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## **Standardizované technologie z pohledu soutěžního práva EU**

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Perspective**

**Master Thesis**

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## **Prohlášení**

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## **Declaration**

I hereby declare that I have written this master thesis on my own; all the sources and literature have been duly cited and this master thesis has not been used to obtain any other or the same academic degree.

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Jiří Mňuk

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## **LIST OF ABBREVIATIONS**

CEN	European Committee for Standardisation
CENELEC	European Committee for Electrotechnical Standardisation
CEO	Chief Executive Officer
DG	Directorate General
ETSI	European Telecommunications Standards Institute
EU	European Union
FRAND	Fair, Reasonable and Non-Discriminatory (Licensing Terms)
GSM	Global System for Mobile Communication
ICT	Information and Communication Technologies
IEC	International Electrotechnical Commission
IPR(s)	Intellectual Property Rights
ISO	International Organization for Standardization
ITU	International Telecommunication Union
NPE	Non-Practising Entity
SEP(s)	Standard-Essential Patent(s)
SSNIP	Small but Significant Increase in Price
SSO	Standard Setting Organization
TTBER	Technology Transfer Block Exemption Regulation
TFEU	Treaty on the Functioning of the European Union
UK	United Kingdom (of Great Britain and Northern Ireland)
US	United States (of America)
UMTS	Universal Mobile Telecommunications System
WDCMA	Wideband Code Division Multiple Access



# INTRODUCTION

Technologies govern our everyday life increasingly. It is possible to come across certain technological systems, products or components almost at any place and any time. Despite the fact that one might not realize it, many of the technologies that we treat as a natural part of our life implement certain standards. One of the primary benefits of standards is that they secure compatibility and interoperability so that the society is connected as standards enable technologies to cooperate.

Naturally, technologies which are an outcome of standardisation are usually protected by intellectual property rights (IPRs) in order for their holders to obtain remuneration. While holders of such IPRs may prevent others from using their IPRs compatible with a standard, it is a common interest of the society to have the opportunity to enjoy the benefits which standards may provide. This tension inevitably creates an explosive compound which causes a large number of legal issues.

The aim of this thesis is to focus primarily on these legal issues in specific context of EU competition law. Given an extensive number of different standards that might be observed both in terms of theoretical typology as well as in terms of actual different industries, this thesis focuses particularly on technical standards. Moreover, as the current EU competition law concerns regarding technical standards relate primarily to standards adopted by formal standard-setting organizations (SSOs), the main focus will be turned to such technical standards and IPRs related thereto.

The underlying question that will govern the research carried out herein below in this thesis is the following: From the current EU competition law perspective, what are the consequences of the inclusion of IPRs in technical standards governed by SSOs for IPR proprietors? In this regard, the imbalances and various considerations that affect the position of such IPR holders will be observed. On the one hand, it may seem to be evident that should their IPRs read on a particular technical standard, these IPR holders are not about to enjoy the same treatment as proprietors of regular IPRs. On the other hand, however, absent any express determination of their position by EU competition law or internal rules of SSOs and also given the complexity of industries implementing technical standards, the statement that these IPR holders should be deprived of rights otherwise contained in regular IPRs is not that evident anymore.

The structure of this thesis and the method applied in individual chapters is the following.

Firstly, in order to set the relevant overall framework, general definition of standards and technical standards will be provided. Consequently, various types of technical standards that may occur will be outlined along with their basic characteristics. The most important market effects that are caused by technical standards will also be briefly described from the economic perspective in order to provide the background necessary for further discussion and analysis.

Secondly, the general interplay between technical standards, IPRs and EU competition law will be outlined. It should however be noted that with regard to general EU competition law, merely the issues necessary for further elaboration will be presented (i.e. no extensive and wide description of EU competition law will be provided). Subsequently, the current EU competition law concerns will be discussed both from the theoretical perspective and through the lenses of relevant case law. From a wider range of possible paths, the most recent one related to the EU competition law concern with *patent hold-up* and *reverse hold-up* will be chosen for further discussion within the rest of this thesis.

The approach undertaken in the remaining chapters will be the following. Primarily, the essential theoretical notions governing the issues in questions will be presented; then the position *de lege lata* will be established along with the relevant case law; and finally an attempt will be made to discuss a potential solution *de lege ferenda*.

In this sense, chapter three will discuss the complex nature of industries implementing standardised technologies and demonstrate the substantial imbalance in licensing framework. Given the fact that prevailing EU concerns with technical standards relate to alleged abuse of dominance, chapter four will focus on the issue of market power and IPRs reading on technical standards. Chapter five will demonstrate approaches available in order to find abuse of dominant position in the context of relevant decisions and present the reader with potential ways to restore the current imbalance.

Finally, the partial conclusions made in individual chapters will be united in order to provide coherent outcome.

# 1. STANDARDISATION AND STANDARDS

There is no unified, broadly accepted or universally legally binding definition of standardisation and standards. In economic and legal theory there is certain diversity, confusion and inconsistency as to what these terms actually cover.<sup>1</sup>

Standardisation is often described indirectly through its typical characteristics, its outcomes and purpose, impact on markets and potential pro- and anti-competitive effects. Such aspects of standardisation will be further discussed herein below, but firstly it is necessary to take one step back and define standardisation directly. In general terms, it may be observed that standardisation is an explicit or implicit agreement to do certain key things in a uniform way.<sup>2</sup> Therefore, the process of standardisation aims at the definition of such uniformity – a standard. Primarily, it is thus necessary to properly clarify what the term ‘standard’ represents.

## 1.1 Definition of Standards

There appears to be an ongoing effort to determine a universally acceptable definition of a standard. Some scholars broadly define standards as ‘*the consensus of different agents to certain key activities according to agreed-upon rules*<sup>3</sup>’. However, such a definition does not provide the reader with any significant insight in terms of a concrete idea about what a standard is in reality.

While some other definitions attempt to provide a clearer picture, the issue is that they rarely succeed to cover all different types of standards that might exist.<sup>4</sup> For example, they promote only standards issued or approved by certain recognized bodies or authorities<sup>5</sup> and omit the ones arising from the market naturally. They sometimes also

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<sup>1</sup> DE VRIES, Henk J. IT Standards Typology. In: JAKOBS, Kai. *Advanced Topics in Information Technology Standards and Standardization Research*. Hershey, PA: Idea Group Pub, 2006. pp. 1 - 26. ISBN 978-1591409380. p. 2.

<sup>2</sup> FARELL, Joseph; SALONER, Garth. Converters, Compatibility, and the Control of Interfaces, *The Journal of Industrial Economics*, 1992, Vol. XL, No. 1, pp. 9 – 35. p. 9.

<sup>3</sup> Ibid.; See also: NARAYANAN, V.K.; CHEN, Tianxu. Research on Technology Standards: Accomplishment and Challenges. *Research Policy*. 2012, Vol. 41, Issue 8, pp. 1375-1406. p. 1376.

<sup>4</sup> DE VRIES, supra note 1, p. 3.

<sup>5</sup> JAKOBS, Kai. *Standardisation processes in IT: impact, problems and benefits of user participation*. 1st ed. Braunschweig [u.a.]: Vieweg, 2000. 250 p. ISBN 9783528056896. p. 17.: “...a publicly available definitive specification of procedures, rules and requirements, issued by a legitimated and recognized authority through voluntary consensus building observing due process, that establishes the baseline of a common understanding of what a given system or service should offer.”

do not cover all of the subject-matter that may be subject to a particular standard,<sup>6</sup> stating that standards relate only to products, not including any other subject-matter, e.g. activities, processes etc. (not to mention that standards usually do not relate to products or processes as a whole, but rather to their specific parts<sup>7</sup>). Furthermore, some other definitions<sup>8</sup> try to stress the binding nature of standards and point out the requirement of compliance with a standard by all of the subject-matter of a standard in a certain jurisdiction, leaving out standards that are obligatory merely by nature, not by law.

Yet, one of the possibilities to shed more light on the respective term in its entirety is provided by a definition stating that a standard is an ‘...*approved specification of a limited set of solutions to actual or potential matching problems, prepared for the benefits of the party or parties involved, balancing their needs, and intended and expected to be used repeatedly and continuously, during a certain period, by a substantial number of the parties for whom they are meant.*’<sup>9</sup>

The said definition promotes as a general subject-matter of a standard ‘an actual or potential matching problem’, avoiding the danger of being too narrow as to the specification of issues that standards may relate to. It is neither too broad nor too vague or narrowly focused. However, as the term ‘matching problem’ is rather of a technical nature, further clarification is required.

A matching problem actually depicts one of the primary features of standards, which is that the need for a standard occurs when there are two or more interrelated issues (components of certain products, processes etc.) that need to be harmonized. In other words, matching problems embody the necessity to make certain things work together. Such things might be of the same or completely different nature as matching problems can solve the issue of matching two or more products together, a product to a process, a process to a process and so forth.<sup>10</sup>

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<sup>6</sup> HOVENKAMP, Herbert. *IP and Antitrust: An Analysis of Antitrust Principles Applied to Intellectual Property Law*. 2nd ed. Frederick, MD: Aspen Publishers, 2010. 2096 p. ISBN 07355755092. § 35.1a: A standard is “any set of technical specifications which either does, or is intended to, provide a common design for a product or a process.”

<sup>7</sup> TELYAS, David. *The Interface Between Competition Law, Patents and Technical Standards*. International Competition Law Series, 2014, volume 59. 288 p. ISBN 978-9041154187. p. 32

<sup>8</sup> See e. g. TASSEY, Gregory. Standardization in Technology-Based Markets. *Research Policy*. 2000, Vol. 29, Issues 4 – 5, pp. 587 – 602. p. 588: “Standard is a set of specifications to which all elements of products, processes, formats, or procedures under its jurisdiction must conform.”

<sup>9</sup> DE VRIES, Henk J. *Standardization: A Business Approach to the Role of National Standardization Organizations*. Boston: Kluwer Academic, 1999, 320 p. ISBN 978-0-7923-8638-4. p. 15.

<sup>10</sup> DE VRIES, supra note 1, p. 5.

That implies that the main objective of determining a particular standard is to ensure compatibility and interoperability between particular issues, including not only issues of the same nature (objects to objects, processes to processes) but also any combination thereof, e.g. the safe interaction of objects/processes and humans).<sup>11</sup>

## **1.2 Technical Standards and Standardised Technologies**

Distinction can be made between different types of standards relating to various fields of human interests and various subject-matter. Again, the theory is quite inconsistent in this matter and different approaches can be applied towards the division of standards. It is not the point of this work to develop any substantive classification of standards, on the contrary it is necessary to point out that this work relates merely to technical (also technology or industry standards, depending on the literature) standards. Theoretical delimitation of what a technical standard is can be extracted from the aforementioned general definition of a standard.

On the basis thereof, a standard is a technical standard if it provides solutions to one or more matching problems which are intended for continuous and repeated use in any technical field<sup>12</sup> and where at least one of the interrelated issues solved is a technology issue.<sup>13</sup> Therefore, we can conclude that technical standards refer to specifications of solutions to interrelated issues, where such solutions provide users and vendors with a common platform and ensure compatibility and interoperability between components of a technological system.<sup>14</sup>

Considering the large number of different standards, this thesis focuses only on technical standards enabling compatibility and interoperability. Herein below the term “standardised technology” contained in the title of this thesis refers to such technical standards; moreover, unless expressly stated otherwise, herein below in this thesis the term “standard” refers to a technical standard, i.e. a standardised technology.

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<sup>11</sup> LEA, Gary; Peter HALL. Standards and Intellectual Property Rights: An Economic and Legal Perspective. *Information Economics and Policy*. 2004, Vol. 16, Issue 1, pp. 67 – 89. p. 71.

<sup>12</sup> Ibid.

<sup>13</sup> DE VRIES, supra note 1, p. 19.

<sup>14</sup> JAIN, Sanjay. Pragmatic Agency in Technology Standards Setting: The case of Ethernet. *Research Policy*. 2012, Vol. 41, Issue 9, pp. 1643 – 1654. p. 1643.

### 1.3 Typology of Standards

Standards may be set in a number of ways, including independent actions of market participants or formal coordination activities of industry standard committees, as well as through government actions.<sup>15</sup> Various typologies and differentiations of standards can be found in the literature. One of the possible distinctions of standards may be their origin, distinguishing between *de facto* standards, arising purely from the market, and *de jure* standards, which are a result of a formalized procedure within SSOs<sup>16</sup> of either public or private nature.<sup>17</sup> However, the terms *de jure* and *de facto* may sometimes be misleading. Sometimes *de facto* standards include not only unilateral commercial standards, but also the work of formal multilateral bodies, such as corporate consortia, trade associations or ad hoc entities established in order to adopt a concrete standard.<sup>18</sup> Moreover, the term *de jure* might imply that there has to be some supporting legislation governing such standards or SSOs, which might however not always be the case.

One of the other possible distinctions draws the line between compulsory and voluntary standards, depending on whether their implementation is mandatory in a certain field and/or whether they are recognized by public authorities.<sup>19</sup> Within this distinction, compulsory standards, on the one hand, include standards which have their basis in a certain legal act, are requested and/or approved by public authorities, e. g. governments, international organizations etc., adopted by officially recognized SSOs and whose implementation in a particular field is mandatory in order to promote public welfare (compulsory formal standards). Voluntary standards, on the other hand, cover all the remaining, non-binding standards, including voluntary standards adopted by both

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<sup>15</sup> FARELL; SALONER, 1992, supra note 2, p. 9.

<sup>16</sup> For the purpose of this work the term standard-setting organization (SSO) shall include both formal, officially accredited organizations responsible for standardisation in particular fields, often referred to as standard developments organizations (SDOs), and any other forms of cooperation between two or more stakeholders in any form, e.g. joint-ventures, ad hoc informal standardisation bodies or any other form of cooperation. See e.g. TELYAS, supra note 7, p. 35.

<sup>17</sup> See e.g. DAVID, Paul A.; GREENSTEIN, Shane. The Economics of Compatibility Standards: An Introduction to Recent Research 1. *Economics of Innovation and New Technology*. 1990, Vol. 1. pp. 3 - 41. p. 4.

<sup>18</sup> LEA; HALL, supra note 11, p. 70.

<sup>19</sup> FORNENGO, Graziella. Interorganizational Networks and Market Structures. In.: ANTONELLI, Cristiano. *New Information Technology and Industrial Change: the Italian case*. Boston: Kluwer Academic Publishers for the Commission of the European Communities, 1988, pp. 15 – 132. ISBN 9027727473. p. 123.

recognized and non-recognized SSOs (formal voluntary standards) and standards arising purely from the market as a result of a unilateral commercial effort of a certain business entity (unilateral voluntary standards). In other words, there are no legislative requirements for voluntary standards and they are implemented by choice of market participants. Therefore, both formal and unilateral voluntary standards are also standards *de facto*.

Undoubtedly, there are even more distinctions possible, either modifying the two aforesaid notions or establishing new criteria, yet such typologies are all purely artificial and none of them are objectively more precise than the other ones. Nevertheless, for the purpose of the analysis carried out herein below, a mixed approach distinguishing primarily between compulsory and voluntary standards and consequently between *de facto* standards, i.e. formal and unilateral voluntary standards is adopted.

### **1.3.1 Compulsory and Voluntary Standards**

Standards may be adopted or established on national, regional, international or global level. Firstly, national compulsory standards can be seen as “technical regulations” which are issued at a governmental level and whose aim is to harmonise health, safety, security and environmental issues or to prevent deceptive and fraudulent practices.<sup>20</sup> Secondly, the nature of standards adopted by SSOs at a national level differs depending on the applicable legislation. In France, for example, some SSOs have a status of public bodies and the standards they adopt are binding and compulsory. On the contrary, in the United Kingdom or Germany, there is no legislative requirement to comply with standards adopted by national SSOs and acceptance of standards is up to the market.<sup>21</sup>

At the EU level, the consolidated legal basis for standardisation is laid down by Regulation No 1025/2012 on European standardisation.<sup>22</sup> It updates and simplifies the

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<sup>20</sup> International Centre for Trade and Sustainable Development: Addressing the Interface between Patents and Technical Standards in International Trade Discussions [online]. Policy Brief No. 3, 2009 [cit. 10 April 2015], p. 3. Available at: [http://unctad.org/en/Docs/iprs\\_pb20093\\_en.pdf](http://unctad.org/en/Docs/iprs_pb20093_en.pdf)

<sup>21</sup> PETROVČIČ, Urška. *Competition Law and Standard Essential Patents: A Transatlantic Perspective*. International Competition Law Series, v. 58, 2014, 217 p. ISBN 9041149600. p. 23.

<sup>22</sup> Regulation No 1025/2012 of the European Parliament and the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council, OJ L 316 (Regulation 1025/2012).

previous European legislation regarding standardisation (in relation to technical standards namely Directive No 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society Services)<sup>23</sup> in order to reflect the latest developments and upcoming challenges in the fast developing innovation markets.<sup>24</sup>

The EU defines standards as documents that set the technical or quality requirements with which the current or future products, processes, services, methods or systems may comply, which are adopted by a recognised standardisation body for repeated and continuous application and with which compliance is *not compulsory* [emphasis added].<sup>25</sup> Generally, this definition is inconsistent in the same way as some of the aforementioned theoretical ones. However, contrary to the evaluation of the theoretical definitions, it is a legitimate action carried out within the discretion of EU authorities to narrow the legislative definition of standards in order to cover only standards adopted by recognised SSOs.

It should be noted that according to the above mentioned EU definition, standards are generally voluntary documents. However, the Commission may request the European SSOs to draw up certain standards and make implementation thereof compulsory in order to ensure interoperability in the single market, improve freedom of choice for users, promote technological development or meet consumers' requirements.<sup>26</sup> For example, such may be the case of standards in information and communication technologies (ICT) industry according to the Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services.<sup>27</sup>

Depending on which SSO in terms of the territorial scope of its activities adopts a standard, the Regulation 1025/2012 distinguishes between national, European and international standards. The adoption of European standards is entrusted to three recognized European SSOs, namely the European Committee for Electrotechnical Standardisation (CENELEC), operating in the electro-technical area, the European

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<sup>23</sup> Directive No 98/34/EC of the European Parliament and the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations, OJ L 204 (Directive 98/34/EC)

<sup>24</sup> Regulation No 1025/2012, *supra* note 22, Recital 7.

<sup>25</sup> *Ibid.*, Article 2.

<sup>26</sup> *Ibid.*, Recital 34.

<sup>27</sup> Directive No 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, OJ L 108 (Framework Directive)



Telecommunications Standards Institute (ETSI), responsible for telecommunication standards, including technology industries such as mobile-handsets (which are most recently discussed in the framework of EU competition law), and the European Committee for Standardisation (CEN), implementing standards in various fields not covered by the two former SSOs.<sup>28</sup>

On the international level, there is also a number of officially accredited SSOs, among others the International Organization for Standardization (ISO), the world's largest developer of voluntary international standards in various fields,<sup>29</sup> International Electrotechnical Commission (IEC), adopting standards in the fields of electrical, electronic and related technologies,<sup>30</sup> or the International Telecommunication Union (ITU), the oldest SSO in the world,<sup>31</sup> defining ICT standards.<sup>32</sup> However, it is not purpose of this thesis to provide an exhaustive list of formal standard setting bodies. SSOs, as stated above, may be both officially recognized and widespread as well as of more of an informal nature.

Notwithstanding the aforesaid about compulsory standards, a vast majority of standards are voluntary standards neither explicitly requested nor authorized by public authorities. The choice and setting of such standards is rather driven by the requirements of particular industries and markets as well as consumers' preferences.<sup>33</sup>

### **1.3.2 Unilateral and Formal Voluntary Standards (*De Facto* Standards)**

Firstly, as already indicated above, on the one hand, unilateral voluntary standards may derive their status from wide market acceptance. On the one hand, such standards may be set individually by undertakings with significant market power where the market position of such undertakings enable them to sponsor their technologies so

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<sup>28</sup> Regulation No 1025/2012 supra note 22, Recital 4 and Annex I; see also: European Commission. Key Players in European Standardisation [online] [cit. 12 April 2015] Available at: [http://ec.europa.eu/growth/single-market/european-standards/key-players/index\\_en.htm](http://ec.europa.eu/growth/single-market/european-standards/key-players/index_en.htm)

<sup>29</sup> International Organization for Standardization. About ISO [online]. [cit. 12 April 2015]. Available at: <http://www.iso.org/iso/home/about.htm>

<sup>30</sup> International Electrotechnical Commission. About the IEC [online]. [cit. 12 April 2015]. Available at: <http://www.iec.ch/about/?ref=menu>

<sup>31</sup> GANDAL, Neil. Compatibility, Standardization, and Network Effects: Some Policy Implications. *Oxford Review of Economic Policy*. 2002, vol. 18, issue 1, pp. 80 – 91. p. 83.

<sup>32</sup> International Telecommunication Union: ITU-T in Brief [online] [cit. 12 April 2015] Available at: <http://www.itu.int/en/ITU-T/about/Pages/default.aspx>

<sup>33</sup> European Commission. A Strategic Vision for European Standards: Moving Forward to Enhance and Accelerate the Sustainable Growth of the European Economy by 2020. COM(2011) 311 final. p. 1.

that they prevail over other potentially applicable technical solutions. On the other hand, if the power of market participants is not significant, tough competition may take place before one particular standard prevails. In both of the cases, standards are set by a unilateral innovative effort. Sometimes the primary aim of undertakings promoting new technologies does not even have to be a setting of a standard, standards may be created merely by filling a gap in a market or by the innovative nature or technological progressiveness.<sup>34</sup> In other words, the determining factor of whether a standard is accepted is a *de facto* recognition by markets. An example of such a *de facto* standard is the QWERTY setting of keyboard used in Remington typewriters.<sup>35</sup>

Secondly, formal voluntary standards are created through a cooperation on the basis of an agreement and may take many various forms, ranging from official SSOs to more informal, ad hoc bodies. It should be noted that some SSOs enjoy wide recognition within their industries and it may become vital for companies to participate in the activities of such SSOs or at least monitor the recent development.<sup>36</sup> Telecommunication standards set by ETSI are one of the examples where an SSO is crucially important in a particular industry and even though compliance with its standards is voluntary, the implementation thereof is factual prerequisite for entering a market.<sup>37</sup> Nevertheless, one factor common to basically all the forms of cooperation relating to formal voluntary standards is that they are of a more formalized nature, i.e. there are some formal rules that have to be observed during the standard-setting process.

There may certainly be competing SSOs attempting to develop voluntary standards in the same fields of technology. Even in such cases, the success of a specific standard is dependent on the actual market acceptance. Thus, in the broad sense of the term, formal voluntary standards are also chosen on a *de facto* basis.<sup>38</sup>

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<sup>34</sup> TELYAS, supra note 7, p. 33.

<sup>35</sup> WEITZEL, Tim. *Economics of Standards in Information Networks*. New York: Physica-Verlag Heidelberg, 2004, 292 p. ISBN 3790800767. p. 40.

<sup>36</sup> RUBIN, Jonathan J. Patents, Antitrust, and Rivalry in Standard-Setting. *Rutgers Law Journal*. 2007, Vol. 38, pp. 509 - 538. p. 514.

<sup>37</sup> ALENCAR, Marcelo S.; ROCHA, Valdemar C. *Communication Systems*. New York: Springer, 2005, 416 p. ISBN 9780387254814. p. 305.

<sup>38</sup> NIMMER, Raymond T. Technical Standards Setting Organizations & Competition: A Case for Deference to Markets [online]. 2009 [cit. 13 April 2015]. Available at SSRN: <http://ssrn.com/abstract=1473431>, p. 6

## 1.4 Network Effects, Interoperability and Compatibility

Markets where voluntary technical standards play a crucial role are characterized by network effects. Once a certain technical standard prevails, the number of consumers using the outcome of such standard raises and so do the benefits for consumers within the network.<sup>39</sup> Two different types of network effects can be distinguished, namely direct and indirect. Direct network effects appear where the increasing number of consumers using a standard physically affects the quality of products or services in question. In other words, the value of a standard to one person depends on the number of others using the standard. One of the examples of direct network effect is the spreading of users in the telephone network – the more users started using telephones, the greater interaction between users in the network was possible.<sup>40</sup> Indirect network effects, on the other hand, lacks any physical aspects; they mostly make standards more accessible, plentiful and lower in price as the number of users grows.<sup>41</sup>

As a result of the expansion of the network, users may expect that the increasing popularity of a standard will result in the “winning” of the market and such consumers are thus likely to prefer the standard. Therefore, the market is prone to consequently “tip” in favour of the prevailing standard.<sup>42</sup> Any new or existing market participants that intend to include their products in a network have to secure compatibility of their products or components thereof with the predominant standard.<sup>43</sup>

Compatibility and interoperability are considered to be one of the greatest benefits of standardisation. They enable the interchangeability of complementary products, provide a common interface between certain products and save costs by allowing mass production.<sup>44</sup> For example, the GSM standard adopted by ETSI enabled the interoperability and compatibility of mobile handsets for hundreds of millions of users – in 2006, over 1.6 billion people were using devices compatible with the GSM standard, which was at the time more than the number of users of all other mobile phone

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<sup>39</sup> GANDAL, supra note 31, p. 2.

<sup>40</sup> LIEBOWITZ, S. J.; MARGOLIS, Stephen E. Network Externality: An Uncommon Tragedy. *Journal of Economic Perspectives*. 1994, Vol. 8, No. 2, p. 133 – 150. p. 135, 140.

<sup>41</sup> Ibid.

<sup>42</sup> KATZ, Michael L.; SHAPIRO, Carl. Systems Competition and Network Effects. *The Journal of Economic Perspectives*. 1994, Vol. 8, Issue 2, p. 93-115. p. 105 – 106.

<sup>43</sup> LEA, HALL, supra note 11, p. 73.

<sup>44</sup> FARELL, Joseph; SALONER, Garth. Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation. *The American Economic Review*. 1986, Vol. 76, No. 5. pp. 940 – 955. p. 940.

technologies put together.<sup>45</sup> Without the setting of standards in various industries, such as in the field of telecommunications, it would be much more complicated, if not impossible, to agree upon a common platform for products to work together and the opportunity to communicate within society, for example, would be undermined. Thus, consumers benefit to a large extent from standards by simplifying the everyday life.

However, in this framework the relevance of substitutes or alternatives in the market decreases and it is therefore crucial for vendors to adhere to the prevalent standard. The industry then becomes locked in to a standard (i.e. other technologies are no longer relevant), even though such standard may not necessarily always be the most technologically advanced or the best solution. As the actual choice of a standard depends on a larger number of factors, one can never predict in advance whether an actually superior standard prevails or whether a different one is selected by the market.<sup>46</sup> Nevertheless, in any case this may result in a situation where a standard reserves the whole market or a significant part thereof for itself and the industry is thus an oligopoly or a quasi-monopoly.<sup>47</sup>

Naturally, there are competition law concerns regarding such markets, for example due to the potential reduction of incentives to innovate. Yet, in theory the dilemma which companies are in a better position to innovate – whether the ones holding a monopoly or the ones facing competition – is rather controversial. The lack of product variation does not automatically have to result in anti-competitive effects; contrarily, even markets that lack direct competition may be innovative.<sup>48</sup> Moreover, the proprietary rights related to certain standards may be divided between more undertakings; this on the one hand causes the risk of collusion between such technology proprietors, but on the other hand also makes the situation within the standard much

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<sup>45</sup> European Commission, Information Society and Media. Stimulating Mobile Broadband: Building on the worldwide success of GSM, the EU aims to stimulate growth in the development of mobile broadband services, delivering significant benefits to European society and industry [online]. Mobile Communications Policy, 2006 [cit. 20 April 2015], p. 23. Available at: [http://ec.europa.eu/information\\_society/doc/factsheets/023-mobile-policy-en.pdf](http://ec.europa.eu/information_society/doc/factsheets/023-mobile-policy-en.pdf)

<sup>46</sup> ARTHUR, W. Brian. Competing Technologies, Increasing Returns, and Lock-In by Historical Events. *The Economic Journal*. 2007, Vol. 99, No. 964 pp. 116-131. p. 128.

<sup>47</sup> GANDAL, supra note 31, p. 12-13.

<sup>48</sup> LÉVÊQUE, François. Innovation, Leveraging and Essential Facilities: Interoperability Licensing in the EU Microsoft Case. *World Competition*. 2005, Vol. 28, No. 1, pp. 71 - 91. p. 79.

more unclear in comparison to monopolistic markets where the dominant position is held by one market participant.

## 2. EU COMPETITION LAW, TECHNICAL STANDARDS AND INTELLECTUAL PROPERTY RIGHTS

It should be noted that the presence of IPRs in the markets with network effects may increase the threat of development of undesirable monopoly power. In theory, it is therefore suggested that compatibility and interoperability technical standards should rather be opened and non-proprietary.<sup>49</sup> Yet, in order to obtain revenue e.g. in the form of royalties as a reward for the development of technical standards, in a vast majority of industries standard developers tend to have their innovative outcomes protected by IPRs, mostly patents.

On the one hand, standards are intended for a widespread and to the largest possible extent unrestricted use. Patents (as well as any other patents and IPRs in general), on the other hand, generally enable their proprietors to exclude others from using the protected inventions without authorization; the right to exclude others is considered to constitute one of the very cores of entitlements within IPRs.<sup>50</sup>

Thus, in order to secure access to a standard and promote the benefits of standardisation, certain rights constituting the very basis of IPRs unavoidably have to be restricted, e.g. by means of competition law. Such a contradiction between standards and IPRs along with competition law interventions and limitations represent the central source of tension between the said areas and cause a number of legal issues.

Patent proprietors who participate in a formalized standard-setting process within SSOs (i. e. the setting of formal voluntary standards) contribute their patents to standards. Once a particular technology is chosen by an SSO from a potential wider range of alternative patent-protected technologies to become a standard, the patents which protect such a technology become standard-essential patents (SEPs). That means that it is impossible to manufacture products that require the implementation of a

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<sup>49</sup> SWANN, Peter, G. M. The Economics of Standardization: Final Report for Standards and Technical Regulations Directorate Department of Trade and Industry [online]. Manchester Business School. 2000 [cit. 22 April 2015], p. 5. Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/16506/The\\_Economics\\_of\\_Standardization\\_-\\_in\\_English.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/16506/The_Economics_of_Standardization_-_in_English.pdf)

<sup>50</sup> SCHWEITZER, Heike. Controlling the Unilateral Exercise of Intellectual Property Rights. A Multitude of Approaches But No Way Ahead?. In: GOVAERE, Inge, ULLRICH, Hans. *Intellectual property, Market Power and the Public Interest*. New York: P.I.E. Peter Lang, 2008, pp. 59 – 96. ISBN 9789052014227. p. 91.

standardised SEP-protected technology without using (and thus potentially infringing, if used without authorisation) the SEPs concerned. Thus, in theory SEPs should be complementary vis-à-vis each other and together form standard as a whole. Such theoretical presumption is however sometimes curtailed by the fact that SEPs are merely declared to be essential, yet in reality their actual technical essentiality does not have to be warranted.

Nevertheless, in order to counterbalance the otherwise existing entitlement of patent holders to choose freely who to conduct business with and prevent others from using their technologies arbitrarily, SSOs require SEP holders to make a commitment to license their SEPs to interested standard implementers on fair, reasonable and non-discriminatory (FRAND) terms.

FRAND commitment is in principle a contractual relationship between SEP proprietors and SSOs.<sup>51</sup> However, there is basically no specific determination of which royalty rates, or more generally, licensing terms, meet FRAND requirements and which licensing conditions reach beyond such a notion. It may be argued that such a lack of clarity may be to a certain extent intentional – in order to meet the objectives of standardisation and secure the widest possible access to a standard under many different circumstances, FRAND terms should be determined according to specific positions of SEP holders (licensors) and potential licensees.<sup>52</sup>

However, SSOs generally do not have many possibilities to actually enforce FRAND commitments other than to bring judicial claims for breach of contractual obligations before courts of law. Besides that, they may also exclude SEPs of standard developers who refuse to adhere to FRAND from the standard. Such an action is however not always possible if the SEPs concerned are truly essential to a technical standard and there are no other viable substitutes. Some argue that FRAND commitments are by themselves insufficient to protect licensees who are interested in the implementation of IPRs incorporated in standards.<sup>53</sup> Therefore, it is suggested that

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<sup>51</sup> BROOKS, Roger G., GERADIN, Damien. Taking Contracts Seriously: The Meaning of the Voluntary Commitment to License Essential Patents on 'Fair and Reasonable' Terms [online]. 2010 [cit. 26 April 2015], p. 3 – 4/ Available at: <http://ssrn.com/abstract=1569498>

<sup>52</sup> GERADIN, Damien; RATO, Miguel. Can Standard-Setting Lead to Exploitative Abuse? A Dissonant View on Patent Hold-Up, Royalty Stacking and the Meaning of FRAND [online.]. 2006 [cit. 16 May 2015], p. 11. Available at : <http://ssrn.com/abstract=946792>

<sup>53</sup> Ibid., p. 19.

competition law intervention should safeguard the proper observance of FRAND terms in standard setting context.<sup>54</sup>

Herein below throughout the rest of this thesis, the interplay between EU competition law, technical standards securing compatibility and interoperability of technical components and FRAND encumbered SEPs will be discussed.

## 2.1 EU Competition Law Framework

In order to address the relevant legal issues within EU competition law properly and set the basic framework for a deeper analysis, it is primarily necessary to take a step back and outline the applicable EU legislation and accompanying soft law along with relevant theoretical notions.

Nevertheless, the following has to be noted. Firstly, it is not the aim of this thesis to provide a comprehensive picture of all underlying principles of general EU competition law; merely the matters directly related to standardised technologies will be discussed herein below to the extent necessary for further elaboration.

Secondly, as the main recent EU competition law issues with technical standards and SEPs relate to the alleged market power conferred on SEP holders and to conduct that may amount to an abuse of dominant position, this thesis will primarily focus on Article 102 TFEU.<sup>55</sup> Nevertheless, as the Court of Justice ruled in *Hoffman La-Roche*<sup>56</sup>, Articles 101 and 102 TFEU may be applied to the same relations between two or more undertakings, both of Articles may be applied at the discretion of the EU competition authorities and depending on the specific nature of the conduct.<sup>57</sup> Moreover, in *Tetra Pak I*, the Court of the First Instance ruled that Article 101 and 102 TFEU are independent and complementary.<sup>58</sup>

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<sup>54</sup> CHAPPATTE, Philippe. FRAND Commitments – The Case for Antitrust Intervention. *European Competition Journal*. 2009, Vol. 5, No. 2. pp. 319 – 346. p. 331.

<sup>55</sup> Treaty on the Functioning of the European Union, OJ C 326.

<sup>56</sup> Case 85/76 *Hoffmann-La Roche & Co. AG v. Commission* [1979] ECR 416, para. 91. See the definition provided therein: “*The concept of abuse is an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those which condition 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.*”

<sup>57</sup> *Ibid.*, para. 116.

<sup>58</sup> Case T-51/89 *Tetra Pak Rausing SA v. Commission* [1994] ECR II-755, para. 25.



It is therefore sometimes not the most convenient course of research to draw a clear distinctive line between the two basic EU competition law provisions. EU documents and case law intended to shed light on Article 101 TFEU may provide useful information for the assessment of potential abuse of dominance and the other way around, sources addressing abuse of dominant position under Article 102 TFEU may also provide clarification of collusive practices under Article 101 TFEU.

Thirdly, the research provided herein below is narrowed only to the recent developments in the respective field and therefore not all issues that may be expected to constitute a part of this thesis will be examined to the fullest extent. Rather than addressing a large number of questions briefly, an attempt will be made herein below to examine the latest key matters more thoroughly.

Herein below, the applicable EU competition law principles will be briefly defined and outlined along with the relevant legislation and soft-law. However, as noted above, the information provided herein below in this part provide only a basic overview of EU competition law in general and the legislation most evidently relating to the topic of this thesis.

### **2.1.1 Article 102 TFEU: Exploitative and Exclusionary Abuses**

Primarily, the applicable rules governing Article 102 TFEU will be examined. As of the *Continental Can*<sup>59</sup> case, Article 102 TFEU theory distinguishes between two basic forms of abusive conduct – exploitative and exclusionary.<sup>60</sup> Exploitative abuse, on the one hand, is a conduct whereby the dominant undertaking directly<sup>61</sup> takes advantage of its market power to exploit its customers or trading partners.<sup>62</sup> Some of the specific examples thereof may be found, inter alia, in the list of specific abuses under Article 102 (a) and (b) TFEU, i.e. the imposition of unfair purchase or selling prices and the limiting of competitor's conduct to the prejudice of consumers.

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<sup>59</sup> Case 6/72, *Europemballage Corp and Continental Can Inc v. Commission* [1973] ECR 215.

<sup>60</sup> JONES, Alison; SUFRIN, Brenda. *EU Competition Law: Text, Cases, and Materials*. 5th Edition. Oxford: Oxford University Press, 2014 1331 p. ISBN 0199660328. p. 367.

<sup>61</sup> Case C-209/10 *Post Danmark A/S v Konkurrencerådet* [2012], para. 20.

<sup>62</sup> JONES; SUFRIN, supra note 60, p. 367.

However, the exercise of market power may also provide important incentives to innovate, compete and seek for better ways to satisfy consumer demand.<sup>63</sup> Thus, the competition authorities need to strike the right balance between such pro-competitive effects of the exercise of market power and exploitative practices which appreciably constrain or completely destroy the ability of dominant undertaking's rivals to compete. It is argued that the forces within the markets are in many cases capable of readjusting such otherwise abusive conduct themselves and exploitative abuse is therefore investigated by competition authorities rather infrequently.<sup>64</sup>

Exclusionary abuse, on the other hand, is aimed at excluding (foreclosing) competitors from the market and thereby hindering competition therein,<sup>65</sup> e.g. by predatory pricing or refusal to supply tangibles, license IPRs etc. The general approach towards exclusionary abuse stems from the Court of Justice's definition laid down in *Hoffman La-Roche*<sup>66</sup> where two basic elements for the assessment thereof are provided. Firstly, the dominant undertaking's behaviour has to be capable of eliminating competitors from the market by recourse to abusive methods; secondly, the conduct in question has to have the effect of hindering competition, i.e. foreclosing the market.<sup>67</sup> There has been an ongoing debate and quite inconsistent approach in the EU courts' case law as to what qualitative criteria are to be applied in relation to the second criteria, the effect of hindering competition. We can observe references to actual, likely or possible effects. In some cases merely the 'risk' of effect of hindering of competition is sufficient enough to find an abusive conduct.<sup>68</sup>

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<sup>63</sup> FAULL, Johnatan; NIKPAY, Ali. *The EU Law of Competition*. 3rd Edition. Oxford: Oxford University Press, 2014, 2134 p. ISBN 9780199665099. p. 334.

<sup>64</sup> SCHMIDT, Hedvig K. S.. Private Enforcement - Is Article 82 EC Special?. In: MACKENRODT, Mark-Oliver; GALLEGRO, Beatriz Conde; ENCHELMAIER, Stefan (eds.). *Abuse of Dominant Position: New Interpretation, New Enforcement Mechanisms?*. Berlin: Springer, 2008, pp. 137 - 164. ISBN 9783540699583. p. 151

<sup>65</sup> FAULL, NIKPAY, supra note 63, p. 332.

<sup>66</sup> Hoffmann-La Roche, supra note 56, para. 91. See the definition provided therein: "The concept of abuse is an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those which condition 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."

<sup>67</sup> SCHMIDT, 2008, supra note 64, p. 153, fn. 61.

<sup>68</sup> For a detailed discussion see: ØSTERUD, Eirik. *Identifying Exclusionary Abuses by Dominant Undertakings under EU Competition Law: The Spectrum of Tests*. Frederick, MD: Kluwer Law International, 2010, 350 p. ISBN 9041132716. p. 45 – 47.

This uncertainty as to what conduct is to be considered as exclusionary abuse in the past resulted in a formalistic assessment of abusive conduct, in certain situations even leading to a quasi *per se* prohibition of several types of allegedly abusive conduct. The Commission has however recently shifted its approach towards a more effect-based and economics-based treatment of exclusionary abuses.<sup>69</sup> In this regard, the discussion formally initiated by the publication of the Discussion Paper on the application of Article 82 of the Treaty [Article 102 TFEU] to exclusionary abuses<sup>70</sup> in December 2005 resulted in the adoption of the Guidance on the Commission's enforcement priorities in applying Article 82 of the Treaty [Article 102 TFEU] to abusive exclusionary conduct by dominant undertakings.<sup>71</sup>

Firstly, it should be noted that the Article [102 TFEU] Guidance (along with any other guidelines and soft law listed herein below) does not constitute the rule of law, but rather the rule of practice. However, even though such documents are not legally binding as such, they impose limits on the exercise of otherwise appreciably wide discretion of the issuing authorities (the Commission in this case). Undertakings operating in the framework of these documents may therefore rely on the principles of equal treatment, legitimate expectation and legal certainty when it comes to the application of such soft law.<sup>72</sup>

Nevertheless, in the Article [102 TFEU] Guidance the Commission states that it will intervene against allegedly abusive exclusionary conduct only in the presence of cogent and convincing evidence showing that such a conduct is likely to lead to anti-competitive foreclosure<sup>73</sup> i.e. “*a situation where effective access of actual or potential competitors to supplies or markets is hampered or eliminated (...) to the detriment of consumers.*”<sup>74</sup> In other words, the Commission declares that it will only step in when it

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<sup>69</sup> GRAVENGAARD, Andreas; KJÆRSGAARD, Niels. The EU Commission guidance on exclusionary abuse of dominance - and its consequences in practice. *European Competition Law Review*. 2005, Vol. 31, Issue 7, pp. 285 - 305. p. 285.

<sup>70</sup> European Commission, Directorate-General Competition. DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses [online]. Brussels, 2005 [cit. 1 May 2015] (DG Competition Discussion Paper). Available at: <http://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>

<sup>71</sup> Communication from the Commission. Guidance on its enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings. OJ C 45, 24 February 2009, p. 7–20 (Article [102 TFEU] Guidance).

<sup>72</sup> Joined Cases C-189/02 P, C-202/02 P, C-205/02 P to C-208/02 P and C-213/02 P, *Dansk Rørindustri A/S and Others v. Commission* [2005] ECR I-5425, paras. 209-213

<sup>73</sup> Article [102 TFEU] Guidance, supra note 71, para. 20.

<sup>74</sup> Ibid., para. 19.

is convincingly proved that the *effect* [emphasis added] of allegedly exclusionary abusive conduct is actual or likely harm to consumers. On the contrary, the Commission should not intervene against conduct capable of hampering or even completely eliminating the dominant undertaking's competitors when the negative effect on consumers is not demonstrated.<sup>75</sup>

Article [102 TFEU] Guidance however provides merely general information and does not expand on IPR related issues at all, not to mention standardised technologies and SEPs. After all, Article [102 TFEU] Guidance has been subject to criticism as being too vague, descriptive and lacking sufficient detail of any substantial use to companies.<sup>76</sup> Standard-setting context and IPRs essential to standards are however addressed in a more detailed fashion in the documents related to Article 101 TFEU.

### **2.1.2 Article 101 TFEU: Applicable Legislation and Guidelines**

Firstly, Regulation No 316/2014 on the application of Article 101(3) TFEU to categories of technology transfer agreements<sup>77</sup> and the complementary guidelines<sup>78</sup> lay down rules for the assessment of technology transfer agreements. The essence such agreement under the 2014 Technology Transfer Regulation is the licensing of 'technology rights' which include know-how, patents, copyrights (as well as several other IPRs of merely technical nature) and the manufacturing rights related to such IPRs.<sup>79</sup> The 2014 TTBER Guidelines address, among other matters, the essentiality of IPRs, deal extensively with technology (patent) pools, provide guidance on the assessment of market power conferred on the IPR holders and much more.

Even though the 2014 Technology Transfer Regulation lays down conditions for the exemption under Article 101(3) TFEU to become applicable (market share thresholds, restricted provisions in the licensing agreements etc.), the following should be noted. Even when an agreement falls outside the scope of the block exemption which

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<sup>75</sup> GRAVINGAARD; KJÆRSGAARD, *supra* note 69, p. 288.

<sup>76</sup> PIERCE, Justin. Is There Sufficient Judicial Review in Assessing Economic Evidence in Article 102 TFEU Cases? [online]. 2013 [cit. 2 May 2015]. p. 37. Available at: <http://ssrn.com/abstract=2329924>

<sup>77</sup> Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements, OJ L 93 (2014 Technology Transfer Regulation).

<sup>78</sup> Communication from the Commission - Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements [2014] OJ C89 (2014 TTBER Guidelines).

<sup>79</sup> 2014 Technology Transfer Regulation, *supra* note 77, Art. 1 (b).

is thus not granted as such, the general rules stipulated in the 2014 Technology Transfer Regulation and the 2014 TTBER Guidelines are still of vital importance for the interpretation of numerous practices and issues within the EU competition law.

Secondly, Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements<sup>80</sup> address horizontal agreements, i.e. agreements between actual or potential competitors.<sup>81</sup> In the context of technical standards and IPRs essential thereto, the provisions aiming at standardisation agreements<sup>82</sup> are particularly important. They are considered to usually have a positive economic effect and be pro-competitive.<sup>83</sup> Horizontal Guidelines expand on the matter of FRAND commitments given by SEP holders, circumstances of the standard-setting process, permissible terms and conditions included in the agreement and conditions for the applicability of exemption under Article 101(3) TFEU and so forth.

Naturally, numerous potentially anti-competitive aspects are discussed in the standard-setting context. As Neelie Kroes, the European Commissioner for Competition Policy, stated in 2009, “...we [the Commission] *can't give a carte blanche endorsement to the idea of companies sitting around a table agreeing technical developments. We need to put some safeguards in place to make sure the general interest is served.*”<sup>84</sup>

In this regard, the Commission expresses its concerns mostly in relation to the anti-competitive use of IPRs essential to standards and effective access thereto. It stresses the importance of timely disclosure of such IPRs during the standard-setting process thereby securing unhampered access to essential IPRs<sup>85</sup> and also addresses the threat of refusal to license or extracting excessive royalties after a standard is set.<sup>86</sup>

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<sup>80</sup> 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 OJ C11, 14. 1. 2011 (Horizontal Guidelines).

<sup>81</sup> Ibid., para. 1.

<sup>82</sup> Ibid., para. 257. Standardisation agreements are defined as agreements that “...*have as their primary objective the definition of technical or quality requirements with which current or future products, production processes, services or methods may comply (1). Standardisation agreements can cover various issues, such as standardisation of different grades or sizes of a particular product or technical specifications in product or services markets where compatibility and interoperability with other products or systems is essential.*”

<sup>83</sup> JONES, SUFRIN, supra note 60, p. 757.

<sup>84</sup> European Commission, KROES, Neelie. Setting the Standards High. Address at Harvard Club of Belgium, "De Warande". (Press Release SPEECH/09/475 [online]. Brussels, 15 October 2009 [cit. 20 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_SPEECH-09-475\\_en.htm?locale=en](http://europa.eu/rapid/press-release_SPEECH-09-475_en.htm?locale=en)

<sup>85</sup> Horizontal Guidelines, supra note 80, para. 268, 269.

<sup>86</sup> Ibid., para. 269.

## 2.2 EU Competition Law Concerns with Technical Standards

Traditionally, the primary EU competition law concerns with technical standards related to the issues of collusion and foreclosure. Under collusive practices standard holders may affect the output of standardisation effort or fix prices to the detriment of consumers as well as competitors interested in the participation in the standard-setting process or the implementation of a standard. The notion of foreclosure addresses the practices whose aim is to deny access to the standard and thereby exclude rivals from competing.<sup>87</sup>

More recently, as indicated above, the EU competition law focus has nevertheless turned primarily not on the collective practices of participants within the standard-setting process, but rather on the assessment of unilateral conduct of standard proprietors, either during the standard-setting process itself<sup>88</sup> or, as the very latest Commission's decisions show, the unilateral conduct of SEP holders after a technical standard is set. Subject to competition law scrutiny are mainly the activities of SEP holders related to utilization and exploitation of their SEPs by licensing.

The basic distinctive criteria for types of potential abusive unilateral conduct that might occur is whether they take place during the standard-setting process or after a technical standard is set. Even though this thesis focuses mostly on the competition law issues arising out of the latter, even the concerns related to the former will be addressed in order to provide a more complete theoretical picture of competition law matters that may be of interest. In this regard, the notions of *patent ambush*, appearing during the standard setting process, and *hold-up* along with *reverse hold-up* emerging after a standard is set, have to be outlined in the context of SEPs along with the relevant case law.

### 2.2.1 Early Developments: Patent Ambush and Excessive Royalties

Members of SSO may engage in *patent ambush* which occurs when members of SSOs wilfully and knowingly conceal the existence of IPRs potentially essential to the

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<sup>87</sup> PETROVČIĆ, *supra* note 21, p. 26.

<sup>88</sup> DAGEN, Richard. Rambus, Innovation Efficiency, and Section 5 of the FTC Act. *Boston Law Review*. 2010, Vol. 90, No. 4, pp. 1479 - 1542. p. 1484.

technology which is later incorporated in the technical standard.<sup>89</sup> Once a particular standard is chosen and the industry becomes locked into using it, the existence of such essential IPRs is revealed by their holders. Consequently, as the standard is already set and switching costs are prohibitively high, the IP holders engaged in patent ambush illegally acquire monopoly power. Consequently, this enables them to charge prices they would otherwise not be entitled to.<sup>90</sup>

The Commission addressed patent ambush in its *Rambus*<sup>91</sup> decision. Rambus, a US technology company, was investigated by the Commission since 2007 for the non-disclosure of its patents and patent applications relevant to the computer system DRAM technology to JEDEC, an industry-wide US based SSO. Rambus claimed such IPRs to be relevant to the DRAM technology after adoption of the respective standard, thereby obtaining dominant position and engaging in patent ambush.<sup>92</sup> According to the Commission's preliminary view, Rambus consequently abused such a dominant position by charging royalties which it would have otherwise not be able to charge absent its deceptive conduct.<sup>93</sup>

As indicated above, this case may be conveniently broken down into two consequent subsections: (i) the obtaining of monopoly through the deceptive conduct of IPR holders during the standard-setting process; and (ii) charging exploitative royalties.

As the plain wording of Article 102 TFEU<sup>94</sup> suggests, the mere obtaining or holding of dominant position is not in itself anticompetitive.<sup>95</sup> An actual abusive conduct relating to that dominant position has to be present in order to trigger the prohibition laid down in Article 102 TFEU. Thus, even if an undertaking obtains dominant position/monopoly through illegal or deceptive means, it cannot be caught under Article 102 TFEU in the absence of other abuse. Therefore, in order to find an

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<sup>89</sup> SCHELLINGERHOUT, Ruben; CAVICCHI, Piero. Patent ambush in standard-setting: the Commission accepts commitments from Rambus to lower memory chip royalty rates. *Competition Policy Newsletter*. 2010, No. 1, pp. 32 - 36. p. 3.

<sup>90</sup> SCHELLINGERHOUT, Ruben. Standard-setting from a Competition Law Perspective. *Competition Policy Newsletter*. 2011, No. 1, pp. 3 - 9. p. 4.

<sup>91</sup> Case COMP/38.636 - *Rambus*, Commission Decision of 9 December 2009 (Rambus).

<sup>92</sup> *Ibid.*, para. 16, 27.

<sup>93</sup> *Ibid.*, para. 28.

<sup>94</sup> TFEU, *supra* note 55, Article 102: "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."

<sup>95</sup> Case 6/72 *Europemballage Corporation and Continental Can Company Inc. v Commission* [1973] ECR 215, para. 155. The Court of Justice ruled that: "...only the strengthening of dominant positions and not their creation can be controlled under Article [102 TFEU]."

abuse in *Rambus*, the Commission had to focus on the evaluation of allegedly excessive royalty rates.<sup>96</sup>

In any case, the Commission's preliminary assessment of the allegedly exploitative prices has been subject to an extensive criticism as it neither involved any specific mathematical or economic analysis nor was based on any precise methodology, e.g. the one laid down by Court of Justice in *United Brands*,<sup>97</sup> and as it was based on supposedly false presumptions about the industry in question.<sup>98</sup> As the case was settled and commitments related to the royalty rates that Rambus would charge in the future were accepted in June 2009, no further guidance as to how excessive royalties in standard setting context should be calculated or evaluated was provided by the Commission.

The Commission further attempted to deal with the issue of excessive royalties in the context of essential IPRs in its *Qualcomm* investigation on the basis of complaints filed by mobile phone manufacturers Ericsson, Nokia, Texas Instruments, Broadcom, NEC and Panasonic. Qualcomm, a US chipset manufacturer, who held patents essential to the mobile phone WCDMA standard, was accused of charging royalty rates which violated FRAND commitments which Qualcomm had previously accepted.<sup>99</sup> The Commission stated that the potential finding of abuse under Article 102 TFEU "...*may depend on whether the licensing terms imposed by Qualcomm are in breach of its FRAND commitment.*"<sup>100</sup>

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<sup>96</sup> GERADIN, Damien. The European Commission Policy towards the Licensing of Standard-Essential Patents: Where Do We Stand?. *Journal of Competition Law and Economics*. 2013, Vol. 9. Issue 4, pp. 1125 - 1145. p. 1132

<sup>97</sup> Case 27/76 *United Brands Company and United Brands Continental BV v Commission* [1978] ECR 207, para. 250, 252: (a) whether the price has reasonable relation to the economic value of the product supplied; and (b) whether a price imposed is unfair in itself or when compared to competing products.

<sup>98</sup> KILLICK, James; BERGHE, Pascal. *Rambus: An overview of the Issues in the Case and Future Lessons for SSOs when Designing IPR Products* [online]. White and Case, 2010. [cit. 14 May 2015]. Available at:

[http://www.whitecase.com/files/Publication/8a08ec44-5c06-4094-a1e7-f1678976886b/Presentation/PublicationAttachment/eda66bde-648c-46b7-b05f-fb503a08fdbba/article\\_Rambus\\_An\\_Overview\\_of\\_the\\_Issues\\_in\\_the\\_Case\\_and\\_Future\\_Lessons\\_for\\_SSOs\\_When\\_.pdf](http://www.whitecase.com/files/Publication/8a08ec44-5c06-4094-a1e7-f1678976886b/Presentation/PublicationAttachment/eda66bde-648c-46b7-b05f-fb503a08fdbba/article_Rambus_An_Overview_of_the_Issues_in_the_Case_and_Future_Lessons_for_SSOs_When_.pdf)

<sup>99</sup> European Commission. Antitrust: Commission initiates formal proceedings against Qualcomm (Press Release MEMO/07/389 [online]. Brussels: 1 October 2007. [cit. 4 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_MEMO-07-389\\_en.htm](http://europa.eu/rapid/press-release_MEMO-07-389_en.htm)

<sup>100</sup> Ibid.



The claimants however subsequently withdrew their complaints and no formal decision was thus adopted in the respective case.<sup>101</sup> Arguably due to the very complex nature of the matter in question, the Commission would not have even been able to prove that the royalties were actually exploitative in terms of Article 102 TFEU.

Nevertheless, as the cases discussed above indicate, the targeting of which royalty rates are excessive (e.g. violating FRAND commitments) and which still stay within the boundaries of “normal” competition may be a very tough question to solve. It may be argued that direct price interventions by competition authorities may not only negatively affect natural competitive processes within markets but also undermine incentives to innovate by undertakings capable of coming up with new technologies to the benefit of consumers.<sup>102</sup> Some authors even go so far to state that the compliance of royalties with FRAND commitments is not a concern of EU competition law at all.<sup>103</sup>

It is suggested that cases involving deceptive obtaining of dominant position, such as the *Rambus* case, should be evaluated not from the perspective of consequent exploitative outcome of such conduct (excessive royalties). Rather, effective measures should be adopted within the EU competition law in order to enable competition authorities to prohibit the illegal acquisition of monopoly directly. In such cases, there would be no need for the consequent assessment of whether royalties are excessive or not as the preceding conduct would amount to abuse of dominant position itself.<sup>104</sup>

This may be to some extent a road to take, however, there are also cases where exploitative royalties may be charged by an undertaking holding a legally obtained dominant position. In these cases, even though the abuse of dominant position may occur, it is, in my point of view, almost impossible to clearly determine excessive royalties. Moreover, competition authorities should not accept the role of “rate-setting” bodies. Such an approach would lead to a situation where any undertakings unsatisfied

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<sup>101</sup> European Commission. Antitrust: Commission closes formal proceedings against Qualcomm (Press Release MEMO/09/516 [online]. Brussels: 1 October 2007. [cit. 5 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_MEMO-09-516\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-09-516_en.htm?locale=en)

<sup>102</sup> MARINIELLO, Mario. Standard-Setting Abuse: The Case for Antitrust Control. *Bruegel Policy Brief*. 2013, Issue 1. pp. 1 - 8. p. 6.

<sup>103</sup> GERADIN, Damien. Pricing Abuses by Essential Patent Holders in a Standard-Setting Context: A View from Europe [online]. 2008 [cit. 7 May 2015] p. 14. Available at : <http://ssrn.com/abstract=1174922>

<sup>104</sup> RÖLLER, Lars-Hendrik. Exploitative Abuses. In: MARQUIS, Mel; EHLERMANN, Claus-Dieter Ehlermann (eds.). *European Competition Law Annual 2007: A Reformed Approach to Article 82 EC*. Oxford: Hart, 2008. pp. 525 - 532. ISBN 9781841138381. p. 528: The fact that EU competition law does not prohibit the obtaining of dominant position through recourse to anti-competitive or otherwise illegal or deceptive methods is sometimes called a “*monopolization gap*”.

with negotiated royalty rates allegedly not complying with FRAND terms would require competition investigations and findings of abusive conduct.

### **2.2.2 Recent Concerns: Hold-Up and Reverse Hold-Up**

Be that as it may, the Commission seems to have recently shifted its focus from pure excessive royalties in violation of FRAND commitments elsewhere, to the question whether and to what extent the rights of SEP holders should be limited in order to secure unrestricted access to the essential technologies and standards to potential licensees willing to conclude a license on FRAND terms.

In this regard, the theory of *hold-up*<sup>105</sup> reflects the aforesaid dilemma. This concept suggests that SEP holders may threaten to exclude their competitors and, at the same time, potential licensees of their technologies, from the market, mostly by threat or an actual enforcement of (preliminary, permanent) injunctive relief. By these means SEP holders may strengthen their position in licensing negotiations and consequently demand exploitative (onerous) licensing terms not corresponding with the economic value of their technology.<sup>106</sup>

In other words, as SEP holders may try to prevent licensees from implementing the technology, such licensees might, in order to liberate themselves from the restrictions resulting out of the injunction, be consequently prone to accepting excessive royalty rates or otherwise less favourable licensing terms.

Standardisation is considered to be a fertile ground for hold-up to occur. In particular, undertakings active in downstream product market where the implementation of SEP-related technologies is a market requirement are the most vulnerable entities to

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<sup>105</sup> Some authors distinguish between hold-up and refusal to license as two separate practices. (PETROVČIČ, Urška. supra note 21, p.104.) However, in my point of view, hold-up and refusal to license pursue the same objective – the restriction of access to the standardised technology. The main difference can be observed in the extent of such a restriction; a hold-up, on the one hand, can be perceived as a “conditional” refusal to license, i.e. a refusal to license SEPs on FRAND terms, the terms proposed by a potential licensee or to extract desired goal, e.g. a cross-license instead of a unilateral license. On the other hand, a refusal to license, in my point of view, may be seen as a “absolute hold-up”, i.e. a situation where a SEP-holder refuses to grant access to its essential IPR at all, e.g. in order to preserve the secondary market for itself. For the purpose of this thesis, refusal to license can therefore be seen as an extreme hold-up situation.

<sup>106</sup> LEMLEY, Mark A.; SHAPIRO, Carl. Patent Holdup and Royalty Stacking. *Texas Law Review*. 2007, Vol. 85, pp. 1991 - 2049. p. 2008.

be harmed by such conduct.<sup>107</sup> As such undertakings might have invested significantly into the development and manufacturing of their products, even the acceptance of higher royalty fees or other onerous licensing terms would seem to be a more reasonable solution than getting involved in a lengthy and costly litigation proceedings thereby delaying the introduction of a product to the market (excluding their products therefrom).

Some scholars argue that the main issue with theoretical hold-up is that there is little, if any, empirical evidence that it actually occurs in the day-to-day business practices and it is more of a conjecture than a real-world fact.<sup>108</sup> Moreover, standardisation is a “repeated game” and if SEP holders restrict access to IPRs which represent a part of the standard, they might gain short-term benefits but are likely to be avoided in the next standardisation rounds and thus suffer a significant loss in the long term perspective.<sup>109</sup>

Injunctions serve as a powerful invitation to the negotiation table<sup>110</sup> but do not necessarily have to be violation competition law. Nevertheless, as will be further demonstrated herein below, the recent EU competition law development shows that the hold-up theory gains acceptance within the Commission and the possibility to use injunctions in relation to SEPs is curtailed.

In this context, also the other side of the “hold-up coin” embodied in the theory of *reverse hold-up* recently gains attention. If SEP holders are deprived of an injunction (i.e. a significant bargaining tool in their legal arsenal), potential licensees may start implementing SEPs without licenses (thereby infringing the SEPs in question), leaving SEP holders with the mere chance to seek *ex post* damages though lengthy patent-by-

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<sup>107</sup> RATO, Miguel; ENGLISH, Mark. IP and Antitrust: Recent Developments in EU Law. In: CUGIA, Fabrizio; NOORMOHAMED, Rehman; GUIMARÃES, Denis Alves (eds). *Communications and Competition Law: Key Issues in the Telecoms, Media and Technology Sectors*. Kluwer Law International, 2014. pp. 193 - 204. ISBN 9789041151469. p. 195.

<sup>108</sup> SIDAK, Gregory J. The Meaning of FRAND, Part I: Royalties. *Journal of Competition Law and Economics*. 2013, Vol. 9, Issue 4, pp. 931 - 1055. p. 1021.

<sup>109</sup> O'CONNOR, Daniel. Standard- Essential Patents in Context: Just a Small Piece of the Smartphone War Puzzle [online]. Disruptive Competition Project. 2013 [cit. 12 May 2015]. Available at: <http://www.project-disco.org/intellectual-property/030513-standard-essential-patents-in-context-just-a-small-piece-of-the-smartphone-war-puzzle/>

<sup>110</sup> RATO; ENGLISH, supra note 107, p. 195.

patent, country-by-country claims.<sup>111</sup> Standard implementers (SEPs infringers) may be obstructing licensing negotiations, e.g. by refusing to accept licensing offers on FRAND terms, and even be prepared to litigate when the cost of such a litigation is reasonably low in comparison to the potential more beneficial licensing terms (e.g. royalties below the FRAND rate) that they might extract therefrom. As the negotiations and/or litigation might be lengthy and costly, SEP holders may have the incentive to avoid them in order to obtain cash flow faster.<sup>112</sup> In this situation, the potential hold-up situation is therefore turned around as the licensees actually “hold-up” SEP holders.

It is thus vital to strike the right balance between the hold-up and reverse hold-up in order to (i) secure access to the standard; (ii) enable SEP holders to obtain remuneration for their R&D efforts; (iii) avoid the infringement of fundamental rights of SEP holders.

The EU competition authorities nowadays seem to be in favour of the *hold-up* theory, on the one hand promoting the rights of potential licensees during the licensing of SEPs and on the other omitting the danger of *reverse hold-up*. This EU competition law approach will be demonstrated herein below in the context of the so-called smartphone wars.

### **2.3 Smartphone Wars in the EU Competition Law Context**

In the past few years, the so-called “smartphone wars” have emerged between the major mobile telephony companies. With the rapid development of mobile phone technologies and the entrance of mobile telephony markets by Apple, Google and Microsoft along with their new innovative products and technologies (iPhone, Android, Windows Mobile),<sup>113</sup> the existing status quo in the markets has changed. Such new entrants possess large patent portfolios consisting of both SEPs and non-SEPs, some of which are however commercially essential (as will be discussed herein below), and carry out aggressive litigation in relation to both their SEPs and non-SEPs in a large

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<sup>111</sup> GERADIN, Damien; RATO, Miguel. Reverse Hold-Ups: The (Often Ignored) Risks Faced by Innovators in Standardized Areas [online]. Tillburg: Tilburg Law and Economics Center, 2010 [cit. 7 May 2015], p. 15. Available at: <http://www.ssrn.com/abstract=1711744>

<sup>112</sup> O’DONGHUE, Robert; PADILLA, Jorge. *The Law and Economics of Article 102 TFEU*, 2nd ed. Oxford: Hart Publishing, 2013, 1008 pp. ISBN 9781849461399. p. 702 – 703.

<sup>113</sup> JONES, Alison. Standard-Essential Patents: Frand Commitments, Injunctions and the Smartphone Wars. *European Competition Journal*. 2014, Vol. 10, Issue 1, pp. 1-36. p. 9.

number of jurisdiction on the both sides of Atlantic and elsewhere.<sup>114</sup> The mobile telephony companies seem to be trying to push the boundaries of IP system as far as it goes in order to secure for themselves the best positions possible in the lucrative markets.

Herein below in the rest of this thesis, the EU competition law branch of the extensive “smartphone wars” saga will be analysed. The respective cases relate to SEPs adopted by ETSI and the question whether SEP holders who have committed to license on FRAND terms may deny access to a willing licensee<sup>115</sup> (or in a different perspective, a SEP infringer willing to enter into a license on FRAND terms) by the seeking and enforcement of injunctions. Thus, the EU competition authorities are required to balance the two aforesaid notions of hold-up and reverse hold-up.

### **2.3.1 Samsung<sup>116</sup> and Motorola<sup>117</sup> decisions**

In the early 2012,<sup>118</sup> two almost identical antitrust proceedings were initiated by the Commission. The Commission expressed its concerns with Samsung and Motorola, two mobile phone manufacturers active on both the technology (licensing) market and the downstream product market, who sought and enforced injunctions in relation to their SEPs reading on ETSI’s standards against Apple.

In the *Samsung* case, Samsung sought preliminary and permanent injunctions on the basis of its Universal Mobile Telecommunications Service (UMTS) SEPs reading on ETSI’s UMTS standard. Samsung has committed to ETSI to license such SEPs on FRAND terms and conditions.<sup>119</sup> As Apple was manufacturing various products which implemented Samsung’s UMTS SEPs without a license concluded between the two undertakings, Samsung started to seek injunctions in a number of jurisdictions to

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<sup>114</sup> CARRIER, Michael A. A Roadmap to the Smartphone Patent Wars and FRAND Licensing [online]. *CPI Antitrust Chronicle*, Vol. 2, 2012. [cit. 13 May 2015], p. 2. Available at: <http://ssrn.com/abstract=2050743>

<sup>115</sup> LUNDQVIST, Björn. Competition Law as the Limit to Standard-Setting [online]. Copenhagen Business School; Stockholm University - Faculty of Law, 2014 [cit. 13 May 2015], p 29. Available at: <http://ssrn.com/abstract=2551026>

<sup>116</sup> Case AT.39939 - *Samsung – Enforcement of UMTS Standard Essential Patents*, Commission Decision of 29 April 2014 (Samsung).

<sup>117</sup> Case AT.39985 - *Motorola - Enforcement of GPRS Standard Essential Patents*, Commission Decision of 29 April 2014 (Motorola).

<sup>118</sup> The proceedings against Samsung were started on 30 January 2012 without any prior complaint. The investigation of Motorola was initiated upon the submission of a complaint by Apple on 14 February 2012, formal proceedings were opened on 2 April 2012.

<sup>119</sup> Samsung, supra note 116, para. 2.

prevent Apple from further (alleged) infringement of the SEPs in question. After the Commission's intervention, however, Samsung unilaterally withdrew all actions and terminated the ongoing proceedings before the courts in France, Germany, Italy, the Netherlands and the United Kingdom.<sup>120</sup> Despite the fact that no injunctions were thus granted in any of the jurisdictions, the Commission proceeded with its assessment of Samsung's allegedly abusive conduct. The case was eventually settled as the Commission accepted commitments offered by Samsung; the commitment decision was adopted on 29 April 2014. Thus, this case to some extent lacks significant detailed reasoning and precedential value.

In *Motorola*, the situation was very similar. Motorola sought and enforced injunctions against Apple in Germany on the basis of three of its patents, two of which were SEPs. The first SEP was declared essential to the UMTS standard (Whinnet UMTS SEP) and the second one to the General Packet Radio Service (GPRS) standard (Cudak GPRS SEP);<sup>121</sup> both of the SEPs were FRAND encumbered. In this case, the German court granted the injunction only with respect to the Cudak GPRS SEP as the infringement of Whinnet UMTS SEP was not sufficiently evidenced.<sup>122</sup> Licensing agreement was being negotiated between the two undertakings in the background of injunction proceedings commenced by Motorola. After extensive negotiations, a settlement agreement was eventually concluded between the two undertakings. The Commission proceeded with the examination of the allegedly abusive aspects of Motorola's conduct, concluded that Motorola had abused its dominant position and adopted a prohibition decision on the same date as the Samsung decision, i.e. on 29 April 2014. However, no fines were imposed as there was no EU decisional practise and national courts have reached diverging conclusion in this question.<sup>123</sup>

The core of both *Samsung* and *Motorola* decisions is to be found in the Commission's conclusions regarding the abuse of dominant position under Article 102 TFEU by seeking and enforcing injunctions on the basis of FRAND encumbered SEPs against licensees (and SEP infringers at the time of the seeking of injunctions) who are willing to enter into licensing agreements on FRAND terms. While the Commission's

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<sup>120</sup> Samsung, supra note 116, para. 54.

<sup>121</sup> Motorola, supra note 117, para. 115.

<sup>122</sup> Ibid., para. 130, 123, fn. 108.

<sup>123</sup> Ibid., para. 561.

analysis was quite extensive (and will subject to further examination herein below), it may be, as a working premise, stated that the abusive nature of the conduct was determined by the following:

- (a) the injunctions were sought and enforced in the framework of exceptional circumstances, as follows:
  - a. they were related to SEPs; and
  - b. both of the dominant undertakings committed to license such SEPs on FRAND terms;<sup>124</sup>
- (b) Apple (the SEP infringer) was willing to enter into a license of FRAND terms;<sup>125</sup> and
- (c) there was no objective justification on the side of the dominant undertakings for the seeking and enforcement of injunctions under such circumstances.<sup>126</sup>

In other words, a SEP holder who has committed to license on FRAND terms is prohibited to seek and enforce an injunction against a potential licensee who is willing to conclude a license on FRAND terms, unless a SEP holder comes up with sufficient reasons to justify his judicial proceedings. The willing licensee is free to keep *de facto* infringing the IPRs in question until a licensing agreement is concluded. Therefore, it practically all comes down to the clarification of the term “willing licensee” and the circumstances under which a licensee may qualify as willing. Is a mere declaration of willingness sufficient, or are there other requirements that are to be fulfilled by a licensee in order to qualify as “willing” in legal terms?

### **2.3.2 Huawei v. ZTE<sup>127</sup>**

In this regard, there is a pending request for preliminary ruling lodged with the Court of Justice by the German District Court in Düsseldorf on 5 April 2013.<sup>128</sup> The German court is asking a number of questions relating to practically an identical issue as already assessed by the Commission in *Samsung* and *Motorola*. The ruling is anxiously anticipated as it is likely to significantly clarify the recent uncertainties. Most

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<sup>124</sup> Motorola, supra note 117, para. 281, 492; Samsung, supra note 116, para. 55.

<sup>125</sup> Motorola, supra note 117, para. 307, 495; Samsung, supra note 116, para. 122.

<sup>126</sup> Motorola, supra note 117, para. 496; Samsung, supra note 116, para. 70.

<sup>127</sup> Case C-170/13 *Huawei Technologies Co. Ltd v ZTE Corp., ZTE Deutschland GmbH* (judgement pending) (Huawei v. ZTE).

<sup>128</sup> Request for a preliminary ruling from the Landgericht Düsseldorf (Germany) lodged on 5 April 2013 in Huawei v. ZTE, supra note 127.

recently, Advocate General Melchior Wathelet presented his opinion in the case on 20 November 2014<sup>129</sup> and the final judgement is expected to be adopted in the first half of 2015.<sup>130</sup>

The reference for preliminary ruling resulted from a SEP infringement lawsuit between Huawei Technologies (Huawei) and ZTE Corporations (ZTE), mobile telephony companies. Huawei has sought an injunction in Germany on the basis of its patent declared essential to the ETSI's 4G/LTE standard against ZTE.<sup>131</sup> Considering the fact that in general most of the SEP infringement disputes have been carried out before German courts (solely or along with parallel actions in other European jurisdictions), a legitimate question may be why the German courts have not requested clarification of the matters from the Court of Justice earlier.

The reason for this “delay” could arguably be that absent any concurring EU competition law decisions, there was a sufficient German precedent for this type of disputes, the so-called *Orange-Book Standard*<sup>132</sup> (which will be discussed herein below). However, as it became evident that seeking and enforcing of injunctions on the basis of SEPs raises concerns under Article 102 TFEU,<sup>133</sup> a danger that the German approach might be in breach of EU competition law occurred.<sup>134</sup>

In essence, in its request for preliminary ruling the District Court in Düsseldorf distinguished between two possible scenarios. Firstly, it asks whether an abuse of dominant position by seeking and enforcement of injunction on the basis of a FRAND encumbered SEP against a SEP infringer is to be presumed when the infringer merely

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<sup>129</sup> Opinion of Advocate General Wathelet delivered on 20 November 2014 in *Huawei v. ZTE*, supra note 127.

<sup>130</sup> See e.g. BELL, Robert; MADEJ, Roman. *Huawei v ZTE - EU Advocate General Rules out the Ability of Standard Essential Patents' Holders to Obtain Injunctions to Protect Their Patents in Most Cases* [online]. Bryan Cave, EU & Competition Law, 2014 [cit. 11 May 2015]. Available at: <http://eu-competitionlaw.com/huawei-v-zte-eu-advocate-general-rules-out-the-ability-of-standard-essential-patents-holders-to-obtain-injunctions-to-protect-their-patents-in-most-cases/>

<sup>131</sup> GALLASCH, Sven. The referral of *Huawei v ZTE* to the CJEU: determining the future of remedies in the context of standard-essential patents. *European Competition Law Review*. 2013, Vol. 34, Issue 8, pp. 443 - 445. p. 443.

<sup>132</sup> Federal Supreme Court (Bundesgerichtshof) May 6, 2009 – Case No. KZR 39/06 – *Orange-Book Standard*. English translation [online]. Available at: <http://www.ipeg.eu/blog/wp-content/uploads/EN-Translation-BGH-Orange-Book-Standard-eng.pdf> [cit. 11 May 2015] (*Orange-Book Standard*).

<sup>133</sup> European Commission. Antitrust: Commission opens proceedings against Motorola. (Press Release IP/12/345) [online]. Brussels: 3 April 2012. [cit. 11 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_IP-12-345\\_en.htm?locale=en](http://europa.eu/rapid/press-release_IP-12-345_en.htm?locale=en); European Commission. Antitrust: Commission opens proceedings against Samsung. (Press Release IP/12/89) [online]. Brussels: 31 January 2012. [cit. 11 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_IP-12-89\\_en.htm?locale=en](http://europa.eu/rapid/press-release_IP-12-89_en.htm?locale=en)

<sup>134</sup> See e.g. Case 14/83 *Sabine von Colson and Elisabeth Kamann v Land Nordrhein-Westfalen* [1984] ECR 1891, para. 23; see also JONES, supra note 113, p. 15.



*declares* [emphasis added] that he is willing to negotiate a license. If so, the German court asks whether there are any quantitative or qualitative criteria required in order for the potential licensee to declare his willingness sufficiently; particularly, whether a general oral statement that he is willing to negotiate is satisfactory, or whether the potential licensee has to declare his willingness by specifying conditions on which he is willing to conclude a licensing agreement. The list of proposed criteria is however not exhaustive.

This approach is clearly inspired by *Samsung* and *Motorola* Commission's investigations. At the time of the lodging of the request for preliminary ruling, only Commission press releases<sup>135</sup> dealing with the matter of willingness to license on FRAND terms were available. Such press releases, however, did not provide any sufficient clarification at that time.

Secondly, the German court asks whether the approach adopted in the aforementioned German *Orange-Book Standard* could be applicable. In order for a patent infringer to qualify as a willing licensee under this precedent and thus be able to successfully use competition law defence (claiming that the patent proprietor abuses his dominant position by refusing to license the patent in question) against the actions for injunctive relief sought by a patent holder, the patent infringer has to fulfil the following conditions:

- (a) make an unconditional licensing offer to which he stays bound and which the patent proprietor cannot reject without breaching the ban of discrimination or competition law rules,<sup>136</sup> and
- (b) fulfil the obligation arising out of the prospective licensing agreement, particularly by paying royalties for the past use of the patent (not necessarily to the patent proprietor, but also e.g. to an escrow account).<sup>137</sup>

Provided that the Court of Justice finds the *Orange-Book Standard* principles applicable, the consequent question is whether there any concrete criteria to be applied

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<sup>135</sup> European Commission. *Samsung - Enforcement of ETSI Standard Essential Patents (SEPs): Questions and Answers* (Press Release MEMO/12/1021) [online]. Brussels: 21 December 2012. [cit. 11 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_MEMO-12-1021\\_en.htm](http://europa.eu/rapid/press-release_MEMO-12-1021_en.htm); European Commission. *Antitrust: Commission sends Statement of Objections to Samsung on potential misuse of mobile phone standard-essential patents* (Press Release IP/12/1448) [online]. Brussels: 21 December 2012. [cit. 11 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_IP-12-1448\\_en.htm](http://europa.eu/rapid/press-release_IP-12-1448_en.htm)

<sup>136</sup> *Orange-Book Standard*, supra note 132, p. 1.

<sup>137</sup> *Ibid.*

in relation to the unconditional offer and to the compensation for the use of the IPR subject to the infringement.

### 2.3.3 Exclusionary or Exploitative Abuse?

Moreover, bearing in mind the aforesaid distinction between exploitative and exclusionary abuse, the question how the recent abusive conduct in *Samsung* and *Motorola* and the pending judgement before the Court of Justice should be understood will be discussed before an analysis thereof is carried out herein below. One thing is that if the actual cases were to be evaluated only as exploitative, the Article [102 TFEU] Guidance would be inapplicable. Also, as indicated above, as it would be substantially difficult for the Commission to address solely the exploitation,<sup>138</sup> the Commission prefers to invest its time and resources into the investigation of exclusionary abuses.<sup>139</sup>

In the case of *Samsung* and *Motorola*, a brief statement that the conduct was only exclusionary would lead to a distorted conclusion. Prior to the publishing of the respective decisions by the Commission,<sup>140</sup> it was argued that Commission's attention was drawn both to the exclusionary and exploitative nature of the conduct in question.<sup>141</sup> With the decisions becoming publicly available, this fact was confirmed. In *Motorola*, the Commission states at the very beginning of the decision that the matter meets its enforcement priorities under the Article [102 TFEU] Guidance<sup>142</sup> and also refers to the danger of (temporary) exclusion of Apple's products from the market multiple times.<sup>143</sup>

Nevertheless, the conclusion that the cases include both types of abuses is still valid. The Commission stated that after the injunction was granted, Apple was forced to choose between having its products excluded from the market or accepting less advantageous licensing terms which it would have otherwise not agreed to should there

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<sup>138</sup> GERADIN, RATO, supra note 52, p. 44.

<sup>139</sup> See e.g. Commission's Press Release MEMO/09/516, supra note 101.

<sup>140</sup> Both of the decisions were published on 13 May 2014. See Charts of events related to Samsung, supra note 116 [online]. Available at:

[http://ec.europa.eu/competition/elojade/isef/case\\_details.cfm?proc\\_code=1\\_39939](http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_39939);

Motorola, supra note 117 [online]. Available at:

[http://ec.europa.eu/competition/elojade/isef/case\\_details.cfm?proc\\_code=1\\_39985](http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_39985) [both cit. 7 May 2015].

<sup>141</sup> JONES, supra note 113, p. 16.

<sup>142</sup> Motorola, supra note 117, para. 1, fn. 4.

<sup>143</sup> Ibid., para. 326, 411, 421, 523.

be no injunction enforced.<sup>144</sup> It actually lists the acceptance of less favourable licensing terms in the licensing agreements as one of the anti-competitive effects of Motorola's abusive conduct.<sup>145</sup>

It may thus be concluded that the conduct in question contained both exclusion and exploitation.<sup>146</sup> The acceptance of disadvantageous licensing terms, which is reflective of the exploitative aspect, however resulted from the (threat of) exclusion by enforcing the injunction. The exclusionary nature of the injunction is thus the central issue which causes consequent anti-competitive effects.

Unlike in *Rambus* where the EU competition law measures did not enable the competition authorities to intervene against the deceptive obtaining of dominant position, Samsung and Motorola already (allegedly, as will be discussed in chapter 4 herein below) held dominant position and the Commission was not forced to address only the exploitative aspects of the cases but mostly the exclusionary conduct leading to exploitation.

On the date of adoption of *Samsung* and *Motorola* decision, the Commission cited the words of its (nowadays former) vice president in charge of competition policy Joaquín Almunia who welcomed the way the cases had been solved and stated in direct relation thereto that ” *[t]he protection of intellectual property and competition are both key drivers of innovation and growth. This is why it is essential that intellectual property is not misused to the detriment of healthy competition and, ultimately, of consumers.* ”<sup>147</sup>

However, as of the adoption of the *Motorola* and *Samsung* decisions, there are considerable doubts<sup>148</sup> whether the Commission has actually delivered on its commitments regarding the anti-competitive foreclosure approach expressed in the Article [102 TFEU] Guidance, i.e. to intervene only if an actual or likely harm to

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<sup>144</sup> Ibid., para. 320

<sup>145</sup> Ibid., para. 311

<sup>146</sup> GYSELEN, Luc. The European Commission's Commitments Decisions in Abuse of Dominance Cases. In: HAWK, Barry E. (ed.). *Annual Proceedings of the Fordham Competition Law Institute: International Antitrust Law & Policy*. Juris Pub Inc, 2014. pp. 247 - 274. ISBN 9781578233410. p. 267.

<sup>147</sup> European Commission. Antitrust: Commission accepts legally binding commitments by Samsung Electronics on standard essential patent injunctions (Press Release IP/14/490) [online]. Brussels: 29 April 2014. [cit. 10 May 2015]. Available at: [http://europa.eu/rapid/press-release\\_IP-14-490\\_en.htm?locale=en](http://europa.eu/rapid/press-release_IP-14-490_en.htm?locale=en)

<sup>148</sup> MALLINSON, Keith. Plunging into a Safe Harbour from SEP Injunctions [online]. 2014 [cit. 10 May 2015], p. 6 - 7. Available at: <http://www.wiseharbor.com/pdfs/Safe%20Harbour%20from%20SEP%20Injunctions%20Mallinson%20WiseHarbor%204June2014.pdf>

consumers is unquestionable. This concern will be reflected herein below in the following chapters within the analysis of the respective cases.

#### **2.3.4 Issues Raised by Recent Decisions**

It should be noted that the impact of the recent Commission's decisions in *Samsung* and *Motorola* along with the national court's approach (particularly the *Orange-Book Standard*) and the pending Court of Justice's ruling in *Huawei v. ZTE* reach far beyond the actual matter of injunctions on the basis of SEPs. In my opinion, rather than clarifying how to treat SEPs in general, the current decisional practise creates uncertainty in a number of issues which, surprisingly enough, do not necessarily directly relate to the enforcement of SEPs by injunctions. The rest of thesis will particularly focus on the following issues that I find crucial.

Firstly, before these questions are dealt with, it is necessary clarify some of the issues related the principles governing the licensing of standard essential patents and the circumstances under which patents actually become essential as these notions are provide the necessary insight into the complexity of the industries relying on technical compatibility standards. The analysis thereof will be provided in chapter 3.

Secondly, in order to be able to assess the actual alleged abusive conduct under Article 102 TFEU, competition authorities have to define the relevant market(s) and conclude that the undertaking concerned holds dominant position therein. Given the complex relations in the SEP markets and the ways in which SEPs are licensed, a mere holding of a SEP should not *per se* imply that SEP holders enjoy monopolies in relation to every single SEP. Thus, the question whether SEPs confer market power (and dominance) on their holders will be made subject to scrutiny in chapter 4.

Thirdly, in *Samsung* and *Motorola* the Commission stated that the abuse of dominant position was based on the exceptional circumstances of the cases. The Commission's application of the "exceptional circumstances" doctrine may be questioned as there are concurring approaches in the EU courts' case law. Moreover, if SEP holders are deprived of their right to enforce judicial claims in infringement cases, the issue of restriction of their fundamental rights arises. Therefore, the concurring potentially applicable legal tests will be examined herein below.

Finally, as the approaches towards “willing licensee” undertaken in *Samsung* and *Motorola*, the *Orange-Book Standard* and Advocate General’s opinion in *Huawei v. ZTE* are rather incompatible, the question of how competition authorities should deal with this rather complex issue will be analysed. Both of the two last aforesaid questions will be discussed in chapter 5.

### 3. PATENT PORTFOLIOS AND NATURE OF STANDARD ESSENTIAL PATENTS

Industries where SEPs are implemented are characterized by the fact that they rely on a large number of patents that are complementary vis-à-vis each other and therefore constitute a technical standard only as a complete group of patents. However, within industries such as telecommunications the implementation of formally non-essential technologies is often also inevitable in order to meet the requirements of consumers and keep up to date with the latest technology developments.

This confusing maze of overlapping IPRs to which an undertaking has to obtain access in order to implement a technical standard is usually labelled as a “patent thicket”.<sup>149</sup> The nature of patents which are included in the patent thickets, i.e. whether they are essential or non-essential to a standard, is irrelevant as patent thickets are a market phenomenon.

In the specific context of smartphone wars, most of the patents asserted in the litigations are actually non-essential.<sup>150</sup> However, the recent competition law concerns relate merely to SEPs; non-SEPs enjoy a much more lenient approach. Therefore, herein below the substantial differences between the licensing and/or asserting of SEPs as opposed to non-SEPs and the implications for SEP holders arising out of the different treatment by EU competition law will be discussed.

#### 3.1 The Notion of Essentiality

A lengthy formal procedure is adopted by SSOs in order to set a technical standard. It is not the aim of this thesis to describe standard-setting procedure and its individual steps in detail, but the following notions have been observed. During standard-setting process, standard implementers *declare* [emphasis added] their patents to be essential to a standard and once a particular technology is chosen to constitute a standard, standard-essential patents are the ones that have previously been declared. For

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<sup>149</sup> SHAPIRO, Carl, Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting [online]. 2001 [cit. 17 May 2015], p. 2. Available at SSRN: <http://ssrn.com/abstract=273550>.

<sup>150</sup> PETIT, Nicolas. Injunctions for Frand-Pledged Standard Essential Patents: The Quest for an Appropriate Test of Abuse under Article 102 TFEU [online]. 2013 [cit. 29 April 2015] p. 1. Available at: <http://ssrn.com/abstract=2371192>

example, a total number exceeding 23,500 patents were declared essential to the GSM and “3G” or UMTS standards developed by ETSI.<sup>151</sup> This number, however, is merely an indication of two factors: (i) technical standards read on an enormous number of individual SEPs not exceptionally amounting to hundreds and thousands, and (ii) declaration of essentiality is used extensively by patent proprietors within standard-setting process; the question whether such declarations are legitimate or purely utilitarian is subject to discussion.

Actually, it should be noted that the fact whether such declared patents are factually essential for the implementation of a standardised technology or whether they may be worked or designed around or whether substitutes are available is usually not additionally assessed or “double-checked” by SSOs. Thus, this approach may lead to an “over-declaration” of essentiality of patents as a result of a purely strategic conduct of patent holders.<sup>152</sup> They might have the incentive to declare their patents as essential for a number of reasons, e.g. in order to obtain FRAND royalties, which they would otherwise not be entitled to, to include their patents in a standard as a precautionary measure, or because the actual essentiality of a patent is still uncertain on technical grounds at the time of the setting of a standard and so forth.

Some studies suggest that only 21 % of the overall number of patents declared as essential to the 3G standard were actually essential on technical grounds.<sup>153</sup> However, due to the actual overall number of patents declared as essential it is impossible to draw a clear line between the indeed essential patents and non-essential ones. After all, it is always up to the courts of law to determine the actual nature of a patent when essentiality is challenged. In this regard, in litigation between Nokia and InterDigital<sup>154</sup> before the UK courts, for example, InterDigital originally claimed 29 patents to be essential to the UMTS standard. After Nokia’s claims of non-essentiality, InterDigital

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<sup>151</sup> BEKKERS, Rudi; MARTINELLI, Arianna. Knowledge Positions in High-Tech Markets: Trajectories, Standards, Strategies and True Innovators. *Technological Forecasting and Social Change*. 2012, Vol. 79, Issue 7. pp. 1192–1216. p. 1203.

<sup>152</sup> BARON, Justus; POHLMANN, Tim. Mapping Standards to Patents using Databases of Declared Standard-Essential Patents and Systems of Technological Classification [online]. 2015 [cit. 17 May 2015], p. 4. Available at: [http://www.law.northwestern.edu/research-faculty/searlecenter/innovationeconomics/documents/Baron\\_Pohlmann\\_Mapping\\_Standards.pdf](http://www.law.northwestern.edu/research-faculty/searlecenter/innovationeconomics/documents/Baron_Pohlmann_Mapping_Standards.pdf)

<sup>153</sup> GOODMAN, David J.; MYERS, Robert A. 3G Cellular Standards and Patents [online]. *IEEE WirelessCom 2005*, 2005 [cit. 17 May 2015], p. 1. Available at: <http://eeweb.poly.edu/dgoodman/wirelesscom2005.pdf>

<sup>154</sup> *Nokia v. InterDigital*, English and Wales High Court 802 /Pat), Pumfreu J., 12 April 2006, BL C746

dropped essentiality claims for 26 of them<sup>155</sup> and eventually only one patent was held by the court to be essential.<sup>156</sup>

### 3.1.1 Technical and Commercial Essentiality: Divergence?

Therefore, the grounds on which essentiality of patents reading on a technical standards is assessed should be observed. According to the current policy undertaken by a number of SSOs, *technical* [emphasis added] essentiality is the key factor determining the essential nature of patents. That means that it should not be possible on technical grounds to exploit the patents in any way without infringing them, i.e. the patents cover the only possible technical solution. On the contrary, it is expressly stated in most of SSOs' IPR policies that commercial considerations related to the nature of patents do not determine their essentiality.<sup>157</sup> In other words, even if the case is that a technology becomes *de facto* essential, i.e. that it is prohibitively expensive to develop and implement alternative solutions and thus the implementation of such a technology becomes unavoidable, it is non-essential according to most of SSOs' IPR policies.<sup>158</sup> Generally, SSOs do not even take these implications into account when defining standards; the technical perspective is the decisive point in the assessment whether a patent is (declared) essential. Whether or not a standard enjoys commercial success is irrelevant. Moreover, innovation carried out by a single undertaking may result in a unilateral *de facto* standard – essential from a commercial point of view; in these cases, however, SSOs are completely excluded from any kind of determination of the standard's nature.

There had been discussion within SSOs whether to include commercially essential IPRs to their definition of essentiality but eventually, only technical essentiality prevailed.<sup>159</sup> It may be considered legitimate as the rules laid down by SSOs

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<sup>155</sup> BEKKERS, Rudi; WEST, Joel. The Limits to IPR Standardization Policies as Evidenced by Strategic Patenting in UMTS. *Telecommunications Policy*. 2009, Vol. 33, Issues 1-2. pp. 80-97. p. 92.

<sup>156</sup> LUNDQVIST, Björn. *Standardization under EU Competition Rules and US Antitrust Laws: The Rise and Limits of Self-Regulation. New Horizons in Competition law and Economics*. Edward Elgar Publishing, 2014. 480 pp. ISBN 1781954852. p. 345.

<sup>157</sup> European Telecommunications Standard Institute (ETSI): ETSI Intellectual Property Rights Policy [online]. 2014 [cit. 15 April 2015], clause 15.6. Available at: <http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf>

<sup>158</sup> BEKKERS, Rudi; VERSPAGEN, Bart; SMITS, Jan. Intellectual Property Rights and Standardization: The Case of GSM. *Telecommunications Policy*. 2002, Vol. 26, Issues 3-4. pp. 171 - 188. p. 173.

<sup>159</sup> WILKINSON, S.L. They're Stealing our Diamonds: The Standards Assault on Patents. *Revue Canadienne de Propriete Intellectuelle*. Vol. 8, Issue 2, pp. 193–205. p. 197.



are agreements whereby their members are free to agree on any definition of essentiality at their will. However, considering the aforesaid notion of probabilistic essentiality of patents, patents labelled as essential under the policy of SSOs can be considered merely formalistic unless the actual essentiality is demonstrated. Given these presumptions, it is therefore argued that SSOs should consider including commercial (or economic) essentiality expressly in their IPR policies.<sup>160</sup>

The question, however, is how commercial essentiality should be assessed in order for the related patents to become SEPs and whether it is possible at all. From the theoretical perspective, Kesan and Hayes offer three distinctive notions of commercial essentiality: broad, intermediate and narrow. Firstly, under broad definition commercially essential would be the patents for which there is unanimous market demand and which necessarily have to be implemented by manufacturers in order to compete. Secondly, intermediate perspective takes as a distinctive point the fact whether or not the implementation of a patent is required in order to enable interoperability and compatibility in network markets. The narrow view, finally, considers essential only the patents which are already included in a standard (declared SEPs) but which are actually not technically essential, yet still commercially they are.<sup>161</sup> I would personally prefer the intermediate definition promoting compatibility and interoperability. On the one hand, the broad one, from the competition law perspective, seems to be firstly too over-restrictive when it comes to the promotion of incentives to innovate and protection of IPR holders, and secondly, too much in favour of third parties with no particular contribution to the development of standard. On the other hand, the narrow view is of a very formalistic nature and is likely to result in over-declaration of IPRs which are in fact not essential to a standard at all merely because the IPR holders would hope that their non-essential IPRs become commercially essential.

Within the framework of smartphone wars, Apple's "slide-to-unlock" patent can be demonstrated as an example. There have been numerous disputes both in the US and in Europe regarding the alleged infringement of such Apple's patent. Google's legal representatives have claimed that some of Apple's patents, including the aforesaid,

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<sup>160</sup> LUNDQVIST 2014, supra note 147, p. 348.

<sup>161</sup> KESAN, Jay P.; HAYES, Carol M. FRAND's Forever: Standards, Patent Transfers, and Licensing Commitments. *Indiana Law Journal*. 2014, Vol. 89, Issue 1. pp. 231 - 314. p. 242.

should be treated the same way as SEPs reading on SSO's technical standards.<sup>162</sup> This patent protects a technology that most smartphone users require and it may thus fall under the aforesaid broad definition of commercial essentiality.<sup>163</sup> It may however be argued that this is not the brightest example, as in the US it was eventually ruled that the said patent was not infringed "wilfully"<sup>164</sup> and in Germany, where the main "battlefield" in the European context of smartphone wars is located, the patent was invalidated due lack of an "inventive step".<sup>165</sup>

But this example may serve as a proof that even though some patents are not determined as SEPs under formal definitions, the implementation thereof may become a market requirement. Should the patent in question secure compatibility and interoperability (which was actually not the case of the "slide-to-unlock" patent), the claim would be even stronger.

The Commission, however, mentions the "slide-to-unlock" patent as a typical example of non-SEP as opposed to the actual formally determined SEPs stating that most smartphone manufacturers were eventually able to develop alternative technologies for unlocking a smartphone screen which do not infringe the "slide-to-unlock" patent, which would not have been possible in case of SEPs.<sup>166</sup> Given the extensive litigation related to the alleged numerous infringements of the "slide-to-unlock" patent, the mentioning of such a patent as an example of a typical non-SEP however demonstrates the formalism with which the Commission treats SEP-related issues and the notion of essentiality in general.

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<sup>162</sup> GOLSON, Jordan. Google's Top Lawyer: Some Apple Inventions are Commercially Essential, Should Be Made into Standards [online]. MacRumors, 2014 [cit. 18 May 2015]. Available at: <http://www.macrumors.com/2012/07/20/googles-top-lawyer-some-apple-inventions-are-commercially-essential-should-be-made-into-standards/>

<sup>163</sup> KESAN; HAYES, supra note 161, p. 244.

<sup>164</sup> ESSERS, Loek. Apple's slide-to-unlock patent not wilfully infringed by Samsung, judge rules [online]. IDG News Service, 2014 [cit. 18 May 2015]. Available at: <http://www.pcworld.com/article/2605340/apples-slidetounlock-patent-not-wilfully-infringed-by-samsung-judge-rules.html>

<sup>165</sup> CAMPBELL, Mikey. Google's Top Lawyer: Apple's 'slide to unlock' patent invalidated by German court [online]. AppleInsider, 2013 [cit. 18 May 2015]. Available at: <http://appleinsider.com/articles/13/04/04/apples-slide-to-unlock-patent-invalidated-in-german-litigation>

<sup>166</sup> European Commission, Competition Directorate-General. Standard-Essential Patents [online]. *Competition Policy Brief*. 2014, Issue 8, [cit. 10 May 2015]. pp. 1 - 5. p. 2. Available at: [http://ec.europa.eu/competition/publications/cpb/2014/008\\_en.pdf](http://ec.europa.eu/competition/publications/cpb/2014/008_en.pdf)

### 3.2 Validity Challenges

It should be noted that the question about patents in context of technical standards is not only whether they are essential, but also whether they are valid. Patents are generally considered to be “probabilistic” IPRs by nature.<sup>167</sup> In most cases, patent authorities check whether statutory requirements for patentability are met and if so, they grant protection to the invention. However, under closer scrutiny the scope of protection granted may be found inappropriate and not corresponding with the real nature of the invention and patents may thus be found invalid.<sup>168</sup> The authority to determine the invalidity of patents is usually entrusted to courts or other public authorities.

If validity is challenged by (potential) licensees and a patent is actually found to be invalid, patent protection is not an issue anymore and anyone is practically free to implement the subject-matter of such invalid patent without the obligation to pay royalties to the original patent proprietor. Thus, within licensing negotiations, the probabilistic nature of patents is used as a bargaining tool by licensees in order to either pay lower royalties, or, if the patent is actually challenged and invalidated, to pay no royalties at all. However, as judicial proceedings initiated in order to obtain a ruling on patent’s validity are expensive and lengthy, parties often tend to accept the probabilistic nature of patents and take that into consideration when setting royalty rates or other licensing conditions.<sup>169</sup>

Moreover, in order to avoid future litigation, parties may include in their licensing agreement a “non-challenge” clause, an obligation of the licensee not to challenge the validity of the patent, or a “termination” (or “terminate-on-challenge”) clause, which, as the wording might suggest, enables licensors to terminate the agreement when validity is challenged by licensees.<sup>170</sup> Nevertheless, the EU competition law looks at these clauses with suspicion.

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<sup>167</sup> LEMLEY, Mark A.; SHAPIRO, Carl. Probabilistic Patents. *Journal of Economic Perspectives*. 2005, Vol. 19, No. 2. pp. 75 – 98. p. 76.

<sup>168</sup> CHOI, Jay Pil. How Reasonable is the 'Reasonable' Royalty Rate? Damage Rules and Probabilistic Intellectual Property Rights [online]. CESifo Working Paper Series No. 1778, 2006 [cit. 22 May 2015], p. 2. Available at: <http://ssrn.com/abstract=926037>

<sup>169</sup> LAROUCHE, Pierre; ZINGALES, Nicolo. Injunctive Relief in Disputes Related to Standard-Essential Patents: Time for the CJEU to Set Fair and Reasonable Presumptions [online]. TILEC Discussion Paper No. 2014-048, 2014 [cit. 22 May 2015], p. 28. Available at : <http://ssrn.com/abstract=2536829>

<sup>170</sup> HERRMANN, Nadine. Germany: IP and Antitrust: Licence Agreements under Scrutiny: A New Challenge for Non-Challenge Clauses [online]. Quinn Emanuel Urquhart & Sullivan LLP. The European Antitrust Review, 2015 [cit. 22 May 2015]. Available at:

Even if the licensing agreement falls under the block exemption granted by 2014 TT Regulation, these clauses are generally excluded from the exemption and their nature is assessed individually.<sup>171</sup> Particularly in the context of SEPs, licensees may have strong incentives not to challenge validity of the licensed SEPs if licensors would have the possibility to terminate the license.<sup>172</sup> Considering the potential length of litigation, licensees would be (at least temporarily) prevented from implementing SEPs if they challenged their validity and not only their commercial interests, but also consumers would arguably be harmed as they would be deprived of licensees' products.

The Commission states that generally licensees should be free to challenge validity of the licensed subject matter as invalid IPRs generally hinder innovation and competition<sup>173</sup> (not to mention that in fact licensees might be the only ones to have economic incentives to do so<sup>174</sup>). Within the pro- and anti-competitive effects of such clauses, the right of licensors not to conduct business with entities that question the validity of their IPRs has to be balanced against public interest to eliminate invalid IPRs from markets.<sup>175</sup>

Competition law treatment of such clauses is different in cases of settlement agreements whereby parties actually have the strongest incentives to straighten their relations, resolve their existing disputes and avoid any future disputes of a similar kind. Such clauses are generally considered to fall outside Article 101(1) TFEU;<sup>176</sup> however, in cases of SEPs, such clauses arguably need to be subject to scrutiny.<sup>177</sup>

In *Motorola*, the settlement agreement eventually concluded between Motorola and Apple included a termination clause.<sup>178</sup> The clause was however agreed upon under the regime of previous legislation<sup>179</sup> which generally considered non-challenge and

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<http://globalcompetitionreview.com/reviews/62/sections/210/chapters/2488/germany-ip-antitrust/>

<sup>171</sup> 2014 Technology Transfer Regulation, supra note 77, Art. 5(1)(b); 2014 TTBER Guidelines, supra note 78, para. 128.

<sup>172</sup> 2014 TTBER Guidelines, supra note 78, para. 136.

<sup>173</sup> Ibid., para. 134: "...if the technology rights are necessary input for the licensees production."

<sup>174</sup> LAWRENCE, Sophie. The Competition Law Treatment of No-Challenge Clauses in License Agreements: An Unfortunate Revolution?. *Journal of Intellectual Property & Practise*. 2014, Vol. 9, Issue 10, pp. 802 - 811. p. 805.

<sup>175</sup> Case 193/83 *Windsurfing International Inc v Commission*, [1986] ECR 611, para. 91; 2014 TTBER Guidelines, supra note 78, para. 138

<sup>176</sup> 2014 TTBER Guidelines, supra note 78, para. 242.

<sup>177</sup> Ibid., para. 243.

<sup>178</sup> *Motorola*, supra note 117, para. 329.

<sup>179</sup> Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements, OJ L 123 (2004 Technology Transfer Regulation),

termination clauses in settlement agreements not to be anti-competitive and did not provide any sufficient indication under what specific circumstances such clauses might be infringing competition rules. However, as the Commission stated, the settlement agreement between Motorola and Apple was not concluded as a result of a *bona fide* dispute resolution as Apple was facing a threat of injunction should it not settle the case.<sup>180</sup>

The Commission noted that if Apple challenged validity of the Cudak GPRS SEP, Motorola would be entitled to terminate the agreement and Apple would consequently happen to be *de facto* infringing the SEP in question, thus being in potential danger of facing an (allegedly abusive) injunction again.<sup>181</sup> While this may be true, it may also be observed that applying this logic more generally, a licensee in fact faces a threat of injunction in case of *any* termination of a SEP licensing agreement; provided that such licensee still qualifies as “willing”, licensors would in fact never be entitled to terminate the agreement. Thus the overwhelming interest of SEP licensees is to qualify as willing and enjoy the generous protection of EU competition law.

Motorola argued that any potential anti-competitive effects of the termination clause were counterbalanced by the promotion of Motorola’s incentives to innovate<sup>182</sup> and portfolio-based licensing, thereby avoiding patent-by-patent litigation.<sup>183</sup> The Commission, however, took the position that it is in the public interest to challenge the validity of potentially invalid patents and thus eliminate royalties for invalid IPRs.<sup>184</sup> Actually, the Commission seems to have even been encouraging Apple to challenge validity of licensed SEPs as it expressly stated that Apple’s inability to challenge validity would lead *other* [emphasis added] potential licensees to pay for invalid IPRs.<sup>185</sup> As Apple is the strongest competitor of Motorola and an undertaking with significant financial strength, it might have the largest resources to carry out sometimes lengthy litigation related to validity challenges. Consequently, other less powerful undertakings and ultimately consumers might benefit from the invalidation as royalties

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Art. 5(1)(c); Commission Notice - Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements, OJ C 101 (2004 TTBER Guidelines), para. 209.

<sup>180</sup> Motorola, *supra* note 117, para. 485.

<sup>181</sup> *Ibid.*, para. 342.

<sup>182</sup> *Ibid.*, para. 481.

<sup>183</sup> *Ibid.*, para. 488.

<sup>184</sup> *Ibid.*, para. 376, 490.

<sup>185</sup> *Ibid.*, para. 355.

for invalid IPRs would be eliminated.<sup>186</sup> However, it may also be argued that removing the probabilistic nature of all SEPs is impossible and the Commission should rather accept that as a real-world fact.<sup>187</sup>

Even though this Commission's view can be considered as a partial underestimation of abilities of less economically significant undertakings to challenge the validity of IPRs, it can otherwise be perceived as substantially correct. Portfolio-based licensing does not necessarily have to be incompatible with patent-by-patent validity challenges; rather, challenging validity of SEPs may be one of the remedies available in order to solve the problem of over-declaration as SEPs may not only be found not essential, but also invalid.

### 3.3 Common Licensing Practices

As may have already been implicitly indicated above, in licensing negotiations patents are used as “bargaining chips”,<sup>188</sup> that is to say the wider and more valuable the patent portfolios of individual market participants are, the better the outcome of licensing negotiations may be for them. Given the extensive number of SEPs reading on one standard and their complementary nature, SEPs are rarely licensed on a per-SEP basis; rather, the usual business practice is to license whole patent portfolios. This enables licensees to avoid complicated licensing proceedings in relation to every single patent and implement certain technologies without being concerned about whether or not they infringe particular individual patents from the licensor's portfolio.<sup>189</sup>

As opposed to unilateral licenses,<sup>190</sup> vertically integrated undertakings active on both upstream technology market (possessing patent portfolios and licensing them) and

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<sup>186</sup> Ibid., para. 378, 383.

<sup>187</sup> LAROUCHE; ZINGALES, supra note 169, p. 29.

<sup>188</sup> GOLLIN, Michael A. *Driving Innovation: Intellectual Property Strategies for a Dynamic World*. New York: Cambridge University Press, 2008, pp. 415. ISBN 0521701694. p. 171.

<sup>189</sup> HARKRIDER, John D. Seeing the Forest through the SEPs. *Antitrust*. 2013, Vol. 27, No. 3, pp. 22 - 29. p. 25.

<sup>190</sup> Unilateral licenses may usually be granted by the so called non-practising entities (NPEs), i.e. companies which possess IPRs but are not active in the downstream markets. Their sole source of income is royalties. NPEs are also called „patent trolls“. The main concern with NPEs is that they may represent a threat to an unhampered access to standards as they have no interest in other technologies and their sole aim is to charge as high royalties as possible. In this thesis, the discussion will however focus primarily on vertically integrated undertakings active on both upstream and downstream markets. For an extensive discussion see e. g.: HOVENKAMP, Herbert J. Competition in Information Technologies: Standards-Essential Patents, Non-Practicing Entities and FRAND Bidding [online]. University Iowa Legal Studies Research Paper No. 12-32, 2012 [cit. 24 May 2015]. Available at: <http://ssrn.com/abstract=2154203>

downstream product markets (manufacturing products implementing technical standards) are most likely to conclude cross-licensing agreements, i.e. licensing agreements whereby parties grant each other rights to practice the other party's IPRs.<sup>191</sup> If patent portfolios which are subject to a cross-licenses are comparable (in other words, the bargaining chips are of a similar value), they may counterbalance each other and cross-licensing agreements may end up with very low or zero royalties. Particularly within the mobile telephony industries cross-licensing is the predominant licensing method.<sup>192</sup>

Nevertheless, besides cross-licensing agreements, there is another option available to patent proprietors. In order to arrange licensing of their extensive technologies, they may establish a technology (patent) pool, i.e. a bilateral or multilateral agreement whereby they aggregate their patents and make them available to the pool contributors and also set up licensing terms that are offered to licensees who have not contributed to the pool.<sup>193</sup> In high technology industries relying on SEPs, patent pools are however relatively rare considering the potential number of pools that could have been arranged.<sup>194</sup> Given the rapidly increasing complementary standards and new market entrants who seek access to standardised technologies in order to implement them, patent pools may serve as a very useful tool for simplifying and speeding-up the licensing of SEPs. Therefore, patent pools can be seen as one of the potential future (partial) solutions of the "patent thicket" issue.<sup>195</sup>

### 3.3.1 Patent Pools

Two main lines of discussion from the EU competition law perspective regarding patent pools relate to the inclusion of (i) substitute (as opposed to complementary) technologies, and (ii) essential (and at the same time complementary)

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<sup>191</sup> SHAPIRO, supra note 149, p. 9.

<sup>192</sup> European Commission, Directorate-General for Enterprise and Industry. *Patents and Standards: A Modern Framework for IPR-Based Standardization. Final Report* [online]. 2015 [cit. 20 May 2015], p. 61. Available at:

<http://ec.europa.eu/DocsRoom/documents/4843/attachments/1/translations/en/renditions/pdf>

<sup>193</sup> BANAIT, Narider S.; Yamasaki, Robert J. Patent Pools in Life Sciences [online]. Fenwick & West LLP, 2009 [cit. 21 May 2015], p. 1. Available at:

[https://www.fenwick.com/FenwickDocuments/Patent\\_Pools.pdf](https://www.fenwick.com/FenwickDocuments/Patent_Pools.pdf)

<sup>194</sup> European Commission, Directorate-General for Enterprise and Industry, supra note 192, p. 171.

<sup>195</sup> LAROUCHE, Pierre; VAN OVERWALLE, Geertrui. Interoperability Standards, Patents and Competition Policy [online]. TILEC Discussion Paper No. 2014-050, 2014 [cit. 25 May 2015], p. 14. Available at: <http://ssrn.com/abstract=2539964>

as opposed non-essential technologies.<sup>196</sup> Herein below the second line will be discussed, demonstrating that the treatment of notion of essentiality within the two aforementioned multiple licensing methods is substantially different.

First of all, it should be noted that patent pools do not generally fall under Article 101(3) TFEU exemption.<sup>197</sup> But in 2014 TTBER Guidelines, the Commission constitutes a “safe harbour” for patent pools as it lists a number of requirements that are to be complied with in order for a patent pool to be granted the exemption; among others, the exclusive pooling of essential technologies (i.e. not including non-essential technologies) is a prerequisite for a patent pool to fall outside Article 101(1) TFEU.<sup>198</sup>

The Commission takes quite a daring economic position in defining what pooled technologies are to be treated as essential. Firstly, it states that *mere declaring* [emphasis added] of essentiality does not imply that such a technology is actually essential to a standard.<sup>199</sup> In other words, pooled technologies that have to be implemented in order to comply with a standard are essential if there are no viable substitutes, i.e. such technologies by a matter of fact constitute an indispensable part of the pooled standard.<sup>200</sup> Usually, the essentiality of pooled technologies would thus be determined by an independent expert<sup>201</sup> rather than relying on the declaration of essentiality or formal definition of SEPs determined by SSOs.

This treatment reflects the aforementioned issue of over-declaration of essentiality and to a significant extent offers a solution. It is interesting to observe that the initial draft of 2014 TTBER Guidelines<sup>202</sup> did not contain the “economic” approach towards essentiality, i.e. it was not explicitly stated that the declaration of essentiality is irrelevant. Arguably, during thorough public consultation of the draft the respective approach made its way into the final wording of the 2014 TTBER Guidelines.<sup>203</sup>

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<sup>196</sup> 2014 TTBER Guidelines, supra note 78, para. 250.

<sup>197</sup> Ibid., para. 56.

<sup>198</sup> Ibid., para. 261(b).

<sup>199</sup> Ibid., para. 252.

<sup>200</sup> Ibid.

<sup>201</sup> SHAPIRO, supra note 149, p. 17 – 18.

<sup>202</sup> European Commission. Draft Communication from the Commission. Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements [online]. C(2013) 924 draft, 2013 [cit. 23 May 2015] para. 236. Available at: [http://ec.europa.eu/competition/consultations/2013\\_technology\\_transfer/guidelines\\_en.pdf](http://ec.europa.eu/competition/consultations/2013_technology_transfer/guidelines_en.pdf)

<sup>203</sup> See e.g.: Cleary, Gottlieb, Steen & Hamilton LLP. Commission's Consultation on the Review of the Current Regime for the Assessment of Technology Transfer Agreements. Comments of Cleary Gottlieb on the Draft Regulation and Guidelines. [online]. 2013 [cit.23 May 2015], p. 19 - 20. Available at:



However, this approach does not anyhow touch upon the matter of unilateral *de facto* standards which might have the same effects in the markets as collective standards within SSOs as patent pools are agreements which, by definition, require more parties to share their technologies.

Certain solution may be seen in the following. Besides promoting certain essential technologies within a formal technical standards, patent pools may also consist of technologies essential to manufacture a particular product.<sup>204</sup> That means that such pools would not necessarily be linked to a technical standard, but to *any* technologies essential in order to produce a certain product. In this regard, the 2014 TTBER Guidelines expressly state that essentiality of such technologies (the availability of substitutes) will be evaluated from both the technical and commercial perspectives.<sup>205</sup>

In this regard, the latest solution suggested for the quickly developing and innovative high-tech industries is the establishment of the so-called “pool-of-pools”, i.e. a technology pool consisting of multiple essential technologies (e. g. different generations)<sup>206</sup> thereby arranging a one-stop licensing tool. Such pioneering solution would however require willingness to collaborate.<sup>207</sup>

Arguably, however, the incentives of proprietors of commercially essential patents to participate in this form of licensing would be significantly low, considering the numerous obligations and restrictions that the EU competition law might impose once a technology is determined as essential. One of the possible motivations of such patent proprietors to enable the expert assessment of whether their (unilateral) technologies not included in formal standards are actually essential might be if they got something valuable in return, that is to say particularly other patent proprietors’ commercially essential non-SEPs which would otherwise be difficult to obtain.

Should there be no such technologies available, the undertaking(s) possessing commercially essential non-SEPs are most likely rather to enjoy the situation where the EU competition law focuses on formally defined SEPs. Non-SEPs, even if

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[http://ec.europa.eu/competition/consultations/2013\\_technology\\_transfer/cleary\\_gottlieb\\_steen\\_hamilton\\_en.pdf](http://ec.europa.eu/competition/consultations/2013_technology_transfer/cleary_gottlieb_steen_hamilton_en.pdf)

<sup>204</sup> 2014 TTBER Guidelines, supra note 78, para. 252.

<sup>205</sup> Ibid.

<sup>206</sup> BEKKERS, Rudi; DEN UIJL, Simon; DE VRIES, Henk J. Managing Intellectual Property Using Patent Pools: Lessons from Three Generations of Pools in the Optical Disc Industry. *California Management Review*. 2013, Vol. 55, No. 4. pp. 31 - 50. p. 44.

<sup>207</sup> Ibid.

commercially essential, are not FRAND encumbered and therefore confer considerable leverage in licensing negotiations; as the current EU competition law position seems to be, they may also be enforced freely (through injunctions) even though they, from the economic perspective, generate the same effects as SEPs.

### **3.3.2 Cross-Licensing**

Apparently, one of the reasons why patent pooling occurs rarely within the smartphone industry may be that individual undertakings have different interests depending on the value of their patent portfolios. It is thus immensely difficult to agree on a common licensing scheme and the establishment of a patent pool. Therefore, the logical option remaining is cross-licensing. Contrary to the treatment of patent pools, there is however no “safe harbour” for cross-licenses when it comes to the assessment of licensing of SEPs and non-SEPs, albeit commercially essential, in packages or in exchange for each other.

Firstly, if patent proprietors were to require their licensees to conclude licensing agreements for their whole patent portfolios including both SEPs and non-SEPs (in the formal meaning), there is a danger of finding an anti-competitive tying arrangement under EU competition rules.<sup>208</sup>

According to Article 2 of Regulation 1/2003<sup>209</sup> patent proprietors (i.e. defendants) are obliged to prove the pro-competitive efficiencies of such tying arrangements in order to successfully claim that the exemption under Article 101(3) TFEU is applicable. Evidence that the tying of SEPs and non-SEPs promotes technically satisfactory exploitation of licensed subject-matter would have to be provided,<sup>210</sup> otherwise the competition authorities might conclude that the tie results in an anti-competitive foreclosure, particularly in cases when significant market power is possessed by licensors.

There is no decisional practise regarding this matter, but it can be argued that it may be substantially difficult for licensors to prove such pro-competitive efficiencies,

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<sup>208</sup> 2014 TTBER Guidelines, supra note 78, para. 221 et seq.

<sup>209</sup> Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1 (Regulation 1/2003)

<sup>210</sup> 2014 TTBER Guidelines, supra note 78, para. 224, 225.

considering the rather formalistic approach of the Commission towards the assessment of essentiality.

Secondly, SEP holders demanding non-SEPs under a cross-license may be abusing their dominant position under Article 102 (a) TFEU, i.e. imposing unfair trading conditions.<sup>211</sup> Moreover, even from a commercial point of view holders of non-SEPs may be reluctant to enter into such cross-licenses as they would rather emphasise FRAND commitments given by SEP holders and arguably even assert FRAND terms in litigation or by claiming abuse of dominant position when SEP holders insist on cross-license.

In *Motorola*, licensing negotiations were conducted by Motorola with the intention, among others, of obtaining a cross-license for Apple's *SEPs* [emphasis added], i.e. also FRAND encumbered IPRs. In this regard, Motorola was relying on ETSI's IPR Policy which states that SEP licensors who are bound to license on FRAND terms may require licensees to agree on reciprocate.<sup>212</sup> The Commission supported Apple's continuous unwillingness to conclude a cross-license and stated that cross-licensing is not the only way to achieve reciprocity; other licensing tools, such as unilateral licenses, are still available.<sup>213</sup>

This view is however questionable as it is contrary to the common business practise within the industry (as stated above). Also, it would be much more difficult to achieve counterbalanced reciprocity by concluding more unilateral licenses separately and probably at different times in comparison to reciprocity balanced in one agreement where the mutual licensing obligations are much more evident. The view undertaken by the Commission may have been influenced by the fact that the cross-license was required by Motorola in the light of allegedly abusive injunction contrary to Article 102 TFEU, i.e. by abusive leveraging.

### **3.4 Licensing Schemes and Bargaining**

However, considering the results of the aforesaid approach in the overall context, a rather unbalanced outcome may be observed.

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<sup>211</sup> LUNDQVIST, supra note 156, page 348.

<sup>212</sup> ETSI Intellectual Property Rights Policy, supra note 157, clause 6.1.

<sup>213</sup> Motorola, supra note 117, para. 457.

It should be noted that in cases of (alleged) infringement of IPRs and consequent licensing negotiations, there are generally two bargaining tools available to licensors and licensees respectively; licensors may rely on (threats of) injunctions and licensees may shield themselves by validity challenges. Consequently, to avoid exhausting litigation, parties may agree on a certain middle ground.<sup>214</sup>

As noted above, the Commission offers a different scenario for licensees who are infringing SEPs but are willing to conclude a license on FRAND terms. Firstly, the use of an injunction against such licensees (and SEP infringers) constitutes an abuse of dominant under Article 102 TFEU. Secondly, SEP infringers (and licensees) cannot be prevented from challenging validity of the SEPs in question as such prohibition would also amount to abuse of dominant position. In other words, the Commission uses competition law measure to deprive SEP licensors of their bargaining tool and forces licensees to keep theirs thereby preventing the parties from reaching the middle ground. Moreover, as noted herein above, SEP licensees and infringers may challenge the essentiality of SEPs. The only remedy available to SEP holders in such cases, on the other hand, is thus the seeking of *ex post* damages.<sup>215</sup>

As was also observed herein above, IPRs may be essential from both technical and commercial point of view. However, both the IPR policies of SSOs and EU competition law (except for patent pools, which are not the case in the recent Commission's decisions) treat the notion of essentiality rather formalistically, promoting formal technical and omitting commercial essentiality. Even though both forms may have the same market effects, the restrictions that the Commission imposes on SEPs do not in any way relate to the not formally recognized yet commercially essential IPRs.

In conclusion, there are two imbalances. Firstly, SEP proprietors are in much less favourable position and their ability to prevent "willing licensees" from the infringement of their SEPs is zero; they are however always facing a threat of validity or essentiality challenges. Some argue that this results in a situation where SEP holders require higher royalties and there are consequently no consumer benefits.<sup>216</sup> While this might be true theoretically, it however mostly depends on the real prescribed way in

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<sup>214</sup> LAROUCHE; ZINGALES, *supra* note 169, p. 29.

<sup>215</sup> See e.g. Motorola, *supra* note 117, para. 405.

<sup>216</sup> LAROUCHE; ZINGALES, *supra* note 169, p. 30.

which FRAND terms are determined. There are competing approaches, which will be discussed in chapter 5.

Secondly, if the assertion of commercially essential non-SEPs is evaluated in the overall context of complex relations between vertically integrated undertakings which implement both SEPs and such non-SEPs, there is significant negotiating power in non-SEPs which may affect even otherwise separate negotiations of licensing of SEPs, mostly because injunctions may be sought and enforced on the basis thereof, non-challenge clauses may be required and other potentially otherwise potentially abusive and exclusionary measures may be utilized. One of the potential remedies to adjust the current state might be that SSOs include commercially essential IPRs in their IPR policies thereby practically fixing the root of the issue. It may be however substantially difficult to force SSO members to agree on such a thing as the current status may be convenient for some of them. Alternatively, not only the EU competition rules but particularly the actual application thereof by competition authorities should be modified in a way that they recognize this problem and divert from formalism to market effects.

Nevertheless, in order for all the aforesaid presumptions (all being based on the alleged abuse of Article 102 TFEU by seeking and enforcement of injunctions against licensees willing to conclude a SEP license on FRAND terms) two preconditions have to be fulfilled, namely that: (i) dominant position is established, i.e. that SEPs confer market power amounting to dominance, and (ii) the seeking and enforcement of injunctions under the aforesaid conditions is abusive. These issues will be analysed in chapters 4 and 5 respectively.

## 4. STANDARD-ESSENTIAL PATENTS AND MARKET POWER

For the purposes of evaluation of unilateral conduct under Article 102 TFEU as well as for the examination of impacts of agreements on competition under Article 101 TFEU, the assessment of market power that undertakings concerned hold is crucial. In this sense, the primary essential step is to define the relevant market since incorrect market definition inevitably leads to errors in the competitive assessment of conduct or transaction and possibly unwarranted prohibition decisions.<sup>217</sup> When defining relevant markets, both their product and geographic dimensions have to be carefully observed. The assessment of market power and potential dominance of an undertaking in a market comes as a consequent step.

Given the fact that most SEPs are implemented on an international basis and that products containing SEPs are distributed worldwide or at least within whole large territories such as the US or the EU as a whole, the fact that the geographic scope of SEP markets extends to the whole internal market in the meaning of Article 102 TFEU may be, for the purposes of the discussion carried out herein below, taken as warranted.

Therefore, the crucial issue is a proper definition of the ‘product dimension’ of relevant technology (licensing) markets where SEPs are being licensed for further implementation in the secondary markets where the actual products (smartphones etc.) are consequently manufactured, distributed and sold.

Taking into account the recent Commission’s decisions under Article 102 TFEU containing the conclusion that SEP holders are abusing their dominant position in technology markets, the question to be examined herein below is whether SEPs confer market power on their owners as such, or whether there are certain considerations to be taken into account. In this regard, firstly the general definition of IPR markets and the consequent mechanisms to determine market power therein will be discussed herein below; secondly, the approach undertaken by the Commission in the recent decisions regarding SEPs will be addressed.

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<sup>217</sup> FATUR, Andrej. *EU Competition Law and the Information and Communication Technology Network Industries: Economic versus Legal Concepts in Pursuit of (Consumer) Welfare*. Bloomsbury Publishing, 2012. 312 pp. ISBN 1847319130. p. 124.; see also Case 94/922 - *MSG Media Service*, Commission Decision of 9 November 1994.

## 4.1 Relevant IPR Markets and Market Power

When defining relevant IPR market, the primary question to observe is the existence of substitute IPRs. If no substitutes are found, the IPR proprietor, by nature, becomes the only supplier and a *de facto* monopolist.<sup>218</sup>

### 4.1.1 Relevant IPR Markets in EU Case Law

In *Magill*,<sup>219</sup> the Court of Justice stated that mere ownership of an IPR does not amount to dominance.<sup>220</sup> It however also adopted a very narrow definition of the relevant market, in practise corresponding to the subject-matter of the copyright.<sup>221</sup> Furthermore, in *Deutsche Gramophon v Metro*<sup>222</sup> the Court of Justice suggested that if recording artists are tied to a manufacturer of sound recording by exclusive contracts, a dominant position might arise, depending on the popularity of the artist, the duration of the contracts and the ability of competitors to obtain the services of comparable performers.<sup>223</sup>

Some may argue that the presence of IPRs in the cited cases was merely incidental and also that the presence of copyright was not of a great significance because the copyright (as opposed to patents) was less influential upon the outcome of the cases.<sup>224</sup>

Thus, considering the market power that patents may confer on their owners, it is clearly possible to envisage a patent, or series of patents, making substantial contribution to dominance.<sup>225</sup> For example, in *Hilti*<sup>226</sup>, the Court of First Instance in its

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<sup>218</sup> SHASTITKO, Andrey, KURDIN, Alexander. Structural Alternatives of Intellectual Property Rights [online]. 2013 [cit. 22 April 2015], p. 4. Available at: [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=IIOC2013&paper\\_id=254](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=IIOC2013&paper_id=254)

<sup>219</sup> Cases C-241-242/91 P, *RTE & ITP v. Commission* [1995] ECR I-743 (Magill).

<sup>220</sup> *Ibid.*, para. 46.

<sup>221</sup> CZAPRACKA, Katarzyna A. Where Antitrust Ends and IP Begins - On the Roots of the Transatlantic Clashes. *International Journal of Communication Law & Policy*. 2006, Issue 11, pp. 1 - 55. p. 9.

<sup>222</sup> Case 78/70 *Deutsche Gramophon Gesellschaft mbH v Metro-SB-Großmärketete GmbHCo* [1971] ECR 487, CMLR 631

<sup>223</sup> *Ibid.*, para. 18.

<sup>224</sup> SCHMIDT, Hedvig. *Competition Law, Innovation and Antitrust: An Analysis of Tying and Technological Integration*. New Horizons in Competition Law and Economics. Northampton, MA, USA: Edward Elgar, 2009, 280 pp. ISBN 1848446322. p. 113.

<sup>225</sup> ROSE, Vivien; BAILEY, David (eds.). *Bellamy & Child: European Union law of Competition*. 7th ed. Oxford: Oxford University Press, 2013, 1431 pp. ISBN 9780199660148. p. 772 - 773.

<sup>226</sup> Case T-30/89, *Hilti AG v. Commission* [1991] ECR II-1439 [1992] 4 CMLR 16 (Hilti), para. 93.

judgement, further upheld by the Court of Justice,<sup>227</sup> found Hilti's dominant position in the market for cartridge strips due to a patent it held therefor, stating that "*it is highly improbable in practise that a non-dominant supplier will act as Hilti did, since effective competition will normally ensure that the adverse consequences of such behaviour outweighs any benefits.*"<sup>228</sup> Similarly, in *Tetra Pak II*<sup>229</sup> four independent relevant markets were identified, with the emphasis being put on the existence of patents relating to machines, cartons and processes around which some of the relevant markets were revolving.<sup>230</sup>

The assessment of relevant IPR markets sometimes tends to result in narrow markets, not preferring whole business relations in their complex nature and taking into account the interrelation of certain IPRs or existence of substitutes from a wider perspective, but rather splitting the markets into narrower units. For example, the Court of Justice established a separate market even for spare parts of an otherwise wholly IP protected product.<sup>231</sup>

The case law, however, does not provide any clear picture either in terms of relevant IPR market definition or the extent to which ownership of IPRs confers market power (and potential dominance) on their holders. Even though a market definition has to be carried out on an individual basis, a certain likelihood that the relevant IPR markets will be defined rather narrowly may be expected.

#### **4.1.2 Technology Markets and Substitutes**

The Commission defines technology markets as consisting of "*technology rights and its substitutes, that is to say, other technologies which are regarded by the licensees as interchangeable with or substitutable for the licensed technology rights [...]*"<sup>232</sup> On the one hand, it may be argued that substitutes are available for IPR protected products in most of the cases and the mere existence of IPRs should thus not be seen as a matter

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<sup>227</sup> Case C-53/92 P *Hilti v. Commission* [1994] ECR I-667.

<sup>228</sup> Hilti, supra note 226, para. 93.

<sup>229</sup> Case T-83/91, *Tetra Pak v Commission* [1994] ECR II-755.

<sup>230</sup> ANDERMAN, Steven D.; SCHMIDT, Hedvig. *EU Competition Law and Intellectual Property Rights: The Regulation of Innovation*. 2nd ed. Oxford: Oxford University Press, 2011, 358 pp. ISBN 9780199589968. p. 131.

<sup>231</sup> Case 22/78, *Hugin Kassaregister AB and Hugin Cash Registers Ltd v. Commission* [1979] ECR 1869, [1979] 3 CMLR 345

<sup>232</sup> 2014 TTBER Guidelines, supra note 78, para. 22.



that raises antitrust concerns.<sup>233</sup> On the other hand, however, as indicated above there is no presumption whatsoever that IPRs do or do not entail market power and the assessment should therefore to be carried out on an individual basis.

As already indicated above, in relation to technology markets the focus has to be turned to the existence of substitute technologies, potential substitute products on the downstream market capable of replacing the outcomes of the technology concerned and the competitive constraints arising both from the former and the latter.

Such evaluation of substitutability depends on a number of factors, one of the primary being the response of licensees (in the technology market) or consumers in the product market to a small but significant permanent increase in relative prices, i.e. either royalties or prices of the products (the so called SSNIP test). If the licensees or consumers are likely to switch to different technologies or products in case of such increase, there is not a distinct relevant market for the specific technology in question, even if it is formally incorporated in a standard.<sup>234</sup>

Thus, the recognition of substitute technologies and even products may create competitive constraints for the technology concerned, increase the degree of competition in the whole relevant market and reduce the risk of anticompetitive foreclosure.

#### **4.1.3 Factors Relevant for the Assessment of Market Power**

Nonetheless, the narrower the IPR market, the more likely market power is to be resting with IPR proprietors. However, even if there are no substitutes for an IPR in the market, it does not by itself have to imply that IPR proprietor holds a dominant position.

Considering the exclusionary nature of IPRs and the likely effects on competition, several general principles may be recognized. In order to determine the level of market power, an assessment on a case-by-case basis has to be carried out,

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<sup>233</sup> HEIMLER, Alberto. Competition Law Enforcement and Intellectual Property Rights [online]. 2008 [cit. 24 April 2015], p. 2. Available at: <http://ssrn.com/abstract=1105326>

<sup>234</sup> BRUZZONE, Ginevra; BOCCACCIO, Marco. Standards under EU Competition Law: The Open Issues. In: CAGGIANO, Giandonato, MUSCOLO, Gabriella, TAVASSI, Marina. *Competition Law and Intellectual Property: The European perspective*. Alphen aan den Rijn: Kluwer Law International, 2012, International competition law series, vol. 50, 434 pp. ISBN 9789041134479. p. 88, fn. 16.

taking into account all relevant factors that are capable of affecting market power that IPRs might confer on their owners.<sup>235</sup>

In this regard, not only the position of the allegedly dominant undertakings, but also of its competitors and clients (buyers, licensees) in the market has to be observed. While, on the one hand, the strong IPR proprietor may be able to raise barriers to entry and expansion through its conduct, others, on the other hand, may possess significant bargaining power which could be capable of restoring the imbalance or even tipping the scales in their favour.<sup>236</sup>

#### 4.1.4 Market Share

Firstly, the exercise of IPRs may raise barriers to entry and expansion by potential competitors, thereby strengthening the market position of the IPR holders.<sup>237</sup> In other words, IPR holders may prevent others from entering the market and thereby obtain a strong position. However, even when an undertaking achieves that, the consequent high market share is not always the most crucial criteria for the evaluation of market power and dominance as market share is perceived diversely.

On the one hand, there are certain presumptions regarding market share – for example, the Commission states that according to its experience dominance is less likely to occur if the undertaking's market share is below 40 % of the relevant market.<sup>238</sup> The Court of Justice suggests in *AKZO*<sup>239</sup> that very high market shares (i. e. exceeding 50 %) are prone to be an evidence of dominance.

On the other hand, even a lower market share (considering the above mentioned criteria) may also be found to establish dominance, as was the case in *British Airways*,<sup>240</sup> where market share of 39,7 % was found to establish dominance on the grounds that it constituted a multiple of the market shares of each of the five main competitors of the dominant undertaking.

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<sup>235</sup> PATTERSON, Mark R. Intellectual Property and Sources of Market Power. In: GOVAERE, Inge, ULLRICH, Hans. *Intellectual property, Market Power and the Public Interest*. New York: P.I.E. Peter Lang, 2008, pp. 35 - 59. ISBN 9789052014227. p. 42.

<sup>236</sup> Article [102] Guidance, supra note 71, para. 13-18.

<sup>237</sup> Ibid., para. 16 – 17.

<sup>238</sup> Ibid., para. 14.

<sup>239</sup> Case C-62/86 *AKZO Chemie BV v Commission* [1991] ECR I-2969, para. 60.

<sup>240</sup> Case T-219/99 *British Airways plc v Commission* [2003] ECR II-5917, para. 211.

However, the recent development regarding fast developing innovation and technology markets suggests that even high market shares do not have to express dominance. In *Cisco v Commission*,<sup>241</sup> the General Court held that “*large market shares may turn out to be ephemeral. In such dynamic context, high market shares are not necessarily indicative of market power.*” Such a statement points out one of the main current difficulties when assessing market power of IPR holders in dynamic markets.<sup>242</sup> As opposed to the traditional determination of market power in the markets for tangible products where market shares can be calculated on the basis of the number of overall sales of a particular product or other similarly hard data, the market power in dynamic markets is much harder to detect, considering the ongoing innovation and tough competition thereon.

Furthermore, despite its aforesaid general presumption of 40 %, the Commission also questions the relevance of market share criteria when assessing market positions in technology markets by stating that the relative strength of a particular technology may differ significantly depending on different calculation methods, mostly due to the uncertainty arising out of the lack information on royalties.<sup>243</sup>

Therefore, as the market share does not by itself indicate anything, it is important to assess the markets in their complexity, examining the position of *other* entities concerned. As indicated above, the position of existing and potential clients (e. g. buyers, licensees) as well as at the first sight weaker competitors is an important aspect as such entities might also possess certain economic or bargaining power which may be capable of counterbalancing even significant market power of a strong undertaking.<sup>244</sup>

How such considerations affect, or should affect, the finding of dominance, will be demonstrated herein below in practise on the example of the recent Commission’s decisions.

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<sup>241</sup> Case T-92/12 *Cisco Systems Inc. and Messagenet SpA v Commission*, [2012], para 69.

<sup>242</sup> GRAEF, Inge. Sneak Preview of the Future Application of European Competition Law on the Internet?: Cisco and Messagenet. *Common Market Law Review*. 2014, Vol. 51 Issue 4, pp. 1263 - 1279. p. 1269.

<sup>243</sup> 2014 TTBER Guidelines, supra note 78, para. 25, 162.

<sup>244</sup> For further assessment see Article [102] Guidance, supra note 71, para. 18; 2014 TTBER Guidelines, supra 78, para. 161, 164.

## 4.2 Essential Technologies and Market Power

Searching for substitute technologies may be pointless in network industries relying on compatibility standards (as further discussed herein above in part 1.4) where the number of users adhering to the same technology determine the value of the product.<sup>245</sup> If a standard is adopted and becomes widely accepted within the particular field, a significant number of standard implementers and end-consumers is likely to adhere thereto, the market tips in favour of the holders of standardised technologies and the field consequently becomes locked-in to the standard. Due to the strong preferences of consumers for products incorporating such a standard-essential technology,<sup>246</sup> the inefficiency caused by high switching costs results in a fact that the development of alternative substitute technologies is practically disabled, which gives the proprietors of technologies essential to the standard lucrative market power.<sup>247</sup>

In Horizontal Guidelines, the Commission does not provide any clarification as to whether an essential technology, that is to say, SEPs, confers market power on their holders, stating that “[..] *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.*”<sup>248</sup> Such a Commission’s position seems to be merely a repetition of the general principles described herein above. In general, however, it may be noted that in order to regulate the use and exercise of essential infrastructures which create dependency relationships or lock-ins in after markets, the Commission tends to define the relevant IPR markets narrowly.<sup>249</sup>

The recent Commission’s decisions in the field of SEP licensing and enforcement provide a more detailed guidance on the factual application of the “case-

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<sup>245</sup> BRUZZONE; BOCCACCIO, supra note 225, p. 89.

<sup>246</sup> 2014 TTBER Guidelines, supra note 78, para. 157.

<sup>247</sup> FARELL, Joseph; KLEMPERER, Paul. Coordination and Lock-In: Competition with Switching Costs and Network Effects. In: ARMSTRONG, Mark; PORTER, Robert. *Handbook of Industrial Organization. Volume 3*. Amsterdam: Elsevier, 2007, Handbooks in economics, 10. pp. 1967 - 2072. ISBN 9780444824356. p. 1970.

<sup>248</sup> Horizontal Guidelines, supra note 80, para. 269.

<sup>249</sup> ANDERMAN, Steven D. *The Interface between Intellectual Property Rights and Competition Policy*. New York: Cambridge University Press, 2007, 572 pp. ISBN 0521863163. p. 42.

by-case” approach in cases involving SEPs as well as of the practical application of the theoretical concepts discussed in part 4.1 herein above.

#### **4.2.1 Google/Motorola Mobility: Presumption of Dominance**

In *Google/Motorola Mobility*,<sup>250</sup> a merger decision, the Commission recognized the market power that SEPs confer on their holders in rather a brief statement that Motorola’s SEPs for which there is no substitutes will give Google market power<sup>251</sup> and went on to discuss the potential impediments of effective competition that might be a consequence of such market power. As to market power, the Commission also referred to the ETSI’s definition of SEPs and briefly concluded that *by definition*, there is no alternative substitute for each SEP. Thus, every single SEP constitutes its own separate relevant market.<sup>252</sup>

It may be argued that such a statement is rather a shortcut and too simple a conclusion not to be questioned. Firstly, one thing is the way individual SSOs define SEPs themselves - they may uphold practically any notion in their agreements. Such a definition, however, should not be decisive of how concrete factual situation in a particular business and complex relations therein are assessed.

Secondly, it is also in contradiction to the aforesaid Commission’s position expressed in Horizontal Guidelines that IPRs essential to standards do not *per se* imply market power. In other words, on the one hand the Commission claims that no presumption that holding of SEPs equals market power, but on the other hand in the said decision makes such a presumption, i.e. that SEPs (at least the ones within ETSI, if not all SEPs in general) confer a *de facto* monopoly on their owners.

As the respective merger decision only raised concerns about the potential anticompetitive results of the use and enforcement of SEPs by Google and did not deal with the precise assessment of the relevant SEP market as the most substantial issue, the Commission could have tended to simplify the matters.

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<sup>250</sup> Case COMP/M.6381 – *Google/Motorola Mobility*, Commission Decision of 13 February 2012 (*Google/Motorola Mobility*).

<sup>251</sup> *Ibid.*, para. 111.

<sup>252</sup> *Ibid.*, para. 54, 61.

#### 4.2.2 *Samsung and Motorola*

Furthermore, in decisions *Samsung* and *Motorola* the Commission has found both of the mobile phone companies holding dominant position in the relevant SEP markets. It concluded that there was no possibility to substitute Samsung's UMTS SEP and Motorola's Cudak GPRS SEP with any other similar technologies (2G, LTE, 4G) and the undertakings concerned held a *de facto* monopoly in the SEP markets.<sup>253</sup> While it is to hardly possible to provide a well-founded technical assessment of whether such a conclusion is substantially correct and after all, neither Samsung nor Motorola seem to have objected against it, herein below other *legal* issues of the relevant market delimitation and determination of market power will be examined.

The *Samsung* decision does not provide any detailed guidance for such evaluation, but the close examination of Motorola's views opposing the establishing of dominance raise several interesting concerns.

Motorola primarily argued that it did not enjoy dominant position in the relevant SEP market, at least vis-à-vis Apple, due to the alleged existence of Apple's countervailing bargaining power.<sup>254</sup> According to that argument, Apple should be perceived (i) as one of the world's leaders in the smartphone industry who is capable of determining more favourable royalty fees for itself,<sup>255</sup> and (ii) also as a proprietor of a significant patent portfolio comprising of SEPs and non-SEP, some of which have become commercially essential and non-FRAND encumbered, who asserts such patents against Motorola within the licensing negotiations.<sup>256</sup>

##### 4.2.2.1 Countervailing Buyer Power

It may primarily be noted that Apple, as a strong player in the market, was undoubtedly capable of negotiating more favourable licensing terms for itself in comparison to weaker market participants. After all, it has itself recognized its strong negotiating position during the proceedings in *Motorola* case.<sup>257</sup> The question therefore

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<sup>253</sup> *Samsung*, supra note 116, para. 45; *Motorola*, supra note 117, para. 269.

<sup>254</sup> *Motorola*, supra note 117, para. 237.

<sup>255</sup> *Ibid.*, para. 256.

<sup>256</sup> *Ibid.*, para. 238, 254; There were also other arguments including considerations of standard-setting process and Motorola's incentive not to impose disadvantageous terms on Apple because otherwise the other ETSI members would avoid Motorola's technology when the next standard is set. (see *Motorola*, supra note 117, para. 238 (h)).

<sup>257</sup> *Ibid.*, para. 256.

is whether strong negotiating power of a buyer (or a licensee) in a market where an undertaking is allegedly dominant may prevent the finding of dominance.

As already indicated above, in Article [102 TFEU] Guidance the Commission expressly recognizes the principle that for the assessment of dominance, it will (among other factors as discussed above) take into account the “*constraints imposed by the bargaining strength of the undertaking’s customer (countervailing buyer power)*”.<sup>258</sup> It should be observed that according to the literal interpretation of Commission’s documents, the terms ‘bargaining strength’ and ‘countervailing buyer power’ should be seen as synonyms.<sup>259</sup> The Commission, opposing Motorola’s arguments, stated that “[w]hether Apple has stronger “negotiating power” than certain other licensees is a question of general bargaining power and not countervailing bargaining power.”<sup>260</sup> Therefore, contrary to what the general understanding of the term “bargaining power (or strength)” might be (a capability to, among others, negotiate licensing terms from the position of strength), difference should be made between “general bargaining power (strength)” and “bargaining strength, i. e. countervailing buyer power” in *legal terms* in the aforementioned sense.

The notion of countervailing buyer power is interpreted by the Commission on the basis of *United Brands*<sup>261</sup> as a position in which an undertaking “*cannot act to an appreciable extent independently of its customers with sufficient bargaining strength.*”<sup>262</sup> Such power may result from a number a factors, including the size or commercial significance of such buyers (competitors), the ability to switch quickly to substitutes, to promote new entry or to vertically integrate its power, or credibly threaten to do so.<sup>263</sup>

Applied to the case in question, one of the sources of buyers’ (licensees’) bargaining power is thus the possibility to switch quickly to substitute products or technologies.<sup>264</sup> Provided that the non-substitutability of Motorola’s Cudak GPRS SEP

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<sup>258</sup> Article [102] Guidance, supra note 71, para. 12.

<sup>259</sup> Ibid., para. 18 „...with sufficient bargaining strength. Such countervailing buyer power...”

<sup>260</sup> Motorola, supra note 117, para. 257.

<sup>261</sup> Case 27/76 *United Brands*, supra note 97, para. 65.

<sup>262</sup> Article [102] Guidance, supra note 71, para. 18.

<sup>263</sup> Ibid.

<sup>264</sup> See Motorola, supra note 117, para. 243: The Commission recognizes the ability to switch to competing suppliers as one of the „key elements“ of countervailing buyer power. However, as stated in para. 18 of the Article [102] Guidance, there is no indication whatsoever that substitutability should be taken as the primary source, the sources of buyer power listed therein are rather to be considered equal.

is undisputed, focus should be turned to other sources of buyer power on the side of Apple, in particular its size and commercial significance and the extent to which it affects Motorola's ability to *act independently* [emphasis added] in technology market. The Commission states that even if one or more standard implementers enjoyed countervailing bargaining power (in legal terms), it would only imply that a particular segment of potential licensees (i.e. the stronger ones) is shielded from Motorola's market power.<sup>265</sup>

Such a statement is undeniably true, undertakings not enjoying any appreciable power would be restricted by Motorola's strong position in the relevant SEP market. However, on the other hand, in relation to the strong licensees, the following should be noted. In the 2005 DG Competition Discussion Paper,<sup>266</sup> which preceded the adoption of the Article [102 TFEU] Guidance, the Commission already recognized the potential competitive constraints exerted by strong competitors of an allegedly dominant undertaking. While being in line with the consequent Article [102 TFEU] Guidance adopted in 2009, the DG Competition Discussion Paper further develops on the subject of countervailing buyer power by promoting the attitude that if there are one or more strong buyers in the market effectively extracting more favourable conditions than their weaker competitors from the allegedly dominant undertaking, it may be "*appropriate to define separate relevant markets for, respectively, strong and weak buyers.*"<sup>267</sup> The Commission seems not to have even considered such an option.

#### **4.2.2.2 Assertion of Technically and Commercially Essential Technologies**

Nonetheless, pursuing this line of reasoning even further, an individual assessment of whether Apple's position affected Motorola's ability to *act independently* while negotiating the SEP licensing terms in the specific case has to be carried out. In this context, the attention may be turned to the second aforementioned Motorola's argument, i. e. that Apple is a proprietor of large patent portfolio comprising of both

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<sup>265</sup> Motorola, supra note 117, para. 244.

<sup>266</sup> DG Competition Discussion Paper, supra note 70.

<sup>267</sup> Ibid., para. 42; see also Commission Notice on the definition of relevant market for the purposes of Community competition law [1997], OJ C 372, para. 43 „A distinct group of customers for the relevant product may constitute a narrower, distinct market when such a group could be subject to price discrimination.”



SEPs and non-SEPs, some of which are commercially essential, and that as Apple asserts such patents, it exerts competitive constraints vis-à-vis Motorola.<sup>268</sup>

While it is not presumed that SEPs confer market power *per se*, they indeed confer leverage on their holders.<sup>269</sup> Even though SEPs are FRAND encumbered, there should still be a possibility for patent holders to extract rents which would reflect the advantages standards possess over other technologies that were not incorporated in a standard.<sup>270</sup> Thus, even in the framework of FRAND commitments it should still be possible to negotiate licensing terms to a certain extent independently.

But as discussed above in chapter 3, non-SEPs, some of which may be commercially essential, confer an even stronger leverage on their holders. They are not restrained by any licensing commitments and may even be completely withheld if their holders need to achieve particular aims in the licensing negotiations.

Moreover, SEPs and non-SEPs portfolios are often not licensed individually. In a situation when two SEP holders active on both the upstream technology markets and downstream product markets need to obtain access to the other company's standardised technologies, the most natural licensing strategy would be to conclude a cross-licensing agreement.<sup>271</sup> During the negotiation process parties may pursue various aims depending on the value of both the SEPs and non-SEPs they wish to obtain access to and which they are about to license. In relation to SEPs, they just need to comply with FRAND commitments which are of a contractual nature and not a primary competition law concern.<sup>272</sup> Considering that Apple is also a proprietor of non-SEPs which may have become commercially essential (as stated above), such non-SEPs may be the key factor in negotiations.

According to the Commission, the decisive argument is that there is a possibility to develop substitutes for the technologies covered by the potentially commercially essential non-SEPs.<sup>273</sup> However, even though that such non-SEPs are not *technically* essential for the implementation of a technical standard, it may be argued that the

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<sup>268</sup> Motorola, *supra* note 117, para. 254.

<sup>269</sup> PETIT, *supra* note 150, p. 19.

<sup>270</sup> MARINIELLO, Mario. Fair, Reasonable and Non-Discriminatory (FRAND) Terms: A Challenge for Competition Authorities. *Journal of Competition Law and Economics*. 2011, Vol. 7, Issue 3, pp. 523 - 541. p. 527.

<sup>271</sup> GERADIN, 2008, *supra* note 103, p. 11.

<sup>272</sup> BROOKS, GERADIN, *supra* note 51, p.5.

<sup>273</sup> Motorola, *supra* note 117, para. 253.

implementation of technologies substitute to such non-SEPs may be, at least in a foreseeable period of time, prohibitively expensive<sup>274</sup> and thus practically impossible in a manner similar to the implementation of technically essential technologies (see the discussion on commercially and technically essential IPRs and their market effects herein above).

One of the solutions that may be proposed is to treat patent portfolios complexly in their whole scope and not to focus on every single patent individually. The commercial value of patent portfolios standing against each other should be taken into account.

#### **4.2.2.3 Motorola's Ability to Act Independently**

The Commission, which possessed all of the essential information regarding the contractual relationship and licensing negotiations between the two parties, concluded that Motorola's ability to act independently was not restricted. The fact that Apple had asserted its non-SEPs against Motorola did not alter the fact that if any potential licensee (including Apple) wishes to obtain access to the GPRS standard on which Motorola's Cudak GPRS SEP reads, there is no possibility to switch to a substitute technology. Therefore, even if the royalty rate for such a SEP has to be set at a lower rate in exchange for a potential cross-license for such non-SEPs, it does not affect Motorola's ability to act to an appreciable extent independently in relation to its Cudak GPRS SEP.<sup>275</sup>

Nevertheless, as indicated in the *Motorola* decision itself, even Apple itself seems to have recognized the fact that its patent portfolio exercised a competitive constraint in the respective case.<sup>276</sup> Such acknowledgement, however, did not affect the Commission's findings as it concluded that Motorola was able to act independently on the basis of the following facts:

- (a) Motorola initiated and enforced an injunction against Apple in Germany on the basis of its Cudak GPRS SEP; and

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<sup>274</sup> BEKKERS, Rudi. *Mobile Telecommunications Standards: GSM, UMTS, TETRA, and ERMES*. Boston: Artech House, 2001, 627 pp. ISBN 1580532500. p. 225.

<sup>275</sup> Motorola, supra note 117, para. 242

<sup>276</sup> Ibid., para. 253. „...and regardless of whether Apple agrees with such an assessment, Apple's large patent portfolio [...] does not exercise a constraint [...]“

(b) Apple was consequently forced to accept ‘disadvantageous’ licensing terms in the settlement agreement.<sup>277</sup>

On the basis of the aforesaid evaluation of relevant markets and market power in *Samsung* and *Motorola* cases the Commission was able to conclude that both Samsung and Motorola hold dominant position in the respective narrowly defined SEP markets.

In this particular case, the Commission’s conclusion is only hardly questionable on its merits as most of the relevant information on the value and nature of Apple’s patent portfolio and Motorola’s licensing strategies preceding the initiation of injunction proceedings before German courts are either not available or not disclosed in the publicly accessible *Motorola* decision due their confidentiality.<sup>278</sup> Nevertheless, the following general observations and conclusions can be extracted from the aforesaid.

### 4.3 Implications for SEP Holders

Firstly, it is useful to summarize the Commission’s approach towards the assessment of market power in the cases discussed above. In *Google/Motorola Mobility* the Commission has generally presumed that there are *by definition* no substitutes available for SEPs and that they constitute their own separate relevant markets. Thus, SEPs confer a *de facto* monopoly power on their holders. While in *Samsung* and *Motorola* the assessment of relevant markets and market power was more detailed, the Commission came to practically an identical conclusion, i.e. that since there are no substitute technologies, relevant markets are constituted for every individual SEP.

In *Motorola*, it also refused the arguments of allegedly dominant Motorola that the countervailing buyer power (i.e. the economic strength and large patent portfolio giving leverage during the negotiations) of its most powerful customer, Apple, affected the ability of Motorola to act independently during licensing negotiations. Therefore, the same market definition applies to Motorola as a SEP proprietor vis-à-vis the specific SEP market as a whole and there is no reason to narrow the market even further vis-à-vis Apple. Consequently and inevitably, both *Samsung* and *Motorola* were found to hold dominant position in such defined markets.

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<sup>277</sup> Motorola, supra note 117, para. 265, 266.

<sup>278</sup> Ibid., para. 252.

Even though it might not be the specific case in *Motorola* that the ability of the allegedly dominant undertaking to act independently was hampered due to the negotiating power of its customer, in some other potential cases the situation might be much clearer; particularly in cases of vertically integrated undertakings whose economic power is much less significant than the power of the market leaders. The conduct of such less powerful undertakings might be governed by incentives to obtain access to other technologies held by much powerful companies and even though such weaker undertakings are most likely to be, according to the current approach undertaken by the Commission, found to hold a 100 % share in their relevant SEP market, it would be rather absurd to conclude that they possess market power amounting to dominance vis-à-vis their powerful negotiating partners.

Nonetheless, under the current Commission's approach, practically all SEP holders, regardless of their commercial significance and the countervailing power of other patent proprietors are most likely to be found dominant on their SEP markets.

As stated above, the EU competition law generally recognizes the possibility to establish separate relevant markets in relation to strong players in the market. Even though the EU authorities seem to be already defining relevant IPR (SEP) markets quite narrowly, if we develop the Commission's presumption that there are no substitutes available for SEPs and that they therefore *ipso facto* constitute their own narrow relevant markets, it appears to be reasonable to advocate an even narrower market definition for less powerful undertakings vis-à-vis their stronger competitors.

I generally agree with the position promoted by some scholars that IPRs which are commercially (or economic) essential should be treated the same way as technically essential IPRs.<sup>279</sup> The position currently held by the Commission seems to be of a very formalist nature as the decisive criteria for concluding whether a SEP case should be an EU competition law concern is the formal adherence of a standardised technology to a particular standard governed by SSOs. Commercial significance of certain non-SEPs is rather omitted under this approach.

Therefore, considering the aforesaid, it can be concluded that the ability of SEP holders to utilize their essential technologies to the fullest extent is currently limited by the following:

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<sup>279</sup> LUNDQVIST, *supra* note 156, page 348.

- (a) the self-imposed FRAND commitments;
- (b) a *de facto* monopoly in each SEP market, thereby being subject to Article 102 TFEU - the prohibition of abuse of dominant position and special responsibility of dominant undertakings.<sup>280</sup>

Naturally, in cases of cross-licenses or other reciprocal commitments between SEP holders, the duties under Article 102 TFEU apply equally to all SEP holders. On the other hand, when there are also commercially essential non-SEP involved in the negotiations, neither FRAND commitments nor restrictions of dominant undertakings' behaviour are involved and all the leverage stays with the non-SEPs.

#### **4.3.1 *Huawei v. ZTE* Approach**

In his opinion, Advocate General rightly points out that mere ownership of a SEP does not necessarily imply dominant position; rather, in compliance with the aforesaid considerations, he states that the evaluation has to be carried out on a case-by-case basis.<sup>281</sup> He also emphasizes that given the consequences that might be related to the finding of dominant position, such a conclusion cannot be based on hypotheses.<sup>282</sup>

It is however rather unlikely that the Court of Justice's upcoming judgement in *Huawei v. ZTE*<sup>283</sup> will provide any clear solution of whether SEPs actually entail market power as such. The Court of Justice is more likely to focus on the actual abusive conduct of the allegedly dominant undertaking and the solution of SEP infringements rather than the very assessment of market power. Therefore, this matter is most likely to remain unsettled for the years to come and will be subject to uncertainty and a *de facto* presumption of dominance undertaken by the Commission.

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<sup>280</sup> See e.g. Case 322/81 *Nederlandsche Banden-Industrie Michelin v. Commission (Michelin I)* [1983] ECR 3461, [1985] I CMLR 282.

<sup>281</sup> Opinion of Advocate General Wathelet delivered on 20 November 2014 in *Huawei v. ZTE*, supra note 127, para. 57.

<sup>282</sup> *Ibid.*, para. 58.

<sup>283</sup> *Huawei v ZTE*, supra note 127.

## 5. INJUNCTIONS IN CASES OF STANDARD-ESSENTIAL PATENTS INFRINGEMENTS

As the Commission established dominance of both Samsung and Motorola, it was able to proceed with the assessment of their allegedly abusive conduct by seeking and enforcing injunctions on the basis of their SEPs. Given the discussion carried out herein above, this chapter will focus on two questions.

Firstly, the comparison of applicable legal tests in order to justify the finding of abusive conduct will be carried out, subsequently demonstrating the current approach undertaken by EU competition authorities.

Secondly, considering the imbalance that is created by depriving SEP proprietors of injunctions, probably even a more important question of how the infringements of SEPs (or cases of unauthorized use thereof without a license) should be dealt with will be discussed in order to find the balance between the access to SEPs, honouring FRAND commitments and still observing the rights of SEP holders to obtain remuneration for their IPRs. Therefore, the ways suggested by concurring approaches to address unauthorised use of SEP and the setting of FRAND licensing terms will be compared and examined.

### 5.1 Injunctions as Abuse: Applicable Legal Tests

The first indication that the seeking and enforcement of injunctions on the basis of SEPs may constitute an abuse was provided by the Commission in *Google/Motorola Mobility*<sup>284</sup> merger decision. The Commission pointed out the threat of potential onerous licensing terms that may be a result of an injunction as well as potential temporary exclusion from the market, which may eventually be harmful to consumers.<sup>285</sup> As stated above, this approach has been developed in *Samsung* and *Motorola* to the fullest potential extent; under certain conditions, injunctions constitute an abuse of dominant position.

The legal test that should be applied when establishing the abusive nature of injunctions on the basis of SEPs is however still subject to uncertainty. There has been

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<sup>284</sup> *Google/Motorola Mobility*, supra note 250.

<sup>285</sup> *Ibid.*, para. 107.

an extensive discussion<sup>286</sup> in legal theory as to what legal test laid down by the EU competition case law should be applied; surprisingly enough, the discussion is still ongoing and maybe even more intense after the *Samsung* and *Motorola* decisions were adopted.

It may generally be observed that there are two competing approaches – either the point of view laid down by case law applicable to abusive (vexatious, sham) litigation, or case law relating to abusive refusal to license IPRs. There is however also a question whether or not the recent conduct which has been subject to investigations constitutes an abuse of dominant position *sui generis* to which no previous case law is applicable.

But primarily it should be stressed out that as the right to seek injunctive reliefs (i.e. to exclude others) constitutes the very core of IPRs,<sup>287</sup> the interplay between fundamental rights recognized by the EU and the finding of abuse in question has to be noted. Under the Charter,<sup>288</sup> the fundamental rights which are relevant to the conduct in question are in particular: (i) the access to court under Article 47 of the Charter; (ii) the right to property (including IPRs) under Article 17 of the Charter; and (iii) freedom to conduct business under Article 16 of the Charter.

According to Article 52(1) of the Charter, any limitations of fundamental rights have to be provided for by law and respect the essence of such rights. Also, under the principle of proportionality, the limitation of rights is possible only if necessary and complying with the general interest recognized by the EU and to counterbalance the fundamental rights of others.<sup>289</sup>

The requirement that any limitation of fundamental rights must be provided for by law may be seen as fulfilled as Article 102 TFEU is a sufficient legal provision to cause the effects of restricting fundamental rights. Thus, the main discussion should relate to the balancing of fundamental rights against Article 102 TFEU under the general proportionality principle and to the determination in what cases competition law rules prevail over the aforesaid fundamental rights.

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<sup>286</sup> HOPSON, Helen; GEORGE, David. A Nice Dilemma: Challenging the Validity of the European Commission's Approach to Frand. *Competition Law Insight*. 2014, Vol. X, No. 12, pp. 12 - 13. p. 12.

<sup>287</sup> VAVER, David. *Intellectual Property Rights: Critical Concepts in Law*. Volume 5. New York: Routledge, 2006. 432 pp. ISBN 04153845915. p. 237.

<sup>288</sup> Charter of Fundamental Rights of the European Union (2010/C 83/02)

<sup>289</sup> *Ibid.*, Art. 52; see also CRAIG, Paul P.; DE BÚRCA, Gráinne. *EU Law: Text, Cases, and Materials*. 5th ed. Oxford: Oxford University Press, 2011, 1155 pp. ISBN 9780199576999. p. 397.

### 5.1.1 Abusive Litigation and Right to Access to Court

As the conduct in question relates to a recourse to a court of law, one would at first sight expect that the already established EU case law laying down the conditions under which this type of conduct constitutes an abuse of dominant position would be clearly applicable. As Nicolas Petit rightly points out, the very existence of such a discussion “...may come as a surprise to the reader. This is because a well-established legal standard set forth in the EU courts’ case-law governs such cases.”<sup>290</sup> Therefore, the line of case law governing abusive litigation and the conditions laid down thereby will be discussed.

There are generally two judgements<sup>291</sup> directly addressing the abusive nature of judicial claims, both adopted by the General Court (or the Court of First Instance). In *ITT Promedia*,<sup>292</sup> Belgacom, a dominant Belgian supplier of telephony services initiated litigation against Promedia.<sup>293</sup> The Commission rejected the complaint and the Court of First Instance upheld its findings; Belgacom was found not to be abusing its dominant position by litigation. Two cumulative<sup>294</sup> criteria for an abuse of dominant position to be found were determined, as follows:

- (a) the judicial claim “cannot reasonably be considered as an attempt to establish the rights of the undertaking concerned and can therefore only serve to harass the opposite party; and
- (b) it is conceived in the framework of a plan whose goal is to eliminate competition.”<sup>295</sup>

In relation to the right to access to court, the Court of First Instance noted that the two aforesaid criteria represent “wholly exceptional circumstances” and must therefore be applied strictly.<sup>296</sup> After the adoption of the *ITT Promedia* judgement, there was confusion whether the Court of First Instance had actually ruled on the aforesaid criteria or whether it had just referred to criteria previously specified by the

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<sup>290</sup> PETIT, 2013, supra note 150, p. 1.

<sup>291</sup> RATO, Miguel; PETIT, Nicolas. Abuse of Dominance in Technology-Enabled Markets: Established Standards Reconsidered? *European Competition Journal*. 2013, Vol. 9, No. 1, pp. 1 - 65. p. 60.

<sup>292</sup> Case T-111/96 *ITT Promedia NV v Commission* [1998] ECR II-2937.

<sup>293</sup> JONES; SUFRIN, supra note 60, p. 564.

<sup>294</sup> *ITT Promedia*, supra note 292, para. 56, 119.

<sup>295</sup> *Ibid.*, para. 55 .

<sup>296</sup> *Ibid.*, para. 60 - 61.



Commission at the preceding stage, without evaluating or confirming them.<sup>297</sup> Nevertheless, a majority of legal scholars interpreted the mentioning of the two cumulative conditions by the Court of First Instance as an implicit confirmation thereof.<sup>298</sup>

Nevertheless, the uncertainty dissolved with the adoption of judgement in *Protégé International*<sup>299</sup> by the General Court. Therein, Pernod Ricard SA repeatedly brought actions against trademark applications in relation to Irish whiskey.<sup>300</sup> In the following investigations, the Commission rejected the complaint and the General Court consequently upheld its decision. Therefore, not even Pernod Ricard abused its dominant position by exercising its right to access to courts.<sup>301</sup>

The criteria previously determined in *ITT Promedia* were upheld and their interpretation was provided by the General Court. It stated that the first aforementioned condition under (a) above requires two lines of evidence proving that the judicial claim (i) “cannot reasonably (...) establish the rights of the undertaking” and (ii) “serves only [emphasis added] to harass”.<sup>302</sup> For the second cumulative criteria under (b) above to be put into effect, a whole *plan* [emphasis added] to eliminate competition has to be present.<sup>303</sup>

Thus, in neither of the cases an abuse of dominance was actually found. According to the aforesaid judgements, the criteria established are of a truly restrictive nature. Not only is a whole exclusionary anti-competitive plan required, but also the initiation of court proceedings has to be both manifestly meritless (and unfounded) and obviously meant to be harassing the opposing party.

It may be concluded that these criteria in theory sufficiently protect the right to access to court as it should lead competition authorities to finding of abuse only in

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<sup>297</sup> Opinion of Advocate General Mazák delivered on 15 May 2012 in Case C 457/10 P *Astra Zeneca AB and AstraZeneca plc v Commission* [2010], para. 52.

<sup>298</sup> PETIT, supra note 150, p. 8.

<sup>299</sup> Case T-119/09 *Protégé International Ltd v Commission* [2012]. As the full wording of the judgement is available in French, the examination of the judgement will be based on the analysis provided by legal scholars in English language.

<sup>300</sup> Norton Rose Fulbright. Technology/Life Sciences: More Antitrust Constraints on IP rights. Cases before the US Supreme Court and the European Commission Seek to Clarify the Interplay between Antitrust and IP law [online]. *Competition World*. 2013 [cit. 21 May 2015]. pp. 8 - 10. p. 9. Available at: <http://www.nortonrosefulbright.com/files/competition-world-july-2013-100718.pdf>

<sup>301</sup> RATO; PETIT, supra note 291, p. 61.

<sup>302</sup> Ibid.

<sup>303</sup> PETIT, supra note 150, p. 9.

“wholly exceptional circumstances”, as the General Court notes itself, and on the other hand prevent them the finding of an abuse arbitrarily.

### 5.1.2 Refusal to License and Rights to IPRs and Conduct Business

However, as seeking and enforcement of injunctions is a natural defence used in order to prevent IPR infringements, injunctions may also be perceived as measures adopted to prevent others from using the IPRs in question. The EU competition authorities have recognized that in certain situations dominant undertakings should be obliged to share their resources with their competitors provided that no substitute resources are available.<sup>304</sup> Thus, the prevention to use IPRs may establish an abuse of dominance under the doctrine of refusal to license, which will be discussed herein below.

In *Volvo v Veng*,<sup>305</sup> the Court of Justice recognized that while balancing the exclusive proprietary rights to IPRs and competition law rules, the scales might tip in favour of the prohibition of abusive conduct under Article 102 TFEU. It held that it is essential not to deprive IPR holders of their right to exclude others;<sup>306</sup> however, under specific circumstances a refusal to grant a license by dominant IPR holders may amount to abuse of dominant position.<sup>307</sup>

This notion was further developed by the Court of Justice in *Magill*<sup>308</sup> where the court established the conditions under which refusal to license constitutes an abuse of dominant position.<sup>309</sup> The applicable principles were consequently upheld in *Oscar Bronner*<sup>310</sup> and specified in *IMS Health*.<sup>311</sup> The Court of Justice held that refusal to

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<sup>304</sup> AREZZO, Emanuela. Intellectual Property Rights at the Crossroad Between Monopolization and Abuse of Dominant Position: American and European Approaches Compared, 24 J. Marshall J. Computer & Info. L. 455 (2006). *Journal of Computer & Information Law*. 2006, Vol. 24, Issue 3, pp. 455 - 506. p. 469.

<sup>305</sup> Case 238/87 *Volvo AB v Erik Veng* (UK) Ltd [1998] ECR 6211

<sup>306</sup> *Ibid.*, para. 7-8.

<sup>307</sup> *Ibid.*, para. 9.

<sup>308</sup> *Magill*, supra above 219.

<sup>309</sup> *Ibid.*, para. 50.

<sup>310</sup> Case C-7/97 *Oscar Bronner GmbH & Co KG v Mediaprint Zeitungsund Zeitschriftenverlag GmbH & Co KG* [1998] ECR I-7791 (Oscar Bronner).

<sup>311</sup> Case C 418/01 *IMS Health GmbH & Co v NDC Health GmbH & Co KG* [2004] ECR I-5039 (IMS Health).

license amounts to abuse of dominance only in “exceptional circumstances”, as follows:<sup>312</sup>

- (a) the IPR is indispensable for carrying on a particular business;
- (b) the refusal prevents the emergence of a new product for which there is potential consumer demand;
- (c) the refusal is likely to exclude all competition in the secondary market; and
- (d) there is no objective justification for the refusal.

Thus, should these cumulative criteria be present in the cases assessed, dominant IPR proprietors are obliged to grant compulsory license to licensees concerned. Not only after the adoption of the aforesaid cases, but also after the more recent judgements of the General Court, *Microsoft I*<sup>313</sup> and the consequent *Microsoft II*<sup>314</sup> there has been an extensive discussion about how the conditions should actually be interpreted.

#### 5.1.2.1 Indispensability of IPRs

The first criteria – the indispensability of the IPR – is the most crucial one. If it is not found, even the presence of all other conditions is irrelevant. Moreover, applied to the case of standardised technologies, indispensability reflects the question of actual essentiality discussed herein above in chapter 3 and elsewhere.

The underlying principle is that there are no viable substitutes for the IPR in question. In *Oscar Bronner*, Advocate General Jacobs pointed out that within the assessment of indispensability fundamental rights have to be observed and therefore indispensability should not be interpreted too leniently.<sup>315</sup> He noted that it is not sufficient to claim the indispensability of a certain subject-matter only on the basis of the lack of economy efficiency to create an alternative solution. Only if there is objectively no actual or potential substitute for the subject-matter of a compulsory access (or licence), competition law rules may intervene. Moreover, the potential incentives to innovate caused by the exclusionary aspect of IPRs as well as the right to conduct business should be balanced against the short-term benefits of compulsory

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<sup>312</sup> Magill, supra note 219, para. 53 – 56; Oscar Bronner, supra note 310, para. 40; IMS Health, supra note 311, para.37 – 38.

<sup>313</sup> Case T-201/04 *Microsoft Corp. v Commission* [2004] ECR II-4463 (Microsoft I).

<sup>314</sup> Case T-167/08 *Microsoft Corp. v Commission* [2012] (Microsoft II).

<sup>315</sup> Opinion of Advocate General Jacobs in *Oscar Bronner*, supra note 310, delivered on 28 May 1998, para. 46, 53.

license and potential opportunistic behaviour by competitors if they are granted the compulsory licenses too easily.<sup>316</sup> Therefore, taking into consideration the aforesaid, this criteria should be applied restrictively.

In *Magill*, the indispensable IPR protected subject-matter was a copyrighted information on weekly TV programmes owned by broadcasters who prevented the emergence of a secondary product, a weekly television guide in the secondary market. In this case, there was by nature no potential substitute as there was no possibility to obtain the information from other sources.<sup>317</sup> In *IMS Health*, the Court of Justice found a ‘1 860 brick structure’ developed by IMS Health for the presentation of regional sales data for pharmaceutical products was a *de facto* standard within the particular business. Even though other undertakings had tried to develop other structures for the presentation of sales data, these were not accepted by the recipients since the market itself was accustomed to the IMS’s structure.<sup>318</sup>

In *Microsoft I*, the indispensable IPR protected subject-matter consisted of “interoperability information” related to the Windows operating system; Windows domain architecture was found to be a *de facto* standard as well.<sup>319</sup> Microsoft was supplying these information only to companies included in Microsoft’s group network. The General Court concluded that the prevention to provide certain software developers with interoperability information prevented them from making their complementary software work with the primary Windows operating system. Considering the fact that Microsoft was “super-dominant” in the respective market and the consumer network attached to the Windows operating system, withholding of its interoperability information (a *de facto* standard) restricted consumers choice and reinforced Microsoft’s position in the market.<sup>320</sup>

#### **5.1.2.2 New Product and Exclusion of Competition**

Such a conclusion points at the second condition listed above – the restriction of emergence of a new product. The condition actually resembles the economic

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<sup>316</sup> PERA, Alberto. The Application of Article 82 in Regulated Sectors: The Case of Price Squeeze. In: HAWK, Barry E. (ed.). *Annual Proceedings of the Fordham Competition Law Institute: International Antitrust Law & Policy*. Huntington, NY: Juris Pub, 2009. pp. 33 - 62. ISBN 9781578232536. p. 51.

<sup>317</sup> *Magill*, supra note 219, para. 37.

<sup>318</sup> *IMS Health*, supra note 311, para. 12.

<sup>319</sup> *Microsoft I*, supra note 313, para. 392.

<sup>320</sup> *Ibid.*, para. 422.

perspective discussed in part 1.4 above, i.e. that due to the extensive network of users the industry was locked into using interoperability and compatibility standards. In *Microsoft I*, these economic effects conferred practically a monopoly on Microsoft; other software developers had to implement Microsoft's technology in order to enter the market. It may be also observed that the Court of First Instance expanded the condition as it stated that not only the limitation of production constitutes an abuse, but also the "*limitation of technical development*".<sup>321</sup>

The third condition - the requirement of exclusion of all competition in the secondary market – was specified in *IMS Health*. The Court of Justice stated that it is sufficient that the market is merely potential or hypothetical, provided that the primary IPR market and the secondary product market are interconnected in a way that the IPR is indispensable for the manufacturing of the downstream product.<sup>322</sup> In *Microsoft I*, the Court of First Instance referred to the requirement of elimination of all "effective" competition.<sup>323</sup> That would imply that it is necessary to distinguish between effective and ineffective competition, the Court of First Instance however did not provide any sufficient guidance how to execute such distinction.

Nevertheless, in *Microsoft II*<sup>324</sup> where the General Court upheld Commission's decision that Microsoft had failed to comply with its commitments to supply its interoperability information to potential standard implementers on non-discriminatory and reasonable terms<sup>325</sup> (an obligation in fact based on *Microsoft I*), the expanded conditions determined in the previous *Microsoft I* judgement were not referred to at all. As the only applicable legal test for abusive refusal to license the General Court mentions *IMS Health* and the "classic" conditions mentioned hereinabove.<sup>326</sup> In *Microsoft II* the General Court diverted from its previous assessment and arguably reversed and overruled the broadened conditions laid down in *Microsoft I*.<sup>327</sup>

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<sup>321</sup> Microsoft I, supra note 313, para. 651.

<sup>322</sup> IMS Health, supra note 311, para. 44, 45.

<sup>323</sup> Microsoft I, supra note 313, para. 563, see also e.g.: HOU, Liyang. Refusal to Deal within EU Competition Law [online]. 2010 [cit. 3 June 2015], p. 27. Available at: <http://ssrn.com/abstract=1623784>

<sup>324</sup> Microsoft II, supra note 314.

<sup>325</sup> Ibid., para. 21.

<sup>326</sup> Ibid., para. 139.

<sup>327</sup> PETIT, Nicolas. "Stealth Licensing" – or Antitrust Law and Trade Regulation Squeezing Patent Rights [online]. Liege Competition and Innovation Institute, 2014 [cit. 4 June 2015], p. 13. Available at: [http://local.droit.ulg.ac.be/jcms/service/file/20141126172342\\_Stealth-Licensing-LES-Conference-2014-N-PETIT.pdf](http://local.droit.ulg.ac.be/jcms/service/file/20141126172342_Stealth-Licensing-LES-Conference-2014-N-PETIT.pdf)

### 5.1.2.3 Current Approach of EU Courts towards Refusal to License

It may therefore be argued that by its *Microsoft II* judgement the General Court deflected from its previous attempts to expand the scope of “exceptional circumstances” and confirmed that the original exceptional circumstances laid down in *Magill*, *Oscar Bronner* and *IMS Health* are still the relevant applicable criteria. Moreover, it can be observed that it was the General Court (or the Court of First Instance) who was applying the exceptional circumstances inconsistently; the Court of Justice, on the contrary, seems to have always been coherent in its approach towards the exceptional circumstances regarding abusive refusal to license.

Even though there may be confusion related to the precise interpretation of the aforesaid conditions, they represent a well-established legal standard under which abusive refusal to license should be dealt with in the EU. Even though they restrict the undertaking’s fundamental right to property (IPRs) and the right to conduct business, they are to a significant extent justified by the economic theory. If they are applied restrictively, only in situations where the prospective social benefits of compulsory licensing are large, while negative effects of reducing the incentives to innovate are small,<sup>328</sup> the limitation of fundamental rights is counterbalanced by the fact that the whole consumer network benefits from the compulsory access to indispensable IPR protected information.

It is interesting to observe that both in *Magill* and *IMS Health* the dominant undertakings tried to obtain *injunctions* [emphasis added] prohibiting unlawful use of the IPR protected information; however the injunctions were not granted by the courts and the undertakings were forced to license their IPRs instead.<sup>329</sup>

The restriction of obtaining injunctions is therefore not new to competition law. In these cases, however, the injunctions were not the central point and the right to access to court was not discussed as such. Rather, the Court of Justice concluded that under the said “exceptional circumstances” a refusal to license exercised *in any way*, including injunctions, constitutes an abuse. It could therefore be argued that even if such undertakings were actually granted the injunctions and enforced it against IPR

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<sup>328</sup> AHLBORN, Christian; EVANS, David S.; PADILLA, Jorge A. The Logic & Limits of the “Exceptional Circumstances Test” in *Magill* and *IMS Health*. *Fordham International Law Journal*. 2004, Vol. 28, Issue 4, pp. 1109 – 1156. p. 1110.

<sup>329</sup> *Magill*, supra note 219, para. 10; *IMS Health*, supra note 311, para. 17.

infringers merely in order to conclude a licensing agreement on reasonable terms and prior to such a licensing result prevent further infringement, such conduct would not necessarily amount to an abuse by itself.

### 5.1.3 Recent Commission's Approach

Certain fundamental rights create a tension and need to be balanced against each other in the present *Samsung* and *Motorola* cases. The Commission, among others, mentions in its reasoning<sup>330</sup> the Court of Justice's judgement *Scarlet Extended*<sup>331</sup> where the rights to IPRs were balanced against the right to conduct business and where the EU precluded a grant of an injunction against an internet service provider. Moreover, as stated above, the restriction of an injunction is also known to case law regarding refusal to supply.

In the present cases, it is actually a legitimate Commission's step to try to prohibit injunctions in certain situation claiming that they might be anti-competitive. Arguably, there will always be discussions about cases where fundamental rights need to be restricted. Especially where there are multiple fundamental rights creating tension between each other, it may sometimes be more of a political question which rights to promote and which to restrict. The fact that the Commission decided to restrict certain fundamental rights in order to prevent SEP holders from seeking and enforcing injunctions in certain situations may be seen as exercise of its discretion for which basis may be found in the EU case law.

What is however more questionable is the legal test under which the Commission has actually found abuse. In *Motorola*, Motorola naturally raised the argument that its conduct cannot be seen as abusive in the light of *ITT Promedia* and *Protégé International*.<sup>332</sup> Bo Vesterdorf, a former president of the General Court, promotes the application of this case law and stresses that unless the "wholly exceptional circumstances" are present, competition law may not curtail the right to

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<sup>330</sup> *Motorola*, supra note 117, para. 503, 509; *Google/Motorola Mobility*, supra note 250, para. 106; *Samsung*, supra note 116, para. 72.

<sup>331</sup> Case C-70/10 *Scarlet Extended SA v Société belge des auteurs, compositeurs et éditeurs SCRL (SABAM)* [2011], para. 43.-46.

<sup>332</sup> *Motorola*, supra note 117, para. 527.

access to court.<sup>333</sup> Abuse would most likely not be found under this legal standard, because arguably not even the first condition, i.e. that the judicial claim lacks any basis in law, would be fulfilled (not to mention that it would be almost impossible to prove the injunctions served *only* [emphasis added] to harass the opposing party and that they were sought and enforced in the context of a whole anti-competitive plan.

On the other hand, in the recent Commission's decisions there more fundamental rights than only the right to access to court involved and looking at the cases exclusively from such a very narrow perspective may lead to distorted results. The Commission itself is aware the presence of injunctions in *Magill* and *IMS Health*.<sup>334</sup>

Therefore, in *Samsung* and *Motorola* the Commission makes reference to *Magill*, *IMS Health* and *Microsoft I* and stresses that the list of exceptional circumstances is not exhaustive.<sup>335</sup> On this basis, it establishes new "exceptional circumstances"<sup>336</sup> to find abuse in the respective cases. Namely, the Commission defines that the seeking and enforcement of injunctions against willing licensees constitutes and abuse in the exceptional circumstances, as follows:

- (a) standard-setting context, i.e. that the cases concern SEPs;
- (b) FRAND commitments related to the SEPs concerned; and
- (c) lack of objective justification.<sup>337</sup>

Such a legal test is however problematic for a number of reasons. Firstly, it may be argued that the new circumstances are actually not "exceptional" at all.<sup>338</sup> Rather, they seem to imply that whole sectors of industries are automatically in exceptional circumstances. They also seem not restrict certain conduct with the assessment on a case-by-case basis but fully prohibit one usual practise in whole particular business areas.<sup>339</sup>

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<sup>333</sup> VESTERDORF, Bo. IP Rights and Competition Law Enforcement Questions. *Journal of European Competition Law & Practice*. 2013, Vol. 4, Issue 2, pp. 109-111. p. 110.

<sup>334</sup> Motorola, supra note 117, para. 531.

<sup>335</sup> Samsung, supra note 116, para. 56; Motorola, supra note 117, para. 25.

<sup>336</sup> In its *Google/Motorola Mobility* decision, the Commission made a reference to the *Magill / IMS Health* set of "exceptional circumstances" in relation to abusive nature of seeking and enforcement of injunctions. However, it indicates that it considers this line of case law to be applicable only in cases of non-SEPs. The indispensability of non-SEPs should thus be thus evaluated on a case by case basis. This statement is however an implicit indication of the Commission's formalist approach towards the evaluation of SEPs discussed mostly herein above in chapters 3 and 4.

<sup>337</sup> Motorola, supra note 117, para. 496; Samsung, supra note 116, para. 70.

<sup>338</sup> RATO; ENGLISH, supra note 107, p. 201.

<sup>339</sup> VESTERDORF, supra note 333, p. 110.



Secondly, the Commission did not explicitly add the condition that potential licensees have to be willing to conclude a license on FRAND terms, which may actually be seen as a core of the whole test. The condition of willingness is of course mentioned numerous times throughout the decisions, but for the purposes of clarity and precision, the willingness should have been explicitly included in the list of “exceptional circumstances”.

Thirdly, it is interesting to note that the most explicit confirmation that the list of exceptional circumstances is not exhaustive is made in *Microsoft I*<sup>340</sup> which controversially tried to expand the scope of exceptional circumstances itself but was arguably overruled by *Microsoft II*. Even though it is undisputable that the list of abusive conduct under Article 102 TFEU is not definitive and new abuses may be determined, it is a bit odd to refer to a well-established set of “exceptional circumstances”, create a completely new procedure and pretend that it is approved by previous case law.

Moreover, it is also doubtful whether the effects-based approach officially promoted in the recent Commission’s policy was actually adopted. Primarily, should the Commission have assessed the market in its full complexity and taken into account Apple’s market strength, it would arguably not have found dominance of either Samsung or Motorola at all.<sup>341</sup> Such issue was discussed in chapter 4 above.

Finally, as stated in part 2.1 above, when investigating potential exclusionary abuses, it is up to the Commission to prove that consumers were likely to be harmed, i.e. that that the conduct is likely to lead to *anti-competitive* [emphasis added] foreclosure. The Commission rather seems to be restricting *any* foreclosure of competitors. In *Motorola*, it stresses the fact that due to the seeking and enforcement of an injunction Apple was eventually forced to accept disadvantageous licensing terms which it would have otherwise not agreed to.<sup>342</sup> This can however be seen as pro-competitive from a different perspective, given that injunctions serve as a tool to bring other parties to negotiating table. Without the injunction, Motorola would arguably have no way to actually negotiate with Apple on an equal footing.

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<sup>340</sup> Microsoft I, supra note 313, para. 332.

<sup>341</sup> MALLINSON, supra note 148, p. 7.

<sup>342</sup> Motorola, supra note 117, para. 311.

#### 5.1.4 Advocate General in *Huawei v. ZTE* and *Way Ahead*

In the latest *Huawei v. ZTE*<sup>343</sup> case, the Advocate General Wathelet also discusses potentially applicable legal test. He completely omits the legal standard regarding abusive litigation adopted in *ITT Promedia* and *Protégé International*.

He discusses the approach adopted in *Magill* and *IMS Health* and points out the main differences between these judgements and the recent cases regarding SEPs. While he admits that SEPs are indispensable for the implementation of a technical standard, he considers FRAND commitments given in relation to SEPs to make such a significant difference as opposed to the previous case law that such case law is only partially applicable.<sup>344</sup>

He emphasises that the implementation of all SEPs reading on a particular standard is necessary in order to produce a standard-compliant product. This fact results in technological dependence of potential licensees on SEP holders.<sup>345</sup> Instead of applying the well-known case law related to refusal to license, he basically upholds the new exceptional circumstances determined by the Commission in its previous decisions as he states that potentially abusive conduct should be assessed in the context of standardisation and FRAND commitments.

The respective Advocate General's opinion does not provide very clear indication as to how what exact legal test should be applied. Rather, according to some commentators he confuses the applicable legal tests<sup>346</sup> and creates even wider uncertainty.

In my point of view, there is however no need to come up with new legal standards as the one regarding refusal to license may be applicable even to the cases regarding SEPs and FRAND commitments. As was demonstrated above, in *IMS Health* and *Microsoft I* the EU competition authorities were able to assess the indispensability of *de facto* industry standards. Moreover, as discussed herein above in chapter 1 and

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<sup>343</sup> *Huawei v. ZTE*, supra note 127.

<sup>344</sup> Opinion of Advocate General Wathelet delivered on 20 November 2014 in *Huawei v. ZTE*, supra note 129, para. 70.

<sup>345</sup> *Ibid.*, para. 74

<sup>346</sup> Shearman & Sterling LLP. Advocate General Wathelet in *Huawei Technologies: Disappointing Opinion Evaluation of FRAND Terms and Conditions in Recent Case Law* [online]. 2014 [cit. 2 June 2015], p. 2. Available at: <http://www.shearman.com/~media/Files/NewsInsights/Publications/2014/12/Advocate-General-Wathelet-in-Huawei-Technologies-Disappointing-Opinion-AT-120814.pdf>

elsewhere, unilateral *de facto* standards and formal standards adopted by SSO cause the same market effects. The main difference is the formal rules attached to formal SSOs' standards.

On the one hand, it is true that all SEPs reading on one technical standard have to be implemented together and therefore refusing to license even one individual SEP prevents the licensee from implementing the whole standard. On the other hand, however, this fact only indicates that it might be easier for competition authorities to actually make a conclusion that a particular SEP is "indispensable" in terms of case law. It would not even prevent the Commission from considering SEPs automatically essential and constituting their own separate relevant markets. But should it seem to be necessary in specific cases, the application of *Magill* and *IMS Health* would also enable the assessment of SEPs on a case-by-case basis if it was uncertain whether a SEP is truly essential to a standard. Therefore, the main prerequisite for the finding of presence of exceptional circumstances would be the indispensability, i.e. essentiality of SEPs. Therefore, whole industries would not, at least in theory, be locked in to the "exceptional circumstances" determined by the Commission, but it would rather be possible to carry out assessment of the nature (i.e. indispensability) of SEPs also on a case-by-case basis.

This assessment does not seem to be possible under the approach undertaken by the Commission and Advocate General as they both promote standard-setting context as one of the exceptional circumstances itself. This approach also implicitly contains the precondition that SEPs are indispensable, however it treats any and all SEPs the same way. As was discussed above, there is no absolute certainty whether SEPs are in reality actually essential.

Moreover, should the case law regarding abusive refusal to license be held applicable, there would not be the need to emphasize the general FRAND commitments themselves as one of the exceptional circumstances. Of course, SEP holders would still be obliged to license on FRAND terms. As was discussed herein above, in *Microsoft II*, Microsoft was held responsible for failing to license its IPRs on non-discriminatory and reasonable terms (arguably a less formally arranged analogue of FRAND commitments); in other words, EU competition law is capable of dealing with FRAND terms even under the classic case law related to refusal to license.

Considering the aforesaid presumptions, I would promote the application of *Magill* and *IMS Health* judgements also in the recent cases related to SEPs as there is arguably no need to establish novel circumstances which, moreover, create uncertainty and doubts from a number of different perspectives.

However, not all the conditions laid down in the case law would be applicable in exactly the same manner as in the previous cases. It is quite evident that under the circumstances of the recent cases the two first conditions regarding the indispensability of SEPs and the emergence of a new product in a secondary market would potentially be fulfilled. By contrast, the third condition regarding the exclusion of all competition in the secondary market would be the problematic one; especially when there are numerous standard implementers acting in secondary markets and the dominant technology proprietor refuses to license just to one particular implementer, it is clear that not *all* competition would be eliminated. Rather, the aforesaid condition would need to be loosened up in order to tackle discriminatory and tactical refusal to license to certain individual manufacturers.

In my point of view, this is where the notion of a “willing licensee” would be of use. Instead of the elimination of all competition, the condition would require that competitive pressure created by such a willing FRAND licensee would be eliminated (or likely to be). This approach would meet the specific nature of the conduct in question, reflect the characteristics of industries in question as well as of standard-setting and still be precise enough not to cover whole industries as such.

It will in any case be very interesting to see whether and how the Court of Justice addresses the aforesaid issues in its *Huawei v. ZTE* judgement. If it upholds the Commission’s and Advocate General’s test, it will undoubtedly be considered as a disappointment by a number of commentators. Arguably, the Court of Justice may come up with numerous solutions, choosing among the ways indicated above or taking a completely different road. Its judgement will nonetheless be crucial for the future of the licensing of SEPs.

## 5.2 Willing Licensees and Standard-Essential Patents Infringements Resolution

Developing the aforesaid, herein below the definition of “willing licensee” under different concurring approaches described in the German *Orange-Book Standard*, the Commission’s decisions and Advocate General’s opinion will be discussed both in relation to the definition of “willing licensee” and to the required course of action in cases of SEP infringements available in order to avoid the finding of abusive conduct.

### 5.2.1 Willing Licensees

Regardless of whether discussing the official approach to find abuse adopted by the Commission, by the Advocate General, or the one suggested herein above, the determination of how to qualify as a licensee willing to conclude a license on FRAND terms is of crucial importance.

The origin of the “willing licensee” concept may be seen in the German *Orange-Book Standard*. Numerous litigations related to SEPs have been carried out in Germany and this judgement has served benchmark for the assessment of potential abusive nature of injunctions on the basis of SEPs.

As already indicated above in part 2.3.2 above, under the *Orange-Book Standard*, SEP infringers may claim that the seeking and enforcement of injunction on the basis of SEPs constitutes an abuse of dominant position by SEP proprietor if they present the SEP proprietor with an unconditional offer to which they must stay bound and which SEP proprietors cannot reject without violating the prohibition of discrimination and anti-competitive behaviour.<sup>347</sup> In reality, this means that SEP infringers have to determine a specific royalty rate themselves and stick to it or accept any rate which SEP proprietor claims to be FRAND and consequently challenge such a rate in litigation.<sup>348</sup> In order to meet the *Orange-Book* requirements, the royalty rate should arguably be within the upper limit of the boundaries that may be considered

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<sup>347</sup> *Orange-Book Standard*, supra note 132.

<sup>348</sup> LUNDQVIST, Björn, 'The Rise of Standardization and the Limits of Self-Governance' - Unilateral Conduct Under International Standards from EU Competition Law Perspective [online]. 2015, DRAFT to be published in Thomas Riis and Jens Schovsbo (ed), '*User Generated Law - Reconstructing IP law in the knowledge society*', Edward Elgar, 2015 [cit. 28 May 2015], p. 7. Available at: <http://ssrn.com/abstract=2551060>

FRAND.<sup>349</sup> Moreover, SEP infringer has to behave as if the licensing offer has already been accepted; most often that would mean that SEP infringers deposit the offered royalties for the past use of the SEP concerned to an escrow account.<sup>350</sup>

Under this German approach, all responsibility to qualify as willing licensees rests with SEP infringers; it imposes a number of obligations on them. Such obligations, however, are a bit blurred and there is still a lot of grey area and uncertainty as to how SEP infringers should actually determine FRAND themselves. Thus, arguably, the *Orange-Book Standard* is very favourable to SEP proprietors as it makes it very difficult to successfully raise the FRAND defence by SEP infringers. According to some sources, there have been hundreds of SEP infringements disputes in Germany throughout the recent years; yet only in *two* [emphasis added] of them the *Orange-Book Standard* defence was successfully used by infringers and accepted by courts.<sup>351</sup>

The *Orange-Book Standard* was subject to examination by the Commission in its recent *Samsung* and *Motorola* decisions. The Commission stated that is not applicable to the recent cases as it does not directly concern SEPs.<sup>352</sup> The Commission argues that the *Orange-Book Standard* deal with a *de facto* standard, i.e. not FRAND encumbered.<sup>353</sup> In my opinion, however, the Commission fails to demonstrate the substantial differences that would make the *Orange-Book Standard* completely inapplicable. Taking into account the considerations discussed above throughout this thesis, *de facto* standards and formal voluntary standards adopted by SSOs may cause the same market effects and there should thus not be any substantial need to treat them completely differently. Moreover, the fact that *Orange-Book Standard* does not originally concern SEPs and formal FRAND commitments has not prevented German courts from treating numerous SEP disputes under this precedent; that may be seen as an indication that it actually may be applicable to the issues in question.

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<sup>349</sup> HAHN, Tobias. Evaluation of FRAND terms and conditions in Recent Case Law [online]. Reimann, Osterrieth, Köhler, Haft. 21st Annual Fordham IP Conference, 2013 [cit. 1 June 2015], p. 4. Available at: [http://fordhamipconference.com/wp-content/uploads/2013/04/2013.hahn\\_FRAND\\_.pdf](http://fordhamipconference.com/wp-content/uploads/2013/04/2013.hahn_FRAND_.pdf)

<sup>350</sup> *Orange-Book Standard*, supra note 132, page 15.

<sup>351</sup> VERHAUWEN, Axel. The end of the “Golden Orange-Book-Standard”. *Journal of Intellectual Property Law & Practise*. 2013, Vol. 8, Issue 11, pp. 879 - 886. p. 880.

<sup>352</sup> European Commission. Antitrust decisions on standard essential patents (SEPs) - Motorola Mobility and Samsung Electronics - Frequently Asked Questions (Press Release IP/14/322) [online]. Brussels: 29 April 2014. [cit. 20 April 2015]. Available at: [http://europa.eu/rapid/press-release\\_MEMO-14-322\\_en.pdf](http://europa.eu/rapid/press-release_MEMO-14-322_en.pdf)

<sup>353</sup> *Motorola*, supra note 117, para. 83.

Nonetheless, the Commission creates a different “safe harbour” for willing FRAND licensees. If potential licensees (SEP infringers) demonstrate their willingness to have FRAND terms determined by courts or arbitrators and stay bound by such a determination, injunction may not be sought and enforced by SEP proprietors.<sup>354</sup>

The principal difference between the Commission’s approach and the *Orange-Book Standard* was demonstrated in *Motorola*, where Apple had to present Motorola with licensing offers meeting the *Orange-Book Standard* requirements. The German court considered no earlier than Apple’s sixth Orange Book offer to be sufficient enough to meet the requirements of the strict precedent.<sup>355</sup> On the other hand, the Commission concluded that contrary to the German court’s point of view, as of the second Orange Book offer Apple qualified as a willing licensee.<sup>356</sup>

The second Apple’s offer allowed Motorola to set FRAND royalties according to its equitable discretion and usual FRAND terms within the industry; the limitations of such determination would only be competition law and FRAND itself. Apple would however be able to file an action for full judicial review of FRAND royalties and submit its own evaluation of what it considers to be FRAND terms.<sup>357</sup> What was upheld by the German court in the sixth Orange Book offer to meet the *Orange-Book Standard* requirements, i.e. among others the inclusion of a termination clause, was evaluated by the Commission as “disadvantageous” licensing terms violating EU competition law.<sup>358</sup>

In other words, even though the Commission states that its decisions in the field are not in conflict with the *Orange-Book Standard*, the tension and incompatibility is more than obvious. While the *Orange-Book Standard* applies a very strict approach towards SEP infringers, the Commission’s approach in essence implies that it is sufficient for SEP infringers to state that they would accept court determination of FRAND royalties and the Commission gives them shelter.

In *Huawei v. ZTE*, Advocate General confirmed the Commission’s position that *Orange-Book Standard* deals with a different factual background and is therefore not

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<sup>354</sup> European Commission. Press Release IP/14/322, supra note 352.

<sup>355</sup> Motorola, supra note 117, para. 151.

<sup>356</sup> Ibid., para. 303.

<sup>357</sup> Ibid., para. 303.

<sup>358</sup> Ibid., para. 145, 322.

relevant to the dispute in question.<sup>359</sup> However, given the strong position of SEP holders under *Orange-Book Standard* on the one hand and their significantly weak protection under *Samsung* and *Motorola* on the other, he attempts to find a middle path.<sup>360</sup>

In order to achieve such an aim, he establishes a procedure in which SEP licensing should be carried out (such procedure will be discussed herein below in part 5.2.2). Nevertheless, as to the notion of willingness to license he notes that an injunction on the basis of a SEP constitutes an abuse of dominance where SEP infringer has shown himself “*objectively ready, willing and able*” to conclude a SEP licensing agreement.<sup>361</sup> In order to prevent a SEP holder from seeking an injunction, the infringer must reply to the SEP holder’s licensing offer in a “*diligent and serious manner*” or make a counter-offer in writing. Should the infringers conduct be “*purely tactical, dilatory or not serious*”, the seeking of an injunction is approved.<sup>362</sup>

Regarding the notion of willingness, several things may be observed. Firstly, under the *Orange-Book Standard* it is very difficult to express willingness to license a SEP on FRAND terms sufficiently. Following this course of action, FRAND royalties would arguably be very high and the access to SEPs reading on formal technical standards significantly restricted in favour of the protection of SEP holders. Therefore, the pure acceptance thereof is inconvenient.

However, secondly, the Commission’s approach, which arguably very clearly states how to express willingness to license a SEP, deprives SEP holders of almost all remaining negotiating power in SEP licensing. Under this approach, FRAND terms would arguably almost always be eventually determined by courts or arbitration tribunals as SEP infringers would have always the possibility to disagree with FRAND terms determined by SEP holders. While FRAND royalties would be significantly lower than under the German attitude, the Commission’s approach would significantly restrict the right of SEP holders to fair remuneration for their innovative efforts.

Thirdly, the Advocate General’s approach towards willingness uses vague terms which are not specified – willing, ready, able, diligent, serious etc. Arguably, his attempt to clarify the situation might by contrast lead to further litigation relating to the

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<sup>359</sup> Opinion of Advocate General Wathelet delivered on 20 November 2014 in *Huawei v. ZTE*, supra note 129, para. 48.

<sup>360</sup> *Ibid.*, para. 52.

<sup>361</sup> *Ibid.*, para. 98, 103 (1).

<sup>362</sup> *Ibid.*, para. 88.



interpretation of such terms; what may be seen as serious from one perspective, may as well be perceived as tactical from a different angle.

### **5.2.2 Procedures to Resolve Standard-Essential Patents Infringements**

As stated above, injunctions may also serve as an invitation to negotiate. If SEP holders are deprived of such a tool, the question to be answered is in what other way SEP infringements should be resolved; in other words, who should approach who with a licensing offer.

It is clear from the aforesaid that under the *Orange-Book Standard* SEP proprietors merely “sit” on their patents and wait for licensees to come with an unconditional and very clear licensing offer. On the other hand, surprisingly enough, even though the *Motorola* decision is quite extensive in its reasoning, it does not provide the reader with any indication of what the proper course of action by Motorola should have been.<sup>363</sup>

The only indication thereof is provided by Samsung’s commitments accepted by the Commission. Under these commitments, Samsung has to approach SEP infringers with an invitation to negotiate. If the infringers accept such an invitation, FRAND licensing negotiations are commenced for the period of 12 months. Within the negotiations both unilateral licenses and cross-licenses may be concluded in case any of the parties seeks reciprocity. If no agreement is reached under this scheme, FRAND terms are eventually determined by a third party – either a court or an arbitration body if parties agree to that.<sup>364</sup> During such third party FRAND determination, potential licensees may not be prevented from raising an argument related to validity, essentiality and (non)infringement of the SEP(s) in question.<sup>365</sup> Samsung is moreover entitled to pursue injunction claims in cases when (i) potential licensees fail to comply with framework of licensing negotiations concretely described in the commitments, (ii) have financial issues or (ii) the other party negotiating a license seeks injunctions on the basis of SEPs.

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<sup>363</sup> LAROCHE; ZINGALES, supra note 169, p. 30.

<sup>364</sup> Samsung, supra note 116, Commitments Offered by Samsung to the European Commission [online]. [cit. 17 April 2015] [http://ec.europa.eu/competition/antitrust/cases/dec\\_docs/39939/39939\\_1502\\_5.pdf](http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1502_5.pdf)

<sup>365</sup> Ibid., page 4

The Advocate General in *Huawei v ZTE* claims to find middle ground between the *Orange-Book Standard* and Commission's "safe harbour".<sup>366</sup> In this regard, it is however important to note that the Advocate General takes as a basis for his position neither the actual full wording of *Samsung* or *Motorola* decisions nor Samsung's accompanying commitments, but merely Commission's press releases that were available at the time of the lodging of the request for preliminary ruling by the German court.<sup>367</sup> While on the one hand it is understandable as the Advocate General may be trying to discuss the matter from the referring court's perspective, it may arguably, on the other hand, lead to distorted and rather surrealistic conclusions.

The middle ground that the Advocate General tries to find is in fact even a stricter approach than the one adopted in Samsung's commitments. In case SEP infringement takes place, a SEP proprietor is required to approach the SEP infringer with a written offer to conclude a license on FRAND terms. Such offer should contain all terms and conditions that constitute a full licensing agreement, i.e. not only the royalty rate.<sup>368</sup> As stated above in relation to their willingness, SEP infringers have to respond in a diligent and serious manner. If they are not satisfied with the offer made by SEP holders, infringers need to make a counteroffer in relation to the contractual clauses they disagree with. Both the offer and the counteroffer have to be presented in, as the Advocate General depicts, in the light of "*commercial window of opportunity*."<sup>369</sup>

If the negotiations fail, SEP infringers are not considered to act in a dilatory or not serious manner if they require third party determination of FRAND terms, i.e. specification of FRAND terms by courts or arbitration tribunals.

### 5.2.2.1 Comparison and Discussion

Even though the *Orange-Book Standard* may generally be considered applicable, given the considerations discussed above, it may be noted that it sets too strict a licensing framework for potential SEP licensees who may legitimately expect SEP holders to honour their FRAND commitments. Considering the investments SEP implementers potentially may have made prior to seeking of license for SEPs, the

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<sup>366</sup> Opinion of Advocate General Wathelet delivered on 20 November 2014 in *Huawei v. ZTE*, supra note 129, para. 52.

<sup>367</sup> *Ibid.*, para. 50, 51.

<sup>368</sup> *Ibid.*, para. 85.

<sup>369</sup> *Ibid.*, para. 89.

*Orange-Book Standard* does not meet the requirements of fast developing innovation markets as it restricts access to technical standards.

On the other hand, the FRAND-setting procedure proposed by Advocate General creates so many uncertain points as to the entitlements of SEP infringers that it could result basically only in two potential scenarios. Arguably, SEP holders might settle with *any* counteroffer that SEP infringers present to them; yet, this would result merely in significantly low remuneration for SEP holders and too favourable licensing terms for SEP infringers, almost reflecting the theory of reverse hold-up. The other possible scenario is that licensing negotiations would almost in any case result in a dispute resolved by courts or arbitral tribunals (not only in relation to FRAND determination, but to any other step made by SEP infringers, i.e. the serious, tactical, dilatory conduct, the window of business opportunity etc.). Under Advocate General's licensing framework, a truly fertile ground for numerous disputes is created and it seems as if parties were almost encouraged to challenge every partial step within the licensing procedure. Moreover, the Advocate General seems to set his licensing framework in a world where SEPs are licensed individually, on a per-SEP basis. The considerations related to cross-licenses and patent portfolios are omitted. Taking into account all the aforesaid, if there is any way to restore the current licensing imbalance and reduce the extensive litigation related to SEPs within the smartphone wars, the Advocate General's approach is certainly not the best way to go.

Despite the aforesaid criticism of the general Commission's "safe harbour" which on its own seems to be rather under-protective of SEP holders, the licensing framework set out by Samsung actually appears to be, in my point of view, to a certain extent reasonable. Instead of seeking of an injunction, SEP holders invite SEP infringers to negotiating table with a general offer and consequently the process of FRAND determination for a stipulated period of time begins. Third party FRAND determination by courts or through arbitration is possible only as a consequent step when licensing agreement is not concluded. Yet, the 12-month licensing procedure preceding the possibility of third party FRAND determination may enable the parties to actually come up with a mutually beneficial solution of the infringement. The considerations regarding cross-licenses, essentiality and validity discussed in chapter 3 are also taken into account and kept available to the parties. However, even under this scenario one of the

parties may try to delay the negotiations and push the boundaries within the permitted licensing framework as far as possible so that eventually third party FRAND determination by courts would also be inevitable.

It is rather unfortunate that after years of development of the interface between IPRs, technical standards and competition law practically all current approaches towards SEP licensing come down to FRAND being set by courts or arbitral tribunals. At the national level, national courts may be almost completely unaware of the background of industries relying on SEPs and may therefore arguably be wild guessing in order to determine FRAND terms. If the general aim is to set a licensing environment convenient for both SEP holders and licensees, the parties should definitely not be exposed to such uncertainty and unpredictability which may significantly affect their businesses.

I generally agree with Lundqvist who notes that FRAND should not be seen merely as static licensing terms, but also (and perhaps primarily) as a dynamic procedure.<sup>370</sup> However, the sufficient procedure is arguably yet to be determined. The Court of Justice will surely contribute to the debate significantly and its expected judgement will undeniably for a long time to come be the milestone and precedent according to which SEPs will be licensed. One can only hope that it will take into account all the complexities that govern SEP-related industries.

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<sup>370</sup> LUNDQVIST, 2015, *supra* note 348, p. 7.

## CONCLUSION

To conclude this thesis, it is firstly useful to remind ourselves of the underlying question of this thesis determined hereinabove in introduction. The aim was to explore, from the perspective of EU competition law, what the consequences of the inclusion of IPRs in technical standards governed by SSOs are for IPR proprietors. Rephrasing the question, the goal was to explore what implications for SEP holders there are under the current EU competition law regime.

In chapter one, the basic economy behind technical standards was outlined, providing the background for consequent analysis. It was observed that once a standard is accepted by a market, the industry concerned becomes locked in to it, due to high switching costs it is prohibitively expensive to develop substitutes and the implementation of such a standard becomes a *de facto* requirement for entering the market(s).

In chapter two, the substantial difficulties that arise when EU competition authorities try to tackle solely the allegedly abusive excessive prices (pure exploitative abuse) reaching beyond FRAND was demonstrated. Therefore, it was argued that EU competition authorities are nowadays shifting their approach towards exclusionary aspects of abusive conduct in the context of standard-setting within SSOs and current case law was outlined for further elaboration.

In chapter three, several interesting phenomenon could be observed. Firstly, there is a problem of extensive over-declaration of essentiality within SSOs resulting in thousands of patents reading on one standard. Secondly, EU competition law and SSOs' IPR policies treat the notion of essentiality in a formalistic way, promoting (allegedly) technically essential patents and omitting commercially essential.

However, when SSOs accept almost any patents as technically essential and omit commercially essential, the primary interest of society – high quality standards – is side-lined. Should it be the primary goal to secure access to the best technical standards possible and given the market effects stated above, on the one hand commercially essential patents would inevitably have to enjoy the same treatment as technically essential patents and on the other hand not such an extensive number of technically essential IPRs would have been allowed.

So, given the substantial differences between the treatment of technical and commercial essentiality, why do patent proprietors still want to have their patents included in SSOs' standards? Arguably, it may often be because the quality of their patents is rather low and they prefer to have the certainty of obtaining FRAND royalties rather than obtaining no royalties at all.

In this sense, potential licensees are enabled by EU competition law to challenge the essentiality and validity of SEPs. In chapter three, a presumption was made that the consequences for SEP proprietors is that they are on the one hand deprived of most of their rights and on the other hand have to face significant pressure which would otherwise not be present from the side of potential (willing) licensees. Considering the omission of commercially essential patents, however, this state is rather unsatisfactory.

In chapter four, this position was further developed and confirmed. It was demonstrated that SEP proprietors are subject to a *de facto* presumption of monopoly. Commercially essential patents, on the other hand, are not constrained by any such restrictions. Therefore, not only are SEP holders already limited by FRAND commitments, but once they include their patents in SSOs' standards, they automatically have to face Article 102 TFEU.

In chapter five, it was demonstrated that under Article 102 TFEU limitations, the Commission considers standard-setting context and FRAND terms to be in itself the reason to impose an obligation on SEP holders to practically give away their patents to willing licensees without any wider possibility to affect the outcome of negotiations. While a certain procedure was suggested which would partially restore the imbalance, the position *de lege lata* is unclear.

Considering all of the aforesaid, in order to come up with a potential solution, the words of Tim Cook, Apple's CEO, who claims that "...*standard-essential patent system is broken*",<sup>371</sup> may be observed. I agree with this statement. EU competition law nowadays seems to be trying to fix something that is wrong from the outset and the distorted results that come out are inevitable.

There are several potential short-term solutions, e.g. establishing a separate relevant market for licensing negotiations between strong undertakings, adapting the

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<sup>371</sup> ONG, Josh. Tim Cook: Standard-Essential Patent System is Broken [online]. Appleinsider, 2012 [cit. 5 June 2015]. Available at: [http://appleinsider.com/articles/12/05/30/tim\\_cook\\_standards\\_essential\\_patent\\_system\\_is\\_broken](http://appleinsider.com/articles/12/05/30/tim_cook_standards_essential_patent_system_is_broken)

legal test to find abuse so that it does not cover whole industries, define SEP licensing procedure in a way that the positions of parties are more balanced etc., as was suggested herein above throughout this thesis.

Nevertheless, as long term solutions which would potentially heal the core of the current issues of SEP, two concurring options can be observed. One possible approach to take is that it should be expressly stated, ideally in SSOs' IPR policies, what rights SEP holders are obliged to waive and how precisely SEPs should be licensed, i.e. make a statement that SEPs are in fact not patents. Under this scenario, commercially essential patents would be exempted from scrutiny and it would be clear that it is unthinkable to expect the same outcome from SEPs as from other patents. Arguably, this is the current position of Apple.

The other possible road to take is to divert from formalism and have a recourse to actual market effects, either in SSOs' IPR policies or within EU competition law, limiting only *truly* (both technically and commercially) essential patents. This attitude would reflect the position held by Samsung, Motorola or other SEP proprietors.

The current EU competition law seems to be in favour of the former, yet still looking for its true face. None of the two approaches is substantially more correct than the other; it is mostly a matter of what particular interests are eventually preferred. Nevertheless, I would personally promote the latter.

# TEZE V ČESKÉM JAZYCE

## Úvod

S technologiemi se v dnešní době setkáváme téměř na každém kroku. Ač to mnohdy nemusí být zcela evidentní, velké množství technologických zařízení, které jsou vnímány jako samozřejmé, zahrnují určité standardy, které zajišťují kompatibilitu produktů.

Na jedné straně je veřejným zájmem, aby standardy byly přístupné co největšímu okruhu příjemců a zvyšoval se tak celkový užitek pro společnost. Na straně druhé jsou standardy mnohdy chráněny právy duševního vlastnictví (PDV), které obecně umožňují jejich držitelům volně se rozhodovat, komu standard poskytnou a komu nikoli. Tento rozpor vytváří určitou výbušnou směs, z níž následně vyvěrají mnohé právní otázky.

Cílem této práce je zaměřit na takové právní otázky ve specifickém kontextu soutěžního práva EU, a to ve vztahu k technickým standardům. Vzhledem ke skutečnosti, že aktuální otázky se zaměřují především na standardy přijaté standardizačními organizacemi, se tato práce primárně zaměřuje na tyto aktuální problémy. Primární otázka, na kterou tato diplomová práce poskytuje odpověď je: Jaké jsou z pohledu soutěžního práva EU důsledky zahrnutí PDV do určitého technického standardu přijatého standardizační organizací pro držitele takových PDV?

Tato práce je rozdělena do pěti kapitol. První kapitola nastiňuje základní teorii týkající se standardů, včetně ekonomické perspektivy, a poskytuje podklad pro další pojednání. Kapitola druhá poskytuje obecnější vhled do problematiky průsečíku technických standardů, PDV a soutěžního práva EU a specifikuje, které konkrétní problémy jsou diskutovány ve zbytku této práce. Kapitola třetí se zaměřuje na komplexní vztahy oborů užívajících technické standardy a povahu PDV zahrnutých do standardu. Kapitola čtvrtá se zabývá otázkou, zda standardizovaná PDV implikují z pohledu soutěžního práva EU dominantní postavení jejich držitelů. Kapitola pátá pak diskutuje aktuální otázky zneužití dominantního postavení a způsoby, kterými lze současný stav napravit. Závěr je pak věnován shrnutí učiněných poznatků a vyvození důsledků pro držitele standardizovaných PDV.



## 1. Standardizace a standardy

Žádná ucelená či univerzálně platná definice standardizace a standardů není v ekonomické ani právní teorii k dispozici. Standardizace je často definována nepřímo, prostřednictvím jejích charakteristik, nicméně její přímá definice stanovuje, že standardizace je v zásadě jakákoliv forma dohody, jejímž cílem je konat určité klíčové věci jednotným způsobem. Cílem standardizace je tedy ustanovení určitého standardu.

K dispozici je mnoho rozličných definic standardů, avšak převážná většina z nich není natolik široká, aby pokrývala veškeré standardy, které se mohou na rozličných trzích vyskytnout. Jedna z definic, která může pestrou škálu standardů pokrýt napříč všemi možnými situacemi, je vymezuje jako řešení existujících či potenciálních problémů přiřazování pro určitý rozsáhlejší okruh zainteresovaných stran, jímž jsou určena a která slouží k opakovanému a dlouhodobému používání.

V teorii je uvedeno mnoho rozličných dělení standardů. Je tedy třeba primárně zdůraznit, že tato diplomová práce se zabývá standardy technickými. Prostřednictvím výše uvedené obecné definice standardů lze dospět k závěru, že technické standardy jsou řešeními jednoho nebo více problémů přiřazování, kde alespoň jeden z aspektů, které mají vzájemnému přiřazování podlehnout, je technologického rázu. Takováto řešení pak poskytují možnost kompatibility a interoperability určitých produktů technologického rázu. Termín „standardizovaná technologie“, jenž je uveden v názvu této práce, je v této práci ekvivalentní termínu technický standard a pokud se v této práci hovoří o standardu, je míněn technický standard, není-li řečeno jinak.

Technické standardy je dále možné dělit rozličnými způsoby, přičemž ekonomická teorie žádný konkrétní ucelený obraz neposkytuje. Jedna z typologií hojně se vyskytujících v literatuře dělí standardy *de jure* a *de facto*, tato klasifikace však může být v mnoha směrech zavádějící. Další možný přístup rozlišuje standardy podle skutečnosti, zda je jejich využití závazné, na standardy povinné a dobrovolné. V této diplomové práci je primárně využit druhý uvedený přístup s tím, že bude zohledněno i hledisko *de jure* a *de facto*.

Povinné standardy jsou většinou stanoveny z iniciativy orgánů veřejné moci, které mohou z důvodů veřejného zájmu určit, že akceptace určitých technických standardů je povinná. Na úrovni EU je kupříkladu Komise oprávněna stanovit, že určité

standards na poli informačních a komunikačních technologií budou na jednotném trhu závazné. Převážná většina standardů je nicméně dobrovolného rázu a jsou určovány tržními požadavky, stejně jako poptávkou spotřebitelů.

Takové dobrovolné standardy lze rozdělit na jednostranné a formální. Zatímco jednostranné standardy vznikají prostřednictvím výzkumu a vývoje prováděného jednotlivými podniky přítomnými na trhu, formální standardy jsou výsledkem procedury uvnitř standardizačních organizací. Na evropské i celosvětové úrovni působí celá řada standardizačních organizací, přičemž jedna z nejvýznamnějších a ta, která z hlediska soutěžního práva EU v současnosti vzbuzuje nejvíc debat, je Evropský institut pro telekomunikační standardy (ETSI). Byť je účast na stanovování standardů standardizačními organizacemi dobrovolného charakteru, síla takových organizací může ústit ve skutečnost, že jí stanovené standardy jsou ve skutečnosti nevyhnutelné pro vstup na určitý trh. Nicméně lze říci, že jak dobrovolné standardy jednostranné, tak i formální, se stávají standardy *de facto* na základě požadavků trhu.

Dobrovolné standardy jsou rovněž charakterizovány síťovými efekty, tj. skutečností, že čím větší počet spotřebitelů užívá příslušný standard, tím se zvyšuje jeho důležitost a zároveň snižuje relevance ostatních soutěžících standardů, a to až do bodu, kdy se trh přikloní k „vítěznému“ standardu zcela.

Pro zajištění kompatibility a interoperability produktů (které lze považovat za jedny z jejich zásadních benefitů), je tedy nevyhnutelné užití takových silných standardů. Nicméně tato skutečnost může vyústit v situaci, kdy je trh „uzamčen“ a využití alternativní řešení není možné. V důsledku toho získává držitel takového standardu *de facto* monopol a vyvstává mnoho otázek z hlediska soutěžního práva.

## **2. Soutěžní právo EU, technické standardy a práva duševního vlastnictví**

Vzhledem k výše uvedenému je tedy v teorii navrhováno, že k zajištění co největšího rozšíření standardů by tyto měly být pokud možno otevřené a neobtěžkány žádnými majetkovými právy. Nicméně, standardy jsou často výsledkem zdlouhavého vývoje a jejich držitelé zcela legitimně požadují odměnu např. v podobě licenčních poplatků. Držitelé standardů tedy nevyhnutelně chrání výsledky své činnosti PDV,

především prostřednictvím patentů. Držitelé patentů jsou v zásadě oprávněni zamezit v užívání patentů komukoliv na základě jejich libovůle. Avšak vzhledem ke skutečnosti, že standardy jsou určeny k co nejširšímu použití, vyvstává zde určité napětí, které vytváří půdu pro regulaci, např. prostřednictvím soutěžního práva.

Držitelé patentů účastníci se standardizace v rámci standardizačních organizací poskytují své patenty v průběhu ustanovování určitého standardu. Pokud je standard následně definován, jsou tyto patenty určeny jako nezbytné pro standard – patenty na standardizované technologie stanovené standardizační organizací (PST). Takové patenty mají teoreticky být komplementární a tvořit standard společně. K zajištění přístupu k takovými PST se jejich držitelé zavazují k poskytování licencí za přiměřených, rozumných a nediskriminačních podmínek (z angl. *fair, reasonable and non-discriminatory*) (FRAND), přičemž tento závazek je smluvního charakteru. Vzhledem ke skutečnosti, že vymáhání takových podmínek je z mnoha hledisek neefektivní, soutěžní právo EU v současné době v odvětvích, pro která jsou PST a FRAND relevantní, intervnuje.

Pro řádný výklad soutěžněprávní problematiky týkající se technických standardů, PST a FRAND je však nezbytné nejprve nastínit určitý teoretický rámec. Vzhledem ke skutečnosti, že pozornost soutěžního práva EU se aktuálně zaměřuje na zneužití dominantního postavení držitelů PST dle čl. 102 SFEU, se tato práce primárně zaměřuje na tyto otázky.

Rozhodovací praxe Soudního dvora obecně rozlišuje mezi vykořisťovatelskými a vylučujícími praktikami dominantních soutěžitelů. První uvedené spočívá v tom, že dominantní soutěžitel zneužívá své tržní síly např. k extrahování nepřiměřených cen či jinému omezování ostatních soutěžitelů na trhu. Lze argumentovat, že v praxi jsou takové praktiky mnohdy těžko postižitelné a že tržní síly jsou schopny tyto praktiky do určité míry regulovat samostatně. V každém případě jsou v rámci soutěžního práva EU vyšetřovány spíše méně často.

Na druhé straně, cílem vylučujících praktik je v zásadě vytěsnění nedominantních soutěžitelů z trhu a jeho uzavření. V rámci vývoje soutěžního práva EU bylo s těmito praktikami nakládáno diverzifikovaně, nicméně v současnosti Komise deklaruje, že bude primárně dbát na ekonomické efekty takového chování dominantních soutěžitelů – pokud bude dokázán negativní dopad na soutěžitele, budou aplikována

omezení dle čl. 102 SFEU, v opačných případech nikoliv. V rámci prosazování tohoto ekonomického přístupu byly Komisí přijaty Pokyny k aplikaci čl. 82 Smlouvy [102 SFEU].

Toto rozlišení je důležité pro další výklad, nicméně Pokyny k aplikaci čl. 102 SFEU nijak nezmiňují problematiku PDV, neřkuli PST či FRAND. Bližší pozornost je těmto otázkám věnována v Nařízení č. 316/2014 o převodu technologií a souvisejících Pokynech, stejně jako v Pokynech k dohodám o horizontální spolupráci. Tyto dokumenty jsou zohledněny v rámci dalšího výkladu v této diplomové práci.

Nicméně, soutěžní právo EU se nyní konkrétně zabývá dvěma větvemi standardizace. Jednak jde o praktiky dominantních soutěžitelů nastávající během procesu standardizace, vtělené do konceptu zneužití dominantního postavení tzv. patentové pasti (angl. *patent ambush*) a nepřiměřeně vysokých licenčních poplatků za PST. Dále se pak jedná o praktiky nastávající poté, co je standard ustanoven, tzv. zablokování (angl. *hold-up*), a to jak ze strany držitele patentu, tak ze strany potenciálního nabyvatele licence.

Koncept patentové pasti byl Komisí adresován v jejím rozhodnutí *Rambus* (Rozhodnutí COMP/38.636), kde Rambus zatajil existenci patentů relevantních k určitému standardu a následně (dle tvrzení Komise) požadoval nepřiměřeně vysoké licenční poplatky. Vzhledem ke skutečnosti, že čl. 102 SFEU není uzpůsoben ke konstatování zneužití dominantního postavení v případě, kdy soutěžitel pouze nelegálním způsobem získá takové postavení, se Komise zaměřila na vykořisťovatelské licenční poplatky. Příklad byl urovnán tím, že Komise přijala závazky ze strany Rambusu. Tento případ demonstruje, jak komplikované je konstatovat zneužití dominantního postavení u vykořisťovatelských praktik. Proto je navrhováno, aby byl čl. 102 SFEU upraven tak, aby bylo možné zamezit i nelegálnímu či pokoutnému získání dominantního postavení.

Dále, v teorii je koncept zablokování popisován jako situace, kdy držitel patentu (PST) využije svého obecného oprávnění vyloučit ostatní soutěžitele a prostřednictvím návrhů na vydání předběžného opatření, zápůřčích žalob apod. (dále jen „soudní příkaz“) blokuje využívání technologie ze strany potenciálního nabyvatele licence. Pokud je však na základě této presumpce držiteli PST odebráno právo podávat a vymáhat takové soudní příkazy, vyvstává na druhé straně nebezpečí zablokování

držitele PST ze strany potenciálního nabyvatele licence, který zároveň PST užívá neoprávněně. Takový nabyvatel licence může prostřednictvím extensivní litigace donucovat držitele patentu k přijetí jinak nevýhodných licenčních podmínek.

Tyto koncepty se v rámci soutěžního práva promítají zejména v tzv. smartphonových válkách. V aktuálních rozhodnutích *Samsung* (rozhodnutí AT.39939) a *Motorola* (rozhodnutí AT.39985) vydaných Komisí dne 29. 4. 2014 bylo Samsungu i Motorole zamezeno podávat návrhy a vymáhat soudní příkazy na základě jejich PST proti Applu a bylo konstatováno zneužití dominantního postavení. Komise dovodila, že v přítomnosti výjimečných okolností – standardizace a závazků poskytovat licenci za FRAND podmínek – bylo podávání návrhů a vymáhání soudních příkazů proti připravenému nabyvateli licence v rozporu s čl. 102 SFEU.

Nejaktuálněji probíhá u Soudního dvoru řízení o předběžné otázce ve věci *Huawei v ZTE* (Případ C-170/13) předložené německým Oblastním soudem v Düsseldorfu. Německý soud se v zásadě Soudního dvora táže, za jakých okolností je podávání návrhu a vymáhání soudního příkazu na základě PST zneužitím dominantního postavení. Zejména jde o stanovení, za jakých okolností může být potenciální nabyvatel licence být považován za „připraveného“ k uzavření licence za FRAND podmínek – zda postačí pouhá ústní deklarace jeho připravenosti, či zda je třeba z jeho strany učinit další kroky. Ve věci v zásadě proti sobě stojí stanovisko Komise ve věci *Samsung a Motorola* a německý precedens aplikovatelný na případy porušení FRAND podmínek, tzv. *Orange-Book Standard*. V uvedené věci předložil dne 20. 11. 2014 Generální advokát Melchior Wathelet své stanovisko. Následný rozsudek Soudního dvora bude mít nepochybně zcela zásadní dopad na další vývoj v oblasti licencování PST.

Vzhledem k výše uvedené diskusi vztahující se k vykořisťovatelským a vylučovacím praktikám lze konstatovat, že podávání návrhů na vydání a vymáhání soudních příkazů na základě PST má jistě charakteristiky obou uvedených forem zneužití dominantního postavení. Nicméně, vylučovací charakter převládá a vykořisťování je pouhým důsledkem možného vyloučení z trhu. Tato skutečnost je důležitá především pro to, zda lze aplikovat Pokyny k čl. 102 SFEU, které se na vykořisťovatelské praktiky jako takové nevztahují.

V následujících částech této práce jsou v širokém kontextu diskutovány otázky spojené s výše uvedenými rozhodnutími Komise *Samsung a Motorola* a očekávaným

rozsudek Soudního dvora ve věci *Huawei v. ZTE*. Zohledněny jsou otázky patentových portfolií v odvětvích užívajících PST, potenciální tržní síla PST a konečně samotné zneužití dominantního postavení prostřednictvím soudních opatření na základě PST a způsoby licencování PST.

### **3. Patentová portfolia a povaha patentů na standardizované technologie**

Je třeba zdůraznit, že odvětví, která užívají PST, jsou charakterizována komplexními vztahy a značným množstvím patentů, které se vzájemně doplňují, překrývají a podobně. V tomto smyslu teorie hovoří o tzv. „patentové zhměti“ (angl. *patent thicket*). Důležitou roli hrají nejen patenty, které jsou technicky nezbytné k užití určitého standardu, ale též ekonomicky nezbytné patenty, tj. takové, které jsou vyžadovány spotřebiteli, ačkoliv nepřísluší k žádnému formálnímu technickému standardu.

V rámci procesu standardizace členové standardizačních organizací deklarují, že jsou jejich patenty nezbytné pro určitý standard. Poté, co je určitý standard ustanoven, se, jak bylo uvedeno výše, se takové patenty stávají pro standard nezbytnými (PST). Je však třeba podotknout, že standardizační organizace nikterak nekontrolují, zda jsou deklarované patenty skutečně technicky nezbytné (nepostradatelné) k vytvoření určitého standardu. Z tohoto důvodu pak dochází k situaci, kdy členové standardizačních organizací deklarují velké množství svých patentů jako nezbytné a jednotlivý standard obsahuje i tisíce patentů, z nichž mnoho by tam však dle přísných technických kritérií nepatřilo. Nabyvatelé licencí k PST pak mají možnost zpochybnit nezbytnost patentu ve vztahu určitému standardu před soudy.

Je třeba poukázat na skutečnost, že ve vztahu k nezbytnosti patentů postupují standardizační organizace značně formalisticky. Za nezbytné pro určitý standard považují jen ty patenty, které byly deklarovány (dle tvrzení jejich držitelů) jako technicky nezbytné pro vytvoření standardu. Skutečnost, že určitý standard se může stát *de facto* ekonomicky nezbytným, je zde zcela opomenuta (ačkoliv v průběhu stanovování politik SO byla diskuse vedena i tímto směrem). Je navrhováno, že by *de*

*lege ferenda* mělo být na technicky a ekonomicky nezbytné patenty v rámci standardizačních organizací nahlíženo stejným způsobem.

Kromě zpochybnění nezbytnosti je v rámci licenčních vyjednávání zpochybňovat platnost licencovaných patentů. V rozhodnutí *Motorola* nicméně Komise dospěla k závěru, že praktika, kdy je smluvně ujednán zákaz takového zpochybnování, je v kontextu PST zásadně v rozporu s čl. 102 SFEU. Tento závěr a skutečnost, že nabyvatelé licencí mohou zpochybnit platnost i nezbytnost patentů může do určité míry vyřešit přespřílišnou deklaraci patentů pro určité standardy.

V rámci odvětví s PST jsou patenty licencovány na individuální bázi pouze velmi zřídka. Naproti tomu, běžnou obchodní praktikou je vzájemné poskytnutí si licence dvěma držiteli patentů (ať už ekonomicky nebo technicky nezbytných ke standardu, jakož i jiných), tzv. křížové licence (angl. *cross-license*), popřípadě licencování patentů prostřednictvím tzv. patent pools. Soutěžní právo EU nicméně se dvěma těmito licenčními praktikami z hlediska technicky a ekonomicky nezbytných patentů nakládá rozdílně.

V případě patent pools Komise zastává stanovisko, že pouhá deklarace, že je patent nezbytný ke standardu, není sama o sobě postačující. Klíčovým faktorem je naopak to, zda patent skutečně je ke standardu nezbytný. V rámci tohoto přístupu se dostává stejné pozornosti jak technicky, tak ekonomicky nezbytným patentům s tím, že nezbytnost je určena nezávislým expertem. Patent pools jsou nicméně v odvětvích, kde jsou užívány PST, rozšířené jen málo. Tento jev lze vysvětlit tím, že vzhledem k rozdílným zájmům jednotlivých členů standardizačních organizací a potenciálnímu nebezpečí, které hrozí z hlediska soutěžního práva v případě konstatování (ekonomické) nezbytnosti patentu pro určitý standard, držitelé ekonomicky nezbytných patentů raději preferují vzájemné licence, které takovému hodnocení nezbytnosti nepodléhají.

Současný režim soutěžního práva EU totiž ve vztahu ke křížovým licencím nikterak nereflexuje podobnost technicky a ekonomicky nezbytných patentů. V případě, kdy by byly licencovány společně dva patenty, jen technicky a druhý ekonomicky nezbytný, by dokonce mohlo být konstatováno zneužití dominantního postavení dle čl. 102 SFEU. V souvislosti s křížovými licencemi se Komise v rozhodnutí *Motorola* přiklonila k závěru, že není legitimním cílem požadovat za PST

protiplnění po jiném držiteli v podobě křížové licence, a to navzdory skutečnosti, že jde o běžnou obchodní praxi v mnoha odvětvích.

V celkovém kontextu lze pozorovat určitou nerovnováhu v oprávněních, které mají držitelé PST a nabyvatelé licencí. Zejména v případech, kdy nabyvatelé licencí drží ekonomicky nezbytné patenty, které mají v úmyslu licencovat výměnou za PST a které nejsou obtěžkány žádnými závazky jako FRAND, jim tyto patenty poskytují velký prostor pro vyjednávání výhodných podmínek. Je proto třeba uvažovat o vyrovnání této disproporce tak, že bude s technicky a ekonomicky nezbytnými patenty zacházeno stejným způsobem, ať už ze strany standardizačních organizací, anebo ze strany soutěžního práva EU a jeho aplikační praxe.

#### **4. Patenty na standardizované technologie a tržní síla**

Jak pro účely čl. 102 SFEU, tak i pro čl. 101 SFEU je zásadní definice relevantního trhu. Následně je totiž možné na takovém trhu určit postavení jednotlivých soutěžitelů a případně učinit další kroky ke konstatování protisoutěžní povahy chování soutěžitelů s významnou tržní silou. Vzhledem ke skutečnosti, že PST jsou užívány na trzích téměř v globálním měřítku, geografický aspekt relevantního trhu není v této práci blíže analyzován. Nicméně je zohledněn produktový aspekt relevantního trhu s PST, tedy trh technologií, a otázka, zda držení PST automaticky implikuje, že jejich držitelé mají významnou tržní sílu či přímo dominantní postavení dosahující až monopolu.

Z rozhodovací praxe evropských soudů není možné dovodit žádný univerzální závěr, jak definovat relevantní trh ohledně PDV. Nicméně je možné obecně říci, že evropské soudy, stejně jako Komise, mají tendenci definovat relevantní trhy PDV spíše úzce, než zohledňovat komplexní vazby jednotlivých minoritních PDV v širším měřítku. Na takto definovaných trzích je pak snadnější konstatovat, že držitelé PDV jsou dominantními soutěžiteli.

V tomto ohledu je zásadní otázkou, zda existuje relevantní substitut pro PDV. Pakliže takový substitut, který by mohl nahradit příslušné PDV, neexistuje, lze snadno dojít k závěru, že držitel PDV drží *de facto* monopolní postavení na relevantním trhu. Nicméně, v této souvislosti je třeba zohlednit nejen samotnou (ne)existenci substitutů, ale rovněž i další omezující okolnosti, které i v případech nenahraditelnosti PDV



poskytují protiváhu jinak existujícímu monopolu. Tyto faktory mohou způsobit, že postavení soutěžitele na trhu, které by jinak mohlo být postavením dominantním ve smyslu čl. 102 SFEU, není možné dovodit. Mezi tyto faktory se řadí nejen pozice (údajně) dominantního soutěžitele, ale i pozice jeho zákazníků, jakož i ostatních soutěžitelů spolu s jejich vyjednávací silou. Je třeba podotknout, že ve vztahu k trhům technologií již v současné době není příliš relevantní hodnocení tržní síly dle podílu na trhu; i velký podíl na trhu technologií nemusí nutně implikovat tržní sílu.

S ohledem na uvedené předpoklady Komise uvádí, že tržní síla ve vztahu k PST musí být hodnocena na individuální bázi a neexistuje žádný automatický předpoklad, že PST poskytují jejich držitelům monopolní postavení. V kontrastu s tímto stanoviskem je však rozhodnutí Komise ve věci fúze *Google/Motorola Mobility* (rozhodnutí COMP/M.6381), kde Komise obecně dovodila, že pro PST neexistují žádné relevantní substituty a z toho důvodu jsou jejich držitelé monopolisté. Tento vcelku překvapivý závěr nikterak nezohledňuje žádné z případných tržních omezení, které by svou protivahou mohly jinak přítomnou tržní sílu vyvážit.

Tento závěr je Komisí dále rozvinut v již výše zmíněných rozhodnutích *Samsung* a *Motorola*. V těchto rozhodnutích dospěla Komise na jedné straně k závěru, že k příslušným PST nejsou k dispozici žádné substituty po poněkud zralejší úvaze, nicméně rovněž konstatovala existenci tržní síly. V této souvislosti je však důležité zohlednit rovněž argumenty dominantní Motoroly, která tvrdila, že nemohla být v dominantním postavení a zneužívat svou tržní sílu vůči Applu proto, že Apple měl v držení rozsáhlé patentové portfolio obsahující komerčně nezbytné patenty, které vyvažovaly pozici Motoroly při vyjednávání. Nadto je třeba poznamenat, že i sám Apple významnost svého patentového portfolio přiznal.

Komise tyto argumenty však odmítla s odůvodněním, že Motorola i přes všechny tyto skutečnosti a navzdory souhlasnému postoji Applu ohledně síly jeho patentového portfolio podala návrh a vymáhala soudní příkaz na základě svých PST proti Applu, což je důkazem toho, že mohla ve vyjednáváních jednat samostatně a dosáhnout licenčních podmínek nevýhodných pro Apple.

Výše uvedené má zásadní dopady na držitele PST. Tito nejen že jsou již omezeni svými FRAND závazky, ale v důsledku výše uvedeného rovněž i omezení stanovenými v čl. 102 SFEU. Přestože Komise obecně stanovuje, že PST neimplikují

tržní sílu, ve své rozhodovací praxi v zásadě univerzálně dovozuje, že PST poskytují jejím držitelům monopolní postavení, které nemůže být vyváženo žádnou myslitelnou protivahou.

V řízení o předběžné otázce *Huawei v. ZTE* Generální advokát Wathelet podotýká, že plošné konstatování, že PST automaticky implikují dominantní postavení, je příliš závažné na to, aby nebylo obecně rozporováno. Naopak, všechny jednotlivé případy musejí být posuzovány samostatně, na základě výše uvedených hledisek. Nicméně obecně lze říci, že se jeví spíše jako nepravděpodobné, že by Soudní dvůr rozsáhle pojednal o otázce tržní síly a PST; spíše je zde předpoklad, že se bude soustředit na samotné zneužití dominantního postavení prostřednictvím soudních příkazů a postup k licencování PST.

## **5. Soudní opatření v případech porušení patentů na standardizované technologie**

Vzhledem ke skutečnosti, že Komise v rozhodnutích *Samsung* a *Motorola* konstatovala, že oba soutěžitelé drželi dominantní na svých úzce specifikovaných trzích PST, byla schopna dále posuzovat jejich praktiky a konstatovat zneužití dominantního postavení prostřednictvím podávání návrhů a vymáhání soudních příkazů proti potenciálním nabyvatelům licencí k PST, kteří však příslušné PST užívají bez licence a tím porušují práva k takovým patentům.

V této souvislosti vyvstávají v zásadě dvě otázky. Nejprve je třeba diskutovat, na základě jakého postupu je možné dovodit zneužití dominantního postavení. Dále se pak nabízí otázka možná ještě většího významu, a to, jak by v případě, že soudní příkazy jsou ve vztahu k PST nepřijatelné, měly být případy porušení práv k PST řešeny.

Ohledně první zmíněné otázky je třeba podotknout následující. Ačkoliv jsou k dispozici dvě zmíněná rozhodnutí Komise, postup, na základě něhož by bylo možné dovodit zneužití dominantního postavení, je předmětem rozsáhlé diskuse. Jednak jsou k dispozici vzájemně si konkurující přístupy v judikatuře evropských soudů, dále je pak možné, že uvedené praktiky představují zneužití dominantního postavení *sui generis*.

Rovněž je třeba též zohlednit základní práva držitelů PST, zejména právo k přístupu k soudu, právo na vlastnictví a svobodu podnikání dle Charty základních

práv EU. Vzhledem ke skutečnosti, že základní predispozice pro omezení některého ze základních práv, tj. že omezení musí být stanoveno zákonem, je v zásadě naplněna prostřednictvím čl. 102 SFEU, se zásadní diskuse soustřeďuje především na balancování jednotlivých základních práv proti čl. 102 SFEU za použití principu proporcionality. V tomto ohledu je v rámci soutěžního práva EU k dispozici poměrně bohatá judikatura.

Zaprvé, existuje judikatura vztahující se na zneužití dominantního postavení prostřednictvím litigace. Rozsudky Tribunálu *ITT Promedia* (Věc T-111/96) a následně *Protégé International* (Věc T-119/09) ustanovují „zcela výjimečné okolnosti“, které v těchto případech zakládají zneužití dominantního postavení. Pravidla, která Tribunál v uvedených rozsudcích stanovuje, jsou přísného rázu a právo přístupu k soudu chrání velmi efektivně.

Zadruhé je pak k dispozici judikatura týkající se odmítnutí poskytnutí licence, které představuje zneužití dominantního postavení. V rozsudcích *Magill* (Věc C-241-242/91 P), *Oscar Bronner* (Věc C-7/97) a *IMS Health* (Věc C-418/01) definoval Soudní dvůr „výjimečné okolnosti“, za nichž odmítnutí poskytnutí licence představuje zneužití dominantního postavení. Uvedené podmínky byly dále potvrzeny, avšak rovněž poměrně kontroverzně rozšířeny Soudem první instance ve věci *Microsoft I* (Věc T-201/04), nicméně rozsudkem *Microsoft II* (Věc T-167/08) se Tribunál navrátil zpět ke klasickému pojetí dle výše uvedených rozsudků Soudního dvora.

Ve svých rozhodnutích Komise v zásadě odmítá aplikovat judikaturu ohledně zneužití dominantního postavení prostřednictvím litigace. Na druhé straně zmiňuje rozhodovací praxi související s odmítnutím poskytnutí licence, ale dovozuje, že výčet „výjimečných okolností“ jí stanovených není konečný. Tudíž aplikuje své vlastní, nové „výjimečné okolnosti“, a to (i) standardizaci, a (ii) FRAND licenční podmínky. Za těchto okolností je vymáhání soudních příkazů na základě PST proti připraveným nabyvatelům licence porušením čl. 102 SFEU. Lze však namítat, že uvedené okolnosti nejsou nikterak výjimečné, naopak automaticky zahrnují celá odvětví, ve kterých se PST užívají. V této diplomové práci je proto rozvinuta diskuse ohledně možného použití judikatury k odmítnutí poskytnutí licence a případné úpravy této judikatury, které by umožnily nápravu současného spíše neuspokojivého stavu.

K odpovědi na druhou výše nastíněnou otázku je třeba zohlednit rozdíly mezi německým *Orange-Book Standardem*, který je zásadně ve prospěch držitelů PST a na

jehož základě je velmi složité pro potenciální nabyvatele licencí kvalifikovat se jako připravení. Na druhé straně stojí přístup Komise, dle něž nabyvatelům licence postačí deklarovat svou ochotu, aby byly FRAND podmínky určeny třetí stranou (soudem, arbitrážním tribunálem) a jsou pod ochranou Komise a čl. 102 SFEU. Generální advokát se v této věci pokouší najít kompromis, nicméně, dle názoru uvedené v této práci, vnáší do celé problematiky spíše mnoho dalších nejasností, které mohou potenciálně vyústit ve velké množství návazných sporů.

Konečně pak samotný postup, který by se mohl potenciálně uplatnit k vyřešení případů porušení PST, je rovněž naznačen ve třech uvedených zdrojích – rozhodnutích Komise, *Orange-Book Standardu* a stanovisku Generálního advokáta rozdílně. Zatímco dle německého precedentu je přístup k PST velmi ztížen, Generální advokát naznačuje postup, který, jak již bylo naznačeno výše, má potenciál způsobit značné množství nejistoty a navíc neúměrně zatěžuje držitele PST.

Postup, který by mohl napomoci vyrovnat současný nevyvážený stav, je k nalezení v závazcích poskytnutých Samsungem v řízení před Komisí. Tento postup vyžaduje, aby držitel PST namísto soudního opatření vyzval potenciálního nabyvatele licence k jednání, která následně probíhají dle vymezených pravidel. Pokud nedojde ke shodě, je možné nechat stanovit FRAND podmínky soudem nebo prostřednictvím arbitráže. Je však možné říci, že za podmínek nastavených příslušnými závazky je pravděpodobné, že se strany shodnou na oboustranně přípustných podmínkách. Nicméně skutečnost, že FRAND podmínky budou i při použití tohoto postupu stanovovány soudem nelze vyloučit. Je proto poněkud nešťastné, že konečným výsledkem vyjednávání FRAND podmínek má být jejich stanovování soudy, které k tomu nemají potřebnou odbornost.

## **Závěr**

Otázkou nastíněnou v úvodu v zásadě bylo, jaké dopady má současné soutěžní právo EU na držitele PST. V kapitole první byly nastíněny základní ekonomické dopady technických standardů, zejména skutečnost, že užití standardu je mnohdy nevyhnutelným předpokladem pro vstup na určitý trh. Kapitola druhá demonstrovala složitosti, se kterými se potýká soutěžní právo EU v případě, že je úmyslem podchytit

čistě vykořisťovatelské praktiky držitelů PST a poukázalo na skutečnost, že v současnosti je pozornost věnována spíše vylučovacím praktikám dominantních soutěžitelů.

Kapitola třetí následně nastínila obtíže, které vyvěrají z formalistického pojetí PST jak ze strany standardizačních organizací, tak i ze strany soutěžního práva EU. Na jedné straně je zde příliš rozsáhlé množství PST, které ve skutečnosti nejsou nezbytné pro standard, a na straně druhé zde mohou být ekonomicky nezbytné patenty, jejichž užívání není nikterak limitováno. V závěru kapitoly třetí je učiněn předpoklad, že současný stav je značně nevyvážený, když na jedné straně soutěžní právo EU odebírá držitelům PST mnohé z jejich oprávnění, a navíc na ně vytváří tlak poskytnutím širších oprávnění potenciálním nabyvatelům licencí.

Tento předpoklad je do značné míry potvrzen v kapitole 4, kde je dovozeno, že se držitel PST v momentně, kdy se jeho patent stane PST, stává takřka automaticky dominantním soutěžitelem ve smyslu čl. 102 SFEU.

V kapitole páté je dále učiněn závěr, že na základě čl. 102 SFEU Komise považuje kontext standardizace a FRAND za okolnosti, které ospravedlňují uložení povinnosti držitelům PST je licencovat téměř bez nároku na ovlivnění výsledku licenčních vyjednávání.

Krátkodobá řešení současného stavu jsou nastíněna napříč touto prací, např. užší definice relevantního trhu ve vztazích mezi silnými držiteli PDV navzájem, upravení postupu pro konstatování zneužití dominantního postavení, upravení postupu vyjednávání licencí a podobně.

Nicméně dlouhodobé řešení je třeba vidět v následujícím. Zaprvé, může být explicitně stanoveno, že PST ve skutečnosti nejsou patenty a bude jasně stanoveno, jaká oprávnění jsou s nimi spojena, a zároveň bude řečeno, že ekonomicky nezbytné patenty jsou vyňaty z působnosti soutěžního práva EU. Zadruhé, na technicky a ekonomicky nezbytné patenty bude nahlíženo stejným způsobem, s ohledem na ekonomické dopady jejich existence, ideálně již v rámci interních pravidel standardizačních organizací či v rámci soutěžního práva EU. Osobně se přikláním ke druhému nastíněnému řešení.

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## ABSTRACT

Technologies that implement particular standards securing compatibility and interoperability govern our everyday lives. Given that on the one hand technical standards should be accessible to the largest possible extent and on the other hand intellectual property right (IPR) holders may restrict such access, a number of legal issues arise. This thesis primarily focuses on technical standards governed by standard-setting organizations and consequences of the inclusion of intellectual property rights (IPRs) in such standards for their proprietors from the EU competition law perspective. In this regard, the method adopted in this thesis firstly explores the underlying theoretical notions, then focuses on the current EU competition law position *de lege lata* and discusses possible adjustments thereof *de lege ferenda*. In the first chapter, technical standards are discussed along with their economic effects, particularly, compatibility, interoperability and network effects. Second chapter lays down the basic matters of interplay between technical standards, IPRs and EU competition law, namely standard-essential patents (SEPs) and fair, reasonable and non-discriminatory (FRAND) licensing terms. Current EU competition law issues are consequently outlined (patent ambush, hold-up) with emphasis on Commission's decisions *Samsung* and *Motorola* and Court of Justice's pending judgement in *Huawei v. ZTE*. Chapter three compares the treatment of technically and commercially essential patents, explores common licensing practises (patent pools, cross-licenses) and depicts current imbalances in SEP-related industries. Chapter four focuses on whether SEPs imply dominant position of their holders and comes to a conclusion that under current approach SEP holders are automatically dominant undertakings. Chapter five discusses the legal tests available in order to find abuse of dominant position by seeking and enforcement of injunctions by SEP holders and examines possible ways in which SEPs could be licensed in the future. Conclusion summarizes the observations and suggestions made in previous chapters and offers potential solutions of current issues.

## ABSTRAKT

Technologie užívající určité standardy zajišťující kompatibilitu a interoperabilitu prostupují naše životy. Za předpokladu, že standardy by měly být na jednu stranu pokud možno co nepřístupnější a držitelé práv duševních vlastnictví (PDV) mohou na druhou stranu takovému přístupu zamezit, vyvstává velké množství právních otázek. Tato diplomová práce se primárně zaměřuje na technické standardy ovládané standardizačními organizacemi a na důsledky zahrnutí PDV do určitého technického standardu přijatého standardizační organizací pro držitele takových PDV z pohledu soutěžního práva EU. Metoda použitá v této práci se nejprve zaměřuje příslušné teoretické koncepty, poté zkoumá aktuální postoj soutěžního práva EU *de lege lata* a diskutuje o možných úpravách takového stavu *de lege ferenda*. V první kapitole je pojednáno o technických standardech, jakož i o jejich ekonomických dopadech, zejména kompatibilitě, interoperabilitě a síťových efektech. Druhá kapitola nastiňuje základní otázky týkající se průsečíku mezi technickými standardy, PDV a soutěžním právem EU, zejména patenty na standardizované technologie stanovené standardizační organizací (PST) a přiměřené, rozumné a nediskriminační (z angl. *fair, reasonable and non-discriminatory*) (FRAND) licenční podmínky. Dále jsou nastíněny současné otázky soutěžního práva EU (patentová past, zablokování) s důrazem na rozhodnutí Komise ve věci *Samsung a Motorola* a očekávaný rozsudek Soudního dvora ve věci *Huawei v. ZTE*. Kapitola třetí porovnává nakládání s technicky a ekonomicky nezbytnými patenty, zkoumá běžné licenční praktiky (patent pools, křížové licence) a názorně demonstruje současnou nerovnováhu v odvětvích s PST. Kapitola čtvrtá se zaměřuje na otázku, zda PST implikují dominantní postavení jejich držitelů a dochází k závěru, že v současnosti jsou držitelé PST automaticky dominantními soutěžiteli. Kapitola pátá se zabývá dostupnými metodami, na jejichž podkladě lze dospět ke konstatování zneužití dominantního postavení prostřednictvím podávání návrhů a vymáhání soudních příkazů ze strany držitelů PST a dále pak prozkoumává možné způsoby licencování PST v budoucnu. Závěr shrnuje postřehy a doporučení z předchozích kapitol a nabízí potenciální řešení současných otázek.

## **NÁZEV PRÁCE A KLÍČOVÁ SLOVA / TITLE AND KEY WORDS**

### **Název práce v českém jazyce:**

Standardizované technologie z pohledu soutěžního práva EU

### **Klíčová slova:**

standard

patent

FRAND

### **Title in English:**

Standardised Technologies from the EU Competition Law Perspective

### **Key Words:**

standard

patent

FRAND