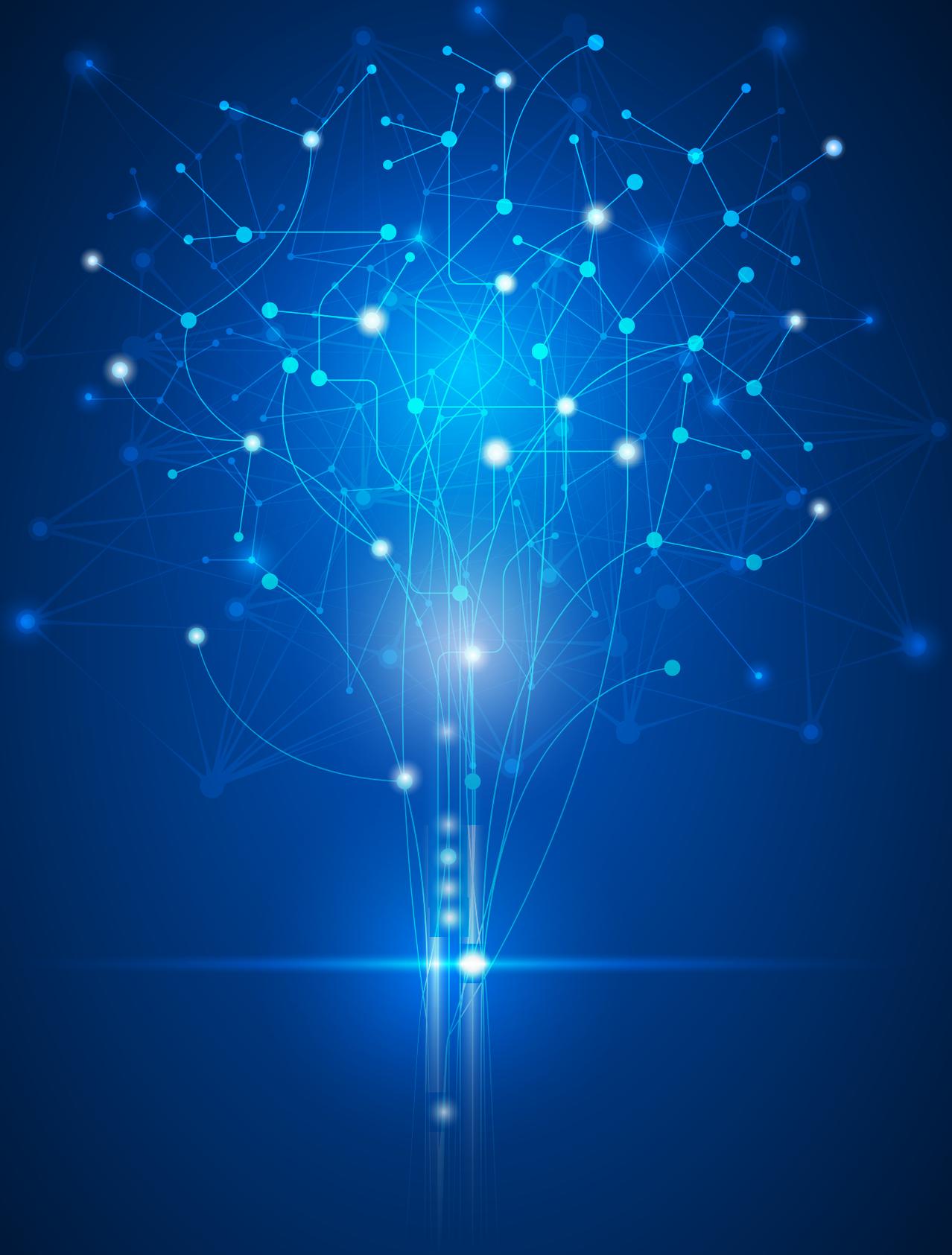


Patent hold-up and patent hold-out: evolutions in Europe and the US

By Marie Barani



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Formal or 'de jure'¹ standardization is a voluntary and collaborative process. In this process, participants contributing to standards development pull together human, financial and technical resources to have *the best consensus-driven solution with which all participants can live*² adopted as a technical standard. Standardized solutions seek to ensure interoperability between competing devices while delivering higher technical performance³. De jure standards are made available to any entity wishing to implement them⁴.

Companies submitting technical contributions in standardization take financial and technical risks in doing so. One of them is the risk that their technical contributions will not be adopted or integrated into the standard, in which case they lose those investments, often significant, made in developing the technology and in the standardization process⁵. Therefore, technical contributions to the standard may well be covered by intellectual property rights, especially patents, used to protect the investments made in technology development. Patents are exclusive rights, entitling their holders to prevent third parties from using the protected technology.⁶ However, in a standardization context, patent-holders usually commit to make their patented technology available under the Intellectual Property Rights (IPR) Policy of the relevant standardization organization, where that technology is essential to practicing the standard (known as standard essential patents or SEPs)⁷. Licensing SEPs is a way to reward the SEP owners for their financial and technical risks while enabling broad technology dissemination⁸.

¹ De jure standards are either developed inside standard-development organisations or endorsed by such organisations. De facto standards result from private initiatives and are adopted by the market. On de jure and de facto standards, cf. Pierre Larouche & Geertrui Van Overwalle, *Interoperability standards, patents and competition policy*. TILEC Discussion Paper, 2014.

² Stephen R. Walli, *Understanding Technology Standardization Efforts*, 2012, available at https://www.google.co.uk/search?q=standardization+best+technology&rlz=1C1CHBF_en-GBGB727GB727&oq=standardization+best+technology+&aqs=chrome..69i57.6979j1j4&sourceid=chrome&ie=UTF-8) i.e. a technological solution selected by consensus among standardisation participants and ensuring interoperability and high performance. See also the European Commission's Communication on *Setting out the EU approach to Standard Essential Patents*, Brussels, 29.11.2017 COM(2017) 712final : "FRAND valuation should ensure continued incentives for SEP holders to contribute their best available technology to standards" (at p. 7).

³ Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, *Setting out the EU approach to Standard Essential Patents*, COM(2017)712 final, November 29, 2017.

⁴ Cf. par. 283 and following of the Communication from the Commission, *Guidelines on the applicability of Article 101 of the Treaty of the Functioning of the European Union to horizontal co-operation agreements*, OJ, 11, January 14, 2011, p.1-72, available at <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52011XC0114%2804%29>.

⁵ Kristen Jakobsen Osega, *Ignorance Over Innovation: Why Misunderstanding Standard Setting Operations will Hinder Technological Progress*, 56 U. Louisville L.Rev. 159 (2018).

⁶ Cf. Article 28 of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement.

⁷ Rudi Bekkers & Andy Updegrave, *A Study of IPR Policies and Practices of a Representative Group of Standard Setting Organizations Worldwide*, 2013.

⁸ Kristen Jakobsen Osega, *opcit.*

However, the overlap between patents and standards has raised some concerns, in particular regarding SEPs licensing and IPR enforcement⁹. In Europe, this topic has become more acute with the Digital Single Market and the Internet of Things priorities, given that billions of devices are expected to be connected and interoperable and many parts of the industry will converge and incorporate (standardized) connectivity to enhance their products¹⁰. One GSMA study predicts that by 2025, more than 25 billion devices will be connected and that the market may generate \$1.1 trillion in revenue¹¹.

As stressed by the European Commission in November 2017:

“The evidence however suggests that the licensing and enforcement of SEPs is not seamless and may lead to conflicts. Technology users accuse SEP holders of charging excessive licensing fees based on weak patent portfolios and of using litigation threats. SEP holders claim that technology users ‘free ride’ on their innovations and consciously infringe intellectual property rights (IPR) without engaging in good faith licensing negotiations. Problems may be particularly acute when players coming from new industrial sectors who are unfamiliar with the traditional ICT business need access to standardised technologies. Disputes and delays in negotiations between technological users and holders may ultimately delay the widespread use of key standardised technologies. This can hamper the development of interconnected products in Europe, eventually affecting the competitiveness of the EU economy”¹².

As noted above, SEPs are patents that are necessarily infringed by any product or service implementing the standardized technology. They could thus, in principle enable, their holders to unfairly restrict access to the standard and development of implementing devices. To ensure access to the standard on affordable terms, while guaranteeing a fair remuneration for SEP-holders for their efforts, some standard-development organizations (SDOs) encourage their members to commit to license their SEPs under fair, reasonable and non-discriminatory terms and conditions (the FRAND commitment)¹³.

Thanks to the FRAND commitment, in particular in the cellular standardization (2G, 3G, 4G), companies that never contributed to standardization have been able to enter the cellphone market¹⁴. While 2G standardization was driven by small group of companies participating both in the

⁹ Yann Menière, *Fair, Reasonable and Non-Discriminatory (FRAND) Licensing Terms. Research Analysis of a Controversial Concept*, 2015.

¹⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Digital Single Market Strategy for Europe*, Section 4.2 Boosting competitiveness through interoperability and standardisation, p.15-16, COM (2015) 192 final, May 6, 2015; Commission Staff Working Document, *A Digital Single Market Strategy for Europe- Analysis and Evidence*, May 6, 2015, SWD(2015)100 final, p. 42; Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, *Setting out the EU approach to Standard Essential Patents*, COM(2017)712 final, November 29, 2017.

¹¹ GSMA press release, *New GSMA Study: Operators must look beyond connectivity to increase share of \$1.1 trillion IoT revenue opportunity study*, 30 May 2018, available at <https://www.gsma.com/newsroom/press-release/new-gsma-study-operators-must-look-beyond-connectivity-to-increase-share/>; and GSMA Study, *IoT: the \$1 trillion revenue opportunity*, May 2018

¹² Cf. footnote 3.

¹³ Rudi Bekkers & Andy Updegrove, *opcit.*

¹⁴ On contributors: *ABI research, Standards Leadership within the 3GPP*, 2013, available at <https://www.abiresearch.com/market-research/product/1016671-standards-leadership-within-the-3gpp/>, to

standardization process and in implementing the standard in their devices¹⁵, 3G standardization has led to significant market changes. New players with diverse business models, such as smartphones and tablets manufacturers who did not participate in standardization activities but focused on the development of end user products, or the development of services made available thanks to the standards (such as apps or online platforms), have been able to enter the market and propose a greater choice of competing devices to consumers.

This competitive changing market has come along with disputes around SEPs licensing¹⁶, highlighting the different interests at stake. Some SEP-holders may act as upstream-only companies that solely develop and market technologies (1) or as vertically integrated companies that both develop technology and commercialize products (2). Some implementers may be either vertically integrated companies developing and selling products or downstream-companies solely manufacturing products or offering services based on technology developed by others (3). For upstream-only companies, patent licensing is a source of income they want to maximize. For downstream-only companies, patent licensing involves costs they try to reduce or avoid. For vertically integrated companies, incentives are mixed: as patent-holders, licensing their own assets brings additional revenues but licensing third parties rights they need to commercialize devices represents a cost¹⁷. Therefore, disputes between companies with different interests have led to divergence on the exact extent and meaning of the FRAND commitment. Accordingly, interests and incentives are different and may conflict, at times leading to litigation, where SEP-holder seek to protect and get a reward on their contributions while implementers try to minimize costs to access to the standard and avoid exclusion¹⁸.

Implementers often accuse the SEP-holders of hold-up, i.e. to seek abusive licensing terms and conditions, including excessive royalty rates, under the threat of a court-awarded injunction prohibiting the sale of infringing products. Despite the fact that the FRAND commitment was originally set up to ensure that hold-up did not occur (i.e. committing to the availability of patented essential technologies on fair terms), proponents of the hold-up theory believe that where a SEP-holder threatens or seeks to enforce its SEPs through the request of an injunction, hold-up occurs, unless the SEP-holder agrees to the terms of the implementer¹⁹. Those in favour of the hold-up theory have sought to limit the availability of injunctive relief for infringement of SEPs. This broad approach, however, results in the significant risk of hold-out behaviours, i.e. a behavior where the implementer attempts to delay taking SEPs licenses in order to minimize or avoid the payment altogether, knowing that they face no sanction from the courts²⁰. Due to the potential impact on the

compare with SEP holders as detailed in the Fraunhofer study on *The Interplay between Patents and Standards*, 2011, Table 3-6, p.42.

¹⁵ Rudi Bekkers, Bart Verspagen, Jan Smits, *Intellectual property rights and standardization: the case of GSMA*, Telecommunications Policy 26 (2002).

¹⁶ Chrysoula Pentheroudakis, Justus A. Baron, *Licensing Terms of Standard Essential Patents. A Comprehensive analysis of Cases*, 2017.

¹⁷ See also the European Commission's *Guidelines on Horizontal Co-operation Agreements*, OJ C 11, 14.1.2011 that recognizes in its paragraph 267 the three main groups of companies with different interests.

¹⁸ Chrysoula Pentheroudakis, Justus A. Baron, *opcit.*

¹⁹ Cf. among others European Commission decisions, *Samsung-Enforcement of UMTS standard essential patents*, and *Motorola-Enforcement of GPRS standard essential patents*, April 29, 2014; N.D. Ill., *Apple Inc. and NeXT Software Inc., v. Motorola, Inc. and Motorola Mobility, Inc.*, June 22, 2012; W.D. Wash., *Microsoft Corp. v. Motorola, Inc., et al/ Motorola Mobility, Inc., et al., v. Microsoft Corporation*, April 25, 2013.

²⁰ Gregor Langus, Vilen Lipatov, Damien Never, *Standard-Essential Patents: Who Is Really Holding UP (And When)?*, *Journal of Competition Law & Economics*, 2013; Bowman Heiden & Nicolas Petit, *Patent 'Trespass'*

success of the Digital Single Market and the Internet of Things, both hold-up and hold-out theories deserve a further analysis.

Hold-up claims have in particular been scrutinized by antitrust authorities and been assessed by courts around the world; with a strong focus on the potential abusive conduct from SEP-holders²¹. This paper will focus on the US and Europe.

In the US, there has been a longstanding advocacy from the Federal Trade Commission (FTC) and the Department of Justice (DOJ) officials suggesting limits or denying injunctions on SEPs against a “willing licensee” to avoid patent hold-up, but without assessing the potential hold-out from the side of the implementer²². Two FTC’s decisions in mergers between Bosch and SPX²³ and Google and Motorola²⁴ have used this notion, but have led to dissenting opinions²⁵. Similarly, courts have denied injunctions on SEPs, based on contract and patent law band following a strict interpretation of the Supreme Court’s four factor test in *eBay* for courts to award injunctive relief in general, on the one hand, and the special nature of the FRAND commitment on the other²⁶. The revision made to the policy of a US SDO called IEEE policy in 2015 seemed to go in this direction, by limiting the enforcement means of SEP-holders in the event of dispute, including seeking injunctive relief, creating a policy that therefore favors implementers and incentivizes hold-out behaviors²⁷. However, since then the DOJ has recognized that hold-out is an even more concerning threat to antitrust law than hold-up. It stresses that a failure to offer FRAND terms should not be subject to US antitrust law, as the FRAND commitment is not a duty under antitrust but contract law²⁸.

In Europe, with the Motorola and Samsung decisions by the European Commission, the European Commission used the FTC’s notion of “willing licensee”.²⁹ It considered that threatening or seeking

and the Royalty Gap: Exploring the Nature and Impact of Patent Holdout, 2017; Vincent Angwenyi & Marie Barani, Smokescreen Strategies: What Lies Behind the Hold-up Argument?, *GRUR* 3/2018, p.204-216; Marie Barani, From Patent Hold-Up to Patent Hold-Out, *Corporate and global standardization initiatives in contemporary society*, 2018.

²¹ Kristen Jakobsen Osega, *opcit.*

²² Renata Hesse, Six “Small Proposals for SSOs Before Lunch, October 10, 2012; DOJ & USPTO, Policy Statement on Remedies for Standard-Essential Patents Subject to Voluntary FRAND Commitment, January 8, 2013.

²³ Statement of the Federal Trade Commission, *In the Matter of Robert Bosch GmbH*, FTC File No. 121-0081, April 24, 2013, available at

<https://www.ftc.gov/sites/default/files/documents/cases/2013/04/121126boschcommissionstatement.pdf>

²⁴ Statement of the Federal Trade Commission, *In the Matter of Google Inc*, FTC File No. 121-0120, January 3, 2013, available at https://www.ftc.gov/sites/default/files/documents/public_statements/statement-commission-regarding-consent-agreement-google/motorola/130103brillgooglemotorola-sep-stmt.pdf

²⁵ Dissenting Statement of Commissioner Maureen K. Ohlhausen, *In the Matter of Robert Bosch GmbH*, FTC File No. 121-0081, April 24, 2013, available at

<https://www.ftc.gov/sites/default/files/documents/cases/2013/04/121126boschohlhausenstatement.pdf> ;

and *In the Matter of Motorola Mobility LL and Google Inc*, FTC File No. 121-0120, January 3, 2013;

²⁶ See Kirti Gupta & Mark Snyder, *Smart Phone Litigation and Standard Essential Patents*, Hoover IP² Working Paper Series No. 14006, May 16, 2014, available at

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2492331.

²⁷ IEEE, IEEE Statement Regarding Updating of its Standards-Related Patent Policy, 8 February 2015.

²⁸ Cf. Speech from the Assistant Attorney General, Makan Delrahim, Assistant Attorney General Makan Delrahim Delivers Remarks at IAM’s Patent Licensing Conference in San Francisco, San Francisco, California, 18 September 2018. Cf. speech of Markan Delrahim.

²⁹ European Commission, *Antitrust Procedure, Case AT-39939-Samsung-Enforcement of UMTS Standard Essential Patents and Antitrust Procedure, Case AT-39985-Motorola-Enforcement of GPRS Standard Essential Patents*, April 29, 2014.

an injunction against such a “willing licensee” would be an antitrust abuse. However, like the FTC, the European Commission did not set out criteria to determine what ‘willingness’ entailed. Some studies and dissenting opinions in lawsuits have underlined that the use of such an unspecified notion of “willing licensee” is too vague³⁰ and may in fact have concealed or encourage a hold-out strategy from companies merely claiming to be “willing”, while their behaviour in negotiations would suggest the opposite.

The subsequent decision from the Court of Justice of the European Union in the case *Huawei Technologies Co. Ltd. v. ZTE Corp. and ZTE Deutschland GmbH* (hereinafter the Huawei decision)³¹ seems to have brought back some balance in negotiations, with clear duties on both SEP-holders and implementers, intended to both prevent hold-up as well as hold-out. This is discussed further below. The recent European Commission Communication on SEP licensing and enforcement now recognizes the value of the Huawei decision and the need to prevent both, hold-up and hold-out.

The aim of this paper is to provide a summary of the evolution of policy and judicial assessments of hold-up and hold-out and compare such evolution in the US and Europe. The first section will address the evolution of legislation and case law regarding hold-up claims and injunctions on SEPs in the US (I). The second section will analyze the same topics in Europe (II).

I. US

In the US, the discourse from official institutions initially focused on hold-up (i). However, recent DOJ pronouncements point out that hold-out is also a threat (even a greater threat than hold-up) to innovation (ii).

i) Hold-up focus

“Hold-up” is an academic theory refers to a situation where a party successfully extorts excessive rents on his input on the basis of sunk costs made by the user that locks them into using the input, with no competitive alternative³². Two economists in particular, Mark Lemley and Carl Shapiro, suggested that the hold-up theory could be applied to SEPs under a FRAND commitment. As implementers require access to the standard to commercialise standard implementing devices, the threat of an injunction on SEPs after they had sunk costs into manufacturing and commercialisation of standardised products would leave implementers with two choices: either accept excessive royalties above FRAND or lose their sunk investments. Therefore, Mark Lemley and Carl Shapiro recommended to deny injunctions on SEPs to avoid hold-up³³.

The DOJ had a longstanding advocacy of suggesting limiting SEP-holders’ rights to minimize the hold-up risk. In particular, in 2012, Renata Hesse, then Assistant Attorney of the DOJ published recommendations for SDOs. She recommended SDOs to clarify the meaning of FRAND and advocated for a limitation of injunctive relief for SEPs³⁴.

³⁰ Cf. Chief Judge Rader, dissenting in *Apple Inc. v. Motorola Inc.*, Fed. Circ., Case Nos. Nos. 2012–1548, 2012–1549 (2014) and Dissenting Statement of Commissioner Maureen K. Ohlhausen, *In the Matter of Motorola Mobility LL and Google Inc*, FTC File No. 121-0120, January 3, 2013.

³¹ Court of Justice of the European Union (CJEU), *Huawei Technologies Co.Ltd. v. ZTE Corp. and ZTE Deutschland GmbH*, C-170/13, July 16, 2015.

³² Oliver Eaton Williamson, Transactions-Cost Economics: The Governance of Contractual Relations, *Journal of Law and Economics*, 22(2), p.233-262.

³³ Mark Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, *Texas Law Review*, 85, 1991-2049.

³⁴ Renata Hesse, *opcit.*

In addition, the DOJ and US Patent and Trademark Office specified in 2013 that an injunction should not be available against “willing licensees”³⁵.

Under U.S. antitrust law, hold-up claims have been raised as a breach of Section 5 of the Federal Trade Commission Act. Section 5 of the FTC Act prohibits unfair methods of competition and unfair or deceptive acts or practices. Applying Section 5 of the FTC Act to antitrust situations has been controversial, especially in the context of SEP licensing. The FTC has only successfully applied Section 5 in merger decisions, where parties were willing to provide commitments to achieve clearance. Yet even the application of Section 5 of the FTC Act to mergers involving SEPs has led to dissenting opinions amongst the Commissioners³⁶. One important example is the investigation of the merger between Google and Motorola by the FTC in 2013. The FTC issued a decision in the acquisition of Motorola by Google. In this statement³⁷, the FTC specified that seeking an injunction on SEPs against a “willing licensee” would be a breach of Section 5 of the Federal Trade Commission Act.

In both cases, there was no specific requirement on the implementer other than a mere statement of willingness to take a license in order to avoid an injunction. But given that no implementer would reasonably describe themselves as ‘unwilling’, such a situation would risk leading to hold-out, because the SEP-holder would then be deprived of any enforcement measures against the unlawful use of its SEPs by an implementer not willing to take a FRAND license. Under that scenario, the worst-case for the implementer would be for a court to impose a FRAND license, after many years of litigation; so implementers would have a high incentive to hold-out while looking to reduce input costs.

Under this scenario, innovation would be damaged for two reasons: (1) The holding-out company would enjoy an unfair competitive advantage versus truly “willing licensees” that have engaged in good faith negotiations and paid FRAND rates³⁸. (2) The SEP-holder would not be timely and/or fairly remunerated for its investments, which disincentivized continued investments in the next generation of the standard.

Some US judges have been asked to address injunction requests by SEP-holders and hold-up claims by implementers³⁹. While those cases reflect a disagreement between parties as to what is a FRAND rate, some cases involve antitrust arguments to defeat injunctions sought by SEP holders⁴⁰. In particular US judges have been requested to assess those claims under Section 2 of the Sherman Act. Section 2 of the Sherman Act prohibits any monopoly that is unlawfully acquired and/or maintained.

³⁵ DOJ & USPTO, *opcit.*

³⁶ Cf. FTC, Statement of the Commission, *In re Robert Bosch GmbH*, FTC File No. 121-0081, November 26, 2012 and Maureen K. Ohlhausen, Dissenting Statement of Commissioner Maureen K. Ohlhausen, *In re Robert Bosch GmbH*, FTC File No. 121-0081, November 2012; FTC, Decision and Order, *In the Matter of Motorola Mobility LL and Google Inc*, January 3, 2013 and Maureen K. Ohlhausen, Dissenting Statement of Commissioner Maureen K. Ohlhausen, *In the Matter of Motorola Mobility LL and Google Inc*, FTC File No. 121-0120, January 3, 2013. Another ongoing case leading to dissenting opinion is the FTC complaint against Qualcomm: the FTC considers Qualcomm’s licensing practices as being in breach of the FTC Act (N.D. Cal., Federal Trade Commission’s Complaint for Equitable Relief, *Federal Trade Commission v. Qualcomm Incorporated*, Case No. 5:17-cv-00220-LHK, January 17, 2017).

³⁷ Statement of the Federal Trade Commission, *In the Matter of Google Inc.*, FTC File 121-0120, January 3, 2013

³⁸ Sir Robin Jacob, *FRAND: A Legal Analysis*.

³⁹ Cf. for example N.D. Ill., *Apple, Inc, and NeXT Software Inc. v. Motorola Inc. and Motorola, Mobility, Inc.* June 22, 2012; W.D. Wash., *Microsoft Corporation v. Motorola, Inc. et al./ Motorola Mobility, Inc., et al. v. Microsoft Corporation*, April 25, 2013; N.D. Cal., *Realtek Semiconduction v. LSI Corp and Agere*, May 20, 2013.

⁴⁰ Cf. Kristen Jakobsen Osega, *opcit.*

There has been no decision concluding that a request for a SEP injunction is a breach of Section 2 of the Sherman Act. However, following *eBay v. Merck Exchange* decision⁴¹ in 2007, that creates strict conditions for awarding an injunction, US courts have not granted an injunction for the infringement of FRAND encumbered SEPs⁴². In some of the leading cases, US courts have rejected to grant injunctive relief for SEPs, mainly applying the public interest test and/or the availability of monetary compensation possibility given the commitment by the SEP holder that the expected outcome was a license. The legal landscape in the US therefore appears to encourage hold-out, if implementers feel that they face no immediate militating threat for not taking a FRAND license⁴³

As noted above, hold-out behavior may also have been encouraged after drastic amendments in the IEEE Bylaws in 2015⁴⁴. The reviewed Bylaws include several recommendations that have been subject to criticism. One of the recommendations is that the smallest saleable patent practicing unit (SSPPU) should be used as basis to determine FRAND. By applying the SSPPU instead of the well-recognized commercial practice of basing value on a percentage of e.g. an end-user device⁴⁵, SEP-holders of technologies essential to IEEE standards could easily receive a rate that is far below FRAND. Moreover, the new bylaws include strict restrictions of SEP-holders to seek any injunction on their SEPs⁴⁶. The DOJ, seized by the IEEE in September 2014, concluded in a business review letter to the IEEE that those amendments were unlikely to harm competition and consumers⁴⁷. This

⁴¹ *eBay v. MerckExchange*, L.L.C., 547 U.S.388 (2006). The *eBay* case requires that courts grant an injunction for patent infringement only after having considered four factors: irreparable injury (1), remedies at law inadequate to compensate for that injury (2), a remedy in equity is warranted (3) and the public interest not disserved by that injunction (4)

⁴² Cf. footnote 39 and Kirti Gupta & Mark Snyder, *opcit.*

⁴³ Another factor that may have fostered hold-out strategies is the ability of US courts to bar a SEP-holder from enforcing valid injunctions granted abroad. Such an ability cancels a valid enforcement measure ordered by a foreign sovereign court on a foreign territory. It raises potential questions as to the justification enabling US judges to deprive foreign courts from their ability to rule on patent rights within their jurisdiction, and conferring upon US courts' decisions an extra-territorial scope while they should territorially be limited to the US (cf. *Microsoft v. Motorola* case, and *Huawei Technologies Co., Ltd v. Samsung Electronics Co., Ltd, et al.* 2018.

⁴⁴ Cf. footnote 5 and 20.

⁴⁵ Marvin Blecker, Tom Sanchez, Eric Stasik, Article of the Month-An Experience-Based Look At The Licensing Practices That Drive The Cellular Communications Industry: Whole Portfolio/Whole Device Licensing, *les Nouvelles*, March 2017, available at <http://www.lesi.org/les-nouvelles/les-nouvelles-article-of-the-month/les-nouvelles-article-of-the-month-archives/les-nouvelles-article-of-the-month-archives-march-2017>.

⁴⁶ *The Submitter of an Accepted LOA who has committed to make available a license for one or more Essential Patent Claims agrees that it shall neither seek nor seek to enforce a Prohibitive Order based on such Essential Patent Claim(s) in a jurisdiction unless the implementer fails to participate in, or to comply with the outcome of, an adjudication, including an affirming first-level appellate review, if sought by any party within applicable deadlines, in that jurisdiction by one or more courts that have the authority to: determine Reasonable Rates and other reasonable terms and conditions; adjudicate patent validity, enforceability, essentiality, and infringement; award monetary damages; and resolve any defenses and counterclaims. In jurisdictions where the failure to request a Prohibitive Order in a pleading waives the right to seek a Prohibitive Order at a later time, a Submitter may conditionally plead the right to seek a Prohibitive Order to preserve its right to do so later, if and when this policy's conditions for seeking, or seeking to enforce, a Prohibitive Order are met.*

⁴⁷ DOJ letter to the IEEE, Response to the Institute of Electrical and Electronics Engineers, February 2, 2015, available at <https://www.justice.gov/sites/default/files/atr/legacy/2015/02/02/311470.pdf>.

conclusion, in line with previous statements from the DOJ, results from an analysis focusing on hold-up danger and negative behaviors from SEP-holders.⁴⁸

Although these changes have been argued by the IEEE as neutral and balanced, many SEP holders see these changes as one-sided (pro-implementers) and adopted in breach of the World Trade Organization Principles for International Standardization⁴⁹, (i.e. transparency, openness, impartiality, consensus, efficiency, relevance and consistency)⁵⁰. Due to the imbalance in favor of implementers of the new policy⁵¹, some SEP-holders have declared they would not abide by them⁵². At least five companies have submitted 'negative letters of assurance' (LoA) to IEEE since the amendments of its bylaws: Ericsson, Nokia, InterDigital, Panasonic⁵³. Qualcomm has stated that it would only submit LoA under the previous policy⁵⁴. The reasons for the negative LoAs is the risk that the new rules could be followed by courts in litigations regarding non-IEEE standards and thus potentially deprive SEP-holders of a FRAND rate by radically changing the negotiating balance. Recent studies have demonstrated that those amendments have not only affected the time to license and the royalty level, but also the standardization process⁵⁵.

Fortunately, recent pronouncements from the DOJ appear to acknowledge the resulting hold-out in the US and its detrimental effect on innovation⁵⁶. Recent speeches from the DOJ Assistant Attorney, which reflect US government's policy, seem to indicate a policy change regarding hold-up.

⁴⁸ Vincent Angwenyi, *Signs of Convergence between the US and Europe on Law and Policy relating to Standard Essential Patents?*, December 2017, available at https://www.4ipcouncil.com/application/files/9915/1298/6872/Signs_of_Convergence_between_the_US_and_Europe.pdf.

⁴⁹ Gregory Sidak, Testing for Bias to Suppress Royalties for Standard-Essential Patents, *The Criterion Journal for Innovation*, vol.1, 2016.

⁵⁰ World Trade Organization, Technical Barriers to Trade Agreement.,

⁵¹ Cf. contributions from some US implementers received by the European Commission for its public consultation on Patents and Standards: http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=7833 (in particular Apple's, Intel's, Microsoft's contributions).

⁵² Richard Lloyd, Ericsson and Nokia the latest to confirm that they will not license under the new IEEE patent policy.

⁵³ For companies' statement on IEEE new bylaws, cf. footnote 52 above and InterDigital's letter to IEEE dated March 24, 2015 available <http://wpuploads.interdigital.com.s3.amazonaws.com/uploads/2015/03/Letter-to-IEEE-SA-PatCom.pdf> For negative LoAs, cf. IEEE 802.11, Register of IEEE 802.11 LoA requests, doc IEEE 802.11-15/1489r11, dated May 9, 2018, and some of the negative LoA available at following links:

http://standards.ieee.org/about/sasb/patcom/negative-loa-802_11ah-ericsson-27Sep2016.pdf;

https://standards.ieee.org/content/dam/ieee-standards/standards/web/governance/patcom/loas/negative-loa-802_11ad-nokia-13Jan2016.pdf ;

https://standards.ieee.org/content/dam/ieee-standards/standards/web/governance/patcom/loas/neg-loa-802_11ax-IPH-15Mar2017.pdf;

https://standards.ieee.org/content/dam/ieee-standards/standards/web/governance/patcom/loas/neg-loa-802_11ax-panasonic-14Feb2018.pdf.

⁵⁴ Susan Decker & Ian King, Qualcomm Says It Won't Follow New Wi-Fi Rules on Patents, *Bloomberg*, February 11, 2015, <https://www.bloomberg.com/news/articles/2015-02-11/qualcomm-says-new-wi-fi-standard-rules-unfair-may-not-take-part> and IEEE document mentioned in footnote 37 above.

⁵⁵ Keith Mallinson, *Development of innovative new standards jeopardised by IEEE patent policy*, 2017; Bowman Heiden & Nicolas Petit, *opcit*; Kirti Gupta & Georgios Effraimidis, *IEEE Patent Policy Revisions: An Empirical Examination of Impact*, 2018.

⁵⁶ Cf. speeches of Markan Delrahim, Los Angeles, California, November 10, 2017; Competition, Intellectual Property, and Economic Prosperity, Beijing, China, February 1, 2018; The New Madison Approach to Antitrust and Intellectual Property Law, Philadelphia, March 16, 2018.

ii) Hold-out as an innovation threat

Before the change of the DOJ policy, expressed by the current DOJ Assistant Attorney general, FTC Commissioner, Maureen K. Ohlhausen, had already vehemently dissented to the FTC Google/Motorola and Bosch/SPX orders in 2013. She found no evidence of antitrust harm was presented and that the notion of “willing licensee” was too broad and risking leading to confusion. Additionally, she underlined that in some cases, the so-called “willing licensee” rather seemed to behave as an unwilling licensee⁵⁷ by refusing to be bound by a licensing rate fixed by the court that would not suit him.

In 2017, she further dissented to FTC decision to investigate Qualcomm’s alleged anticompetitive behavior in licensing its SEPs. She underlined she *have been presented with no robust economic evidence of exclusion and anticompetitive effects*⁵⁸. She had previously pointed out in a paper that antitrust enforcement in the US should be based on evidence and demonstration of harm to competition, rather than to competitor⁵⁹. She alleged that previous court decisions and FTC investigations based on “hold-up” claims seem to have focused on harm to competitor rather than to competition⁶⁰. Even if SEPs may confer a monopoly, it should be demonstrated that the SEP-holder abused from its monopoly through the request of abusive royalty rates. This would imply the determination of what “abusive” pricing is, knowing that an “excessive pricing” is not considered as a breach of U.S. antitrust law. And abuse should result from harm to competition instead of competitors. However, it seems that the FTC and district courts assessed the harm to competitors instead of competition in their decisions regarding injunctions on SEPs.

Indeed, it appears that neither the FTC nor the courts considered whether hold-up claims did not in fact conceal a hold-out strategy, by for example analyzing the behavior of the parties during negotiations. It focused on the SEP-holder’s FRAND commitment and request of an injunction⁶¹ instead of giving the opportunity to the SEP-holder to demonstrate that the implementer may have engaged in hold-out of the SEP-holder⁶². This appears odd, given that some studies demonstrate that recent changes in the policy supporting hold up have negatively affected the market and, in some situations, implementers may in fact have concealed individual and collective hold-out strategies, in bilateral SEP licensing negotiations and in lobbying tactics at IEEE⁶³ respectively. In particular, while evidence of market growth does not yet demonstrate characteristics of endemic hold-up such, as price stagnation and decrease of product offers, Bowman Heiden and Nicolas Petit stress that the

⁵⁷ Maureen K. Ohlhausen, Dissenting Statement of Commissioner Maureen K. Ohlhausen, *In the Matter of Motorola Mobility LL and Google Inc*, FTC File No. 121-0120, January 3, 2013.

⁵⁸ Maureen K. Ohlhausen, Dissenting Statement of Commissioner Maureen K. Ohlhausen *In the Matter of Qualcomm, Inc.*, FTC File No/ 141-0199, January 17, 2017.

⁵⁹ Maureen K. Ohlhausen, *The Elusive Role of Competition in the Standard-Setting Debate*, 20. *Stan; Tech. L. Rev.* 93 (2017).

⁶⁰ *Ibidem*

⁶¹ N.D. Ill., *Apple Inc. and NeXT Software Inc., v. Motorola, Inc. and Motorola Mobility, Inc.*, June 22, 2012; W.D. Wash., *Microsoft Corp. v. Motorola, Inc., et al/ Motorola Mobility, Inc., et al., v. Microsoft Corporation*, April 25, 2013 Statement of the Federal Trade Commission, *In the Matter of Google Inc.*, FTC File 121-0120, January 3, 2013. ; Statement of the Federal Trade Commission, *In the Matter of Google Inc.*, FTC File 121-0120, January 3, 2013

⁶² Chief Judge Rader, dissenting in *Apple Inc. v. Motorola Inc.*, Fed. Circ., Case Nos. Nos. 2012–1548, 2012–1549 (2014).

⁶³ Cf. footnotes 5 and 20.

rate of licensing coverage in telecom has fallen from 73% to 39% between 2006 and 2016⁶⁴, which rather shows evidence for hold-out.

Since then, the US Government's policy position, as expressed by senior DOJ staff, differs from the previous DOJ's position on hold-up, hold-out and SEPs enforcement. Mr. Delrahim, DOJ Assistant Attorney General for Antitrust, has now publicly stated that antitrust should support competition and innovation⁶⁵. He recalls patents are exclusive rights, injunctions lawful remedies available to innovators and that a patent may not automatically confer a monopoly through its insertion into a standard⁶⁶. He specifies that no abuse infers from the sole exercise of exclusive rights. Contrary to Mrs. Hesse, who considered hold-up as an antitrust issue and hold-out as a mere contractual problem⁶⁷, he states that contractual remedies are available against hold-up behaviors and that antitrust law should not be used when there is no evidence of harm⁶⁸. He highlights that the exclusionary effect resulting from the selection of one's contribution to the standard is not unlawful under the Sherman Act⁶⁹. He explains that the Sherman Act *does not police "fair prices or competition"* but the competitive process⁷⁰. He states that a FRAND commitment is not a promise to license at a specific rate⁷¹. In case there is disagreement on what FRAND means, parties can refer the matter to the courts. Moreover, he expresses some doubts as to the reasonableness of unilateral policy changes to SDOs that seem to favor one side's interests and turn FRAND licensing into a compulsory licensing scheme, shifting the bargaining power from SEP-holders to implementers⁷². He underlines that courts and SDOs should bear a high burden before adopting new rules denying or limiting injunctions⁷³. Finally, he points that hold-out is more a danger to innovation than hold-up, especially because contributors invest money into standardization well before the standard is adopted or successful on the market. Therefore, the risk of underinvestment from technology contributors have more potential to harm competition and innovation than the risk of underinvestment by implementers. He reiterates FTC Commissioner Maureen K. Ohlhausen's statement, that evidence of harm to competition rather than competitors should be demonstrated and that there is no economic evidence of hold-up⁷⁴.

After decades of focus on concerns of hold-up or other abusive conducts from SEP-holders, these DOJ speeches constitute a change of policy. They argue for further cooperation on antitrust matters

⁶⁴ Bowman Heiden & Nicolas Petit, *opcit*, p.61.

⁶⁵ Cf. footnote 56.

⁶⁶ Cf. speeches of Markan Delrahim, Los Angeles, California, November 10, 2017; The New Madison Approach to Antitrust and Intellectual Property Law, Philadelphia, March 16, 2018.

⁶⁷ Renata Hesse, Session III: Legal Panel Trends in Antitrust and IP Law, LCII conference *Regulating Patent "Hold-up"? An assessment in Light of Recent Academic, Policy and Legal Evolutions*, Brussels, Belgium, February 29th, 2016.

⁶⁸ Cf. speech of Markan Delrahim, Los Angeles, California, November 10, 2017.

⁶⁹ Cf. Speech from the Assistant Attorney General, Markan Delrahim, Assistant Attorney General Markan Delrahim Delivers Remarks at IAM's Patent Licensing Conference in San Francisco, San Francisco, California, 18 September 2018.

⁷⁰ *Ibidem*.

⁷¹ *Ibidem*.

⁷² *Ibidem*.

⁷³ Cf. footnote 66.

⁷⁴ Cf. speeches of Markan Delrahim, Los Angeles, California, November 10, 2017; The New Madison Approach to Antitrust and Intellectual Property Law, Philadelphia, March 16, 2018; The Long Run: Maximizing Innovation Incentives Through Advocacy and Enforcement, Washington DC, April 10, 2018.

between regional regulatory agencies⁷⁵. They suggest that unilateral changes of SDOs' policies may be investigated⁷⁶. They seek to bring back some balance in negotiations, by focusing on hold-out. It remains to be seen if they will be followed by a change of enforcement in the US. But abuses from both sides should be equally prevented and sanctioned to ensure a fully balanced system.

In Europe, the approach is slightly different, as both hold-up and hold-out behaviors are seen as equally risky for innovation. With the Huawei decision, the CJEU has set up a legal framework with safeguards against abusive behaviors from both sides, implementers and SEP-holders.

II. Europe

In Europe, hold-up claims and injunctions on SEPs have been subject of competition law decisions under Article 102 of the Treaty on the Functioning of the European Union (TFEU) prohibiting the abuse of a dominant position. For example, Article 102 TFEU was applied in the Rambus case in 2009. The European Commission alleged that Rambus had concealed from the standard setting body JEDEC the fact that Rambus held SEPs during JEDEC standardization process and thereafter sought to license those SEPs at "excessive rates" (commonly known as 'patent ambush'). To resolve potential competition concerns Rambus committed to cap the royalty rate of its SEPs⁷⁷. Thereafter, in the ICom case, the European Commission investigated the transfer of SEPs from Bosch GmbH to ICom under Article 102 TFEU given concerns that access to the standard could be eliminated⁷⁸. The investigation was dropped after ICom offered an informal commitment to license the acquired SEPs under FRAND terms and conditions.

Article 102 TFEU was further applied to the threats or seeking of injunctions on SEPs before German courts in the 2014 EC Motorola and Samsung cases. The European Commission held that the decisions by Motorola and Samsung to threaten or seek injunctions against Apple in Germany resulted in potential incentives for holding-out (i).

The subsequent CJEU Huawei decision, which is now the principal source of law on the matter, has developed a different and more balanced approach to the application of competition law to the request of injunctions on SEPs. It sets up a licensing negotiation framework with duties for both sides to assess whether a SEPs injunction request is abusive instead of relying on a mere willingness statement from the implementer to reject such request (ii). The CJEU Huawei decision and the need for safeguards against hold-up and hold-out have, as a result, been recognized in the more recent European Commission Communication on SEPs licensing and enforcement (iii).

i) The Motorola and Samsung decisions

In Europe, the European Commission has approached hold-up allegations involving the seeking of an injunction on SEPs to potentially be a breach of Article 102 TFEU, which prohibits the abuse of a

⁷⁵ Cf. speeches of Markan Delrahim, Assistant Attorney General Makan Delrahim Delivers Remarks at the U.S. Embassy in Beijing, Beijing, China, February 1, 2018; Good Times, Bad Times, Trust Will Take Us Far: Competition Enforcement and the Relationship Between Washington and Brussels, Brussels, Belgium, February 21, 2018.

⁷⁶ Cf. speeches of Markan Delrahim, Los Angeles, California, November 10, 2017.

⁷⁷ Commission Decision of 9 December 2009 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement, Case COMP/38.636 Rambus.

⁷⁸ European Commission, press release, Antitrust: Commission welcomes ICom's public FRAND declaration, MEMO/09/549, December 10, 2009.

dominant position. To be sanctioned for an abuse of a dominant position, a company must fulfil three criteria: holding a dominant position (1) on the relevant geographic and product markets (2) distorting competition (3).

At the end of 2011, the European Commission launched two investigations against Samsung and Motorola, both SEP-holders, to determine whether, by seeking an injunction before the German courts for infringement of their SEPs, these companies had breached Article 102 TFEU. Speeches from the then European Commission Competition Commissioner, Mr. Almunia, insisted on abuses from SEP-holders and the need to prevent hold-up behaviours⁷⁹. But none of those speeches recognised any potential risk of hold-out, only focusing on potential SEP abuses.

In April 2014, the European Commission issued the Motorola and Samsung decisions that held that threatening or seeking an injunction on SEPs against a “willing licensee”, may be an abuse of a dominant position. The EC adopted the FTC’s “willing licensee” approach as a pivotal concept to denying the availability of injunctive relief under antitrust rules, stating⁸⁰ that seeking an injunction on SEPs against a “willing licensee” in the specific circumstances of standardization and the FRAND commitment may breach Article 102 TFEU. Those decisions were based on the determination that each SEP-holder holds a dominant position for each of its SEPs, because each SEP is a separate market on which the SEP-holder holds 100% market shares. But the willingness seemed to be based on a mere statement of willingness to take a FRAND license to ignore the potential hold out strategies of the implementer during licensing negotiations, placing all the focus on the SEP holder. In particular, the European Commission found that:

*Third, Apple's alleged unwillingness between 2007 and 2010 is irrelevant for the purposes of this Decision as this cannot justify Motorola's continued seeking and enforcement of an injunction against Apple in Germany on the basis of the Cudak GPRS SEP after 4 October 2011, the date of the Second Orange Book Offer.*⁸¹

Since the Court of Justice of the European Union ruling in the Huawei decision, however, there is now a harmonized and balanced framework regarding the availability of injunctions on SEPs in Europe and a limit to the application of Article 102 TFEU to injunction requests on SEPs. This approach differs from the Samsung and Motorola decisions.

ii) The CJEU Huawei decision

On 16 July 2015, the CJEU delivered the Huawei decision. The decision focused on whether requesting an injunction on SEPs where a FRAND commitment has been made was an abuse of a

⁷⁹ Cf. Joaquim Almunia’ speeches, in particular Industrial policy and Competition, Paris, France, February 10, 2012; Competition policy and growth. SPEECH/12/131; *European Parliament: Internal Market and Consumer Protection Committee*, Brussels, Belgium; February 28, 2012; Competition policy for innovation and growth: Keeping markets open and efficient. SPEECH/12/2012, Copenhagen, Denmark, March 8, 2012; Higher Duty for Competition Enforcers, SPEECH-12-453, *International Bar Antitrust Conference*, Madrid, Spain, June 15, 2012; Intellectual property and competition policy, SPEECH/13/1042, *IP Summit*. Paris, December 9, 2013.

⁸⁰ European Commission, *Antitrust Procedure, Case AT-39939-Samsung-Enforcement of UMTS Standard Essential Patents and Antitrust Procedure, Case AT-39985-Motorola-Enforcement of GPRS Standard Essential Patents*, April 29, 2014.

⁸¹ European Commission, *Antitrust Procedure, Case AT-39985-Motorola-Enforcement of GPRS Standard Essential Patents*, April 29, 2014, par. 441.

dominant position and a breach of Article 102 TFEU. This decision follows the Opinion of the Advocate General of the CJEU issued to guide the CJEU in its thinking.

Before the opinion of the Advocate General, the referring court stressed that relying on a mere statement of willingness from the potential licensee to avoid any injunction may lead to hold-out because the SEP-holder have no enforcement means against willful infringers⁸². As further added by the Advocate General, *placing reliance only on the alleged infringer's mere willingness* would result in pricing which falls well below the economic value of the SEPs⁸³.

The Advocate General rather underlined that a balance should be found between interests of both sides to avoid both hold-up and hold-out behaviors⁸⁴. Both the Advocate General and the referring court acknowledge the potential detrimental effects of hold-out at European level⁸⁵.

The Advocate General, in his Opinion, proposed negotiation duties for both parties. In particular, the Advocate General underlined that the following the European Commission approach based on an unspecified "willing licensee" notion, would deprive SEP-holders from injunctive relief, which is a fundamental right to patent-holders⁸⁶, based on Articles 47 and 52(1) of the Charter of Fundamental Rights of the European Union⁸⁷. The Advocate General stressed that a SEP-holder would abuse its dominant position if it does not honor its FRAND commitment where the implementer has demonstrated willingness to enter into a licensing agreement⁸⁸. He specified criteria to determine an implementer's willingness. He added that the implementer should diligently reply to a SEP-holder and make a counter-offer in case he finds the offer not FRAND⁸⁹. Additionally, the SEP-holder should notify the implementer about the infringement and make an offer in writing⁹⁰.

The Huawei decision follows in large part the Advocate General's Opinion and sets up a balanced FRAND licensing negotiation framework, including the Advocate General's proposed contractual negotiation duties for both the SEP-holder and the implementer. These duties are divided into five steps. First, the SEP-holder has to notify the implementer about the SEPs and the infringement, i.e. the way they are infringed and the infringing products. Second, the implementer has to reply diligently to such a notification. Third, the SEP-holder has to make a FRAND offer specifying among others the amount of the royalty rate and the way they are calculated. Fourth, the implementer can

⁸² Cf. par. 42 of Advocate General Melchior Wathelet's opinion in the case *Huawei Technologies Co. Ltd. v. ZTE Corp. and ZTE Deutschland GmbH*, delivered November 20, 2014:

However, the referring court also points out that placing a restriction on the right to bring an action for a prohibitory injunction considerably reduces the SEP-holder's margin for negotiation, given that it may lack sufficient leverage to conduct those negotiations on an equal footing with the infringer. The referring court adds that the SEP-holder must tolerate the unlawful use of its patent, regardless of whether and when a licensing agreement will actually be concluded, and that it will not be able to recover damages, the applicability and amount of which are uncertain, until some unforeseeable date after the event. This will be the case even if the licensing negotiations are drawn out for reasons attributable solely to the infringer. Such conduct has been termed 'patent hold-out' or 'reverse patent hold-up'.

⁸³ *Ibidem*, footnote 20.

⁸⁴ *Ibidem*, par. 31-32 and 41-42.

⁸⁵ *Ibidem*, par. 42.

⁸⁶ *Ibidem*, par. 50.

⁸⁷ *Ibidem*, par. 50

⁸⁸ *Ibidem*, par. 103

⁸⁹ *Ibidem*, par. 89.

⁹⁰ *Ibidem*, par. 84.

make a counter-offer in case he thinks the offer is not FRAND. Fifth, if the counter-offer is rejected by the SEP-holder, the implementer must provide a security (either a deposit or bank guarantee) pending adjudication of the FRAND terms. In case the implementer does not comply with its duties but the SEP-holder does, then the latter is entitled to seek an injunction on its SEPs without such a request being considered as an abuse of a dominant position breaching the FRAND commitment and Article 102 TFEU.

In sum, a SEP-holder cannot simply seek to injunct an implementer without having first proposed FRAND licensing terms and conditions and if the terms are not FRAND or the SEP holder did not follow the steps set out by the CJEU, the implementer would have an antitrust defence to the SEP holder's request for injunction. The CJEU duties provide safeguards against hold-up behavior. Similarly, an implementer cannot simply avoid replying to licensing requests, engage in delaying tactics and/or refuse a FRAND offer merely by stating it is not FRAND or wait to be sued without the risk of an injunction being granted. It has also duties to engage in good faith licensing negotiations in a diligent way and timely manner. Such obligations restrict hold-out behaviors. Since the Huawei ruling, national courts have applied the Huawei decision by assessing behavior of both sides during licensing negotiations⁹¹. Thus while EC Competition officials have stated that the Huawei decision confirms the Motorola decision⁹², the Huawei decision actually reverses much of the logic behind the Motorola decision.

The Huawei decision sets out that injunctive relief and access to courts are fundamental rights that antitrust can only limit in the most exceptional circumstances. Importantly the CJEU notes that the FRAND commitment does not change the basic nature of the patent right, which includes the ability to seek injunctive relief⁹³. Contrary to the European Commission's Motorola decision, the Huawei decision does not consider that the existence of injunctive relief leads to hold-up opportunities⁹⁴. Instead of relying on a mere willingness statement from the implementer to reject an injunction, the Huawei decision goes further than the Motorola decision by setting up specific duties for the implementer to comply with to be considered as "willing licensee"⁹⁵. The Huawei decision also reverses the burden of proof: in the Motorola decision, the SEP-holder had to demonstrate the implementer was an "unwilling licensee" to justify the request of an injunction. In the Huawei decision, the implementer has to fulfill its duties to be considered as a "willing licensee". However, this does not mean that the request of an injunction on SEPs leads to a breach of Article 102 TFEU. Courts have the final say, while the Motorola decision let it open to regulators to review courts decisions.

One of the additional principles applied by the CJEU is that negotiations should follow "recognized commercial practices in the field"⁹⁶. Although the CJEU was not seized by any question regarding

⁹¹ On European case law following the Huawei decision, cf. 4ipcouncil's National Courts Guidance, available at <https://caselaw.4ipcouncil.com/guidance-national-courts>; and 4ipcouncil's case law summaries, available at <https://caselaw.4ipcouncil.com/>.

⁹² Margrethe Vestager, (2015, September 11) Intellectual Property and Competition, Florence, Italy, September 11, 2015; Protecting consumers from exploitation, Brussels, Belgium, November 21, 2016

⁹³ Matthew Heim, *Antitrust Enforcement in innovation industries: SEP cases on the two sides of the Atlantic*, available at

<https://www.eui.eu/Projects/ENTRANCE/Documents/NewEntrance/Workshops/AnnualConference/Antitrust-Enforcement-in-Innovation-Industries.-SEP-Cases-Matthew-Heim.pdf>.

⁹⁴ *Ibidem*.

⁹⁵ *Ibidem*.

⁹⁶ Cf. par. 65 of the Huawei decision.

what FRAND means, this principle further specifies the offer a licensor or potential licensee should do but leaves it to national courts to decide what is a FRAND offer. In the meantime, national courts have accepted that in the cellular industry, worldwide portfolio licenses are “recognized practices in this field”. This makes sense, since country-by-country licenses would force SEP-holders to engage in multiple negotiations, increase time, complexity and reducing efficiency. In the UK, the English and Wales High Court has expressly stated and repeated that seeking such country-by-country negotiations would be considered part of a hold-out strategy⁹⁷.

The Huawei decision creates a balanced negotiation framework, with obligations for each side, setting up safeguards against hold-up and hold-out. Those have been applied by national jurisdictions and recognized thereafter by the European Commission in its 2017 SEPs Communication.

iii) The European Commission’s SEP Communication

In November 2017, the European Commission issued its Communication regarding SEP licensing and enforcement setting out its policies relating to the topics. Such a Communication is part of the European Digital Single Market Strategy (DSM), where the European Commission has acknowledged the crucial role of standards to drive the success of the DSM and the Internet of Things.

The Communication focuses on three main issues raised by the European Commission: lack of transparency of SEPs declarations, FRAND determination (for example, the risk of royalty stacking⁹⁸) and ineffective enforcement of SEPs.

While the European Commission underlines there is no “one-size-fit-all” FRAND rate, it lists in the Communication some factors that might be considered by the parties in licensing negotiations. One of these conditions is the relationship of the royalty rate to the economic value of the patented technology, which should exclude any value resulting from the inclusion of the technology to the standard. However, the Communication also notes that when the technology is “*developed mainly for the standard and has no market value*” outside of the standard, the above condition does not apply and rather that other alternative methods of assessing the value of SEPs should be considered, such as the importance of the contribution compared to other contributions to the standard.

Other factors reflect recent court decisions, such as considering the royalty stack and the total number of SEPs on one standard. Based on the total number of SEPs and the royalty stack on one standard, courts have determined what a FRAND rate should be for a licensor based on his share of SEPs. Such a practice has been used by the UK High Court in April 2017 in the *Unwired Planet v. Huawei* decision to determine the appropriate rate for Unwired Planet SEPs⁹⁹. Another important acknowledgement in the Communication is that global portfolio licenses are FRAND for companies active at international level. Such a statement prevents requests of country by country from big corporations, consequently limiting delaying strategies. This point also confirms the *Unwired Planet v. Huawei* decision, where the High Court set up a global license as a FRAND license, with different territorial rates. Such a top-down approach, using comparable licenses and different geographic rates, has been applied in the US in a later decision between *TCL v Ericsson* in California in December

⁹⁷ [2018] EWHC 808 (Pat), par. 28 ; [2018] EWHC Civ.2344, par. 88.

⁹⁸ Defined as a situation where the cumulative licensing fees to pay on patents for one product becomes financially burdensome and potentially impedes the end device manufacturer or brand owner to commercialise such products (cf. Mark Lemley & Carl Shapiro, *opcit.*)

⁹⁹ [2017] EWHC 711 (Pat); [2018] EWHC Civ.2344.

2017, with strong variants in the way to calculate the shares of SEPs and the appropriate FRAND rate (i.e. using top-down as a basis instead of double check tool)¹⁰⁰.

Finally, on SEP enforcement, the Communication underlines the need to find a balance to prevent both hold-up and hold-out behaviors. It is the first European Commission document acknowledging hold-out.

The Communication publicly recognizes the need for finding a balanced approach to FRAND negotiations and enforcement to protect interests of and prevent abuses from both sides, including through injunctive relief for SEP-holders when necessary.

Conclusion

Patents are exclusive rights to exclude third parties from exploiting the patented technology. Through their contributions to SDOs and the FRAND commitment, SEP-holders agree to make their technology available to any third party on FRAND terms.

The rise of hold-up arguments in the smartphone patent wars seems to have led to further limitations of SEP-holders' exclusive rights through the quasi-automatic denial of an injunction against "willing licensees" mainly on the basis of antitrust arguments. This appears in some cases to have contributed or validated hold-out strategies.

While hold-up may deter innovation on the end-user market, by increasing the IPR cost of products, and potentially impair investments of the implementer ex post standardisation, hold-out affects ex ante investments to standardisation, and may impede the development of interoperable technologies through the lack of return on investments for SEP-holders.

After years of hold-up claims, the focus has recently moved from an exclusive focus on hold-up to an understanding that hold-out may threaten innovation as well¹⁰¹. Authorities in Europe and the US seem to recognize the need of a balanced antitrust system to encourage both SEP-holders and implementers in the support of industrial policy goals. There is a recognition that regulatory authorities should be less intrusive in SEPs licensing and enforcement¹⁰². Both jurisdictions also underlined that an injunction should remain available to SEP-holders against holding-out implementers. In both regions, it is recognized that not offering a FRAND rate may not, of its own, be a breach of antitrust¹⁰³ or competition law¹⁰⁴.

Courts in both sides of the Atlantic have recently ruled that an international, portfolio base licensed is FRAND for companies with worldwide activities. They have also applied comparable licenses and the top-down approach, to determine specific FRAND rates per regions, although European courts have preferred comparable agreements and used the top-down approach to double-check the determination.

¹⁰⁰ C.D.Cal., *TCL Comm'n v. Ericsson*, Case No.14-CV-341 (December 21, 2017)

¹⁰¹ Vincent Angwenyi, *opcit.*

¹⁰² *Ibidem.*

¹⁰³ Cf. Speech from the Assistant Attorney General, Makan Delrahim, Assistant Attorney General Makan Delrahim Delivers Remarks at IAM's Patent Licensing Conference in San Francisco, San Francisco, California, September 18, 2018.

¹⁰⁴ [2017]EWHC 711 (Pat); [2018] EWHC Civ.2344.

However, while in Europe the CJEU has framed in which circumstances a request of an injunction on SEPs would not be considered as an abuse of a dominant position, a similar path has not been detailed by any US institution yet. While Europe may continue to treat hold-up as a potential antitrust issue in breach of Article 102 TFEU, this view may not last in the US, where the current DOJ Assistant Attorney General see hold-out as a more concerning antitrust issue.

Europe is also the first region to have issued guidelines on SEPs licensing and enforcement, recognizing rights of SEP-holders to fight against hold-out and of implementers to access standardized technologies under fair, reasonable and non-discriminatory terms and conditions. It remains to be seen if the US views will be enacted into legislation in a balanced way. A closer collaboration between antitrust authorities of Europe and the US and efforts to reduce divergent views may materialize after the DOJ Assistant Attorney General calling for more cooperation between both sides of the Atlantic¹⁰⁵.

Case law in Europe and the US, and potential legislative and policy changes may lead towards further converge and harmonisation. The European Commission Communication makes it clear that the EC will continue to monitor both market practices and the evolution of national law. But a balanced system needs to provide for safeguards against abuses from both sides, hold-up as well as hold-out, as it is the case in Europe, not just against potential abuses from one-side.

¹⁰⁵Markan Delrahim, « Good Times, Bad Times, Trust Will Take Us Far: Competition, Enforcement and the Relationship Between Washington and Brussels”, Brussels, Belgium, February 21, 2018