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## Competition, Standards, and Patents

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## I. INTRODUCTION

The interface of competition, standards, and patents has received increased attention over the past few years, in particular in the information, communication, and technologies (“ICT”) sector. With regard to the mobile devices sector, some even refer to an on-going “patent war”<sup>2</sup> in reference to the extensive global patent litigation between technology and software companies such as Apple, Google, Samsung, Microsoft, Nokia, Motorola, HTC, and others.

Antitrust authorities have recently signaled increased vigilance about the strategic use of patents. When clearing the Google/Motorola merger in February 2012, Vice-President Almunia stated, “the Commission will continue to keep a close eye on the behaviour of all market players in the sector, particularly the increasingly strategic use of patents.”<sup>3</sup>

In January 2012 the European Commission opened a formal antitrust investigation against Samsung Electronics to assess whether it may have abusively used certain of its essential patent rights to distort competition in the field of mobile devices in Europe.<sup>4</sup> In April 2012, the Commission opened two further formal proceedings against Motorola Mobility to assess whether Motorola may have abusively used certain of its standard essential patents related to mobile, wireless, and video compression standards to distort competition.<sup>5</sup> These proceedings are on-going.

The purpose of this paper is to briefly outline some of the issues raised by the use of standards and patents from an EU competition law perspective, and discuss what lessons market participants and regulators might draw from ongoing disputes.

## II. STANDARDS AND PATENTS

Standardization is a voluntary process among stakeholders for developing technical specifications.

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<sup>2</sup> See e.g. <http://www.pcmag.com/article2/0,2817,2399098,00.asp> or Google's blog. <http://googleblog.blogspot.be/2011/08/when-patents-attack-android.html>.

<sup>3</sup> See press release at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/129>. The U.S. Department of Justice expressed similar concerns, see <http://www.justice.gov/opa/pr/2012/February/12-at-210.html>.

<sup>4</sup> See press release at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/89>.

<sup>5</sup> See press release at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/345>. It should be noted that the opening of proceedings simply means that the Commission will examine the cases as a matter of priority. It does not prejudice the outcome of the investigations.

Standards play an increasingly important role in an ever more connected and networked economy,<sup>6</sup> and may give rise to significant efficiency gains in terms of facilitating market integration within the European Union through improved connectivity and interoperability between products. This, in turn, may lead to increased consumer choice, decreasing prices, and follow-on innovation.

Standards can appear or evolve as a result of market outcome (through competition or developed unilaterally by what may be or become a dominant company), or can be agreed between companies in formal or informal settings.

In the mobile phone sector, market participants work collectively through standard setting organization (“SSOs”) to develop technical standards that establish precise specifications for essential components of the technology in question. One example of a formal European standards organization is the European Telecommunications Standards Institute (“ETSI”).<sup>7</sup> More informal processes are applied regarding internet-related standards set in fora such as the World Wide Web Consortium (“W3C”).<sup>8</sup>

Many standards include technologies that are covered by intellectual property rights (“IPRs”).

A recent study of eleven of the most important SSOs revealed that approximately 250 distinct standards included technologies that are covered by one or more declared IPRs—patents being the most relevant type of IPR in this context—and many of these standards are successful and widely employed.<sup>9</sup>

There has been a steep increase in patent applications and patents in recent years, and studies have pointed to the increased importance of *strategic* patenting activities, where patents are used as bargaining chips or as blocking patents.<sup>10</sup> There is also a rise in the strategic *value* of patents, illustrated by the significant valuations in recent acquisitions of patent portfolios, such as CPTN Holdings' \$450 million purchase of 800 Novell patents,<sup>11</sup> the \$4.5 billion acquisition by Rockstar Consortium<sup>12</sup> of 4,000 patents previously owned by Nortel Networks, as well as

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<sup>6</sup> An empirical study identified 251 technical interoperability standards implemented in a modern laptop computer. See Brad Biddle, Andrew White, & Sean Woods, *How Many Standards in a Laptop? (And Other Empirical Questions)* (September 10, 2010). Available at SSRN: <http://ssrn.com/abstract=1619440> or <http://dx.doi.org/10.2139/ssrn.1619440>.

<sup>7</sup> See <http://www.etsi.org>. The other two ESOs are CEN (European Committee for Standardisation) and CENELEC (European Committee for Electrotechnical Standardisation), see further [http://ec.europa.eu/enterprise/policies/european-standards/documents/index\\_en.htm](http://ec.europa.eu/enterprise/policies/european-standards/documents/index_en.htm).

<sup>8</sup> See <http://www.w3.org/>.

<sup>9</sup> See Study on the Interplay between Standards and Intellectual Property Rights (IPR) of April 2011, at [http://ec.europa.eu/enterprise/policies/european-standards/standardisation-policy/policy-activities/intellectual-property-rights/index\\_en.htm](http://ec.europa.eu/enterprise/policies/european-standards/standardisation-policy/policy-activities/intellectual-property-rights/index_en.htm).

<sup>10</sup> See e.g. the OECD study on Competition, Patents and Innovation of June 2009, <http://www.oecd.org/daf/competition/45019987.pdf>. See also the study, *The strategic use of patents and its implications for enterprise and competition policies of July 2007*, commissioned by DG ENTR, <http://www.en.inno-tec.bwl.uni-muenchen.de/research/proj/laufendprojekte/patents/stratpat2007.pdf>.

<sup>11</sup> CPTN Holdings LLC was a consortium of technology companies including Microsoft, Apple, EMC, and Oracle.

<sup>12</sup> The consortium was a partnership between Apple, Microsoft, Research in Motion, and Sony.

Google's acquisition of Motorola Mobility for \$12.5 billion (with a patent portfolio of some 17,000 patents).

### III. STANDARDS AND MARKET POWER

Under certain circumstances, standardization can confer on a particular technology a degree of market power that it would otherwise not have had. Whether this is the case may depend on a number of factors, such as whether *ex ante* there were alternatives as regards the technology to be included in the standard, the importance of the standard in the market, and whether companies are "locked in" as regards the use of the standard and the technology in question.<sup>13</sup>

Once a patent reads on a technology that is included in the mandatory part of a standard, the patent becomes *essential* to the implementation of that standard, thus the term "standard essential patent" ("SEP").<sup>14</sup> Once companies implement the standard and make complementary investments, abandoning the standard can be very costly. Thus, after the standard is set, the SEP holder could seek to extract a higher payment than was attributable to the value of the patented technology before the standard was set. Such behavior may distort innovation and raise prices to consumers.

This potential "hold up" problem is well known, which is why standards organizations generally require both prior disclosure of potentially essential IPRs, and a commitment to license those IPRs on fair reasonable and non-discriminatory—FRAND—terms. This is echoed by the European Commission's Horizontal Guidelines<sup>15</sup> which emphasize that FRAND commitments are designed to ensure that essential IPR protected technology incorporated in a standard is accessible to the users in order to avoid *ex post* "hold-up."

However, these requirements do not necessarily end all problems. What if IPRs are not disclosed? What if one company's FRAND licensing terms is another company's exploitative abuse? If the problems only manifest themselves once the standard has been established, or even widely adopted, it may be too late to restart the standardization process, choosing another technology.

The European Commission looked into the first scenario in its *Rambus* case, which concerned an alleged patent "ambush." This case was concluded after Rambus offered commitments lowering the royalty rates in question.<sup>16</sup>

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<sup>13</sup> See C. Madero Villarejo & N. Banasevic, *Standards and Market Power*, GLOBAL COMPETITION POL'Y, 05/2008, available at <https://www.competitionpolicyinternational.com/file/view/5330>.

<sup>14</sup> Cf the *Google/Motorola* merger clearance decision of February 13, 2012, at ¶ 54, at [http://ec.europa.eu/competition/mergers/cases/decisions/m6381\\_20120213\\_20310\\_2277480\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m6381_20120213_20310_2277480_EN.pdf).

<sup>15</sup> Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements, OJ C 11 of 14 January 2011, ¶ 287.

<sup>16</sup> See press release at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1897>. See also Piesiewicz & Schellingerhout, *Intellectual property rights in standard setting from a competition law perspective*, COMPETITION POL'Y NEWSLETTER (03/2007), at [http://ec.europa.eu/competition/publications/cpn/2007\\_3\\_36.pdf](http://ec.europa.eu/competition/publications/cpn/2007_3_36.pdf).

The Horizontal Guidelines<sup>17</sup> provide that, in case of a dispute on the level of the remuneration, the assessment should be based on whether the fees bear a reasonable relationship to the economic value of the IPR. One way of determining this value could be to compare the licensing fees charged by the company in question for the relevant patents in a competitive environment before the industry has been locked into the standard (*ex ante*) with those charged after the industry has been locked in (*ex post*). However, there may be other alternative methods to establish that value.

#### IV. STANDARDS, PATENTS, AND INJUNCTIONS

A specific concern raised in the mobile devices sector is the use of injunctions to enforce standard essential patents, whereby SEP holders seek to enjoin any products implementing the standard from being sold on the market.<sup>18</sup>

Companies in this sector are frequently engaged in patent licensing discussions. However, through the use of injunctions, SEP holders can potentially make demands in these licensing negotiations that their commercial partners would not otherwise accept.

Indeed, in the Google/Motorola merger decision, the Commission pointed out that the seeking or the actual enforcement of an injunction against a good faith potential licensee might force the potential licensee to agree to higher royalties than he would have otherwise accepted or to accept onerous cross-licensing terms.<sup>19</sup>

As competition is very much based on differentiating features of the devices—such as design, speed, security, or other functionalities—if a company can be coerced into cross-licensing such differentiated patents in exchange for the right to use a SEP, this could potentially affect the incentives to innovate in the first place.<sup>20</sup>

As mentioned above, a distinguishing feature of SEPs is that they are (normally) subject to a commitment to license, and to license on FRAND terms. Hence, it has been argued that as long as a company implementing the standard in question is willing to take a license on FRAND terms, an injunction may not be justified, even if the parties disagree as to the exact *level* of FRAND.<sup>21</sup> In the absence of an agreement the exact FRAND level might finally have to be determined by a court or arbitrator. As the Commission set out in the Google/Motorola merger decision, without the possibility to have the FRAND rates proposed by the SEP holder reviewed by an independent third party (court or arbitrator) absent the threat of an injunction, FRAND

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<sup>17</sup> *Supra* note 13, ¶ 289.

<sup>18</sup> Within the EU, injunctions are sought before national Courts. The Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (OJ L 157, 30.4.2004, page 45) provides for some harmonization of national laws in this regard. In the United States, patent holders very often turn to the International Trade Commission (“ITC”), which has the power to issue so called “exclusion orders” preventing imports and sale of products infringing on a patent.

<sup>19</sup> Cf the *Google/Motorola* merger clearance decision of February 13, 2012, at ¶ 107.

<sup>20</sup> *Id.*, at ¶¶ 107 and 140.

<sup>21</sup> Cf Dolmans *Standards for Standards*, available at <http://www.ftc.gov/opp/intellect/020522dolmans.pdf>, where the author suggests that a SEP holder having publicly declared a willingness to license on FRAND terms is *estopped* from seeking an injunction, and that doing so could raise concerns under Article 101 or 102 TFEU, unless the implementer indicates that it will refuse to sign a FRAND license.

negotiations may be distorted to the detriment of potential licensees and ultimately consumers who might be faced with less choice and innovation.<sup>22</sup>

This would seem in line with the U.S. Supreme Court judgment in *eBay vs MercExchange*, which restricts recourse to injunctions by patent holders. This also resonates in Justice Kennedy's concurring opinion in that case:<sup>23</sup>

An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. For these firms, *an injunction*, and the potentially serious sanctions arising from its violation, *can be employed as a bargaining tool to charge exorbitant fees* to companies that seek to buy licenses to practice the patent. When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and *an injunction may not serve the public interest.*" (emphasis added)

The U.S. Senate Committee on the Judiciary recently organized a hearing on the "Oversight of the Impact on Competition of Exclusion Orders to Enforce Standards-Essential Patents," where both the U.S. Department of Justice and the Federal Trade Commission expressed concerns that owners of standard essential patents may obtain injunctions enabling them to hold up other firms.<sup>24</sup>

In a recent speech, Vice-President Almunia stressed the urgency of this issue and the "need to find good answers soon, because consumers cannot be held hostage to litigation. Both competition authorities and the courts should intervene to ensure that standard-essential patents are not used to block competition."<sup>25</sup>

So what are the solutions to these issues?

Ideally, market participants should resolve these issues themselves.

In this regard, some companies have made clear public statements that they will not seek to prevent or exclude rivals' products from the market based on their SEP rights.<sup>26</sup> For example, Apple stated in a letter to ETSI of November 2011 that:

A party who made a FRAND commitment to license its cellular standards essential patents or otherwise acquired assets/rights from a party who made the FRAND commitment must not seek injunctive relief on such patents. *Seeking an injunction would be a violation of the party's commitment to FRAND licensing.*" (emphasis added)

Further discussions among the members of ETSI are likely, although it remains to be seen whether a consensus can be reached on the issue of injunctive relief.

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<sup>22</sup> Cf the *Google/Motorola* merger clearance decision of 13 February 13, 2012, at ¶ 140.

<sup>23</sup> *eBay vs MercExchange*, judgment of May 15, 2006, at <http://www.supremecourt.gov/opinions/05pdf/05-130.pdf>.

<sup>24</sup> The statements of the DoJ and FTC, respectively, are available at <http://www.judiciary.senate.gov/pdf/12-7-11WaylandTestimony.pdf> and <http://www.judiciary.senate.gov/pdf/12-7-11RamirezTestimony.pdf>.

<sup>25</sup> See <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/453>.

<sup>26</sup> See references made at <http://www.justice.gov/opa/pr/2012/February/12-at-210.html>.

Some jurisdictions, but not all, allow a defendant/implementer in patent infringement proceedings to raise an "antitrust defense," claiming that an injunction based on patent infringement is unwarranted as the SEP holder would be required under competition law to grant a (compulsory) license to the implementer on FRAND terms. In Germany, such an antitrust defense is available under the so-called "Orange Book" case law,<sup>27</sup> but only if a number of conditions are fulfilled.

EU competition law may indeed impose limits on the exercise of intellectual property rights. It is constant case law that the exercise of an exclusive right by the owner of the IPR may, in exceptional circumstances, constitute an abuse of a dominant position.<sup>28</sup>

The European Court of Justice has also recognized in the case *Scarlet Extended* that IP rights are not "absolutely protected"<sup>29</sup> and that "a fair balance between the protection of the intellectual property right and the freedom to conduct a business must be struck."<sup>30</sup>

In any event, when dealing with these issues the European Commission and the Courts must take account of the specific factual circumstances of any case, including the standard-setting context.

## V. CONCLUSIONS

As has been outlined above, standards can bring great benefits to industry and consumers in terms of facilitating market integration, interoperable products, and innovation in general. However, the inclusion of patents in standards has the potential to distort competition by enabling holders of standard essential patents to use the leverage acquired as a result of the standard-setting process to hold-up an entire industry or, through the use of injunctions, seek to negotiate terms that their counterparts would otherwise not have agreed to.

Against this background, a key aspect of standard-setting is that the results are accessible on fair and reasonable terms to anyone who wishes to implement the standard. We therefore believe that it is important that market players respect FRAND commitments made in standard setting fora, thereby enabling innovation and competition on differentiating aspects of their products for the benefit of consumers.

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<sup>27</sup> German Federal Supreme Court, (KZR 39/06), *Orange Book Standard*. Judgment of 6 May 6, 2009.

<sup>28</sup> See e.g. Case T-201/04 *Microsoft v Commission*, judgment of September 17, 2007, at ¶ 331.

<sup>29</sup> Case C-70/10 *Scarlet Extended v SABAM*, judgment of November 24, 2011, not yet reported, ¶ 43.

<sup>30</sup> *Id.*, at ¶ 46.