commercial interests or (ii) the need to protect its IPRs when they have been infringed. Nevertheless, the latter justification cannot in itself constitute an objective justification, because the exercise of IPRs is not an absolute right. Accordingly, the ECJ recognises exceptions of that exercise in favour of free competition[940] (see Section 5.3.1. of Chapter 3).

Focusing on the argumentation related to the need to protect dominant undertaking's commercial interests[941], the IP owner could base on that justification in the following scenarios[942]. When (1) the potential licensee is in financial distress and unable to pay its debts; (2) the implementer's assets are located in jurisdictions that do not provide for adequate means of enforcement of damages; or (3) the alleged infringer is unwilling to enter into a licence agreement on FRAND terms.

Unlike the first two scenarios, to assess the presence of the third one, a definition of the 'willing licensee' is required in order to conclude, on a case by case basis, whether the licensee is willing to enter into a license agreement or not. Below, I will suggest a definition of that concept in the framework of SEP infringement, in order to assess when it is considered that the alleged infringer – to whom actions seeking a prohibitory injunction and the recall of products by the SEP owner are addressed – is a willing licensee.

4.3.2.1. The 'willing licensee'

As it was previously studied, the Commission – in *Samsung* and *Motorola* – and the ECJ – in *Huawei v. ZTE* – relied on different facts to determine when the alleged infringer is

[940] (n 581)
[941] (n 622), (n 623) and (627).
[942] (n 624).

a willing licensee (and also the German Federal Supreme Court in *Orange Book* regarding non-SEPs). From my point of view, neither of these approaches applied are appropriate to determine the willingness of a potential licensee. Accordingly, I suggest a definition that combines elements from the three definitions previously referred.

Moreover, note that in the aforementioned cases – where patent owners' behaviour was treated as a novel category of abuse –, the concept of the 'willing licensee' constituted the core element to assess *prima facie* the unlawfulness of the conduct (see Section 1 of this Chapter). However, when construing the behaviour as a 'constructive' refusal to license – as it is being proposed in this research –, the essential nature of the IP (see above, Section 4.1.) and the anti-competitive effects (see above, Section 4.2.) constitute the fundamental elements for that assessment. And the concept of 'willing licensee' is raised in order to assess whether the SEP owner's conduct might be justified for being objectively necessary to protect its commercial interests, because the alleged infringer is not willing to enter into a license agreement.

Under the *Orange Book* approach (see Section 2.1.2.1. of Chapter 4), a willing licensee is who (i) has made an unconditional offer – not limited exclusively to cases of infringement – that the patent owner cannot reject it without violating the prohibition of discrimination or anti-competitive behaviour; and it (ii) has complied with the obligations that the future licensing agreement imposes in return for the use of the IPR – providing the rendering of account of past acts of use and paying the amount of royalties it has itself calculated therefrom.

In Commission's view established in *Samsung* and *Motorola* (see Section 5.3.4.3. of Chapter 3), a willing licensee is the one that in the event that bilateral negotiations do not come to a fruitful conclusion, it accepts to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate, being irrelevant in that respect if the potential licensee challenges the validity, essentiality or infringement of the SEP or not.

The ECJ in *Huawei v. ZTE* (see Section 4.5. of Chapter 4) considered that the alleged infringer is a willing licensee if (i) after being alerted on the infringement, it expresses its willingness to enter into a license agreement on FRAND terms; (ii) it responds to the offer made by the SEP owner diligently and in good faith – presenting a counter-offer promptly and in writing; and (iii) in the event its counter-offer was rejected, it provides adequate security to guarantee the payment of royalties – by providing a bank guarantee or by placing the amounts necessary on deposit, calculated on the basis of the number of the past acts of use of the SEP. Hence, the ECJ partially based on the proposal provided by the referring court – Regional Court of Düsseldorf –[943], who stated that if the ECJ held the notion of the infringer's 'willingness to negotiate' established by the Commission to be relevant, certain qualitative and time requirements must be imposed in order to ensure

[943] *Huawei* (n 35) [38].

that the applicant for the licence is acting in good faith. However, the ECJ did not follow its suggestion regarding that 'a properly formulated, acceptable, unconditional request for a licence, containing all the provisions normally found in a licensing agreement, ought to be required to be submitted before the patent concerned is used'.

In my opinion, an alleged infringer is willing to enter into a license agreement, if from the moment it is fully aware that is infringing a SEP, and that, in consequence, it needs to obtain a license to use it – from the *Huawei* definition –, it performs the following acts: (i) it renders the accounts in relation to past acts of use of the SEP and it provides a bank guarantee for the payment of royalties or places on deposit a provisional FRAND sum at the court or arbitration tribunal for past and future use of the patent (reflecting the value of the whole SEP portfolio, and not just for patents in the litigation) – from the *Orange Book* and the *Huawei* definitions – ; and (ii) it is ready for the amount of the royalty to be determined by an independent third party (civil courts or arbitration tribunals) and to be bound by such a determination – from the *Samsung*/*Motorola* definition.

In case parties opted to enter into a cross-licensing agreement, the implementer would recover the guarantee or the deposit in case the royalties would not be due. If they entered into a license agreement with payment of royalties, the guarantee or deposit would be used as royalty payments. And in the event they did not reach any agreement, the guarantee or deposit would be intended to compensate the damages caused by the infraction.

4.4. Outcome

In conclusion, the behaviour of refusing to license IPRs would constitute an abuse of a dominant position if the aforementioned three circumstances were present cumulatively. That is to say, if the IPR in question is essential for competitor's activity, if the refusal is capable of excluding competitors from the market and of harming consumer welfare and if the refusal is arbitrary, in the sense of not being justified by objectively verifiable considerations – by efficiency gains or needs to protect IP owners' commercial interests or the IPRs in question.

In particular, when the behaviour in question consists in seeking a prohibitory injunction or the recall of products by SEP owners – *i.e.* a 'constructive' refusal to grant SEP licenses –, that conduct would be justified by the need to protect the SEP owner's commercial interests in the following scenarios: (i) the implementer is in financial distress and unable to pay its debts; (ii) the alleged infringer's assets are located in jurisdictions that do not provide for adequate means of enforcement of damages; or (iii) the potential licensee is unwilling to enter into a licence agreement on FRAND terms, because it did not: (1) render the accounts in relation to past acts of use of the SEP and it did not provide a bank guarantee for the payment of royalties or place them on deposit for past and future use of the SEP; and (2) it was not ready to be the amount of the royalty to be determined by an independent third party and to be bound by it.

In those three scenarios the SEP owner's behaviour would be justified because the prohibitory injunction and the recall of products would be the only effective, proportionate and dissuasive measures against SEP infringements[944]. That is to say, if in the first scenario the SEP owner confined to bring actions for damages, the infringer could not compensate it (as it might also occur in the second scenario) and furthermore, the implementer would continue infringing the SEP because it would be unable to pay the due royalties. In the third scenario, albeit the SEP owner might be compensated if it brought an action for damages, the implementer would also continue infringing the SEP because it would not be willing to enter into a license agreement, holding out the SEP owner (see Section 1.3.1.4. of Chapter 1).

Consequently – if seeking a prohibitory injunction and the recall of products would also constitute an abuse of a dominant position in those three scenarios –, the ability of SEP holders to recover their investments and their incentives to invest in other technologies would be diminished. As well as their wish to participate in the standardization processes and to commit to grant licenses on FRAND terms. Besides, they might also experience losses due to the presence of competitors/infringers in the market – who would be free-riding on their SEPs – and because the decreasing revenues, due to the decline in sales[945].

In that regard, it is well worth recalling that competition policy is about applying rules to make sure companies compete fairly with each other. Moreover, competition within the EU helps make European companies stronger outside the EU too – and able to hold their own against global competitors[946].

5. Antitrust liability for the abuse

In order to analyse the antitrust liability that lies with the SEP owner for the abuse of a dominant position for seeking a prohibitory injunction and the recall of products, this section is based on a number of assumptions. Firstly, the SEP at stake is valid and infringed – consequently, damages will be paid in favour of the SEP owner under Article 13 of IPRED.

And secondly, seeking a prohibitory injunction and the recall of products constitutes an abusive 'constructive' refusal to license, according to the suggested criteria based on the critical review of the *IMS Health* jurisprudence, which is prohibited by Article 102 TFEU. Accordingly, (i) the SEP is essential for the implementation of an industrial *de facto*/*de jure* standard which is indispensable for the exercise of competitors' activities and to be able to compete effectively on the market; (ii) the fact of seeking the aforementioned exclusionary measures is capable (1) of preventing the continuation of competitors in a secondary market, in a vertically related or in a market where the dominant is present, so

[944] See IPRED (n 68), Art 3(2).
[945] *Motorola* Commission Decision (n 7) [283].
[946] 'Why is competition policy important for consumers?' (n 932), paras 1 and 6.

the SEP holder would reserve that market in question for itself; and (2) of harming consumer welfare because they could not enjoy a product that is characterized by its compatibility and interoperability with different products; and (iii) SEP owner's behaviour does not produce efficiency gains nor it is objectively necessary to protect its commercial interests, because (1) the infringer is not in financial distress and it is able to pay its debts; (2) its assets are not located in jurisdictions that do not provide for adequate means of enforcement of damages; nor (3) it is an unwilling licensee since it rendered the accounts of past acts of use of the SEP, it provided a bank guarantee for the payment of royalties or placed on deposit a provisional sum for past and future use of the SEP and it is ready for the amount of the royalty to be determined by an independent third party and to be bound by such a determination.

Note that in case the court determined that the SEP is not valid or infringed, implementers would recover the guarantee or the deposit, because the royalties would not be due. Recall that during the standardization procedure, SSOs do not check whether patents are valid to the *de jure* standard in which they are included.

If the SEP protects a technology essential to implement a *de jure* standard, it could also be assumed that a FRAND commitment has been made by the patent holder. However, as I stated above in Section 3.1.2., that fact is not relevant from the competition law approach taken in this research, but from the contract law perspective.

5.1. Compulsory license together with a periodic penalty payment

The appropriate measures to bring the infringement of Article 102 TFEU to an end are provided for in Regulation 1/2003[947] and they are divided into three categories (remedies, sanctions and binding commitments), as they were studied in Section 2 of Chapter 1. When treating SEP owners' conduct of seeking prohibitory injunctions and the recall of products as a refusal to grant IP licenses in consistency with the critical review of *IMS Health* jurisprudence proposed above, the compulsory license – together with a periodic penalty payment – emerges as the most proportionate and necessary measure to end effectively the infringement of Article 102 TFEU. Actually, that was the case in *Magill* (see Section 5.4.1. of Chapter 2) and *Microsoft* (see Section 5.4.3. of Chapter 2).

Namely, in compliance with Article 7(1) of the aforementioned Regulation, the remedy of compulsory licensing is directly proportional to the infringement because it forces the dominant undertaking to do exactly which it refused to do – to grant licenses of its SEPs. And for that same reason, it also constitutes a necessary measure to bring the infringement of Article 102 TFEU effectively to an end, that is, to end with the behaviour consisting of refusing to grant SEP licenses (see Section 5.2.3. of Chapter 2). In other words, the compulsory license is a remedy capable of restoring competition in the sense of eliminating the consequences of the abuse.

[947] (n 252).

The aim of imposing together with the compulsory license, a periodic penalty payment for each day of delay in compliance is to prevent the non-compliance with the obligation to grant licenses by the SEP holder. Therefore, if the sanction is imposed once the order to grant licenses has been breached (as the Commission did in *Microsoft*), it would not fulfil its purpose. That combination of measures – compulsory license together with a periodic penalty payment – is the most effective one to remedy and, where appropriate, to punish the abuse of a dominant position. Moreover, that combination is the one with the greatest deterrent effect regarding future infringements, compared to the sole imposition of a compulsory license or a fine.

I do not consider it appropriate to also impose a fine on SEP holders to punish the abuse – either if the undertaking acted intentionally or negligently –, because it might act as a disincentive to invest in innovation and it might also dissuade SEP owners from participating in the standardization processes. Consequently, consumers would be harmed because they would be deprived of the pro-competitive benefits of standardized technologies (see Section 'Background' of the Introduction).

5.2. Mechanisms for licensing terms' determination

When drafting the terms of the compulsory license, there might be discrepancies among parties, especially in relation to determine the royalties due. In order to avoid that those discrepancies cause that the IP owner does not grant licenses within the deadline established by the Commission, it is appropriate that the EC includes some mechanisms to prevent the non-compliance.

Indeed, in the case of compulsory licenses whose object is a SEP, the main issue will be related with determining FRAND royalties, because the disagreement on that issue will have been the reason why the implementer decided to infringe the IPR and why the SEP holder brought infringement actions seeking a prohibitory injunction and the recall of products.

Therefore, regarding the determination of royalty rates, I suggest that the Commission always includes a mechanism for determining the remuneration when issuing a compulsory license, taking as reference the solution it provided in *IMS Health* (see Section 5.4.2.2. of Chapter 2). In that case, when the Commission ordered a compulsory license as an interim measure – which application was suspended and subsequently withdrawn –, it provided a solution in case parties failed to reach a mutual agreement about the royalties to be paid. According to it, royalties would be determined by one or several independent experts chosen by agreement of the parties. And if they did not reach an agreement on the identity of the expert(s), they would be appointed by the Commission from a list of candidates provided by the parties or, if appropriate, the Commission would choose one or several suitably qualified person(s).

For those cases where parties disagree about other terms of the license other than remuneration, such as license duration, it would be appropriate to include in the compulsory license the mandatory arbitration as a dispute resolution mechanism (albeit parties involved could also voluntarily decide to include it). That mechanism would be useful to settle the disputes between the licensor and the licensee, as well as to determine the consequences of the incorrect compliance or non-compliance with the obligation to grant licenses, by subject matter experts and in a faster way. In fact, the Commission often requires mandatory arbitration commitments to be attached with compulsory licensing in merger control cases, where compulsory licences are often exclusive for specific and named licensees, with royalty free offers. But it rarely pushes an arbitration clause in compulsory licensing to remedy an abuse of a dominant position under Article 102 TFEU. Nevertheless, for the purpose of preserving competition, abuse of dominant position and merger control should share their design as to compulsory licensing with each other[948].

Moreover, although FRAND determinations by arbitration tribunals would be confidential, non-confidential versions could be made public in accordance with the applicable rules of the tribunal, in particular the method applied to calculate the FRAND rate. This would contribute to the creation of a body of case law of past determinations upon which future FRAND determinations could draw[949].

Furthermore, if the mechanism for determining the remuneration and the dispute resolution mechanism were included in the compulsory license, they would serve not only to determine the licensing terms, but they would also help to track the compliance with the order to grant compulsory licenses imposed on the SEP owner. Hence, it would not be necessary for the Commission to control it. That is to say, indirectly, experts or arbitrators would assume the tracking, becoming *de facto,* the monitoring trustees.

Note that in contrary to structural remedies, the compliance with behavioural remedies has to be monitored[950]. In the EU, the Commission might be responsible for monitoring or it may seek assistance of external technical experts, as long as the designation of a monitoring trustee strictly follows the legal provisions and the costs of monitoring trustees are on the Commission.

The above is in line with the US Supreme Court[951] who is of the opinion that a regulatory agency should not impose a compulsory licensing remedy that it cannot adequately and reasonably supervise – a compulsory license without monitoring measures –, because it would require the court to assume the day-to-day control characteristic of a regulatory agency.

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[948] Wei Wang, 'Compulsory Licensing as Antitrust and Merger Remedy in EU' 19, para 2, 22, para 2 and 26, para 4 <https://mycourses.aalto.fi/mod/resource/view.php?id=345614> accessed 31 July 2018 (unpublished).
[949] *Samsung* Commission Decision (n 7) [90], [103] and [111].
[950] (n 261).
[951] *Verizon Communications* (n 473) [415].

6. *De facto* compulsory licenses to remedy patent infringements

In this section, I will make particular mention to how *de facto* compulsory licenses have been used as a solution in US case law to remedy patent infringements, in order to make SEP licenses available to all – ‘ongoing royalties for future infringements’. In the same vein, I will also allude to the possibility of imposing that remedy in the EU, albeit different premises are required – ‘pecuniary compensation as a substitute’.

Accordingly, the legal approach in which the issuing of compulsory licenses is based in this section diverges from the one suggested in the previous section, namely, to remedy infringements of competition law – abuses of dominant positions – for refusing to license IPRs.

6.1. Ongoing royalties for future infringements

In the US, due to the lack of presence of the required elements to issue prohibitory injunctions, courts have imposed ongoing royalties on infringers to remedy patent infringements, that *de facto* constitute compulsory licenses on SEP holders.

6.1.1. Requirements to issue prohibitory injunctions: *eBay Inc. v. MercExchange*

In most cases, it is understood that the prohibitory injunction deters the infringement, encourages parties to enter into licensing agreements, promotes innovation[952] and entails an increase in consumer welfare[953]. However, in some cases, such as when the patent protects a component of minor importance, the prohibition to continue infringing the SEP may cause harmful consequences. That is to say, patent owners may take advantage of the prohibitory injunction to force implementers to pay excessive royalties, what is known as patent holdup (see Section 1.3.1.1. of Chapter 1). That would lead to an increase in the costs and it would dissuade the innovation development[954].

Therefore, in *eBay Inc. v. MercExchange*[955], the Supreme Court of the US held that according to Section 283 of the Patent Act (35 U.S. Code)[956], a court may issue a permanent (prohibitory) injunction following a finding of patent infringement, only if the patent holder shows the fulfilment of the following four requirements cumulatively (the four-factor test). One, that it has suffered an irreparable injury. Two, that remedies available at law, such as monetary damages, are inadequate to compensate for that injury.

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[952] Vincenzo Denicolò and others, ‘Revisiting Injunctive Relief: Interpreting eBay in High-Tech Industries with Non-Practicing Patent Holders’ (2008) 4(3) Journal of Competition Law & Economics 571, 603, para 5 and 604, para 1.
[953] Jacob Seifert, ‘Welfare effects of compulsory licensing’ (2015) 48(3) Journal of Regulatory Economics 317, 342, para 1.
[954] Suzanne Michel and others, ‘A Report of the Federal Trade Commission, The evolving IP marketplace: aligning patent notice and remedies with competition’ (Federal Trade Commission 2011) 233, 244 < https://www.ftc.gov/sites/default/files/documents/reports/evolving-ip-marketplace-aligning-patent-notice-and-remedies-competition-report-federal-trade/110307patentreport.pdf> accessed 1 August 2018.
[955] Case *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).
[956] (n 71).

Three, that considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted. That is, that issuing a prohibitory injunction would be justified weighing the injury suffered by the SEP holder and the harm the injunction would cause to the infringer. And four, that the public interest would not be disserved by a permanent injunction, in the sense that it would not stifle innovation.

Notwithstanding, for SEP owners – and particularly for NPEs –, it is difficult to prove the fulfilment of the requirements set by the Supreme Court. It turns especially complicated for them to show that they have suffered an irreparable harm[957] – the first element of the test – , because they could receive royalties from the infringer. Likewise, it is complicated to prove that they would not be adequately compensated with pecuniary damages[958] – the second element of the test. Consequently, the prohibitory injunction to cease the continuation of the infringement is not always ordered by US courts. That, not because there exists a *per se* rule foreseeing that prohibitory injunctions are not available for SEP holders[959], but because they do not always constitute the most appropriate remedy.

6.1.2. The equitable remedy of ongoing royalty

Accordingly, when the existence of the four circumstances that comprise the test established in *eBay Inc. v. MercExchange* is not proved, the court does not issue a prohibitory injunction. Nonetheless, according to Section 283 of the Patent Act (35 U.S. Code), it imposes an equitable remedy of ongoing royalty to compensate SEP owners for the harm caused by the infringement. Namely, the court orders the infringer to pay the royalties for the future uses of the SEP, as a compensation for the future infringements that it will commit.

When in a given case, SEP holders request for a prohibitory injunction because they consider it is the most proportionate and necessary remedy, their aim is that the court prohibits infringers from continuing to infringe their SEPs. Nevertheless, when the court imposes on them an equitable remedy of ongoing royalty, it forces patent holders to allow infringers to continue using – infringing – their SEPs. Therefore, it is understood that *de facto*, the court is ordering SEP owners to grant licenses (*de facto* compulsory licenses).

957 Case *Microsoft Corp. v. Motorola, Inc.*, 2012 LEXIS 170587, at *25 (W.D. Wash. Nov. 30, 2012) (‘Because Motorola cannot show irreparable harm or that monetary damages would be inadequate, the court agrees with Microsoft that injunctive relief is improper in this matter and grants Microsoft’s motion’).
958 Case *Apple, Inc. v. Motorola*, *Inc.,* 869 F. Supp. 2d 901, 914 (N.D. Ill. 2012) (‘By committing to license its patents on FRAND terms, Motorola committed to license its patent to anyone willing to pay a FRAND royalty and thus implicitly acknowledged that a royalty (monetary damage) is adequate compensation for a license to use that patent’).
959 Case *Apple, Inc. v. Motorola*, *Inc.,* 757 F.3d 1286, 1331 and 1332 (Fed. Cir. 2014).

6.1.3. Determination of the ongoing royalty rate

In principle, royalties are determined by the parties, unless they do not reach an agreement. In that case, they would be determined by the court[960].

According to the US Federal Circuit[961], the ongoing royalty rate for future infringement should be calculated differently from the reasonable royalty for past infringement, although it does not provide any particular method to calculate it. In accordance with its case law, typically, the rate for the ongoing royalty is higher than the rate for past infringement, holding that the ongoing royalty should reflect the change in circumstances now that the defendant has been adjudicated liable for infringing a valid patent – improving the bargaining position of the patent owner. Namely, if the ongoing royalty rate is not higher than the one for past infringement, implementers would not be stimulated to apply for a license. In fact, the purpose of an ongoing royalty is to reduce a party's incentive to infringe[962].

Hence, changes in the economic conditions between the time of first infringement and the time of the hypothetical negotiation for an ongoing royalty will typically support the court's award of an ongoing royalty that exceeds the reasonable royalty that the jury awarded for past infringement[963]. Although it is unusual, in the case *XY, LLC v. Trans Ova Genetics, L.C.*[964], the judge awarded an ongoing royalty using lower rates than the royalty awarded by the jury for past infringement.

On the contrary, there are those[965] who consider that the ongoing royalty rate should be calculated in the same way that the royalty rate for past infringements.

6.1.4. Compliance with TRIPS Agreement

Scholars[966] have questioned whether the imposition of the remedy of ongoing royalty – instead of a prohibitory injunction – that constitutes a *de facto* compulsory license, it

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[960] Case *Paice LLC v. Toyota Motor Corp*., 504 F.3d 1293, 1315 (Fed. Cir. 2007); Sidak, 'Ongoing Royalties' (n 72) 163, para 3.

[961] *Paice LLC* (n 960) [1317]; Case *Amado v. Microsoft Corp.,* 517 F.3d 1353, 1362 (Fed. Cir. 2008); Case *Activevideo Networks Inc. v. Verizon Communications Inc*., 694 F.3d 1312, 1342 (Fed. Cir. 2012).

[962] Case *Arctic Cat Inc. v. Bombardier Rec. Prods*., 2017 U.S. Dist. LEXIS 1607, at *8 (S.D. Fla., Jan. 3, 2017).

[963] Sidak, 'Ongoing Royalties' (n 72) 212, para 3.

[964] Case *XY, LLC v. Trans Ova Genetics, L.C.*, 890 F.3d 1282, 1297 and 1298 (Fed. Cir. 2018) (the court remanded for the district court to recalculate an ongoing royalty rate).

[965] Mark A. Lemley, 'The Ongoing Confusion Over Ongoing Royalties' (2011) 76(3) Missouri Law Review 695, 695, 696 and 707; Thomas F. Cotter, 'Federal Circuit Remands for Recalculation of Ongoing Royalty' (*Comparative Patent Remedies Blog*, May 23, 2018) ('[...] since the rate for past infringement is supposed to reflect the bargain the parties would have struck ex ante knowing the patent to be valid and infringed, the rate for past and future infringement should be identical') <http://comparativepatentremedies.blogspot.com/search?updated-max=2018-05-30T06:51:00-07:00&max-results=7&start=14&by-date=false> accessed 1 August 2018.

[966] James Packard Love, 'Recent Examples of the Use of Compulsory Licenses on Patents' (2007) Knowledge Ecology International Key Research Note 2, 5 (the denial of injunctions in patent cases as compulsory licensing) <www.keionline.org/misc-docs/recent_cls_8mar07.pdf.> accessed 1 August 2018;

complies with the TRIPS Agreement. It would not meet the specific provisions stipulated in Article 31 (see Section 5.3. of Chapter 2). However, the *de facto* compulsory license would meet the substantive requirements set forth in Articles 8(2) and 30.

Article 8(2) of the TRIPS states that Members may adopt appropriate measures 'to prevent the abuse of IPRs by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology'. And Article 30, specifically establishes that Members may provide limited exceptions to the exclusive rights conferred by a patent, as long as the exceptions do not unreasonably: (i) conflict with a normal exploitation of the patent; and (ii) prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties (see Section 5.2.2. of Chapter 2).

In any event, as Articles 30 and 31 of the TRIPS deal with 'rights' and the *eBay Inc. v. MercExchange* ruling is about remedies against patent infringements, it is more accurate to conclude that Article 44(2) of the TRIPS – which deals directly with injunctions – is the one that empowers the court to impose the remedy of ongoing royalty. That is to say, this provision allows judicial authorities to order infringers to pay a remuneration to compensate SEP holders[967], instead of ordering them to stop the patent infringement. Hence, that Article envisages the possibility that has been used by US courts when SEP owners do not prove the fulfilment of the requirements contained in the four-factor test established in *eBay Inc. v. MercExchange.*

6.2. Pecuniary compensation as a substitute

In line with Article 44(2) of TRIPS, in the EU there is also the possibility of ordering a pecuniary compensation as a substitute for a prohibitory injunction – as a permanent or provisional measure –, as the US courts do basing on Section 283 of the Patent Act (35 U.S. Code), when they impose an equitable remedy of ongoing royalty to compensate SEP owners for the harm caused by the infringement.

6.2.1. Permanent measure: unintentional and non-negligent

According to Article 12 IPRED[968], Member States may provide that the competent judicial authorities may order – in the decision on the merits – a pecuniary compensation

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Christopher Anthony Cotropia, 'Compulsory Licensing Under TRIPS and the Supreme Court of the United States' Decision in *eBay v. MercExchange*' in Toshiko Takenaka and Rainer Moufang (eds), *Patent Law: A Handbook of Contemporary Research* (Edward Elgar 2008); Andrew C. Mace, 'TRIPS, eBay, and Denials of Injunctive Relief: Is Article 31 Compliance Everything?' (2009) The Columbia Science and Technology Law Review 232; Jarrod Tudor, 'Compulsory Licensing in the European Union' (2012) 4(2) George Mason Journal of International Commercial Law 222, 222, para 1; Jorge L. Contreras, 'A Brief History of FRAND: Analyzing Current Debates in Standard Setting and Antitrust Through a Historical Lens' (2015) 80(1) Antitrust Law Journal 39, 45, para 2.

[967] Cotropia, 'Compulsory Licensing Under TRIPS' (n 966) 17, para 4 and 20, para 4; Suñol, 'Patentes y hold-up' (n 21) 22, para 6.

[968] (n 68).

to be paid to the injured party instead of imposing a prohibitory injunction or the recall of products, as long as the following five requirements are present: (i) it is an appropriate case; (ii) the option is requested by the liable person; (iii) that person acted unintentionally and without negligence; (iv) the execution of those other measures – prohibitory injunction and the recall of products – would cause the alleged infringer disproportionate harm; and (v) the pecuniary compensation to the injured party appears reasonably satisfactory.

Accordingly, it depends on each Member State to provide judicial authorities with the possibility of imposing pecuniary compensation as a substitute. That differs from prohibitory injunctions (Article 11 IPRED) and the recall of products [Article 10(1)] IPRED, because Member States must ensure that judicial authorities may issue these measures.

Nevertheless, in the EU, due to the third element required by Article 12 IPRED – that the infringer acted unintentionally and without negligence –, it would be difficult for a court to order the pecuniary compensation as a substitute in SEP infringement cases. That, because implementers are aware that they are infringing SEPs and as they continue doing it instead of entering into licensing agreements, SEP owners decide to bring infringement actions against them.

As mentioned before, issuing a pecuniary compensation as a substitute for a prohibitory injunction or the recall of products is more prejudicial to the SEP owner, whose aim is that the court prohibits infringers from continuing infringing its SEPs and to order the recall of products that infringed them. That, because damages might not be sufficient in that case due to several reasons. For instance, because the implementer was in financial distress and unable to pay its debts; or its assets were located in jurisdictions that do not provide for adequate means of enforcement of damages; or it was unwilling to enter into a licence agreement on FRAND terms.

Therefore, unlike it occurs in the US, in the EU that substitute measure is only available when the infringer acted unintentionally and without negligence, because it does not constitute the most proportionate and necessary remedy to end the patent infringement when the implementer was aware that it was infringing the SEP. Note that the substitution of pecuniary compensation constitutes a restriction on the right to bring actions for a prohibitory injunction for the purpose of protecting IP. That reflects that it does not constitute an absolute and inviolable right and that under certain circumstances, it must be reconciled, in the general interest, with the rules on competition laid down, in particular, in Article 102 TFEU[969].

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[969] *Huawei* AG (n 137) [63].

6.2.2. Provisional measure: in any case

Notwithstanding, according to Article 9(1,a) IPRED, Member States shall ensure that the judicial authorities may, at the request of the applicant, issue against the alleged infringer an interlocutory injunction intended to allow the continuation of the alleged infringements of IPRs, as long as infringers lodge guarantees intended to ensure the compensation of the right holder. The above, instead of issuing against the alleged infringer, on a provisional basis, a prohibitory injunction intended to forbid the continuation of the alleged infringements. Hence, the legislator provides this possibility, regardless of whether the alleged infringer acted intentionally/ negligently or not.

For instance, basing on the aforementioned Article, Judges of Barcelona Commercial Courts No. 5 and No. 4[970] – regarding non-SEP infringement proceedings –, agreed to replace provisional prohibitory injunctions and recall of products with the deposit of a bond to ensure the compensation of patent owners. Thereby, alleged infringers were allowed to continue infringing the patents – that were relevant to implement *de facto* standards – during the MWC that took in place in Barcelona (see Section 3.3.3. of Chapter 4).

7. Positives of treating it as a 'constructive' refusal

In this section, it will be studied how treating SEP owners' behaviour of seeking prohibitory injunctions and the recall of products as a 'constructive' refusal to grant SEP licenses – in consistency with the proposed critical review of *IMS Health* jurisprudence –, it brings positives from a double perspective: from the definition of the infringement and from the remedy design.

Accordingly, envisioning SEP holders' conduct as an abusive refusal, it would entail, from the legal standard viewpoint, that (i) when the required elements for the abuse are not present, injunctions might be granted in favour of SEP owners; (ii) the category of abusive refusal to grant SEP licenses would be applied in a harmonized way, not leaving room for forum shopping; and (iii) the legal standard would be internally consistent with existing law under Article 102 TFEU.

And from the perspective of the competition law enforcement, the fact that the measure to remedy the abuse of a dominant position is a compulsory license – together with a periodic penalty payment –, it might end with the deadlock situation in which SEP licensing negotiations are immersed, both *ex ante* and *ex post.*

[970] *Fractus v. Wiko* (n 750) [8], [11], [12] and [26]; *Tot Power Control v. Xiaomi* (n 750); *Fractus v. Shenzhen New-Bund Network Technology* (n 750) [6.7] and [6.8].

7.1. Non-existence of the *per se* rule for SEP owners

Treating SEP owners' conduct as a novel category of exclusionary abuse either based on the criteria used by the Commission in *Samsung* and *Motorola* or on the one employed by the ECJ in *Huawei v. ZTE* entails, in practice, that in most of the cases courts do not issue actions for a prohibitory injunction or the recall of products. Accordingly, as it will be referred below, that legal standard creates a rule that implies *per se* that SEP owners cannot enjoy the aforementioned measures.

According to the criteria used by the Commission, in practice, the required exceptional circumstances would be always present – that the standard has a widespread adoption and that SEP owners granted FRAND commitments. And usually, the implementer will be willing to negotiate a FRAND license, in the sense of accepting to be bound by a third party's (a court or mutually agreed arbitrator) determination of a FRAND royalty rate in the event that bilateral negotiations do not come to a fruitful conclusion. Consequently, the general rule would be that SEP owners abuse their dominant positions when they seek prohibitory injunctions (see Section 6.2. of Chapter 3).

With regard to the ECJ's criteria, the same conclusion is derived. In most of the cases, the alleged infringer will have submitted the counter-offer and the SEP owner will have rejected it due to a lack of agreement of what FRAND terms should be and that would have originated the initiation of infringement proceedings. Therefore, that criteria prohibits *per se* the use of injunctions and the recall of products by SEP holders, because is most cases the elements to consider SEP owners' behaviour as abusive will be present (see Section 4.5. of Chapter 4).

The test established by the Supreme Court (in *eBay Inc. v. MercExchange*) also implies that same consequence for SEP owners. Namely, in practice, SEP owners – especially NPEs – cannot proof that the IP infringement caused them an irreparable harm and that they would not be adequately compensated with monetary damages, which is required to grant a prohibitory injunction. In consequence, in practice, the availability of obtaining prohibitory injunctions are restricted for SEP holders.

The positive aspect of treating SEP owners' behaviour as a 'constructive' refusal to grant IP licenses – in consistency with the proposed critical review of *IMS Health* jurisprudence – is that it would not entail, in practice, that in most of the cases courts would not issue actions for a prohibitory injunction or the recall of products. That, because it requires that the following circumstances must be present cumulatively to conclude that SEP owners abuse their dominant positions. Firstly, the SEP must be essential for the exercise of the competitor's activity. Secondly, actions seeking a prohibitory injunction and the recall of products must be capable of causing anti-competitive effects on competition and consumer welfare. And thirdly, the objective justifications of the SEP owner's conduct must be absent (moreover, the definition of 'willing licensee' is more demanding than the one employed by the ECJ).

Hence, the proposed legal test strikes a balance between the right to exclude (granted by patent law); and the right to access to markets (conferred by competition law), ensuring that everybody has access to standardised technologies and that fair competition exists in an open-market economy. By contrast, the novel category of exclusionary abuse established in *Huawei v. ZTE* leads to an overprotection of SEP implementers, to the detriment of SEP proprietors (see Section 'Conclusion' of Chapter 4). Due to the fact that the proposed legal standard is based on the critical review of the *IMS Health* jurisprudence, it could not be sustained that is unduly permissive and too patentee-friendly. The above might be argued regarding the 'refusal to supply' test as it was originally established in *Magill*[971].

7.2. Avoidance of dis-harmonization and forum shopping

Both in the EU and in the US, there is a debate about the circumstances under which a SEP holder – committed to grant licenses on FRAND terms – should be entitled to obtain a prohibitory injunction without abusing its dominant position. Although the ECJ judgment in *Huawei v. ZTE* dissociates from Commission's argumentation in *Samsung* and *Motorola* – which is positive, because it leaves SEP owners less unprotected –, it has been widely criticized in general terms, because it does not exhaustively address various issues. Namely, in order to consider that the conduct of a SEP owner constitutes an exclusionary abuse, national courts must assess whether parties complied with the mandatory steps contained in the Framework for the negotiation of the licensing of SEPs established by the ECJ (see Section 4 of Chapter 4). However, it did not address several aspects that are fundamentals for its implementation.

For instance, it did not take into account many aspects that come into play in practice, when negotiating SEP license contracts, such as, portfolio licensing or global licenses. One of the most extensively discussed issues has been whether the criteria established in the judgment is also applicable when SEP holders are NPEs or when patents in question are relevant to implement *de facto* standards. Last but not least, the judgment also posed various legal gaps, such as what is the scope of licensee's obligation to respond to the offer, or what is the solution when after the offer of the SEP holder and the counter-offer of the alleged infringer, parties do not reach a licensing agreement.

The consequence of the above is that national courts are filling the legal gaps posed in a case by case basis, using different interpretations. Consequently, the scope of the obligations contained in the Framework varies from court to court. As a result, the legal standard is being applied without harmonization among Member States.

Knowing the above, SEP owners – international companies – may take advantage of it, choosing the court in which they want to start legal proceedings, depending on how favourably or unfavourably national courts have interpreted the specific elements of the

[971] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 697, para 1.

abuse, for them (forum shopping) (see Section 'Conclusion' of Chapter 4). For instance, as it was mentioned before (see Section 4.3.2.3. of Chapter 4), the fact that in *Unwired Planet v. Huawei* the Judge Birss and the Court of Appeal of England and Wales have concluded that injunctions are appropriate when a licensee refuses to enter into a worldwide license covering SEPs, it might cause SEP owners to be particularly inclined to sue for an injunction in the UK.

Hence, the second positive of treating SEP owners' behaviour of seeking prohibitory injunctions and the recall of products as a refusal to grant IP licenses – in consistency with a critical review of the *IMS Health* jurisprudence – is that it does not pose legal gaps that Member State courts have to interpret afterwards. That, because the elements of the abuse were already defined thoroughly in *Magill* and *IMS Health.* And their review – proposed in this Chapter –, it sticks to that line. I am specifically referring to elements such as the essentiality of the IPR, markets subject of reservation, harm to consumer welfare or willing licensee (see above, Section 4).

Consequently, the suggested category of abuse avoids heading towards dis-harmonization and forum shopping, because national courts would have less scope for interpreting the elements of the abuse in ways so divergent that finding or not an antitrust infringement would be at stake.

7.3. Internal consistency

In contrast to the novel category of abuse established by the ECJ in *Huawei v. ZTE* that generates internal inconsistency[972] (see above, Section 2.3.), the third positive that derives from reviewing requests for prohibitory injunctions and the recall of products by SEP owners under the abusive refusal to grant IP licenses – in its reviewed version –, is that the standard meets the requirement of internal consistency, due to the reasons will be explained subsequently.

Recall that albeit the *Magill* test proved sufficient to solve that specific case, it was not formulated to be applicable – in a consistent manner – to subsequent similar cases (see Section 4.6. of Chapter 2), hence the need for the critical review of *IMS Health* jurisprudence.

7.3.1. Supported by EU precedents

The suggested category of exclusionary abuse is rooted in established Article 102 TFEU case law, such as *Magill*, *IMS Health* and *Microsoft*. As referred above (see Section 2.3.), existing legal standards are by definition lawful, practicable and predictable and new standards are not. In addition, the proposed legal standard fulfils general principles of the law on abuse of dominance in the sense that the refusal to supply might be abusive only

[972] In the same vein, see ibid 701-707.

under specific circumstances and the perpetrator of the abuse must be a dominant firm.

It also leads to determine if the refusal – *i.e.* the act of seeking a prohibitory injunction and the recall of products – is capable of harming consumer welfare, because it might hinder the emergence of a product for which there is a potential, constant, specific and regular demand on the part of consumers. Hence, it is more consistent with the classic competition tests used.

Moreover, the Commission has clearly expressed its willingness to pursue exclusionary cases in its Guidance Paper on Enforcement Priorities in applying 102 TFEU[973], so the suggested test would not contradict the policy expressed in the guidance.

In particular, the Commission applied the refusal to license category of abuse in *Magill, IMS Health* and *Microsoft,* adopting decisions under Articles 7 (a compulsory license in *Magill*), 8 (a compulsory license together with a periodic penalty payment as interim measures in *IMS Health*), 23 (a fine in *Microsoft*) and 24 (a periodic penalty payment as a permanent sanction in *Microsoft*) of Regulation 1/2003 that constitute strong precedents. Moreover, the decisions where the Commission reached finding of infringements (*Magill*, *IMS Health* – only *prima facie* – and *Microsoft*) were put to the test of judicial proceedings before the EU courts, that confirmed the possibility to impose on dominant firms compulsory licenses for refusing to grant IP licenses. Besides, in *IMS Health*, the Regional Court of Frankfurt am Main brought a request for a preliminary ruling asking whether the refusal to grant IP licenses constituted an abuse of a dominant position under Article 102 TFEU (see on that regard, Chapter 2).

7.3.2. The scope of application

As mentioned above in Section 7.2., in *Huawei v. ZTE* the ECJ does not specify whether the criteria established in the judgment is also applicable when SEP holders are NPEs or when patents in question are relevant to implement *de facto* standards. It thus remains unclear whether this case law can be extended to those cases. Regarding the latter scenario, I already referred (see Section 3.3.3. of Chapter 4) to the Orders issued by the Judges of Barcelona Commercial Courts where they took the aforementioned judgment as a guidance in non-SEP infringement proceedings that were essential to implement *de facto* standards.

By contrast, the use of the suggested reviewed standard of refusal to license IPRs would be reserved to solve cases where a competitive relationship exists between the right holder and the alleged infringer, being consistent with the 'last resort' character that normally defines competition law. In case it does not exist (*e.g.* when NPEs are SEP holders), the implementer could base its argument on contract law, alleging a breach of the third-party-beneficiary contract (see above, Section 3.2.).

[973] Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148).

In addition, that category of abuse would be applicable to disputes about patents that are relevant to implement *de jure* standards (SEPs), as well as to implement *de facto* standards. That, because as mentioned before (see Section 3.1.2.), from the competition law viewpoint the fact of giving FRAND commitments does not constitute an exceptional circumstance to exclude non-SEPs from its scope – albeit it is a relevant element from the contract law viewpoint. Indeed, the relevant elements of the suggested abuse are that the SEP is essential for the exercise of the competitor's activity, that the refusal is capable of causing anti-competitive effects on competition and consumer welfare and the absence of objective justifications by the IP owner (see above, Section 4).

In the same vein, recall that as it was established in Section 3.3.3. of Chapter 4, the *Orange Book* judgment – in which the object was a non-SEP essential to implement a *de facto* standard – was applied by German Courts (the Regional Court of Mannheim and the Higher Regional Court of Karlsruhe) in *Motorola v. Apple*, where the object was a FRAND-encumbered SEP essential to implement a *de jure* standard. That case was later on investigated by the Commission (see Section 3.2. of Chapter 3). In addition, the referring court – Regional Court of Düsseldorf – in *Huawei v. ZTE* was also in favour of applying that German judgment, even though the patent was a SEP (see Section 2.3. of Chapter 4).

In conclusion, the scope of application of the reviewed refusal to license IPRs would include any refusal to license IPRs between parties where a competitive relationship exists.

7.3.3. Legal certainty

The concept of consistency is a derivative of general principles of EU law, such as the principle of legal certainty and the rule of protection of legitimate expectations[974]. Hence, the proposed category of abusive refusal to license IPRs is also consistent, because it provides greater legal certainty than the novel category of abuse established in *Huawei v. ZTE* by the ECJ (see above, Section 2.2.).

That is very relevant because the notion of abuse is an objective concept, referring to the behaviour of the undertaking in a dominant position, so the general principle of legal certainty requires that the dominant undertaking should be able to assess the lawfulness of its own conduct on the basis of factors known to it and under its control[975].

Besides, as referred above (see Section 7.1.), the fact that the reviewed refusal to license approach does not create a *per se* rule that entails that prohibitory injunctions and the recall of products cannot be issued in favour of SEP owners, it is more logical than considering that SEP owners abuse their dominant positions at any event.

[974] Petit, 'Injunctions for Frand-Pledged SEPs' (n 661) 698, para 4.
[975] *Deutsche Telekom* (n 156) [198]–[202]; *Motorola* Commission Decision (n 7) [434].

7.4. Problem-solving approach

From the competition law enforcement perspective, treating SEP owners' behaviour as a refusal to license IPRs would entail to impose on them a compulsory license – together with a periodic penalty payment – in case the antitrust infringement was found. That remedy design might end with the deadlock situation in which SEP licensing negotiations are immersed – as mentioned, due to the lack of clarity as to what is meant by 'FRAND terms'[976] –, both *ex ante* and *ex post.*

That is not the case under the category of abuse established by the ECJ in *Huawei v. ZTE*, because it suggests that if no agreement is reached on the details of the FRAND terms following the counter-offer by the alleged infringer, the parties may, by common agreement, request that the amount of the royalty be determined by an independent third party (*ex ante*). Hence, as it is a voluntary step, the alleged infringer may opt not to submit the determination of FRAND terms to a third party and to use the competition law defence against the SEP owner, who would be liable for abusing its dominant position. Nevertheless, parties may continue without having entered into a licensing agreement (*ex post*). That will depend on how the national court decides to enforce the competition law, because the ECJ does not give any additional guidance on that regard (see Section 4.6. of Chapter 4).

7.4.1. *Ex ante*

Being aware of what are the remedy and the sanction that might be issued, parties would be encouraged to enter into licensing agreements so the problem might be solved before the SEP owner brings infringement actions (*ex ante*). That is to say, implementers would be spurred to be willing licensees in order to be able to use the competition law defence, in case they are sued for patent infringement.

Namely, they would have to render the accounts in relation to past acts of use of the SEPs, they would have to provide a bank guarantee for the payment of royalties or place on deposit a provisional FRAND sum at the court or arbitration tribunal for past and future use of the patent and they would have to be ready for the amount of the royalty to be determined by an independent third party and to be bound by such a determination (see above, Section 4.3.2.1.). Those actions of implementers might encourage SEP owners to enter into licensing agreements, instead of seeking prohibitory injunctions and recall of products against them.

7.4.2. *Ex post*

If the previous scenario was not the case – parties did not enter into a license agreement – and the SEP owner initiated a patent infringement proceeding and the compulsory license is issued, the deadlock situation in which SEP licensing negotiations were before

[976] See the reference in (n 665).

the patent enforcement, it would end (*ex post*). That, because it would oblige parties to enter into a license agreement, so the implementer would make a lawful use of the SEP and the SEP owner would be remunerated for it.

Conclusion

Albeit the Commission in *Samsung* and *Motorola* and the ECJ in *Huawei v. ZTE* treated SEP owners' conduct of seeking prohibitory injunctions and the recall of products as a novel category of abuse, there was no need to create a new legal standard. Indeed, several negative consequences derive from that new construction that bases on the 'willing licensee' to assess the legality of SEP owners' behaviour. Instead, it should have been treated as a 'constructive' refusal to deal – to license SEPs – in consistency with a critical review of *IMS Health* jurisprudence.

According to the suggested legal standard, what is relevant is that the following four circumstances are present cumulatively. Namely, that the SEP is essential for the exercise of the competitor's activity, that the refusal is capable of causing anti-competitive effects on competition and consumer welfare and the absence of objective justifications by the IP owner. Regarding the justification of not being a 'willing licensee', implementers would not be considered as willing licensees if they do not render the accounts in relation to past acts of use of the SEPs, they do not provide a bank guarantee for the payment of royalties or do not place on deposit a provisional FRAND sum at the court or arbitration tribunal for past and future use of the patent and they are not ready for the amount of the royalty to be determined by an independent third party and to be bound by such a determination. That actions might encourage SEP owners to enter into licensing agreements, instead of initiating infringement proceedings.

If an infringement would be found when treating SEP owners' behaviour as a 'constructive' refusal to license IPRs, the imposition of a compulsory license – together with a periodic penalty payment – is proposed as the proportionate and necessary remedy to effectively end it. That measure would put an end to the deadlock situation in which licensing negotiations were before initiating patent infringement proceedings, obliging parties to enter into licensing agreements.

In other jurisdictions such as US, the compulsory license is also being issued regarding SEPs, albeit the legal argumentation on which its imposition is based is divergent because it is imposed to remedy patent infringements. In the EU, a similar possibility also exists. Namely, if it is considered that the SEP owner did not abuse its dominant position and a prohibitory injunction or the recall of products can be issued, they could be substituted by a 'pecuniary compensation' to remedy a patent infringement under Article 12 of IPRED. Nevertheless, due to the fact that its imposition requires that the infringer acted unintentionally and without negligence, it would be difficult to be applied in SEP infringement cases that take place in the EU, where implementers are aware of the infringement. That requirement is no needed under the US approach established in the *eBay Inc. v. MercExchange* case, where SEP holders must show, for example, that due to the patent infringement, they suffered an irreparable injury and that monetary damages are inadequate to compensate for that injury.

Albeit the divergent legal argumentation in which the US and the category of abuse (refusal to license IPRs) suggested in this chapter are based on to issue compulsory licenses, the consequence is the same. Namely, the infringer will pay damages for past infringement and royalties for the future use of the SEP. The difference is that under the US approach, these royalties take the form of damages to compensate the future infringements will be committed by the implementer and their rate is higher than the one for past infringement, in order to stimulate implementers to apply for a license. Whereas under the proposed category of abuse – refusal to grant IP licenses –, that increase is not contemplated because the SEP owner abused its dominant position when it brought infringement actions arbitrarily, *i.e.* without an objective justification, as it might be the fact that the implementer was an unwilling licensee. Whereas under the US approach, there is not an antitrust infringement, only a patent infringement that instead of being remedied with a prohibitory injunction, it is compensated with an ongoing royalty that constitute a *de facto* compulsory license.

The above serves to illustrate the possibility to use the compulsory license as a tool, when SEP holders and infringers fail to enter into licensing agreements on FRAND terms.

All in all, the category of abuse that has been proposed in this chapter is more consistent with the classic competition test used to determine if the exclusionary abuse causes harm in competition and consumer welfare. Besides, it provides greater legal certainty, because it does not pose legal gaps that Member State courts would have to fill afterwards.

In addition, the suggested category of abuse only applies when there is a competitive relationship between the right holder and the alleged infringer. In case this does not exist (*e.g.* when NPEs are SEP holders), other branches of law, such as contract law, would be available to the implementer – relying on the breach of the third-party-beneficiary contract. Accordingly, the use of competition law would be reserved to solve cases where that relationship exists.

Moreover, that category of exclusionary abuse is applicable to disputes about patents that are relevant to implement *de jure* standards (SEPs), as well as, to implement *de facto* standards because under competition law, I do not consider that the fact of giving FRAND commitments constitutes an exceptional circumstance to exclude non-SEPs from its scope. It is worth to recall that any market power that the SEP owner may enjoy would be due to its technology and not to the standardization process[977], so patent owners should

[977] Layne-Farrar and Padilla, 'Assessing the Link' (n 137) 25-27.

be subject to the same risk/reward trade off when there are standards, as when there are not[978]. However, it is a relevant circumstance from the contract law perspective.

Hence, the category of exclusionary proposed in this chapter is applicable to any refusal to grant any IP licenses, as long as a competitive relationship exists between the SEP owner and the implementer.

[978] Padilla, Ginsburg and Wong-Ervin, 'Antitrust Analysis Involving Intellectual Property' (n 386) 18, para 4.

CHAPTER 6. FINDINGS AND FUTURE WORK

Introduction

In this final chapter, I will refer to the main conclusions that can be drawn from the research that contribute to knowledge in the field of SEP licensing and competition law. Then, I will discuss how the research questions have been addressed in the thesis. And finally, I will mention the future research lines that arise from the results of this research.

1. Main conclusions

1.1. Lack of unanimity about the existence of exploitative abuses in practice

When SSOs select a patented technology as relevant to a standard, it becomes a SEP and the market power of IP owners' may increase. In consequence, in the framework of SEP licensing, patent owners may abuse their dominant positions. Although the subject matter of this research are the exclusionary conducts – the refusal to grant IP licenses and seeking prohibitory injunctions and the recall of products –, it also exists the possibility of licensors or licensees committing exploitative abuses regarding FRAND-encumbered SEPs. In particular, SEP owners may demand unreasonable terms – excessive royalties – to license their patents, a conduct that may be performed in different manners, being classified under three categories: holdup, patent ambush and royalty stacking. And SEP implementers may also force SEP owners to accept royalties that are lower than the value of the contribution of their technologies to a standard, a conduct known as reverse holdup. In addition, implementers may also refuse to take licenses on reasonable terms or delaying doing so, known as holdout.

There is an ongoing discussion among economists and legal scholars whether the opportunistic behaviours consisting of exploiting competitors by dominant undertakings – holdup, royalty stacking, reverse holdup and holdout –, constitute systematic problems in practice. That is the previous step to propose solutions against these anti-competitive behaviours. In that regard, from the analysis of the extensive literature conducted in this research, the following conclusions are drawn.

A large theoretical literature asserts that SEP holders may take advantage of the increase in their market power to use the threat of a prohibitory injunction against alleged infringers, to demand excessive royalties in comparison with those requested before the standard was chosen by the SSO. In that case, SEP holders would be holding up manufacturers, who do not have any comparable substitute to the SEP available on the market. In addition, when various SEP holders – whose patents are essential to implement a specific standard – do not coordinate their royalties, the implementer who need to get licenses from all of them, faces the royalty stacking problem. In consequence, they also think that royalty stacking is a problem in practice.

Nevertheless, as it is very difficult to obtain data to analyse the extension of these problems – holdup and royalty stacking –, there are those who consider there is very little evidence to conclude that these exploitative conducts actually occur.

With regard to reverse holdup, it seems difficult, even in theory, that SEP owners face that problem in practice. That, because once the standard has been developed, all implementers want to be the first to market. Therefore, it is not likely they waste their time trying to use their leverage to obtain rates and terms below what is reasonable.

There is a lack of empirical studies regarding the holdout problem. But theoretically, even if it was a systematic problem, the fact of not being remunerated during a long-term – until implementers were forced to do so by a court or an arbitrator –, it would only cause serious effects for SEP owners and the competition, if the financial position of implementers and SEP owners was not extremely good. Hence, only SEP holders with financial constraints would have difficulties to finance further standard related innovations. Solely owners with small patent portfolios would suffer the increase of litigations costs, because they could not be spread across a large number of patents. And just implementers who were financially weak, for whom bankruptcy would be a real possibility, could enjoy an unfair competitive advantage lowering their investment costs, over implementers who decided to pay the required fees.

1.2. Refusal to deal (tangible/intangible properties): unified criteria

In two early cases (*Commercial Solvents*, 1974 and *United Brands*, 1978), the ECJ made it clear that the unjustified cutting off of supplies to an existing or new customer for whom these inputs are essential might constitute an abuse. And subsequently, it extended that conclusion to services (*Télémarketing,* 1985). It may also constitute an abuse of a dominant position if the undertaking refuses to supply in order to reserve to itself an ancillary activity that might be carried out by another undertaking on a neighbouring but separate market, with the possibility of eliminating all competition on it, on prejudice of consumers.

Then, relying on the previous case law on refusal to supply goods and services, the CFI (in *Magill,* 1991) developed a new criteria to solve cases about refusals to grant IP licenses that endorsed the US 'essential facilities doctrine'. According to it, a company which has a dominant position in the provision of facilities – which are essential for the supply of goods or services on another market –, abuses its dominant position if, without objective justification, it refuses access to those facilities. In general terms, that criteria was subsequently confirmed by the ECJ (in *Magill*, 1995) and it was subsequently applied to another case on refusal to grant IP licenses (in *Tiercé Ladbroke*, 1997).

Therefore, until that moment, it was assumed that there were two different criteria to solve refusal issues depending on whether their object was a tangible or intangible property. However, in *Bronner* (1998) – a case about a refusal to supply a service –, the ECJ used the criteria developed in *Magill*. That fact, together with the fact that the ECJ – in *Magill* – took as a basis the case law on refusal to supply goods or services to develop the criteria applicable to IPRs, they support the argument that tangible and intangible properties do not need to be treated differently regarding refusal behaviours.

The criticism derived from applying the criteria established in *Magill* to *Bronner* by the ECJ does not lie in the fact that the object in the latter one was a service instead of an IPR, but in the lack of argumentation of that use. It can be inferred implicitly from the judgment in *Bronner*, that the ECJ did it to offer a greater protection to the owner of the service (Mediaprint). That is to say, in order to conclude that the dominant undertaking abused its dominant position according to the criteria established in *Magill*, more circumstances needed to be present – compared to those required by the case law on refusal to supply goods/services –, so it was going to be more difficult to find an antitrust infringement.

Nonetheless, in this regard, it is important to recall that the primary purpose of Article 102 TFEU is to prevent distortion of competition – and in particular to safeguard the interests of consumers – rather than to protect the position of particular competitors (*e.g.* dominant undertakings).

1.3. The relevance of conducting a strict assessment of the existence of potential substitutes

According to the first circumstance set in *Magill*, the IPR must be essential or indispensable for the exercise of competitor's activity in the sense that there is no real or potential substitute. In *Bronner*, the ECJ clarified how to determine whether a 'potential substitute' exists or not, referring to the fact of whether there are any technical, legal or economic obstacles capable of making impossible or even unreasonably difficult for other competitors (publishers of daily newspapers in *Bronner*) to commercialize their own good, service or creation/invention protected by IPRs, whose owner refuses to supply or license (the nationwide home-delivery scheme in *Bronner*).

In my opinion, in *IMS Health*, much attention was paid to the determination of the presence of the second and fourth circumstances established in *Magill*, that is to say, that the refusal prevents the emergence of a new product for which there is a potential demand on the part of consumers and that the refusal pursues the aim of reserving the secondary market, respectively. However, the focus should have been to determine if there were economic obstacles capable of making impossible or even unreasonably difficult for competitors to create a brick structure that substituted the one owned by *IMS Health*.

It should have been concluded that the '1860 brick structure' owned by IMS Health was not essential for the exercise of competitors' activity, because the existing economic obstacles were only capable of making a bit difficult the sale of studies based on their own structures (but not unreasonably difficult or impossible). The difficulty lied on the fact that without market power, competitors' only way to compete with IMS Health – attracting its customers – was improving the efficiency of their alternative structures. This hypothesis could be seen reinforced with the fact that NDC – IMS Health's competitor that filed a complaint with the Commission – parallel to Commission's investigation and legal proceedings, it managed to celebrate contracts based on an alternative structure it created, even with some of the 20 largest pharmaceutical companies.

The consequence of not conducting a rigorous exam of the existence of potential substitutes – as occurred in *IMS Health* – is that the 'essential' concept contained in the first circumstance of *Magill* is interpreted too broadly. Therefore, the IPR will be considered essential for the exercise of competitor's activity, when in fact potential substitutes exist. Accordingly, inefficient rivals will be protected by competition law, damaging therefore the productive efficiency.

Especially in fast moving technologies, the ability of a determined rival to compete around a competitor's IP – with resulting benefits to consumers – is often been underestimated. In that regard, it is fundamental not to lose sight of the fact that competitors are entitled to compete with their own assets, not with those owned by their rivals.

1.4. The rationale to avoid the double inconsistency

In order to sustain the argument about the fact that *Huawei v. ZTE* should have been treated as a refusal to grant SEP licenses, it was necessary to previously study Commission's decisions and ECJ case law on that issue. After the analysis, I drew the conclusion that they were not well-reasoned and they were incoherent.

In several cases the decision-making bodies did not justify explicitly why they applied the *Magill* test to cases where the object of the refusal was not an IPR. For instance, in *Microsoft*, the Commission considered that the protocols – that Microsoft refused to supply to Sun – were protected by copyright. However, the Commission was of the opinion that strictly speaking, they were not protected by the IPR. It can be inferred from the Decision that the Commission applied the *Magill* criteria in *Microsoft* to protect the dominant undertaking, because its application required the presence of more circumstances (for the same reason the ECJ applied the *Magill* criteria in *Bronner*, see above Section 1.2.).

In some other cases, they did not either explain why they modified the indispensability of some of the circumstances that composed the *Magill* test. In *IMS Health,* the Commission did not explain why it considered that the presence of the second circumstance set in *Magill* – that the refusal prevented the emergence of a new product for which there was a potential demand – was not necessary, while it took the precise opposite view in *Tiercé Ladbroke*. In the same vein, the ECJ did not argue why it stated that the aforementioned circumstance was necessary in *IMS Health,* when in *Bronner* it considered that it was not. The President of the CFI did not mention either why in *IMS Health* it considered the presence of the second circumstance necessary and in *Tiercé Ladbroke,* it stated that was sufficient the presence of the first – that the IPR was essential for the exercise of competitor's activity – or the second circumstance, alternatively.

The decision-making bodies neither indicated explicitly the reason to broaden the concept of 'new product' regarding the second circumstance set in *Magill*, that was originally defined as the product that was not limited essentially to duplicate the product already offered by the IP owner. Thus, in order to consider a product as 'new' according to the CFI in *Tiercé Ladbroke,* it was sufficient that it was a far more suitable for consumers. In the view of the Commission and the CFI in *Microsoft*, a product was 'new' if it contained substantial elements contributed by the licensee's own efforts. The same could be said regarding the broadening of the scope of the fourth circumstance established in *Magill* – the refusal had to pursue the aim of excluding competition from a secondary market – made by the Commission and the ECJ in *IMS Health*. They considered sufficient that the refusal excluded competition from a vertically related market, that is, in a downstream production stage, instead of excluding it from a secondary market as it was required by the *Magill* criteria. From their decisions and judgments in *Microsoft* and *IMS Health*, it might be inferred that the purpose of the broadening was to protect dominant undertakings' competitors, whose aim was not to produce a new product, but an existing one.

As it follows from the above, the consequence of the lack of rationale is the double inconsistency. Firstly, in *IMS Health,* the decisions and judgments of the Commission, the CFI and the ECJ were not congruent with their own previous decisions and judgments (*Tiercé Ladbroke* and *Bronner*), but contradictory. And secondly, in the same case (*Tiercé Ladbroke* and *IMS Health*), divergent argumentations were employed by different decision-making bodies.

In conclusion, the Commission and the ECJ instead of applying an existing criteria (*e.g.* the *Magill* test) directly to different cases, they should first analyse all the circumstances of the specific case in detail. And then determine the appropriateness of using the existing legal approach. It may occur that it would be more convenient to review the existing legal approach to adapt it to the case in question or to suggest a different one. In any case, they always have to justify their choices precisely (it is not sufficient that may be inferable from the decision or judgment), that should aim to safeguard the interests of consumers and not of competitors.

1.5. The *Huawei v. ZTE* criteria leads to legal uncertainty

When the Regional Court of Düsseldorf requested for a preliminary ruling in *Huawei v. ZTE*, it was expected that the ECJ was going to provide a criteria to determine whether the fact of bringing infringement actions – seeking a prohibitory injunction and the recall of products – by a SEP owner, it would constitute an exclusionary conduct. That is to say, a criteria to evaluate if that behaviour would limit production, markets or technical development to the prejudice of consumer according to Article 102(b) TFEU.

In the long awaited judgment, the ECJ did not consider that SEP owner's behaviour could be qualified as none of the categories of exclusionary abuse already developed in its case law – *e.g.* refusal to deal. Therefore, it created a novel category of abuse, but without reference to how to evaluate if the competitive damage arising from the conduct was present. It merely stipulated the specific actions SEP holders have to perform and the specific obligations alleged infringers must comply with, so the conduct of bringing infringement actions does not constitute an exclusionary abuse. The ECJ did not explain why it considered those actions and obligations relevant or why the fact of not following them would constitute an abuse of dominant position.

Moreover, it is not clear under what precise circumstances the behaviour would be an exclusionary abuse. Nevertheless, it seems to be clear that whenever SEP owners do not alert the alleged infringers of the infringement and do not present the specific, written offers for a license on FRAND terms, they abuse their dominant positions, regardless of whether alleged infringers are willing licensees or not. To be considered that an alleged infringer is willing to enter into a license agreement, it would have to respond to the offer diligently and in good faith, submitting a counter-offer on FRAND terms in case it rejects it. Moreover, if its counter-offer was rejected, it would have to provide appropriate security to guarantee the payment of royalties for the past acts of use of the SEP.

In conclusion, the criteria provided by the ECJ is very formal and increases the legal uncertainty. That might entail that Member State courts – who determine whether the conduct of SEP owners constitutes an abuse of dominant position in a case by case basis – apply the new category of abuse in a disharmonized way in the EU, enabling so forum shopping.

1.6. Compulsory license and the incentive to invest in innovation

The proposal of treating the case *Huawei v. ZTE* as a refusal to grant IP licenses offers advantages on many aspects, as they were analysed in the previous chapter. Here, I would like to focus on the remedy that gives the name to the title of the thesis 'Compulsory licensing of SEPs to remedy abuses of dominant position'.

In accordance with the critical review of *IMS Health* jurisprudence, the Commission could issue a compulsory license to bring the infringement of Article 102 TFEU committed by SEP holders, effectively to an end.

It would be advisable to issue the compulsory license together with a periodic penalty payment to compel the SEP holder to remedy the consequences of the infringement, by granting licenses to third parties. It would be also appropriate to include in compulsory licensing a mechanism to determine the licensing terms, as the Commission did in *IMS Health* – regarding the determination of royalties – or as it occurs in merger control cases, where the Commission requires mandatory arbitration commitments. In that way, it would be guaranteed, to the extent possible, that in case of disagreement between the parties, the SEP owner would comply with the order to grant licenses in the established period of time. Furthermore, these mechanisms might also help to monitor the implementation of the order.

The common criticism[979] of compulsory license is that the obligation – even for a fair remuneration – may undermine undertakings' incentives to invest and innovate and, thereby, possibly harm consumers. Hence, the knowledge that they may have a duty to supply against their will may lead dominant undertakings – or undertakings who anticipate that they may become dominant – not to invest, or to invest less, in the activity in question. Also, competitors may be tempted to free ride on investments made by the dominant undertaking instead of investing themselves.

Taking as the starting point the fact that any undertaking, whether dominant or not, should have the right to choose its trading partners and to dispose freely of its property, the remedy of compulsory licence does not necessarily entail these consequences[980]. The remedy would only discourage SEP owners to innovate in the following two cases. First, if it would not be clear and predictable for SEP owners to know under which circumstances their behaviour – which may entail the imposition of the aforementioned remedy – would be abusive, because they could not adjust their conduct to competition rules. Hence, companies would be reluctant to innovate (to obtain IPRs) because of the risk of being obliged to grant compulsory licenses. With regard to SEP owners' behaviour of seeking a prohibitory injunction and the recall of products, the category of abuse suggested in this research – the reviewed refusal to license IPRs[981] – brings legal certainty

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979 Richard J. Gilbert and Carl Shapiro, 'An economic analysis of unilateral refusals to license intellectual property' (1996) 93(23) Proceedings of the National Academy of Sciences 12749, 12755, para 2 ('Our analysis has not demonstrated a clear understanding of the conditions that lead to the conclusion that the owner of any type of property should, for reasons of economic efficiency, be compelled to share that property with others. A more productive channel of inquiry appears to us to focus on the types of products that justify intellectual property protection and the appropriate scope of that protection'); Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 75.

980 Ritter, 'Refusal to Deal and Essential Facilities' (n 899) 17-22 (he explains why the fact that compulsory access reduces the return earned by the right holder, it does not necessarily entail a diminish of investment incentives).

981 Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities' (n 148), para 81 (The Commission will consider 'refusal to license IPRs' practice as an enforcement priority if all the following circumstances are present: when the refusal (i) relates to a product or service that is objectively necessary to be able to compete effectively on a downstream market, (ii) is likely to lead to the elimination of effective competition on the downstream market, and (iii) is likely to lead to consumer harm) and para 82 ('In certain specific cases, it may be clear that imposing an obligation to supply is manifestly not capable of having negative effects on the input owner's and/or other operators' incentives to invest and innovate upstream. [...] This could also be the case where the upstream market position of the dominant undertaking has been developed under the protection of special or exclusive rights or has been financed by state resources').

as to the exact boundaries of the infringement. That is to say, the circumstances to determine the liability of SEP owners who bring infringement actions are precise. Thus, SEP owners would not be discouraged to innovate.

And second, the compulsory license might act as disincentive to invest in innovation and research if the compulsory license would not constitute a proportionate and necessary remedy. Note that for IP owners, the IPRs are the due recompense for their invention or creation. So if they are obliged to grant licenses of their IPRs when that measure is not proportionate or necessary to remedy the antitrust infringement, they might be reluctant to invest in innovation. Therefore, if that was the case, the Commission would have to impose a different measure to remedy or sanction the abusive conduct. If SEP owners' behaviour of seeking prohibitory injunctions and the recall of products was treated as a refusal to license IPRs, the compulsory license would constitute the proportionate and necessary remedy that obliges SEP owners to do what they refused to do, that implied to be abusing their dominant positions.

2. Discussion

When implementers use SEPs without obtaining licenses – usually because parties cannot agree on the amount of the royalty to be paid –, patent owners may bring infringement actions seeking a prohibitory injunction or the recall of products. However, as SEP holders gave commitments to SSOs that they will grant licenses on FRAND terms (because the technology protected by SEPs is essential to implement *de jure* standards), alleged infringers – that have been sued – use the competition law-based defence. It consists of accusing SEP owners of abusing their dominant positions for bringing the aforementioned actions. To determine under what circumstances that behaviour constitutes an antitrust infringement, it has been subject of an extensive discussion both in the EU and US.

Note that it has not been under discussion the lawfulness of bringing infringement actions seeking the rendering of accounts in relation to past acts of use of the SEP or an award of damages in respect of those acts of use, that are also measures provided by patent law (*e.g.* in *Huawei v. ZTE,* the dominant undertaking also sought those other measures). The reason is because these actions do not have a direct impact on products manufactured by competitors appearing or remaining on the market.

The aim of the research – that is focused in EU competition law – is to argue that there was no need for a novel category of exclusionary abuse that was what the ECJ established in *Huawei v. ZTE*, when it dealt with that issue for the first time. Until then, there was a considerable degree of uncertainty as to the lawfulness of bringing infringement actions seeking a prohibitory injunction and the recall of products by FRAND-encumbered SEP holders. That is to say, it is defended that SEP owners' behaviour should have been treated as a refusal to grant IP licenses in consistency with a critical review of *IMS Health* jurisprudence. And that the remedy of compulsory license would constitute the proportionate and necessary measure to bring the infringement of Article 102 TFEU effectively to an end. In that way, it would terminate the deadlock situation in which SEP licensing negotiations were before bringing the infringement actions, as said (see Section 7.4. of Chapter 5), mainly due to the lack of clarity as to what is meant by FRAND terms[982].

Accordingly, this research poses the following two questions:

- Does bringing actions for a prohibitory injunction and the recall of products by SEP owners constitute an abuse of a dominant position, because it might be considered as a 'constructive' refusal to grant IP licenses?
- If yes, is compulsory license the most proportionate and necessary remedy to end the violation of Article 102 TFEU?

Hereunder, I will refer to how these questions have been addressed in the thesis.

2.1. First research question

In *Huawei v.* ZTE, the Regional Court of Düsseldorf referred the lawfulness of SEP owners' behaviour to the ECJ for a preliminary ruling because the EC's approach in *Samsung* and *Motorola* and the one established by the German Federal Supreme Court (*Bundesgerichtshof*-BGH) in *Orange Book*, they were contradictory. Moreover, there was an absence of express guidance from SSOs' patent policies on the issue.

Nevertheless, in that long awaited judgment, the ECJ does not provide a criteria to determine whether the competitive damage arising from bringing the infringement actions is present or not. Instead, it establishes that if the alleged infringer was willing to enter into a license agreement, the SEP owner abuses its dominant position even though it had performed the actions required by the ECJ. That is to say, even if the SEP owner – before bringing an action for a prohibitory injunction or the recall of products – alerted the alleged infringer of the infringement and it presented it a specific, written offer for a license on FRAND terms. To consider that the alleged infringer was a willing licensee, it had to (i) express its willingness to conclude a licensing agreement, (ii) respond to the offer diligently and in good faith, submitting a counter-offer on FRAND terms, and (iii) if the counter-offer was rejected by the SEP owner, it had to provide appropriate security to guarantee the payment of royalties for the past acts of use of the SEP.

Thus, Member State courts have to analyse, case by case, if SEP holders performed those specific actions and whether alleged infringers complied with the obligations established in the judgment in order to be considered as willing licensees.

All in all, the ECJ treated the issue as a specific and novel category of abuse within the meaning of Article 102 TFEU. Due to the several negative consequences derived from

[982] *Huawei* AG (n 137) [9].

that new construction based on the 'willing licensee' to assess the legality of SEP owners' behaviour, I am of the opinion that there was no need to create a novel category of exclusionary abuse. That, because SEP owner's conduct should have been treated as a refusal to deal – to grant SEP licenses –, in consistency with a critical review of *IMS Health* jurisprudence developed by the ECJ. In order to do that, it must be argued that the fact of bringing infringement actions by SEP holders is a 'constructive' refusal to grant IP licenses. In this way, the case *Huawei v. ZTE* would be consistent with the ECJ jurisprudence on refusal to deal.

Considering the above, the thesis raised the following research question:

- 'Does bringing actions for a prohibitory injunction and the recall of products by SEP owners constitute an abuse of a dominant position, because it might be considered as a 'constructive' refusal to grant IP licenses?'

The first research question has been answered positively in the thesis. Namely, considering that seeking prohibitory injunctions and the recall of products constitutes a 'constructive' refusal to grant SEP licenses – according to the proposed category of abuse based on the revision of the *IMS Health* jurisprudence –, SEP owners would abuse their dominant positions, as long as the following circumstances were present cumulatively.

Firstly, the SEP must be essential for the exercise of the competitor's activity, in the sense that there is no real or potential substitute.

Secondly, seeking a prohibitory injunction and the recall of products must be capable of causing anti-competitive effects on competition and consumer welfare. Regarding the latter, the refusal might be capable of harming consumer welfare if it might hinder the emergence of a new product, a more economical product or a product characterized by its compatibility and interoperability with different products, for which there is a potential, constant, specific and regular demand on the part of consumers.

And thirdly, SEP owners' behaviour is not justified by objectively verifiable considerations. In other words, the dominant undertaking cannot demonstrate that its behaviour produces possible advantages in terms of substantial efficiencies which outweigh any anti-competitive effects, or show that the conduct is objectively necessary. The behaviour would be considered as objectively necessary if the implementer (i) was not able to pay its debts, (ii) his assets were located in jurisdictions that do not provide for adequate means of enforcement of damages, or (iii) was unwilling to enter into a licence agreement on FRAND terms. It is understood that an implementer is a willing licensee if it (1) rendered the accounts in relation to past acts of use of the SEP, (2) provided a bank guarantee for the payment of royalties or placed on deposit a provisional FRAND sum at the court or arbitration tribunal for past and future use of the patent, and (3) stated that is ready for the amount of the royalty to be determined by an independent third party and to be bound by such a determination.

2.2. Second research question

Once the competition authority or courts have determined that SEP owners infringed Article 102 TFEU when seeking prohibitory injunctions and the recall of products – treating the conduct as a 'constructive' refusal to grant IP licenses –, they would proceed to impose the most appropriate measures to remedy and/or sanction that behaviour.

Accordingly, the thesis posed the second research question:

- 'If yes (if the first question was answered positively, *i.e.* SEP owners' conduct constitutes an abusive refusal to grant IP licenses), is compulsory license the most proportionate and necessary remedy to end the infringement of Article 102 TFEU?'

This question has also been answered affirmatively in the thesis. The compulsory license emerges as the most proportionate and necessary remedy to end that infringement effectively. That conclusion relies on the fact that the compulsory license was the measure issued by the EC and the ECJ in *Magill, IMS Health* and *Microsoft* to end dominant undertakings' antitrust infringement consisting in refusing to grant IP licenses.

And it is also based on the fact that in other jurisdictions such as US, compulsory licenses are also employed as a tool when parties fail to enter into licensing agreements on FRAND terms, albeit basing on different legal argumentation. Namely, US courts impose ongoing royalties that constitute a *de facto* compulsory license to remedy patent infringements.

3. Future work

On the basis of the findings of this thesis, I propose the following areas of further research.

Once the ECJ issued the judgment in *Huawei v. ZTE* in 2015, Member State courts have been issuing their decisions filling the legal gaps posed by the ECJ and interpreting aspects that were not clear, on a case by case basis. Some of these national judgments have been studied in this research, mainly those issued in Germany, but also those released in France, Italy, and UK, until 2019.

Hence, studies can be done analysing national courts' judgments issued in other Member States since 2015 (*e.g.* Netherlands and Romania) and those issued in the countries mentioned in the previous paragraph, but from 2019 on. Thus, the analysis of those judgments together with the ones studied in this thesis, would be usable in order to do a comparative study about the divergent interpretations made by national courts, to see whether the new category of abuse established in *Huawei v. ZTE* is being applied in a harmonized way or not among Member States and if SEP owners and implementers are making use of forum shopping. The results of the study might be relevant for the EC to draft its next Communication, suggesting more specific solutions regarding the issue of

SEP licensing and the competition law. Recall that so far, in its last two Communications issued in 2016 and 2017[983], it merely stated that the uncertainty in enforcement of SEPs should be improved. And it also reckoned that there is an urgent need to set out key principles that foster a balanced, smooth and predictable framework for SEPs.

It might also be interesting to conduct further research about how the issue of bringing infringement actions seeking prohibitory injunctions and the recall of products by SEP owners, is being addressed in other jurisdictions, either under competition or contract law or using other mechanisms. In particular, in China, South Korea or India, SEP licensing disputes are increasingly frequent.

More specifically, it would be intriguing to know if in other jurisdictions would exist the possibility of treating SEP owners' behaviour as a 'constructive' refusal to grant IP licenses. And if that was the case, what would be the required elements to find that antitrust infringement? That analysis would allow to compare them with the elements that compound the reviewed category of exclusionary abuse proposed in this research – *i.e.* essentiality of IPR, competitor's exclusion, harm to consumer welfare and absence of objective justifications.

In the same vein, it would also be of great interest to analyse whether the remedy of compulsory license might be employed as a tool to get parties into licensing agreements under different jurisdictions, either to remedy a patent infringement (*e.g.* in the form of ongoing royalties, as in US) or an antitrust infringement (as it has been proposed in this research). It might be also employed as an ADR mechanism, as part of SSOs' patent policies or managed by national patent offices. Regarding the latter, the Japanese government recently suggested an ADR system with a compulsory license for SEP disputes. However, for the time being, the government has decided not to proceed with this proposal[984]. The proposed ADR mechanism consists of the following points. When negotiations to enter into licensing agreements are deadlocked, the parties can require the Japan Patent Office to appoint a mediator, who will set license rates on FRAND terms.

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[983] Commission COM(2016) 176 final (n 674) 13, para 7; COM(2017) 712 final (n 81) 2, para 7.

[984] 'A study of a new ADR system with a view to the Fourth Industrial Revolution' (Japan Patent Office 2017) <https://www.jpo.go.jp/shiryou/toushin/shingikai/newtokkyo_shiryou21.htm> accessed 1 August 2018; Jacob Schindler, 'Patent Owners Sound Alarm over Proposed "Compulsory Licensing for SEPs" in Japan' (*IAM Blog*, July 27, 2017) <http://www.iam-media.com/blog/Detail.aspx?g=f2d97bca-9a19-4613-bd0f-ad19c0e20e98> accessed 1 August 2018; Jacob Schindler, 'Japanese Government Will Issue SEP Negotiation Guidelines, but Controversial ADR Proposal on Hold for Now' (*IAM Blog*, October 3, 2017) <http://www.iam-media.com/blog/Detail.aspx?g=3519aeb5-0955-4856-909f-c5b7de395c8b> accessed 1 August 2018; Jacob Schindler, 'Japanese government steps back from controversial SEP ADR proposal' (*IAM Blog*, November 27, 2017) <http://www.iam-media.com/blog/detail.aspx?g=96c16e8c-c382-4f0b-a0d1-5c63471c0cb1> accessed 1 August 2018.

Conclusion

In *Huawei v. ZTE,* the ECJ treated the issue as a specific and novel category of exclusionary abuse within the meaning of Article 102 TFEU. Nevertheless, there was a category of exclusionary abuse already developed in its case law, the abusive refusal to license IPRs. Accordingly, the contribution of the thesis is to defend that the case *Huawei v. ZTE* should have been treated as a 'constructive' refusal to deal – to grant SEP licenses.

In that way – treating SEP owners' behaviour of seeking prohibitory injunctions and the recall of products under the aforementioned category of exclusionary abuse –, the case *Huawei v. ZTE* would be consistent with the ECJ's previous case law. Moreover, the remedy that this category of abuse entails – the compulsory license – would be the most effective measure to bring the infringement to an end. And consequently, the deadlock situation in which SEP licensing negotiations were before bringing the infringement actions – usually due to a lack of agreement of what FRAND royalties are –, would end, because the compulsory license would oblige parties to enter into licensing agreements. Hence, implementers would have access to technologies essential to implement *de jure* standards – which would enable them to manufacture products interoperable with other products – and SEP owners would be remunerated for that use.

Accordingly, the answers to the two main research questions of the thesis is affirmative. In addition, along the research, several further contributions to the field of SEP licensing and competition law have been made. All in all, the aim of this study is to suggest a consistent category of exclusionary abuse to assess the lawfulness of SEP owners' behaviour, which in turn, it entails the imposition of a compulsory license to remedy the infringement effectively.

CONCLUDING COMMENT

The subject matter of this research is the behaviour of SEP owners – who committed to SSOs to grant patent licenses on FRAND terms – that consists of bringing infringement actions seeking prohibitory injunctions and the recall of products. As that conduct is capable of excluding competitors from the market and harming consumer welfare, the question of whether SEP owners abuse their dominant positions – according to Article 102 TFEU – arises.

In *Huawei v. ZTE*, the ECJ creates a novel category of exclusionary abuse to assess the antitrust nature of that conduct, that is limited to establish a framework for the negotiation of the licensing of SEPs on FRAND terms. Due to its formality, the legal uncertainty regarding the circumstances required to find an antitrust infringement, increases. In *Samsung* and *Motorola*, the EC also treated SEP owners' conduct as two novel categories of abuse – exclusionary and exploitative – within the meaning of Article 102 TFEU.

Nevertheless, besides that there was no need for the creation of a new category of exclusionary abuse based on the 'willing licensee' concept to assess the legality of SEP owners' behaviour, several negative consequences derive from that new construction. Hence, the thesis proposes that in *Huawei v. ZTE* the ECJ should have applied an existing category of exclusionary abuse, the refusal to grant IP licenses – in consistency with a critical review of *IMS Health*. Thus, a SEP owner who brings infringement actions seeking a prohibitory injunction or the recall of products would only abuse its dominant position if the following circumstances are present cumulatively. Firstly, the SEP must be essential for the exercise of the competitor's activity. Secondly, actions seeking a prohibitory injunction and the recall of products must be capable of causing anti-competitive effects on competition and consumer welfare. And thirdly, the objective justifications of the SEP owner's conduct must be absent.

Accordingly, the *Huawei v. ZTE* case would be consistent with the ECJ's previous case law (*Magill, IMS Health* and *Microsoft*). And as a consequence, the compulsory license would emerge as the most proportionate and effective remedy to end the infringement. Hence, parties would enter into licensing agreements, ending the deadlock situation in which licensing negotiations were before bringing those infringement actions.

Consequently, licensors would receive an adequate return on their investment – so they would continue innovating – and implementers would gain access to standardised technologies at a fair and reasonable cost. Furthermore, consumers' welfare would be improved in several ways. They would have a wider choice to select the product that offers the right balance between price and quality. Namely, they would obtain lower prices, so more people could afford to buy products. And they would enjoy better quality of goods and services that would attract more customers and expand market share.

Note that the approach suggested in this research would be employed only as a solution of 'last resort'– that normally characterizes competition law –, when the principle of the freedom of the competing parties to arrange their own affairs turned out to be unsuccessful – *i.e.* they failed to enter into licensing agreements – and the required elements to find the antitrust infringement are present.

Therefore, treating SEP owners' conduct as a 'constructive' refusal to licence IPRs, would strike the balance between the following rights. On the one hand, SEP owners' right to exclude – granted by patent law – and right of access to the courts. And on the other hand, implementers' right to access to markets and in particular, to standardized technologies – conferred by competition law. So the suggested category of abuse would not involve to overprotect or underprotect any of the parties, because it is not too patentee-friendly nor too implementer-friendly.

The above would be in line with Article 345 TFEU that provides that 'the Treaties shall in no way prejudice the rules in Member States governing the system of property ownership'. That is to say, the general rule is that IPRs must be respected. IP owners are free to decide if they want to license their rights or not (principle of freedom of the parties to arrange their own affairs). However, IPRs are not absolute rights. Accordingly, in exceptional circumstances – *i.e.* when the interest in protection of free competition prevailed over the protection of IPRs and the economic freedom of their owners –, IP owners may be obliged to allow the use of their rights.

To conclude, the refusal to grant IP licenses proposed in this research – in consistency with a critical review of *IMS Health* – would bring more coherence, legal certainty and effectiveness to SEP licensing and enforcement framework in the EU. The above is crucial bearing in mind that as a result of the expansion of 5G and IoT across the territory, products that implement SEPs will be even more present in our everyday lives than they are already nowadays.

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