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THE MEANING OF FRAND, PART II: INJUNCTIONS

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ABSTRACT

Under what conditions may the holder of standard-essential patents (SEPs) seek to enjoin an infringing implementer without breaching the SEP holder's contract with the standard-setting organization (SSO) to provide access to those SEPs on fair, reasonable, and nondiscriminatory (FRAND) terms? I show that the SEP holder's contractual obligations still permit it to seek an injunction. A FRAND commitment requires the SEP holder to offer a license for the SEPs on FRAND terms (or otherwise to grant implementers access to the SEPs). Extending an offer containing a price within the FRAND range discharges the SEP holder's contractual obligation. Thereafter, the SEP holder may seek to enjoin an implementer that has rejected a FRAND offer. This analysis indicates the imprudence of categorically banning injunctions for the infringement of SEPs, as some scholars have advocated and as one of the world's most significant SSOs—the Institute of Electrical and Electronics Engineers (IEEE)—actually did in 2015 in amendments to its bylaws. Such a ban would invite opportunism by implementers and is unnecessary. Courts already can prevent opportunism by SEP holders by conditioning an injunction on the implementer's actual or constructive rejection of a FRAND offer.

JEL: K00; K12; K21; K41; L12; L63; O34

I. INTRODUCTION

A patent holder that joins a standard-setting organization (SSO) typically agrees to license its standard-essential patents (SEPs) on fair, reasonable, and nondiscriminatory (FRAND) terms to future implementers of the standard. In the United States, a court "may grant injunctions . . . to prevent the violation of any right secured by patent."[1] However, an SEP holder's right to enjoin implementers that infringe FRAND-committed patents is a controversial topic in

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[1] 35 U.S.C. § 283.

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patent law and competition policy throughout the world.[2] In this article, I analyze whether, and under what conditions, an SEP holder may seek and enforce an injunction against an implementer without breaching the SEP holder's FRAND contract with the SSO—including the SEP holder's commitments to the contract's third-party beneficiaries (namely, implementers of the standard).[3]

Some commentators have suggested that an SEP holder should never be allowed to seek or enforce an injunction after it has committed to offer to license its SEPs on FRAND terms. Mark Lemley and Carl Shapiro are leading proponents of this view and argue that an SEP holder's use of an injunction facilitates patent holdup.[4] According to Lemley and Shapiro, an SEP holder's mere threat to exclude an implementer's products from the market, even if only for a limited period of time, could enable the SEP holder to extract licensing fees from implementers that exceed the SEP's genuine economic value.[5] Lemley and Shapiro urge courts to deny injunctions to SEP holders.

Citing these theoretical conjectures, some implementers of SEPs have sought to amend an SSO's bylaws to impose a categorical ban on injunctions for infringement of SEPs. On February 8, 2015 one of the world's most

[2] *See, e.g.*, Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1331–32 (Fed. Cir. 2014); On Claim Against Samsung Electronics for Obstruction of Business Operations [삼성전자의 사업활동 방해행위 심의 결과에 대한 건], Fair Trade Commission, Republic of Korea (Feb. 26, 2012), http://www.ftc.go.kr/news/ftc/reportView.jsp?report_data_no=5542 (Korea); Intex Tech. Ltd. v. Telefonaktiebolaget LM Ericsson, Case No. 76 of 2013, ¶ 6, Competition Comm'n of India (Jan. 16, 2014) (India); Guangdong Gaoyuan Shenjie Huawei Gongsi yu Meiguo IDC Gongsi Lanyong Shichang Diwei Longduan Jiufen An [广东高院审结华为公司与美国IDC公司滥用市场地位垄断纠纷案] (Guangdong High Court's Decision on Abuse of Market Power in Huawei v. IDC Case) (Nov. 1, 2013) (China), http://www.gdcourts.gov.cn/ecdomain/framework/gdcourt/monehcpnabjcbboekklboafjdjkbjamc/cohhkcfaabjdbboekklboafjdjkbjamc.do?isfloat=1&disp_template=pchlilmiaebdbboeljehjhkjkkgjbjie&fileid=20131101104516982014&moduleIDPage=cohhkcfaabjdbboekklboafjdjkbjamc&siteIDPage=gdcourt&infoChecked=0&keyword=&dateFrom=&dateTo=.

[3] In a predecessor to this article, I have analyzed the law and economics of FRAND royalties. *See* J. Gregory Sidak, *The Meaning of FRAND, Part I: Royalties*, 9 J. COMPETITION L. & ECON. 931 (2013).

[4] *See, e.g.*, Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 1991–92 (2007) [hereinafter Lemley & Shapiro, *Patent Holdup and Royalty Stacking*]; Carl Shapiro, *Injunctions, Hold-Up, and Patent Royalties*, 12 AM. L. & ECON. REV. 280, 280–82 (2010).

[5] Lemley & Shapiro, *Patent Holdup and Royalty Stacking*, *supra* note 4, at 2009 ("In the real world, it is common for patent defendants to settle cases for more money than the patentee could have won in damages and license fees, simply to avoid the threat of an injunction."); Shapiro, *supra* note 4, at 302 (discussing patent holdup when the SEP holder does not itself compete in the downstream market). For critiques of the Lemley-Shapiro thesis that patent holders are systematically overcompensated, see John M. Golden, *"Patent Trolls" and Patent Remedies*, 85 TEX. L. REV. 2111 (2007) (criticizing the method and data that Lemley and Shapiro use to show that patent holders are systematically overcompensated); J. Gregory Sidak, *Holdup, Royalty Stacking, and the Presumption of Injunctive Relief for Patent Infringement: A Reply to Lemley and Shapiro*, 92 MINN. L. REV. 714 (2008) (explaining the methodological flaws of the Lemley-Shapiro model of patent law and assessing the factors that bias the results of their study).

significant SSOs, the Institute of Electrical and Electronics Engineers (IEEE) ratified amendments to its bylaws to diminish the rights of SEP holders in various ways, including categorically banning the SEP holder's right to an injunction. (The IEEE has promulgated, among other important standards, the 802.11 and subsequent standards for Wi-Fi.) Draft 39 of the IEEE Standard Board Bylaws defines the new term "Prohibitive Order" to "mean an interim or permanent injunction, exclusion order, or similar adjudicative directive that limits or prevents making, having made, using, selling, offering to sell, or importing a Compliant Implementation."[6] The significance of the IEEE's new definition of a Prohibitive Order becomes clear when one examines how the IEEE then defines another new term, "Reasonable Rate," to mean:

> appropriate compensation to the patent holder for the practice of an Essential Patent Claim excluding the value, if any, resulting from the inclusion of that Essential Patent Claim's technology in the IEEE Standard. In addition, determination of such Reasonable Rates should include, but need not be limited to, the consideration of:
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> - The value that the functionality of the claimed invention or inventive feature within the Essential Patent Claim contributes to the value of the relevant functionality of the smallest saleable Compliant Implementation that practices the Essential Patent Claim.
> - The value that the Essential Patent Claim contributes to the smallest saleable Compliant Implementation that practices that claim, in light of the value contributed by all Essential Patent Claims for the same IEEE Standard practiced in that Compliant Implementation.
> - Existing licenses covering use of the Essential Patent Claim, *where such licenses were not obtained under the explicit or implicit threat of a Prohibitive Order*, and where the circumstances and resulting licenses are otherwise sufficiently comparable to the circumstances of the contemplated license.[7]

For a patent holder to have its patented technology adopted into an IEEE standard, the patent holder must provide an Accepted Letter of Assurance (LOA), which, under the IEEE's amendments to its bylaws, requires that the patent holder waive its right to seek an injunction against an infringer. The patent holder's licensing assurance must either contain a general waiver of enforcement or

> [a] statement that the Submitter will make available a license for Essential Patent Claims to an unrestricted number of Applicants on a worldwide basis without compensation or under Reasonable Rates, with other reasonable terms and conditions that are demonstrably free of any unfair discrimination to make, have made, use, sell, offer to sell, or import any

[6] IEEE Draft 39 IEEE Standards Board Bylaws § 6.1, at 1 (2014) [hereinafter IEEE Draft 39 IEEE Standards Board Bylaws], *available at* http://grouper.ieee.org/groups/pp-dialog/drafts_comments/SBBylaws_100614_redline_current.pdf; *see also* IEEE Draft IEEE-SA Patent Policy FAQs: Understanding Patent Issues During IEEE Standards Development, Draft 14 (Dec. 3, 2014) [hereinafter Draft IEEE-SA Patent Policy FAQs], *available at* http://grouper.ieee.org/groups/pp-dialog/drafts_comments/Patent_Policy_FAQ_031214_redline.pdf; *see also* Press Release, IEEE, IEEE Statement Regarding Updating of Its Standards-Related Patent Policy (Feb. 8, 2015), https://www.ieee.org/about/news/2015/8_february_2015.html?WT.mc_id=std_8feb.

[7] Draft 39 IEEE Standards Board Bylaws, *supra* note 6, § 6.1, at 2.

> Compliant Implementation that practices the Essential Patent Claims for use in conforming with the IEEE Standard. An Accepted LOA that contains such a statement signifies that *reasonable terms and conditions, including without compensation or under Reasonable Rates, are sufficient compensation for a license to use those Essential Patent Claims and precludes seeking, or seeking to enforce, a Prohibitive Order except as provided in this policy.*[8]

In informal accompanying documents, the IEEE describes the SEP holder's forced waiver of its right to an injunction as voluntary: "An Accepted Letter of Assurance defines the circumstances in which the Submitter has *voluntarily agreed not to seek or seek to enforce a Prohibitive Order*, even if otherwise permitted in a specific jurisdiction."[9] The IEEE deems a patent holder's request for an injunction an "explicit threat," and it deems even the mention of the availability of an injunction during negotiations an "implicit threat":

> A patent holder's request that a court issue a Prohibitive Order against an implementer, who does not have a license, would be an example of an *explicit threat*. A patent holder's reminder to an implementer that a Prohibitive Order might be available if the implementer does not agree to the requested rate would be an example of an *implicit threat*.[10]

The IEEE directly connects the patent holder's forced waiver of the right to an injunction to the determination of reasonable rates for SEPs because, in the calculation of such rates, "the [proposed] policy recommends consideration of license agreements obtained *without explicit or implicit threat of a Prohibitive Order*."[11] In other words, the analysis of comparable licenses for purposes of determining a FRAND royalty may consider only licenses for which the SEP holder had relinquished the right to seek and enforce an injunction against an unlicensed implementer. The IEEE's amendments would allow an SEP holder to seek an injunction only after it had successfully litigated claims against the unlicensed implementer to conclusion in a court of appeals, which could take years.[12] The updated IEEE-SA Patent Policy is retroactive to

8 *Id.* § 6.2, at 3 (emphasis added).

9 Draft IEEE-SA Patent Policy FAQs, *supra* note 6, ¶ 56, at 15 (emphasis added).

10 *Id.* ¶ 47, at 13–14 (emphasis added).

11 *Id.* ¶ 48, at 14 (emphasis added).

12 The IEEE amended its statement of policy to provide:

> 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 IEEE,* [sic] *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.

Draft 39 IEEE Standards Board Bylaws, *supra* note 6, § 6.2, at 4 (emphasis added). The IEEE's bylaws prohibiting an SEP holder from seeking an injunction against an unlicensed implementer will reduce the value of SEPs to below their current market-disciplined level and ultimately harm investment in R&D and contributions to the IEEE. Whatever static

January 1, 2015.[13] The updated policy thus applies to SEP holders that have submitted a letter of assurance on or after January 1, 2015.[14]

Before the IEEE proposed this radical amendment of its bylaws that categorically bans injunctions for FRAND-committed SEPs, some scholars had argued that, by making a FRAND commitment, an SEP holder already has waived its statutory right to seek an injunction.[15] Lemley and Shapiro argue that a court may conclude that an SEP holder that has made a FRAND commitment thereby declares that monetary damages are an adequate remedy at law for the infringement of its SEPs and that the SEP holder will suffer no irreparable harm from that infringement.[16] In addition, some implementers have invoked the doctrine of equitable estoppel as a defense in patent-infringement suits brought by SEP holders.[17] Finally, some enforcement agencies

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benefits from lower prices might flow to consumers from downstream manufacturers in the short run surely would be more than offset by forgone consumer surplus in future periods because of reduced innovation and diminished dynamic efficiency. *See* J. Gregory Sidak & David J. Teece, *Dynamic Competition in Antitrust Law*, 5 J. COMPETITION L. & ECON. 581 (2009).

Apart from raising these particular concerns regarding their categorical ban on injunctions, the IEEE's amendments to its bylaws present other significant problems. First, the evident lack of adherence to procedural safeguards in the formation of the IEEE's amendments raises serious antitrust concerns of oligopsonistic collusion. *See* J. Gregory Sidak, *Patent Holdup and Oligopsonistic Collusion in Standard-Setting Organizations*, 5 J. COMPETITION L. & ECON. 123 (2009). Second, the amendment to preclude an SEP holder and an implementer from relying on comparable licenses to set a FRAND rate if such licenses were supposedly obtained "under an explicit or implicit threat" of an injunction would exclude relevant market-based data for the valuation of patents. *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 1000–09. Third, the requirement that a reasonable royalty rate be measured against the "smallest saleable compliant implementation that practices an Essential Patent Claim" is unsound on both legal and economic grounds. *See* J. Gregory Sidak, *The Proper Royalty Base for Patent Damages*, 10 J. COMPETITION L. & ECON. 989 (2014). Fourth, the accounting for all SEPs so as to set a proportional cap on the value of a single SEP or a single portfolio of SEPs will arbitrarily limit the returns to patents that contribute disproportionately greater value to a given IEEE standard. *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 963–66. Fifth, the exclusion from the FRAND royalty of any value from standardization reveals that the amendments seek to appropriate all the rewards from the process of standardization for the benefit of implementers, to the detriment of SEP holders. *See id.* at 1022; J. Gregory Sidak, *Mandating Final-Offer Arbitration of FRAND Royalties for Standard-Essential Patents*, 18 STAN. TECH. L. REV. (forthcoming 2015), *available at* http://www.criterioneconomics.com/lemley-shapiro-baseball-arbitration-frand-royalties-seps.html.

13 Draft IEEE-SA Patent Policy FAQs, *supra* note ¶ 85, at 21–22.

14 *Id.* ¶ 86, at 22.

15 *See, e.g.*, Joseph S. Miller, *Standard-Setting, Patents, and Access Lock-in: RAND Licensing and the Theory of the Firm*, 40 IND. L. REV. 351, 358 (2007).

16 Mark A. Lemley & Carl Shapiro, *A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents*, 28 BERKELEY TECH. L.J. 1135, 1144 (2013) [hereinafter Lemley & Shapiro, *A Simple Approach*].

17 *See, e.g.*, Qualcomm Inc. v. Broadcom Corp., 548 F.3d 1004, 1022–24 (Fed. Cir. 2008); Hynix Semiconductor Inc. v. Rambus Inc., 645 F.3d 1336, 1348 (Fed. Cir. 2011); Apple,

assert that an SEP holder's request for an injunction, after the SEP holder has committed to license its SEPs on FRAND terms, constitutes anticompetitive conduct or an act of unfair competition, actionable under antitrust law.[18]

In this article, I analyze how a FRAND commitment affects an SEP holder's ability to enforce its patent rights. In Part II, I examine the FRAND contract. I explain that a primary purpose of a FRAND commitment is to grant implementers *access* to the patented technology.[19] As a result, a FRAND commitment contractually restricts some of the SEP holder's statutory rights. By entering into a FRAND contract, an SEP holder gives up its right to exclude from the use of the SEPs any implementer willing to pay FRAND compensation. However, the duty to make a FRAND offer does not ensure that a licensing agreement with a specific implementer will eventuate. The FRAND commitment does not transform an SEP holder into a guarantor of contract formation. An SEP holder discharges its FRAND obligation when it makes a FRAND offer to the requesting implementer. Thereafter, if the SEP holder commences a negotiation, it does not do so because the FRAND commitment obligates it to negotiate. The negotiation still might fail. For

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Inc. v. Motorola Mobility, Inc., No. 11-cv-178-bbc, 2012 WL 5416941, at *16 (W.D. Wis. Oct. 29, 2012).

[18] *See, e.g.*, Complaint, Motorola Mobility, L.L.C., No. 121–0120 (F.T.C. Jan. 3, 2013); Press Release, European Commission, Antitrust: Commission Opens Proceedings Against Samsung (Jan. 31, 2012), http://europa.eu/rapid/press-release_IP-12-89_en.htm [hereinafter European Commission Opens Proceedings Against Samsung].

[19] In *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 933, I said that a FRAND royalty should ensure the implementer's access to the *standard*. I now believe that this proposition overstates the scope of the duties that the FRAND obligation could feasibly impose on any single SEP holder. No single SEP holder can guarantee the success of the implementer's business strategy. Judge Richard Taranto's opinion for the Federal Circuit in Aqua Shield v. Inter Pool Cover Team, No. 2014–1263, 2014 WL 7239738 (Fed. Cir. Dec. 22, 2014), forcefully explains, in the context of the hypothetical negotiation generally, why a court cannot set the reasonable royalty due a licensor according to a residual calculation intended to ensure the licensee's profitability:

> Another hypothetical assumption, bearing particularly on the anticipated-profits inquiry, abstracts away from the particular infringer's degree of efficiency. An especially inefficient infringer—*e.g.*, one operating with needlessly high costs, wasteful practices, or poor management—is not entitled to an especially low royalty rate simply because that is all it can afford to pay without forfeiting or unduly limiting its profit if it uses the patented technology rather than alternatives. Thus, the royalty the particular infringer could profitably pay by going about its business in its particular way does not set the market value that the hypothetical negotiation aims to identify.

Id. at *4. The same reasoning applies to the mistaken proposition that the FRAND obligation makes an individual SEP holder the guarantor of the implementer's profit margin on the downstream product practicing the standard. "Ensuring access to the SEP holder's standard-essential *technology*" therefore more realistically and accurately describes the meaning of an individual SEP holder's FRAND commitment to the SSO and to implementers as third-party beneficiaries.

example, the implementer might not be willing or able to pay a FRAND royalty for the use of the SEPs. Under those circumstances, even though the SEP holder has discharged its contractual duty arising from the FRAND commitment, there will be no licensing agreement with the specific implementer. My analysis indicates the imprudence of categorically banning injunctions for infringement of SEPs, as the IEEE has amended its bylaws to require. Such a ban would invite opportunism by implementers and is unnecessary. Courts already can prevent opportunism by SEP holders by conditioning an injunction on the implementer's actual or constructive rejection of a FRAND offer.

In Part III, I analyze the potential legal restrictions on an SEP holder's right to seek an injunction after having committed to license its SEPs on FRAND terms. I make three main points. First, as a matter of contract law, a FRAND contract typically does not waive an SEP holder's right to an injunction. Second, principles of equitable estoppel generally do not constrain an SEP holder's right to request an injunction. Third, there is no reason to presume that an SEP holder that has committed to license its SEPs on FRAND terms will not suffer irreparable harm and consequently will not be able to meet the legal criteria required to obtain an injunction.[20] None of the presented theories supports an automatic extinguishment of the SEP holder's right to seek and receive an injunction. Under U.S. law, a court's determination of whether to enjoin an infringer of SEPs properly turns on application of the Supreme Court's *eBay* factors to the facts of the case.[21]

In Part IV, I analyze the risks associated with both a court's grant and a court's denial of an injunction against an infringer of SEPs. Some commentators have argued that permitting injunctions might allow an SEP holder to pressure an implementer opportunistically to agree to exploitative licensing terms. However, denying injunctions in cases that involve the infringement of FRAND-committed patents would invite opportunism in the opposite direction—by implementers. Absent the threat of an injunction, implementers will have little incentive to negotiate sincerely and to agree promptly to FRAND licensing terms. Limiting an SEP holder's ability to obtain an injunction might encourage freeriding on the SEP holder's invention and decrease the implementer's incentives to negotiate the licensing terms in good faith.[22] Limiting an SEP holder's ability to obtain an injunction could also prolong litigation, rather than facilitate voluntary licensing agreements between the parties.[23] A

[20] *See, e.g.*, Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1332 (Fed. Cir. 2014).

[21] eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006).

[22] *See, e.g.*, Damien Geradin, *The European Commission Policy Towards the Licensing of Standard-Essential Patents: Where Do We Stand?*, 9 J. COMPETITION L. & ECON. 1125, 1129 (2013); James Ratliff & Daniel L. Rubinfeld, *The Use and Threat of Injunctions in the RAND Context*, 9 J. COMPETITION L. & ECON. 1, 9 (2013).

[23] *See, e.g.*, *The International Trade Commission and Patent Disputes: Hearing Before the Subcomm. on Intellectual Property, Competition, and the Internet of the H. Comm. on the Judiciary*, 112th Cong.

categorical prohibition on injunctions would in turn reduce the SEP holder's willingness to invest in innovation and contribute its future inventions to SSOs.[24]

In Part V, I identify the steps a court should follow when ruling on a request for an injunction against an infringer of a FRAND-committed patent. An SEP holder should be able to request an injunction only if it has made a FRAND licensing offer. The absence of any licensing offer, or the extension of an offer that lies outside the FRAND range, indicates that the SEP holder is not willing to license its SEPs on FRAND terms. Conversely, when the SEP holder has made a FRAND offer, the court's evaluation should focus on whether the implementer has rejected that offer, either explicitly or constructively. An implementer that rejects a FRAND offer should not be exempt from an injunction. Rather, the court should grant an injunction against that implementer if it finds that the *eBay* criteria are met. My proposed methodology disfavors the party that acts in bad faith during the negotiation of FRAND terms and thus discourages opportunistic practices *by either party*. This approach will stimulate voluntary licensing agreements on FRAND terms and will strike a balance between the need to ensure that implementers have access to the patented standard-essential technology and the need to ensure that SEP holders are adequately compensated for their inventions.

Finally, in Part VI, I examine the theories that would subject an SEP holder to potential liability under antitrust law for requesting an injunction against an infringer of the SEP holder's FRAND-committed patent. Despite the concerns expressed by antitrust agencies, an SEP holder's use of an injunction will not necessarily harm competition (or consumer welfare) in the relevant market. A request for an injunction should neither automatically trigger the application of section 2 of the Sherman Act[25] or section 5 of the Federal Trade Commission (FTC) Act,[26] nor should such a request necessarily constitute an abuse of a dominant position in violation of Article 102 of the Treaty on the Functioning of the European Union (TFEU).[27]

II. THE FRAND CONTRACT

By virtue of its membership in an SSO, an SEP holder typically must declare during the standardization process whether it is willing to license its SEPs on FRAND terms to implementers of the standard. Although commentators have

10 (2012) (statement of Bernard J. Cassidy, Executive Vice President & General Counsel, Tessera Technologies, Inc.).

[24] *Id.*

[25] 15 U.S.C. § 2.

[26] *Id.* § 45.

[27] Consolidated Version of the Treaty on the Functioning of the European Union art. 102, Oct. 26, 2012, 2012 O.J. (C 326) 47 [hereinafter TFEU].

discussed various questions related to the meaning of FRAND, the exact obligations arising from a FRAND contract between an SEP holder and the SSO have remained remarkably unclear.[28] To clarify the matter, I analyze the purpose of the FRAND contract and the duties that the contract imposes on SEP holders.

A. The Purpose of the FRAND Contract

Industry standards often include technologies that patent rights protect. When an SSO adopts a patented technology in a standard, access to the patent becomes essential to those implementing the standard. By definition, it is not technically possible to make a product that complies with a standard without infringing the patents essential to that standard. The patent's essentiality, of course, depends on its claims; the patent could include some claims that are essential to the standard and other claims that are not.[29]

One of the primary purposes of a FRAND contract is to ensure an implementer's access to the patented standard-essential technology. If it refused to license its SEPs, the SEP holder could render the standard impracticable. Manufacturers that do not have access to an SEP cannot produce goods compliant with the standard. In such circumstances, the SSO would need to revise the standard to bypass the technology covered by the SEP in question and make the standard accessible to the interested implementers. To obviate revising its standard (as well as the related costs and delays), SSOs typically require a participant in the standardization process to declare the existence of its SEPs—as early as possible—and to declare further whether it will license those SEPs on FRAND terms.[30] By requiring a FRAND commitment, an SSO prevents the SEP holder from refusing to license its SEPs and thereby denying implementers access to those standardized technologies, after the patented technology has been implemented into the standard.

An SSO, however, cannot compel a participant in the standard-setting process to offer its intellectual property rights (IPR) on FRAND terms. The rules of the European Telecommunications Standards Institute (ETSI), for example, clarify that if the SEP holder, before the publication of the standard, informs ETSI that it is not prepared to license its IPR on FRAND terms, "the General Assembly shall review the requirement for that STANDARD or TECHNICAL SPECIFICATION and satisfy itself that a viable alternative

[28] *See, e.g.*, Christine Graham, Jeremy Morton, Chris Watson & David Healey, *Standard Setting, Competition Law and FRAND Licensing in Europe and the United States*, *in* NICOLAS FOX, INTELLECTUAL PROPERTY IN ELECTRONICS AND SOFTWARE: A GLOBAL GUIDE TO RIGHTS AND THEIR APPLICATIONS 31, 38 (Globe Law & Business 2013).

[29] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 958.

[30] *See, e.g.*, European Telecommunication Standards Institute [ETSI], ETSI Intellectual Property Rights Policy, Annex 6, § 4.1–4.3 (Nov. 19, 2014) [hereinafter ETSI IPR Policy], *available at* http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf.

technology is available."[31] If no alternative is available, ETSI rules provide that the Director-General of ETSI should "request [a] MEMBER to reconsider its position."[32] If "that MEMBER . . . decides not to withdraw its refusal to license the IPR," it should inform the Director-General of its decision and provide a written explanation, and the Director-General should then "send the MEMBER's explanation . . . to ETSI Counselors for their consideration."[33] ETSI's IPR policy confirms that ETSI cannot force a participant to grant a license on FRAND terms; rather, it confirms that agreeing to FRAND licensing terms is a *voluntary* commitment made by the SEP holder.

Courts have recognized that an SEP holder's voluntary commitment to license its SEPs on FRAND terms constitutes a binding contract with the SSO.[34] The SEP holder and the SSO are parties to the contract, whereas the implementer of the standard (the licensee) is a third-party beneficiary. The SSO benefits from adopting the patented technology into the standard because the higher the quality of the adopted technology, the higher the quality of the standard. High-quality standards are more likely to be implemented by downstream firms and are more likely to encourage continuing investment in new generations of the standard. If a standard is commercially successful, the SEP holder will benefit from widespread implementation of its patented technology. Finally, an implementer of the standard benefits from the FRAND contract, which gives it lawful access to the patented standard-essential technology on reasonable terms and increases its ability to implement the standard. The implementer also benefits from the success of a standard; a product that is compatible with a widely adopted standard and, consequently, with a large network of devices, is typically more valuable to consumers than is an incompatible product.[35]

As with any other contract, a FRAND contract imposes duties on the parties. The extent of those duties, however, provokes significant controversy. Does a FRAND contract impose on an SEP holder a duty to license? Does the contract impose on an SEP holder a duty of good faith that supersedes the general duty of good faith in contract law? In the next part, I analyze in detail the duties that a FRAND contract imposes on an SEP holder.

My analysis proceeds on the assumption that the SEP is valid and standard-essential. It is worth noting that this assumption will not always hold.[36] First, an

[31] *Id.* § 8.1.1.

[32] *Id.* § 8.1.2.

[33] *Id.*

[34] *See, e.g.*, Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1005 (N.D. Cal. 2013) ("There is no dispute . . . that defendants entered into a binding contract with the IEEE to license their declared standard-essential patents . . . on RAND terms."); *see also* Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 878 (9th Cir. 2012).

[35] *See, e.g.*, Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CAL. L. REV. 1889, 1896 (2002).

[36] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 956–60.

SEP might be found invalid—for example, because the patent application is eventually not granted or because the issued patent is later found to be invalid. Second, patent holders can declare their patents to be standard-essential when in fact they are not.[37] Empirical evidence shows that only a portion of the patents that are declared to be standard-essential describes technologies that are in fact necessary for compliance with the standard.[38] The SSO does not make this determination. As in the case of validity and infringement, any disagreement with respect to the essentiality of an SEP is conclusively resolved only through litigation. If a court declares a patent to be inessential to the standard, the implementer need not implement the patented technology to be able to comply with the standard, but neither is the patent holder subject to an obligation to license the patent in question on FRAND terms.[39]

Several scholars,[40] as well as antitrust authorities[41] and courts,[42] have asserted that the *raison d'être* of a FRAND contract is to prevent patent holdup. A FRAND commitment may indeed enable the implementer to avoid excessive royalties. An implementer that believes that the offered licensing terms are not FRAND has the option to sue the SEP holder for breach of contract and seek adjudication of a FRAND royalty in court. Given this ready alternative available to the implementer, patent holdup is improbable, if not impossible. However, from the perspective of contract interpretation, the supposition that the primary purpose of a FRAND commitment is to prevent patent holdup is devoid of factual evidence.

The SSOs' IPR policies clearly state that one purpose of the FRAND commitment is to ensure *access* to the standardized technology. The IPR policy of the International Telecommunication Union (ITU), for example, explicitly states that securing access to SEPs is the "*sole* objective of the code of

[37] *Id.* at 958.

[38] David J. Goodman & Robert A. Myers, *3G Cellular Standards and Patents*, 2005 IEEE WIRELESSCOM § VI (June 13, 2005), *available at* http://eeweb.poly.edu/dgoodman/wirelesscom2005.pdf.

[39] *See, e.g.*, Commission Decision, Case No. COMP/M.6381, *Google/Motorola Mobility*, 2012 O.J. (C 1068) 1, ¶¶ 58–59 [hereinafter Google/Motorola Mobility, Case No. COMP/M.6381].

[40] *See, e.g.*, Joseph Farrell, John Hayes, Carl Shapiro & Theresa Sullivan, *Standard Setting, Patents, and Hold-Up*, 74 ANTITRUST L.J. 603 (2007); Jorge L. Contreras, *Fixing FRAND: A Pseudo-Pool Approach to Standards-Based Patent Licensing*, 79 ANTITRUST L.J. 47 (2013).

[41] *See, e.g.*, Analysis of Agreement Containing Consent Orders to Aid Public Comment at 4, Robert Bosch GmbH, Dkt No. C-4377 (F.T.C. Apr. 24, 2013); Press Release, European Commission, Antitrust: Commission Sends Statement of Objections to Motorola Mobility on Potential Misuse of Mobile Phone Standard-Essential Patents—Questions and Answers (May 6, 2013), http://europa.eu/rapid/press-release_MEMO-13-403_en.htm.

[42] *See, e.g.*, Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 876 (9th Cir. 2012); Microsoft Corp. v. Motorola, Inc., No. C10–1823JLR, 2013 WL 2111217, at *11 (W.D. Wash. Apr. 25, 2013); InterDigital Commc'ns, Inc. v. ZTE Corp., No. 1:13-cv-00009-RGA & No. 1:13-cv-00010-RGA, 2014 WL 2206218, at *1 (D. Del. May 28, 2014).

practice."[43] Similarly, ETSI states that the purpose of its policy is to reduce the risk that the "investment in the preparation . . . of [standards] could be wasted as a result of an [essential] IPR . . . being unavailable."[44] By including a FRAND commitment in their IPR policies, SSOs seek to prevent an SEP holder from refusing to license its SEPs on reasonable terms and from thereby denying implementers access to the patented standard-essential technology.

At the same time, a FRAND commitment aims to ensure that an SEP holder will be fairly compensated for its contribution to the standard.[45] Technologies that have contributed to a standard are not costless; their development requires significant investments in research and innovation. Further, once a technology has been invented, a patent holder has the option to monetize that invention through exclusive use rather than by contributing it to a standard. SSOs recognize that, without an adequate royalty, technology owners might have insufficient incentives to continue to contribute their technologies to SSOs. A FRAND commitment addresses this problem: the SEP holder agrees to contribute its technology to the SSO and forgo the technology's exclusive use in exchange for the assurance that the SEP holder will receive fair and reasonable compensation.

The IPR policies of several of the most prominent SSOs—including ETSI, the ITU, and the Joint Electron Device Engineering Council (JEDEC), and, until February 2015, the IEEE—have not dictated how economic rents should be divided between the SEP holder and the implementer.[46] For example, the SSOs' internal rules do not state that an SEP holder's compensation should not capture any part of the value created by the standard. The IPR policies also do not state that a FRAND royalty should be calculated to approximate the *ex ante* incremental value of patented technology, evaluated at the moment of standard selection. The analysis of the SSOs' internal rules suggests that SSOs are less concerned with how actual FRAND royalties are negotiated—as long as the resulting royalties do not prevent implementers access to the standard-essential technologies.

In 2014, the IEEE published on its website a series of documents proposing amendments to the IEEE's patent policy. Draft 39 of the IEEE Standard Board Bylaws proposed that a reasonable royalty should appropriately compensate the SEP holder but should "exclud[e] the value, if any, resulting from the inclusion of that Essential Patent Claim's technology in the IEEE Standard."[47] Without examining here the merits and demerits of this now-ratified amendment, it is worth emphasizing that the IEEE patent policy is the

[43] Int'l Telecomm. Union [ITU], Common Patent Policy for ITU-T/ITU-R/ISO/IEC [hereinafter ITU Patent Policy] (emphasis added), *available at* http://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx.

[44] ETSI IPR Policy, *supra* note 20, § 3.1.

[45] *See, e.g.*, *id.* at § 3.2 ("IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS.").

[46] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 1021.

[47] Draft 39 IEEE Standards Board Bylaws, *supra* note 6, § 6.1, at 2.

first and only SSO policy to announce the remarkable proposition that an SEP holder may not obtain any of the value created by the standard.[48]

In sum, the main goals of a FRAND commitment are generally to ensure access to the technology covered by the SEP and to ensure proper compensation of the SEP holder. The interpretation of a FRAND commitment, including the decision to grant or deny an SEP holder an injunction, must account for those goals. An interpretation which focuses on the risk of patent holdup but which disregards that a FRAND commitment aims to facilitate access to the patented technology and to ensure adequate compensation to the SEP holder not only would fail as a matter of contract interpretation, but also would create an imbalance in the standardization process. In the absence of fair compensation, an SEP holder will have no incentive to contribute its technologies to an SSO. The decreased participation of patent owners would in turn decrease the quality of standards, to the ultimate detriment of consumers. Therefore, a correct interpretation of a FRAND commitment must account for all the goals that such a commitment pursues, including the goals of assuring access to the patented standard-essential technology and providing adequate compensation to the SEP holder for its contribution to the standard.

B. The SEP Holder's Contractual Duties

A FRAND commitment imposes duties on the SEP holder that circumscribe by contract the rights that the patent system has statutorily awarded the SEP holder. In this part, I analyze the extent of that circumscription. First, I explain that a FRAND contract generally imposes a duty on an SEP holder to offer a

[48] The China IPR blog reported in November 2014 that the Ministry of Industry and Information Technology's IP Center had suggested that Chinese SSOs adopt internal rules that provide a more detailed definition of FRAND compensation. In particular, the MIIT reportedly has recommended that FRAND compensation be determined by considering the following factors, among others:

> (1) The value contributed to a Compliant Portion by the Necessary Claim shall be assessed against the smallest component or device that is compliant with the Final Standard and that practices the relevant Necessary Claims; (2) A reasonable royalty shall also take into account the total aggregate royalties that may apply if other owners of intellectual property demand similar terms; (3) The degree of innovativeness of the Necessary Claims in the standard, the technical area of the standard, the nature of the standard, the implementation scope of the standard, relevant licensing terms and other factors.

Mark Cohen, *Some Comments on MIIT's Template for IP Policies in Industry Standard Organizations*, China IPR (Nov. 28, 2014), http://chinaipr.com/2014/11/28/some-comments-on-miits-template-for-ip-policies-in-industry-standards-organizations/. The MIIT also reportedly has recommended that the SSO's policy provide that "[t]he royalties shall not take into account the value, if any, associated with inclusion of the Necessary Claims in the Final Standard." *Id.*; *see also* Ministry of Industry And Information Technology, Hangye Biaozhunhua, Zuzhi Zhishi Chanquan Zhengce Moban (行业标准化组织知识产权政策模板) [Template for IP Policies for Industry Standardization Organization] (2014).

license on FRAND terms—a duty to deal that otherwise does not exist for a patent holder. Second, I explain that an SEP holder will normally have a duty to act in good faith, not only in performing a contract to which it is a party, but also in negotiating licensing terms with a potential implementer.

1. The Duty to Offer a License on FRAND Terms

Outside the context of SEPs, a patent holder "has the exclusive right to manufacture, use, and sell its invention."[49] A patent holder may exclude third parties from using its invention and may retain the exclusive right to use the invention itself. If a patent holder decides to license its patent, it has the right to select its licensees.[50] In other words, it is a patent holder's right to grant a license to one company and not to another, or not to grant any license at all.[51]

By entering into a FRAND contract, an SEP holder agrees to refrain from exercising some of its statutory rights. The exact duties that arise from a contract between an SEP holder and an SSO are determined by the nature of the specific FRAND commitment and by the IPR policies of the SSO, which may differ depending on the SSO. However, for most SSOs, a voluntary FRAND commitment means that the SEP holder that elects to enforce its SEPs undertakes a duty *to offer* to license its SEPs on FRAND terms. For example, the IEEE currently requires an SEP holder to assure that licenses for SEPs "will be made available to an unrestricted number of applicants . . . under reasonable . . . terms . . . that are . . . free of any unfair discrimination."[52] Similarly, the ETSI requires that the SEP holder confirm that it is "prepared to grant irrevocable licenses on [FRAND] terms and conditions" to the manufacturers of standard-compliant goods.[53] By making a voluntary FRAND commitment, the SEP holder agrees to offer access to its SEPs on FRAND terms to interested implementers (not merely members of the SSO). The duty to *offer* to license SEPs on FRAND terms aims to ensure the main objective of a FRAND commitment—that is, to prevent the SEP holder from denying *access* to the patented technology to implementers that are willing to pay FRAND compensation.

A FRAND commitment, however, does not impose on the SEP holder a duty to license its SEPs to implementers at every level of the value chain. An

[49] Zenith Radio Corp. v. Hazeltine Research, Inc., 395 U.S. 100, 135 (1969) (citing Bement v. Nat'l Harrow Co., 186 U.S. 70, 88–89 (1902)).

[50] *Id.* at 135–36 (citing Waterman v. Mackenzie, 138 U.S. 252, 255 (1891)).

[51] Cataphote Corp. v. De Soto Chem. Coatings, Inc., 450 F.2d 769, 774 (9th Cir. 1971).

[52] IEEE, IEEE-SA Standards Board Bylaws, § 6.2.b (2014), *available at* http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#. The IEEE imposes a duty to offer a license on FRAND terms "from the date of the standard's approval to the date of the standard's transfer to inactive status." *Id.* § 6.2.

[53] ETSI IPR Policy, *supra* note 30, § 6.1. Rather than refer to SEPs, ETSI refers to "essential IPR," which it defines as "any intellectual property right conferred by statute law including applications therefor other than trademarks" and excluding "rights relating to get-up, confidential information, trade secrets or the like." *Id.* § 15, def. 7.

SEP holder may elect, for example, to license its SEPs to the downstream level, but not to implementers in the upper levels of the value chain. That licensing practice would not violate a FRAND obligation as long as the SEP holder grants access to its SEPs to implementers in the upper level of the value chain. A FRAND commitment requires the SEP holder to grant access to its SEPs, but that access need not be granted through a license.

The duty to offer a license on FRAND terms also affects an SEP holder's right to determine certain licensing conditions freely. An SEP holder may not set unreasonable royalties that would create a constructive refusal to license. A FRAND commitment also precludes an SEP holder from imposing discriminatory licensing terms. Although a patent holder is generally free to license its patents to different parties on different terms, the FRAND commitment limits that freedom with respect to SEPs. SSOs do not typically define "discriminatory" or "nondiscriminatory" licensing. The requirement to set nondiscriminatory licensing terms is, however, strictly related to the need to ensure *access* to the patented technology subject to the FRAND commitment. The prohibition on discriminatory terms is a common component of access remedies.[54] However, the requirement of nondiscrimination does not require an SEP holder to license its SEPs under the same licensing terms to all implementers.[55] Outside the context of SEPs, courts have clarified that nondiscriminatory licensing terms need not be identical.[56] The same reasoning applies to SEPs. An SEP holder may charge different royalties to different implementers if the circumstances of the case justify such differentiation. For example, a patent holder may grant a lower net royalty rate in a cross license with an implementer that has a valuable patent portfolio, compared with the royalty rate in a one-way license.

Although an SEP holder has the duty to make a FRAND offer, this duty does not guarantee that a license with the specific implementer will eventuate. An SEP holder agrees to offer a license for its SEPs on FRAND terms; it does not agree to license its SEPs for free or for less than a FRAND rate. SSOs emphasize that the SEP holder should be "adequately and fairly" rewarded for the use of its standard-essential technology.[57] Hence, a FRAND commitment does not obligate the SEP holder to license its SEPs to companies that are not willing or able to pay compensation for the use of the technology that rises to the level of being fair and reasonable. Therefore, even if an SEP holder complies with its FRAND commitment and makes a FRAND offer to the

[54] *See, e.g.*, European Parliament and Council Directive 2009/73/EC, art. 13(1b), 2009 O.J. (L 211).

[55] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 996–97.

[56] *See, e.g.*, Case T-201/04, Microsoft Corp. v. Comm'n, 2007 E.C.R II-3601, at 811 ("[N]on-discriminatory does not mean that Microsoft must impose the same conditions on every undertaking seeking such licenses.").

[57] *See, e.g.*, ETSI IPR Policy, *supra* note 30, § 3.2.

interested implementer, there is no assurance that the parties will achieve a meeting of the minds and enter into a mutually satisfactory license.

2. *The Duty to Negotiate in Good Faith*

The FRAND commitment is part of a contract. According to the Restatement (Second) of Contracts, "[e]very contract imposes upon each party a duty of good faith and fair dealing in its performance and its enforcement."[58] Less clear is whether contract *formation* (such as the negotiation of a license for a portfolio of SEPs) carries the same duty of good faith and fair dealing. The Restatement merely says that bad faith during negotiation and formation may be subject to sanctions.[59]

Several U.S. courts have said that an SEP holder has a duty to negotiate a FRAND license in good faith. In *Apple v. Samsung*, for example, the district court for the Northern District of California observed, "both parties agree that Samsung's contractual obligation arising from its FRAND declarations to ETSI at the very least created a duty to negotiate in good faith with Apple regarding FRAND terms."[60] The Western District of Washington made a similar point in *Microsoft v. Motorola*.[61] Microsoft alleged that Motorola breached its FRAND contract with the IEEE and ITU by offering to Microsoft a "blatantly unreasonable" royalty.[62] In evaluating Microsoft's argument, the court applied the rules of Washington State law (without, however, discussing its choice of law).[63] Consistent with the Washington Supreme Court's decision in *Badgett v. Security State Bank*,[64] the court in *Microsoft v. Motorola* reasoned

[58] RESTATEMENT (SECOND) OF CONTRACTS § 205 (American Law Institute 1981). American courts recognize this implied covenant in contracts. *See, e.g.*, Seidenberg v. Summit Bank, 791 A.2d 1068, 1074 (N.J. Super. 2002); Commercial Credit Corp. v. Nelson Motors, Inc., 147 S.E.2d 367, 484 (S.C. 1966) ("[T]here exists in every contract an implied covenant of good faith and fair dealing."); *see also* RESTATEMENT (SECOND) OF CONTRACTS § 205 cmt. a (American Law Institute 1981).

[59] RESTATEMENT (SECOND) OF CONTRACTS § 205 cmt. c (American Law Institute 1981). Some legal scholars have attempted, with limited success, to define good faith during contract negotiations. *Compare* Robert S. Summers, *"Good Faith" in General Contract Law and the Sales Provisions of the Uniform Commercial Code*, 54 VA. L. REV. 195, 201 (1968), *with* Steven J. Burton, *Breach of Contract and the Common Law Duty to Perform in Good Faith*, 94 HARV. L. REV. 369, 369 (1980), *and* Steven J. Burton, *More on Good Faith Performance of a Contract: A Reply to Professor Summers*, 69 IOWA L. REV. 497 (1984). *See also* E. Allan Farnsworth, *Precontractual Liability and Preliminary Agreements: Fair Dealing and Failed Negotiations*, 87 COLUM. L. REV. 217, 281 (1987).

[60] Apple Inc. v. Samsung Elecs. Co., No. 11-cv-01846, 2012 WL 1672493, at *12 (N.D. Cal. May 14, 2012) (emphasis omitted).

[61] Microsoft Corp. v. Motorola Inc., 864 F. Supp. 2d 1023 (W.D. Wash. 2012).

[62] *Id.* at 1036.

[63] *Id.* at 1033. *But see Apple v. Samsung*, 2012 WL 1672493, at *10–11 (holding that French law was applicable to the ETSI-related breach of contract claim).

[64] Badgett v. Security State Bank, 116 Wash. 2d 563 (Wash. 1991) ("There is in every contract an implied duty of good faith and fair dealing. This duty obligates the parties to cooperate with each other so that each may obtain the full benefit of performance.").

that any offer "(be it an initial offer or an offer during a back-and-forth negotiation) must comport with the implied duty of good faith and fair dealing inherent in every contract."[65] Therefore, the court construed a FRAND contract to impose on the SEP holder a duty to negotiate the FRAND terms in good faith.

An SEP holder must make a FRAND offer in good faith. Nevertheless, the duty to negotiate the licensing terms in good faith does not require that an SEP holder that has already made a FRAND offer continue to negotiate licensing terms with an implementer. By making a FRAND offer, an SEP holder has fulfilled its FRAND commitment—any further negotiation is solely at the discretion of the SEP holder. It appears that some commentators have failed to recognize this conclusion, and thus they have misinterpreted the duties that a FRAND commitment imposes on an SEP holder. After an SEP holder has made an offer within the FRAND range, it has no further obligation that arises from the FRAND commitment. If the SEP holder nonetheless decides to negotiate further the licensing terms with the implementer, the SEP holder needs to negotiate such terms in good faith.

However, the duty to negotiate in good faith is not limited to the SEP holder.[66] When an implementer and an SEP holder commence negotiations for a bilateral patent licensing agreement, the implementer has a similar common law duty to negotiate in good faith. The implementer need not be a member of the SSO or a party to the FRAND contract. Rather, the implementer may be merely a third-party beneficiary of the FRAND contract, such that the FRAND contract cannot bind the implementer to its contractual obligation to negotiate in good faith. Nonetheless, when an implementer is negotiating a bilateral license agreement with an SEP holder, and if U.S. law applies, the implementer is bound by the common law duty to negotiate in good faith. It would be anomalous, to say the least, to apply an asymmetric rule whereby the SEP holder was obliged to negotiate a bilateral license agreement in good faith while the counterparty to the negotiation—the implementer—was excused from any reciprocal duty.[67]

From the moment that an SEP holder and an SSO enter into a FRAND contract, the SEP holder has the duty to offer its SEPs to the implementer on FRAND terms. An SEP holder discharges that duty when it makes an offer to the implementer on terms that are FRAND. After an SEP holder has made an

[65] *Microsoft v. Motorola*, 864 F. Supp. 2d at 1038.

[66] *See* Ericsson Inc. v. D-Link Sys., Inc., No. 6:10-cv-00473, 2013 WL 4046225, at *87 (E.D. Tex. Aug. 6, 2013), *aff'd in part, rev'd in part, and vacated in part*, 773 F.3d 1201 (Fed. Cir. 2014).

[67] With respect to contract performance and enforcement, the Restatement says that "[e]very contract imposes *upon each party* a duty of good faith and fair dealing . . . ." RESTATEMENT (SECOND) OF CONTRACTS § 205 (American Law Institute 1981) (emphasis added). It is not clear why this symmetry of obligations should give way to asymmetry of obligations at the stage of contract formation, assuming that a court is inferring that the common law duty of good faith and fair dealing encompasses contractual negotiations.

offer within the FRAND range, it has no further obligation *that arises from its FRAND commitment*. At this point, it is for the implementer to accept or reject the offer, or to make a counteroffer (which, as a general rule in contract law, would constitute an implicit rejection of the offer).[68] Whether the implementer's behavior at this point in the negotiations adheres to the standard of good faith will depend ultimately on how quickly the implementer seeks to close the bid-ask spread and converge on an agreement.

The obligation to negotiate in good faith does not prevent a party from seeking the best possible deal during the negotiation. Judge Posner has written that there is only "a limited duty of good faith at the contract-formation stage."[69] For example, the case in which "a knowledgeable buyer took advantage of an ignorant seller to obtain a valuable good at a below-market price" would not constitute bad-faith negotiations.[70] The duty to bargain in good faith does not require a party to subordinate its interests to those of the other party.[71] The duty to negotiate in good faith does not prohibit parties from "profit[ing] from asymmetry of information."[72] The Seventh Circuit has said that "[i]n a business transaction both sides presumably try to get the best of the deal. That is the essence of bargaining and the free market . . . . So one cannot characterize self-interest as bad faith."[73] By this reasoning, an SEP holder does not breach the common law duty to negotiate in good faith if it seeks to obtain a higher royalty that is still within the FRAND range, nor does an implementer breach the same duty if it seeks to obtain a lower royalty that is still within the FRAND range.

III. WHAT LAW CONSTRAINS THE SEP HOLDER'S RIGHT TO AN INJUNCTION?

I analyze now the constraints that a FRAND commitment imposes on an SEP holder's ability to demand an injunction against infringers of FRAND-committed SEPs. I evaluate whether contract law or equitable estoppel limits an SEP holder's right to seek an injunction against infringers of FRAND-committed patents. I then analyze whether, after entering into a FRAND contract, the SEP holder is any longer able to meet the legal requirement needed

[68] *See, e.g.*, RESTATEMENT (SECOND) OF CONTRACTS § 39(2) (American Law Institute 1981) ("An offeree's power of acceptance is terminated by his making of a counteroffer, unless the offeror has manifested a contrary intention or unless the counteroffer manifests a contrary intention of the offeree.").

[69] Richard A. Posner, *Let Us Never Blame a Contract Breaker*, 107 MICH. L. REV. 1349, 1360 (2009).

[70] *Id.*

[71] *Id.* at 1358.

[72] *Id.*

[73] Feldman v. Allegheny Int'l, Inc., 850 F.2d 1217, 1223 (7th Cir. 1988) (Coffey, J.); *see also* A/S Apothekernes Laboratorium for Specialpraeparater v. I.M.C. Chem. Group, Inc., 873 F.2d 155, 159 (7th Cir. 1989) (Coffey, J.).

to obtain an injunction. I explain that, even after undertaking a FRAND commitment, the SEP holder still might be able to meet the *eBay* requirements to obtain an injunction. There is consequently no valid reason to proscribe categorically the use of injunctions for FRAND-committed patents. It bears emphasis that the analysis in this part concerns the SEP holder's right merely to *seek* an injunction—not to *obtain* an injunction. The significance of that distinction will become clear.

A. Contract

Some commentators have argued that SEP holders are contractually precluded from seeking an injunction against infringers of FRAND-committed SEPs.[74] According to this view, a FRAND commitment represents a contractual waiver of the right to seek an injunction, such that an SEP holder's request for an injunction breaches the FRAND contract. However, a detailed analysis of the contractual provisions of a FRAND commitment does not support this interpretation. In fact, there is no indication that a FRAND contract provides either an explicit or an implicit waiver of the right to seek an injunction.

In the United States, seeking an injunction is one of the statutory remedies available to a patent holder for infringement of its patents.[75] Other jurisdictions provide similar remedies.[76] Nevertheless, an SEP holder may agree by contract to forbear from exercising its statutory rights. An SSO and an SEP holder could agree that, by concluding a FRAND contract, the SEP holder forgoes its right to seek an injunction against an infringing manufacturer of standard-compliant goods. In that case, the FRAND contract would include an explicit waiver of the right to seek an injunction (as the IEEE's 2015 bylaw amendments illustrate). Should the SEP holder subsequently request an injunction against the manufacturer, the SEP holder would breach its FRAND contract.

In practice, however, SSOs' contractual agreements typically do not prohibit seeking injunctions for infringement of FRAND-committed SEPs. In other words, a contract between an SEP holder and an SSO does *not* provide that, by entering into the FRAND contract, the SEP holder waives its right to seek an injunction. For example, the IPR policy of ETSI, one of the largest SSOs in the field of telecommunications, is silent on the question of injunctive relief.[77] The language of a typical FRAND contract therefore supports neither the assertion that entering into a FRAND contract represents a

[74] *See, e.g.*, Miller, *supra* note 15, at 358 ("[T]he core meaning of the RAND promise [is] an irrevocable waiver of injunctive relief and other extraordinary remedies.").

[75] 35 U.S.C. § 283.

[76] *See, e.g.*, European Parliament and Council Directive 2004/48/EC, art. 9, 2004 O.J. (L 195) ("Member States shall ensure that the judicial authorities may, at the request of the applicant: (a) issue against the alleged infringer an interlocutory injunction intended to prevent any imminent infringement of an intellectual property right.").

[77] *See, e.g.*, ETSI IPR Policy, *supra* note 30.

waiver by the SEP holder of the right to seek an injunction nor the assertion that requesting an injunction violates the SEP holder's duties under the FRAND contract.

There is also no evidence that, as a matter of contract interpretation, the FRAND contract includes an *implicit* waiver of an SEP holder's right to seek an injunction. As a general principle of legal interpretation, the waiver of a statutory right must be clear and unambiguous.[78] Consequently, an implicit waiver of rights originating from public law should be disfavored as a matter of contract interpretation concerning the SEP holder's FRAND obligations. There is no indication that, in a typical FRAND contract, either the SSO or the SEP holder intended to include an implicit waiver of the SEP holder's right to seek an injunction. Certainly, the IEEE's proposed bylaw amendments are evidence to the contrary. Furthermore, members of ETSI discussed the possibility of implementing in the ETSI IPR policy a waiver of the right to seek an injunction. The Interim IPR policy adopted in 1993 contained, among other provisions, an explicit restriction on the SEP holder's request for an injunction.[79] However, ETSI excluded this restriction from the policy that it adopted in 1994,[80] and ETSI has not adopted such a policy since. Thus, it cannot plausibly be argued that ETSI decided to exclude that provision from its policy, but nonetheless considers that the SEP holder's waiver of its right to an injunction is an implicit part of the FRAND contract. In the absence of clear evidence of a waiver, a court cannot properly construe a FRAND contract to preclude the SEP holder from seeking an injunction.

[78] The Supreme Court has said (in labor law) that it "will not infer from a general contractual provision that the parties intended to waive a statutorily protected right unless the undertaking is 'explicitly stated.' More succinctly, the waiver must be clear and unmistakable. . . . [T]o waive a statutory right the duty must be established clearly and unmistakably." Metropolitan Edison Co. v. NLRB, 460 U.S. 693, 708–09 (1983) (quoting Mastro Plastics Corp. v. NLRB, 350 U.S. 270, 283 (1956)).

[79] ETSI/GA15 TD 25, § 13 ("The Signatory hereby undertakes not to seek an injunction against a Party in respect of any Essential IPR in respect of [enumerated situations]."); *see* Roger G. Brooks & Damien Geradin, *Taking Contracts Seriously: The Meaning of the Voluntary Commitment to Licence Essential Patents on "Fair and Reasonable" Terms*, *in* INTELLECTUAL PROPERTY AND COMPETITION LAW: NEW FRONTIERS 389 (Steven Anderman & Ariel Ezrachi eds., Oxford Univ. Press 2011).

[80] Karl Rosenbrock, former director at ETSI, testified in 2012:

> I am not aware of any background discussions within ETSI in which it was agreed that ETSI Members are stopped from seeking a court order to prevent infringement of their ETSI essential patents. Early drafts of the ETSI IPR Policy included a provision that limited an essential patent holder's ability to seek injunctive relief for its essential patents, but this proposal was dropped from the Interim ETSI IPR Policy that was adopted in 1994.

Declaration of Karl Heinz Rosenbrock in Support of Samsung's Opposition to Apple's Motion for Partial Summary Judgement ¶ 42, at 12, Apple, Inc. v. Samsung Elecs. Co., No. 11-cv-01846-LHK (N.D. Cal. Apr. 2, 2012), ECF No. 847 attachment 49.

The scope of the rights of a third-party beneficiary is defined in the contract "between the promisor and the promisee."[81] In accordance with the canon of construction *nemo dat quod non habet*, one cannot transfer what one does not have.[82] The FRAND contract between an SEP holder and an SSO delineates the implementer's rights, as a third-party beneficiary of the FRAND contract, to receive access to the SEP holder's standard-essential technology. The implementer does not have more contractually enforceable rights *vis-à-vis* the SEP holder than the rights that the SEP holder granted to the implementer in the FRAND contract.[83] Theoretically, implementers could derive additional rights from the SSO's constitutional documents, such as the SSO's articles of incorporation or bylaws. But, again, such additional rights would rest on a theory that the implementer is the third-party beneficiary of those extrinsic documents (as well as on the dubious theory that the FRAND contract did not fully integrate the agreement between the SEP holder and the SSO regarding the granting of access to a member's SEPs to implementers on FRAND terms[84]). Again, the implementer's rights can in no event encompass more or broader rights than what the SEP holder initially granted to the SSO for the benefit of the implementer. In other words, an SSO cannot confer on the implementer immunity from an injunction for patent infringement unless the SSO's contract with the SEP holder contains an explicit waiver by the SEP holder of its preexisting right under public law to enjoin one who infringes its patents. If the implementer is claiming a right more powerful than any right conveyed to him as a third-party beneficiary of the SEP holder and the SSO, then the implementer needs to identify the source of that claimed right and prove the extent of its authority.

Several U.S. courts have implicitly confirmed such an approach by determining that SEP holders' requests for injunctions did not violate the contractual obligations of the SEP holder arising from a FRAND commitment.[85] The Federal Circuit said in *Apple v. Motorola* that it is incorrect to apply a *per se* rule that injunctions are unavailable for SEPs.[86] Even Judge Posner's district court opinion in the case—considered by some as rejecting the right of an SEP holder that has made a FRAND commitment to seek an injunction—does not

[81] *See* RESTATEMENT (SECOND) OF CONTRACTS § 309 cmt. b (American Law Institute 1981); *see also* 4 ARTHUR L. CORBIN, CORBIN ON CONTRACTS §§ 811, 819 (West 6th ed. 1951).

[82] Mitchell v. Hawley, 83 U.S. 544, 549–50 (1872).

[83] *See* RESTATEMENT (SECOND) OF CONTRACTS § 309 cmt. b.B (American Law Institute 1981).

[84] *See id.* § 209(3) ("Where the parties reduce an agreement to a writing which in view of its completeness and specificity reasonably appears to be a complete agreement, it is taken to be an integrated agreement unless it is established by other evidence that the writing did not constitute a final expression.").

[85] *See, e.g.*, Apple, Inc. v. Samsung Elecs. Co., No. 11-cv-01846, 2012 WL 1672493 (N.D. Cal. May 14, 2012); Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1007 (N.D. Cal. 2013) ("[A]n injunction may be warranted where an accused infringer of a standard-essential patent outright *refuses* to accept a RAND license.") (emphasis in original).

[86] Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1331 (Fed. Cir. 2014).

specify that *seeking* an injunction constitutes a breach of contract.[87] As the Western District of Wisconsin reasoned in a separate *Apple v. Motorola* case,

> [a]lthough Judge Posner concluded that Motorola was not entitled to injunctive relief, he did not state explicitly that Motorola's act of seeking injunctive relief constituted a *breach of its contract* with ETSI or IEEE. He did not purport to interpret the terms of the ETSI or IEEE contracts or make any rulings with respect to Motorola's contractual obligations under the ETSI and IEEE policies. In fact, he never refers to the ETSI or IEEE policies as "contracts."[88]

Therefore, Judge Posner's opinion in *Apple v. Motorola* does not hold that seeking an injunction in itself violates the contract between an SSO and an SEP holder, although he did note that the court might reject the SEP holder's request for an injunction on other grounds.

The amendments to the IEEE Patent Policy ratified on February 8, 2015 are an exception to the general approach that SSOs adopt toward the SEP holder's ability to request an injunction. Draft 39 of the IEEE Standards Board Bylaws proposed that, by making a FRAND commitment, an SEP holder would agree that a FRAND license is "sufficient compensation" for the use of its SEPs and that a FRAND commitment would "preclud[e] seeking, or seeking to enforce, a Prohibitive Order" except for cases specifically provided by the IEEE policy.[89] The IEEE patent policy would allow the SEP holder to request an injunction on two occasions. First, if "the implementer fails to participate in, or to comply with the outcome of, an adjudication, including an affirming first-level appellate review," an SEP holder may request an injunction.[90] Second, "[i]n jurisdictions where the failure to request a Prohibitive Order in a pleading waives the right to seek a Prohibitive Order at a later time," an SEP holder may "conditionally plead the right to seek a Prohibitive Order to preserve its right to do so later" if the conditions for a Prohibitive Order are met.[91] The amended IEEE patent policy is the first and only SSO policy to require the SEP holder to accept a contractual waiver of its right under public law to seek an injunction.[92]

In sum, the question of whether the FRAND contract represents a waiver of the SEP holder's right to seek an injunction needs to be evaluated primarily

[87] Apple, Inc. v. Motorola, Inc., 869 F. Supp. 2d 901, 914 (N.D. Ill. 2012), *aff'd in part, rev'd in part, vacated in part, and remanded*, 757 F.3d 1286 (Fed. Cir. 2014).

[88] Apple, Inc. v. Motorola Mobility, Inc., No. 11-cv-178-bbc, 2012 WL 5416941, at *14 (W.D. Wis. Oct. 29, 2012) (emphasis in original).

[89] Draft 39 IEEE Standards Board Bylaws, *supra* note 6, § 6.2.

[90] *Id.*

[91] *Id.*

[92] The China IPR blog reported in November 2014 that the MIIT IP Center had suggested that Chinese SSOs adopt a similar policy. The MIIT reportedly suggested that SSOs request that an SEP holder not seek an injunction against the infringer "unless the potential Licensee is not subject to the jurisdiction of, fails to participate in, or fails to comply with the outcome of, an independent adjudication of FRAND licensing terms." Cohen, *supra* note 48.

according to the language of the document manifesting the FRAND commitment and only secondarily (if at all) in light of the constitutive (but still inherently contractual) documents of the SSO in question. In general, the provisions in an SSOs' policy on FRAND licensing provide neither an explicit nor an implicit waiver of an SEP holder's right to an injunction. Therefore, the SEP holder's contractual obligations arising from its FRAND commitment generally do not preclude the SEP holder from requesting an injunction in case of an infringement of its FRAND-committed SEPs.

B. Equitable Estoppel

In defense of a claim of patent infringement, the alleged infringer can equitably estop the patent holder from enforcing its patent rights if the alleged infringer proves (1) that the patent holder engaged in misleading conduct that led the infringer reasonably to infer that the patent holder did not intend to enforce its patent against the infringer, (2) that the infringer relied on the patent holder's misleading conduct in practicing the patent (which conduct may include specific statements, action, inaction, or silence where there was an obligation to speak), and (3) that, due to its reliance on the misleading conduct, the infringer will be materially prejudiced if the patent holder is allowed to proceed with its infringement claim.[93] Lemley has observed that an infringer can typically invoke estoppel only when a patentee has "induced others to believe it will not enforce the patent."[94] It is unlikely that an alleged infringer could prove these three requirements with respect to SEPs.

The first of these three prerequisites is clearly absent from the SEP situation. As Lemley observes, an SEP holder that has made a FRAND promise "has not induced others to believe it will not enforce the patent: far from it."[95] By making a FRAND commitment, an SEP holder promises to license its SEPs on FRAND terms. It does *not* promise to license its SEPs for free or to forgo the enforcement of its patent rights against those who do not accept its offer of a license on FRAND terms. In making a FRAND commitment, the SEP holder has not made any misleading statement from which one could deduce that the SEP holder will not enforce its patents or will not seek an injunction against a licensee that is not willing to agree to a FRAND royalty. The initiation of a lawsuit for infringement and the request for an injunction against an infringer that is unwilling to pay a FRAND royalty are therefore compatible with the SEP holder's FRAND commitment.

The second necessary element for equitable estoppel—the infringer's reliance on the patent holder's misleading statement—is also absent. No infringer

93 *See, e.g.*, A.C. Aukerman Co. v. R. L. Chaides Constr. Co., 960 F.2d 1020, 1028 (Fed. Cir. 1992).

94 *See* Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, *supra* note 35, at 1923.

95 *Id.*

could reasonably believe that the SEP holder will not enforce its patent rights (and will not seek an injunction) if the infringer does not or cannot pay a FRAND royalty. To the contrary, ETSI expressly recognizes that an SEP holder should be fairly compensated for contributing its technology to the standard.[96] That proposition in ETSI's IPR policy would be meaningless if, among implementers and inventors alike, the commercially reasonable expectation did not exist that the royalty that a licensee would pay for access to SEPs would need to exceed some minimal threshold to be FRAND. An implementer that will not or cannot agree to pay FRAND compensation for its use of an SEP must expect to be sued by an SEP holder for infringement and possibly to be enjoined from using the patent in suit.

Absent evidence that the first and second requirements for equitable estoppel are present, it would be unlikely that the infringer could prove the third requirement—that, due to the reliance on the patent holder's commitment, the infringer would be materially prejudiced if the patent holder were allowed to proceed with its infringement claim. In sum, the infringer will rarely, if ever, be able to equitably estop the SEP holder from enforcing its FRAND-committed patents.

C. *eBay* and the FRAND Commitment

In *eBay*, the Supreme Court of the United States held that the issuance of an injunction is not automatic upon the finding of patent infringement.[97] To obtain an injunction against a patent infringer in the United States, an SEP holder must prove

> (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.[98]

Some scholars argue that, after making a FRAND commitment, an SEP holder cannot meet *eBay*'s requirements to obtain an injunction. For example, Lemley and Shapiro argue that, by making a FRAND commitment, an SEP holder has conceded that damages would suffice to compensate the SEP holder for the infringement of its SEPs.[99] They say that "the court may well not grant an injunction" if it concludes that, given the availability of monetary damages, the SEP holder will not suffer irreparable harm from the infringement of its SEPs.[100]

[96] *See, e.g.*, ETSI IPR Policy, *supra* note 30, § 3.2.
[97] eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006).
[98] *Id.*
[99] *See, e.g.*, Lemley & Shapiro, *A Simple Approach*, *supra* note 16, at 1144.
[100] *Id.*; *see also* Brief for the Fed. Trade Comm'n as Amicus Curiae, Supporting Neither Party at 15, Apple Inc. v. Motorola, Inc., 757 F.3d 1286 (Fed. Cir. 2014) (Nos. 12–1548, 12–1549);

However, the Lemley-Shapiro interpretation of a FRAND commitment contradicts *eBay* on the availability of injunctions. The Court ruled on whether a company that is not active in the downstream market, but which instead monetizes its invention by licensing it to operating companies, should be precluded from obtaining an injunction. The Court criticized the district court's interpretation that the "'plaintiff's willingness to license its patents' and 'its lack of commercial activity in practicing the patents' would be sufficient to establish that the patent holder would not suffer irreparable harm if an injunction did not issue."[101] The Court held that "traditional equitable principles do not permit such broad classifications."[102] The Court said that even patent holders that prefer to license rather than use their technology exclusively may be able to meet the four-factor test to obtain an injunction, and the Court "[saw] no basis for categorically denying them the opportunity to do so."[103]

The Federal Circuit confirmed that *eBay*'s rationale applies to SEPs. In *Apple Inc. v. Motorola, Inc.*,[104] the Federal Circuit rejected a categorical ban on committed patents: "While . . . FRAND commitments are certainly criteria relevant to its entitlement to an injunction, we see no reason to create . . . a separate rule or analytical framework for addressing injunctions for FRAND-committed patents."[105] The Federal Circuit said that "[t]he framework laid out by the Supreme Court in *eBay* . . . provides ample strength and flexibility for addressing the unique aspects of FRAND committed patents and industry standards in general."[106] It added that, although "[a] patentee subject to FRAND commitments may have difficulty establishing irreparable harm[,] . . . an injunction may be justified [in some circumstances]."[107] The Federal Circuit thus rejected the interpretation that a FRAND commitment categorically precludes the SEP holder from obtaining an injunction. The fact that an SEP holder has expressed its willingness to license its SEPs on FRAND terms does not imply that the SEP holder cannot meet *eBay*'s four-factor test.

1. Is the Harm from the Infringement of a FRAND-Committed Patent Irreparable?

An SEP holder may suffer irreparable harm because of the infringement of its SEPs. Injunctions play an important role in stimulating an expedited licensing

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Brief for Professors Thomas F. Cotter, Shubha Ghosh, A. Christal Sheppard & Katherine J. Strandburg as Amici Curiae Supporting Plaintiff-Appellant Apple, Inc., and Affirming Motorola, Inc.'s Cross-Appeal at 16, Apple Inc. v. Motorola, Inc., 757 F.3d 1286 (Fed. Cir. 2014) (Nos. 12–1548, 12–1549).

101 *eBay*, 547 U.S. at 393 (quoting MercExchange, L.L.C. v. eBay, Inc, 275 F. Supp. 2d 695, 712 (E.D. Va. 2003)).

102 *Id.*

103 *Id.*

104 757 F.3d 1286 (Fed. Cir. 2014).

105 *Id.* at 1332.

106 *Id.*

107 *Id.*

negotiation. Without the threat of an injunction, an implementer might have little incentive to agree promptly upon FRAND licensing terms.[108] Although the infringement of an individual implementer and its failure to negotiate licensing terms in good faith might not seem to inflict irreparable harm on the SEP holder, the severity of the harm is magnified when such behavior becomes the industry norm. When the largest implementers systematically infringe SEPs and fail to negotiate licensing terms in good faith, it becomes far costlier for the SEP holder to enforce its SEPs effectively. Such a scenario could be defined as "reverse royalty stacking," whereby the aggregate litigation costs that implementers impose on the SEP holder by infringing its SEPs is too high to allow the SEP holder to remain a viable market participant. In such circumstances, the SEP holder could suffer irreparable harm from the infringement of its SEPs.

Judge Bo Vesterdorf, the former president of the Court of First Instance (now the General Court) at the European Court of Justice (now the Court of Justice of the European Union), has provided the following analogy to illustrate the SEP holder's harm from infringement:

> Compare . . . [a] situation where an Aston Martin stops outside a jeweler's shop and the owner of the Aston enters the shop, picks up a Piaget gold watch with a price tag of £25.000, puts £20.000 on the desk, and leaves with the watch saying "I am a willing buyer but your price is too high; this is my price, sue me in court if you want the remaining £5.000 and, if the court says I must pay £23.000 or £25.000, I'll accept that." We would be somewhat surprised if the shop owner were told that he cannot go to the police but must wait for a judge to tell him whether his price was fair or unfair.[109]

Indeed, the legal system should not allow the behavior of the Aston Martin's owner to become a common practice. The shop owner could be easily driven out of business and suffer irreparable harm if all buyers were to emulate the Aston Martin's owner behavior. In that case, it would be too burdensome for the shop owner to bring a legal action against every buyer. Similarly, if the implementers systematically infringed SEPs, did not negotiate licensing terms in good faith, and forced the SEP holder to enforce its rights in court, the SEP holder would suffer irreparable harm.

The determination of monetary damages for the violation of a FRAND-committed patent suffers from great uncertainty. The FRAND cases decided to date confirm that a serious risk of irreparable harm exists, for the simple reason that the measure of FRAND royalties used by judges or jurors varies widely. From an economic perspective, one reason that a court might consider harm to be ir-

[108] *See, e.g.*, Certain Wireless Devices with 3G and/or 4G Capabilities and Components Thereof at 114, USITC Inv. No. 337-TA-868 (June 13, 2014) (initial determination) [hereinafter USITC Inv. No. 337-TA-868 Initial Determination].

[109] Bo Vesterdorf, *Antirust Enforcement and Civil Rights: SEPs and FRAND Commitments*, 8 COMPETITION POL'Y INT'L 1, 8 (2014).

reparable is that no one can accurately measure it.[110] In general, claims that the harm from patent infringement cannot be measured deserve skepticism, because economists have developed rigorous techniques to assess damages from infringement activities. Those methods improve over time, as courts become more comfortable with sophisticated economic methods for assessing causation and the magnitude of harm.[111] Nevertheless, two lingering sources of uncertainty contribute to a court's difficulty in determining the correct monetary damages for the infringement of a FRAND-committed patent.

The first source of uncertainty arises from the fact that almost no guidance exists in the current case law concerning the proper determination of a FRAND royalty. As of January 2015, U.S. courts had determined what constitutes a FRAND royalty only in a few cases—*Microsoft v. Motorola*,[112] *Innovatio IP Ventures*,[113] *Ericsson v. D-Link*,[114] and *CSIRO v. Cisco*.[115] Those decisions apply different methodologies to calculate a FRAND royalty—and some of those methodologies contain fundamental errors of economic reasoning, if not also legal reasoning, with respect to measurement of the SEP holder's harm.[116] Some FRAND decisions contain lofty discussions of abstract principles, but then calculate a FRAND royalty that does not actually rely on those principles. For example, Judge Robart first emphasizes that the *ex ante* incremental value approach should define the hypothetical negotiation between the licensor and the licensee to set a RAND rate,[117] but later in his opinion he uses data from a patent pool (not from any actual bilateral negotiation for the licensing of SEPs) to extrapolate the RAND range for Motorola's SEPs.[118]

Further, some methodologies adopted to calculate FRAND royalties are difficult to reconcile with the Federal Circuit's most recent decisions concerning the calculation of a reasonable royalty. For example, the top-down approach adopted in *Innovatio IP Ventures*—which bases the calculation of a FRAND royalty on "the average profit that a chipmaker earns on the sale of

[110] For an explanation of different economic interpretations of "irreparable harm," see J. Gregory Sidak, Inaugural Address for the Ronald Coase Professorship of Law and Economics, Tilburg University: Is Harm Ever Irreparable? 21 (Sept. 16, 2011), *available at* http://www.criterioneconomics.com/docs/is_harm_ever_irreparable1.pdf.

[111] *Id.* at 22.

[112] Microsoft Corp. v. Motorola, Inc., No. C10–1823JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013) (Robart, J.).

[113] *In re* Innovatio IP Ventures, L.L.C. Patent Litigation, MDL No. 2303, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013).

[114] Ericsson Inc. v. D-Link Sys., Inc., No. 6:10-cv-00473, 2013 WL 4046225 (E.D. Tex. Aug. 6, 2013), *aff'd in part, rev'd in part, and vacated in part*, 773 F.3d 1201 (Fed. Cir. 2014).

[115] Commonwealth Scientific & Indus. Research Org. v. Cisco Sys., Inc., No. 6:11-cv-00343, 2014 WL 3805817 (E.D. Tex. July 23, 2014).

[116] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 979–88.

[117] Microsoft Corp. v. Motorola, Inc., No. C10–1823JLR, 2013 WL 2111217, at *13 (W.D. Wash. Apr. 25, 2013).

[118] *Id.* at *82.

each chip"[119] used in a mobile device—seems inconsistent with the Federal Circuit's subsequent decision in *Aqua Shield v. Inter Pool Cover Team*.[120] In the latter case, the Federal Circuit, in an opinion by Judge Richard Taranto, emphasized that the infringer's profit earned during the period of infringement cannot be treated as a royalty cap when calculating a reasonable royalty, let alone the profit earned by the *manufacturer of a smaller salable patent-practicing component*.[121] The Federal Circuit said that "[a]n especially inefficient infringer—*e.g.*, one operating with needlessly high costs, wasteful practices, or poor management—is not entitled to an especially low royalty rate simply because that is all it can afford to pay without forfeiting or unduly limiting its profit."[122] The Federal Circuit emphasized that the "royalty the particular infringer could profitably pay . . . does not set the market value that the hypothetical negotiation aims to identify."[123] Such a methodology "incorrectly replaces the inquiry into the parties' anticipation of what profits would be earned *if a royalty . . . were to be paid* with an inquiry into what profits were earned *when [the alleged infringer] was charging prices without accounting for any royalty*."[124] Extending Judge Taranto's reasoning, one should thus question whether computing a FRAND royalty based on an average chipmaker's profit (rather than on the basis of the price paid for the downstream mobile device incorporating the chip) is any longer a reliable and admissible methodology for calculating FRAND compensation.

A related matter is the institutional competence of judges to define the economic methodology for calculating a FRAND royalty. If a judge invents his own economic methodology to compute a FRAND rate, why is that methodology necessarily "reliable" in the precise sense that Rule 702 of the Federal Rules of Evidence[125] and *Daubert*[126] would require if an expert economic witness instead were the author of the identical methodological innovation? Federal judges are appointed for their expertise in law, not economics. Moreover, in the scholarship of industrial organization, theory is plentiful and empiricism scarce.[127] It is therefore not surprising to find in patent litigation

[119] *In re* Innovatio IP Ventures, L.L.C. Patent Litigation, MDL No. 2303, 2013 WL 5593609, at *38 (N.D. Ill. Oct. 3, 2013).
[120] No. 2014–1263, 2014 WL 7239738 (Fed. Cir. Dec. 22, 2014).
[121] *Id.* at *5.
[122] *Id.* at *4.
[123] *Id.*
[124] *Id.* at *5 (emphasis in original).
[125] An expert witness "may testify in the form of an opinion or otherwise if . . . (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case." FED. R. EVID. 702 (c), (d).
[126] Daubert v. Merrill Dow Pharm., Inc., 509 U.S. 579 (1993); *see also* General Elec. Co. v. Joiner, 522 U.S. 136 (1997); Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999).
[127] For one Nobel laureate's expression of this criticism, see Ronald H. Coase, The Institutional Structure of Production 3 (1991), *available at* http://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1033&context=occasional_papers.

and other high-stakes commercial disputes that expert economic witnesses commonly are called upon to develop novel theories for quantifying damages that are intellectually rigorous at the level of theory. Yet it is also common that many of those novel theories end up in the dust bin, never to be used in direct testimony before a jury (and never, therefore, even to be advanced in expert reports exchanged before trial) for the simple reason that the data do not exist for the expert economic witness to connect his theoretical methodology for calculating damages to the facts of the case to the scrupulous degree that *Daubert* requires. Put differently, it is unclear why in a case of first impression a judge, writing *sua sponte*, should be held by the appellate court to a less sedulous standard of theoretical and empirical rigor when introducing a novel theory for measuring FRAND royalties than would an expert economic witness who submitted testimony subject to the *Daubert* standard on the same question. The problem at hand is not the duping of a jury by an expert witness—the usual gatekeeper rationale imputed to Rule 702 and *Daubert*.[128] The problem fundamentally relates to due process. It is the propagation of a legal rule on damagesa rule having actual or *de facto* precedential effect—that rests on unreliable economic principles or methods, or on an insufficient empirical connection to the facts and data of the case.

It should be clear, then, that a second source of uncertainty regarding the adequacy of damages for infringement of SEPs concerns the paucity of information with which to calculate a FRAND royalty, whichever analytical model one ultimately chooses to use. Most of the critical information relevant to determining a FRAND royalty is proprietary. Much of it belongs to third parties, rather than to the SEP holder and the implementer that are involved in litigation (or arbitration). Furthermore, by definition, evidence regarding the comparability of a FRAND offer for an entirely new standard (such as licenses for SEP portfolios that read on the LTE (or 4G) standard for smartphones circa 2014) will not even exist if the SEP holder has not yet negotiated a FRAND license for that standard with any other implementer.

In sum, measuring damages for the infringement of a FRAND-committed patent has proven to be a daunting task. By the beginning of 2015, the federal courts had not yet adopted, and did not inspire confidence that they soon will adopt, a significantly rigorous methodology to determine FRAND royalties that will ensure that the SEP holder will suffer no irreparable harm due to the infringement of its FRAND-committed patents.[129] At the same time, even if one favors a particular methodology for measuring FRAND royalties, the

[128] Apple, Inc. v. Motorola, Inc., 757 F.3d 1286, 1314 (Fed. Cir. 2014) (reasoning that a judge should exclude expert testimony "if it is based upon unreliable principles or methods, or legally insufficient facts and data").

[129] The most encouraging development is the Federal Circuit's decision in Ericsson Inc. v. D-Link Sys., Inc., 773 F.3d 1201 (Fed. Cir. 2014), which affirmed in significant part the opinion by Chief Judge Leonard Davis in Ericsson Inc. v. D-Link Sys., Inc., No. 6:10-cv-00473, 2013 WL 4046225 (E.D. Tex. Aug. 6, 2013).

unavailability of relevant information may make it impossible to compute accurately the amount of damages necessary to provide the SEP holder an adequate remedy at law. Therefore, it is incorrect to assume and premature to conclude that the SEP holder will suffer no irreparable harm from the infringement of its SEPs.

2. *Does the FRAND Commitment Implicitly Concede That Monetary Damages Suffice to Compensate Harm?*

Given the FRAND cases publicly decided by courts as of January 2015, an SEP holder (certainly an SEP holder making *recent* contributions to SSOs) would be justifiably skeptical that court-determined monetary compensation would be an adequate remedy at law for infringement of its SEPs. It is consequently implausible to assume that, by making a FRAND commitment, the SEP holder has implicitly recognized—as Lemley and Shapiro argue[130]—that the prospect of receiving monetary damages would be sufficiently high in expected value, and sufficiently small in its variance, to compensate the SEP holder adequately for the harm arising from the infringement.

By making a FRAND commitment, an SEP holder recognizes that it is willing to license its SEPs for FRAND royalties determined through a voluntary, bilateral negotiation with the implementer. To date, courts have not credibly replicated that bargaining outcome. Courts should consequently aim to encourage voluntary agreements on FRAND terms, rather than litigation. I explain in Part IV that it is necessary to allow an SEP holder to seek and obtain an injunction against an unwilling licensee if a negotiation is to have any chance of occurring and any chance of yielding a voluntary agreement.

IV. THE OPPOSING RISKS OF OPPORTUNISTIC BEHAVIOR

Although a FRAND commitment does not preclude the SEP holder from obtaining an injunction, the issuance of an injunction might not always be desirable. Most critics have focused on the possibility of opportunistic behavior by the SEP holder. Courts and commentators frequently conjecture that patent holdup will result from the asymmetric bargaining power that the availability of an injunction supposedly would give an SEP holder during license negotiations. However, a categorical ban on injunctions for infringement of SEPs would open the door to opportunism by infringers. In the absence of any threat of an injunction, an infringer can behave opportunistically by engaging in reverse patent

[130] *See* Lemley & Shapiro, *A Simple Approach*, *supra* note 16, at 1144 ("The court may well conclude that an SSO participant who has made a FRAND commitment has already declared that royalties are sufficient to compensate it for infringement by compliant products, so that the SSO participant will suffer no irreparable harm from infringement of its standard-essential patents.").

holdup. I therefore examine here the risks associated with both allowing and denying an SEP holder to seek an injunction against an infringer.

A. Risks from Allowing the SEP Holder to Seek an Injunction

A common conjecture is that allowing an SEP holder to seek an injunction against the implementer of a FRAND-committed patent would result in patent holdup. According to the patent-holdup narrative, an SEP holder would use the threat of seeking an injunction to extract a royalty exceeding the SEP's intrinsic value. Lemley and Shapiro argue that the risk of patent holdup is even greater when the infringing patent is only a small part of a valuable, complex technology.[131] This theory, however, has serious holes. At least three reasons suggest that the SEP holder's request for an injunction will not necessarily result in patent holdup.[132]

First, a large body of legal and economic literature disputes the plausibility of the patent-holdup conjecture.[133] Scholars have emphasized that holdup is a conjecture, not a real-world fact.[134] Dennis Carlton and Allan Shampine observe that holdup is particularly unlikely when the implementer has the legal right to challenge the offered licensing terms in court if it believes that the licensing terms offered by the SEP holder are not FRAND.[135] As Carlton and Shampine observe, the implementer's ability to go to court affects the negotiation and safeguards the implementer against unreasonable terms.[136] When the implementer has the legal right to enforce the FRAND commitment in court, patent holdup is improbable.

Empirical evidence confirms that patent holdup rarely occurs in practice. Commissioner Joshua Wright of the Federal Trade Commission emphasized in 2013 that, "[d]espite the amount of attention patent hold-up has drawn from policymakers and academics, there have been relatively few instances of litigated patent hold-up among the thousands of standards adopted."[137] He observed that

[131] Lemley & Shapiro, *Patent Holdup and Royalty Stacking*, *supra* note 4, at 1993.

[132] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 1007–08.

[133] *See, e.g.*, Damien Geradin & Miguel Rato, *Can Standard-Setting Lead to Exploitative Abuse? A Dissonant View on Patent Hold-Up, Royalty Stacking and the Meaning of FRAND*, 3 EUR. COMPETITION J. 101 (2007); Elyse Dorsey & Matthew R. McGuire, *How the Google Consent Order Alters the Process and Outcomes of FRAND Bargaining*, 20 GEO. MASON L. REV. 979 (2013).

[134] *See, e.g.*, Gregor Langus, Vilen Lipatov & Damien Neven, *Standard-Essential Patents: Who Is Really Holding Up (and When)?*, 9 J. COMPETITION L. & ECON. 253 (2013); Ratliff & Rubinfeld, *supra* note 22, at 9; Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 1021–22.

[135] Dennis W. Carlton & Allan Shampine, *Identifying Benchmarks for Applying Non-Discrimination in FRAND*, 8 COMPETITION POL'Y INT'L 1, 5 (2014).

[136] *Id.*

[137] Joshua D. Wright, Comm'r, Fed. Trade Comm'n, Remarks at the Center for the Protection of Intellectual Property Inaugural Academic Conference: The Commercial Function of Patents in Today's Innovation Economy 20 (Sept. 12, 2013) (citing Bruce H. Kobayashi & Joshua

"empirical evidence of patent hold-up is . . . unremarkable."[138] Similarly, SSOs have repeatedly told the FTC that they have not encountered patent holdup problems.[139] The Telecommunications Industry Association (TIA) has publicly stated that it "has never received any complaints regarding such 'patent hold-up' and does not agree that 'patent holdup' is plaguing the information and telecommunications technology . . . standard development processes."[140] In a study co-funded by Microsoft,[141] which endorses the holdup theory,[142] Lemley and Shapiro do not identify a single occurrence of patent holdup involving SEPs.[143]

Empirical data also do not support the proposition that cases of alleged patent holdup have harmed the success of standards. To the contrary, the data show a dramatic growth in industries, such as the mobile-device industry, in which firms produce devices in compliance with standards that have been subject to disputes related to SEPs. The ITU reported that in 2009 the number of worldwide mobile subscriptions amounted to approximately 4.6 billion.[144] The interim update of the Ericsson Mobility Report, issued in February 2014, estimated that, by the end of 2013, mobile subscriptions had reached approximately 6.7 billion[145]—an increase of more than 45 percent since 2009.[146] There was similar growth in sales of mobile devices. Gartner, an

D. Wright, *Intellectual Property and Standard Setting*, *in* ABA SECTION OF ANTITRUST LAW, HANDBOOK ON ANTITRUST ASPECTS OF STANDARD SETTING 95 (2d ed. 2011)) [hereinafter Wright, The Commercial Function of Patents], *available at* http://www.ftc.gov/sites/default/files/documents/public_statements/ssos-frand-and-antitrust-lessons-economics-incomplete-contracts/130912cpip.pdf.

138 *Id.*

139 *See* Roger G. Brooks, *Patent "Hold-Up," Standards-Setting Organizations and the FTC's Campaign Against Innovators*, 39 AIPLA Q.J. 435, 446–49 (2011).

140 USITC Inv. No. 337-TA-868 Initial Determination, *supra* note 108 (citing a letter received from the Telecomms. Indus. Ass'n on standard-setting issues, CX 3144, at 4).

141 Lemley & Shapiro, *Patent Holdup and Royalty Stacking*, *supra* note 4. The Lemley-Shapiro study was funded by Apple, Cisco, Intel, Micron Technology, Microsoft, and SAP. *Id.* at 1991 n.*.

142 *See, e.g.*, Letter from Brian R. Nester on Behalf of Microsoft Corp. to the Honorable Lisa R. Barton, Acting Secretary to the Commission, U.S. Int'l Trade Comm'n re Comments to Commission's May 10, 2012 Request for Statements on the Public Interest in Certain Wireless Communications Devices, Portable Music and Data Processing Devices, Computers, and Components Thereof, USITC Inv. No. 337-TA-745 (June 6, 2012) ("Owners of patents necessarily practiced by any party who wishes to implement the standard may demand outsized royalties or seek to enjoin implementation altogether.").

143 Lemley and Shapiro cite only one real-world example of patent holdup. NTP, Inc. v. Research in Motion, Ltd., No. 3:01CV767, 2003 WL 23100881, at *1 (E.D. Va. Aug. 5, 2003). However, that case did not involve the infringement of an SEP. *See* Lemley & Shapiro, *Patent Holdup and Royalty Stacking*, *supra* note 4, at 2009.

144 Press Release, Int'l Telecomm. Union, ITU Sees 5 Billion Mobile Subscriptions Globally in 2010 (Feb. 15, 2010), http://www.itu.int/newsroom/press_releases/2010/06.html.

145 ERICSSON, ERICSSON MOBILITY REPORT ON THE PULSE OF THE NETWORKED SOCIETY 2 (Feb. 2014).

146 INT'L TELECOMM. UNION, THE WORLD IN 2013: ICT FACTS AND FIGURES 1 (2013).

international information technology research and advisory company, reported that mobile phone sales increased from 308.9 million units in the third quarter of 2009[147] to 455.6 million units in the third quarter of 2013[148]—a 47.5-percent increase. Empirical data thus show that the mobile-phone industry experienced extraordinary growth over the four-year period from 2009 to 2013. Empirical evidence therefore contradicts the assertion that SEP holders—if they *have* systematically attempted to engage in opportunistic licensing practices—have harmed the standardization process.

Given the lack of empirical evidence that patent holdup is occurring, courts have required that parties to a legal dispute support any reference to patent holdup with empirical data. In *Ericsson v. D-Link*, a case concerning the determination of damages for the use of Ericsson's SEPs, the Federal Circuit held that "[t]he district court need not instruct the jury on hold-up or stacking *unless the accused infringer presents actual evidence of hold-up or stacking*."[149] The Federal Circuit said that the district court must consider "the evidence on the record" when deciding whether to instruct the jury about the risk of patent holdup and royalty stacking.[150] According to the Federal Circuit, "something more than a general argument that these phenomena are possibilities" is required to warrant a jury instruction.[151]

Second, even if one accepts for the sake of argument that patent holdup could arise, there is no reason to assume that the SEP holder will use the right to an injunction as a tool to hold up the infringer. The SEP holder might seek an injunction for a perfectly legitimate purpose—for example, against an infringer that is not willing to pay FRAND royalties. Similarly, the SEP holder might threaten an injunction as a tool to force the implementer to come to the negotiating table.[152] As Administrative Law Judge Theodore Essex of the U.S. International Trade Commission (ITC) observed when discussing ETSI's rules, "[t]here is nothing in [the SSO's] Rules of Procedure, or other documents . . . that state[s] a party cannot use legal means to pressure the other parties in negotiations."[153] An implementer has a stronger incentive to negotiate a license for SEPs when it risks an injunction that could disrupt the implementer's production. Therefore, the SEP holder may use the injunction for a legitimate purpose, rather than as a tool to extract opportunistic licensing terms.

[147] Press Release, Gartner, Gartner Says Grey-Market Sales and Destocking Drive Worldwide Mobile Phone Sales to 309 Million Units; Smartphone Sales Grew 13 Per Cent in Third Quarter of 2009 (Nov. 12, 2009), http://www.gartner.com/newsroom/id/1224645.

[148] Press Release, Gartner, Gartner Says Smartphone Sales Accounted for 55 Percent of Overall Mobile Phone Sales in Third Quarter of 2013 (Nov. 14, 2013), http://www.gartner.com/newsroom/id/2623415.

[149] Nos. 2013–1625, 2014 WL 6804864, at * 25 (Fed. Cir. Dec. 4, 2014) (emphasis added).

[150] *Id.*

[151] *Id.*

[152] *See* Wright, The Commercial Function of Patents, *supra* note 137, at 30–31.

[153] USITC Inv. No. 337-TA-868 Initial Determination, *supra* note 108, at 113.

Third, there is no reason to assume that the royalties negotiated under the threat of an injunction will be outside the FRAND range.[154] The SEP holder's request for an injunction does not guarantee that the judge will issue such a remedy. Courts have been reluctant to enjoin implementers of FRAND-committed patents, such that the SEP holder's ability to obtain a remedy is far from self-evident. In *Apple v. Motorola*, for example, the court found that Motorola did not show that Apple's infringement of Motorola's SEPs caused Motorola irreparable harm; the court consequently denied the injunction.[155] When the likelihood of obtaining an injunction is low, the threat created by the request for an injunction is unlikely to distort the negotiation process in any material way. Further, Judge Essex stated—although referring to an exclusion order (and not an injunction)—that,

> [w]hile the possibility or existence of an exclusion order may benefit [the SEP holder] in negotiating a license, and move the license fee in the upper direction on the FRAND scale, there are hundreds of other economic factors that go into the parties finding a royalty or flat amount both can agree on.[156]

Therefore, even if an injunction can confer some bargaining power on an SEP holder, there is no reason to assume that the licensing terms negotiated under the threat of an injunction will necessarily be outside the FRAND range.

B. Risks from Limiting the SEP Holder's Right to Seek an Injunction

Limiting the availability of injunctions against infringers of SEPs will encourage infringers to behave opportunistically during the licensing negotiation in an attempt to secure lower royalties.[157] An infringer may refuse to pay a FRAND royalty or may even refuse to engage in good-faith negotiations over FRAND terms if it does not face the risk of its infringing products being subject to an injunction. If the penalty for infringement were limited to the payment of court-determined FRAND royalties, it would be in the infringer's best interest consistently to infringe and litigate *ex post*.

Some commentators have criticized such reasoning, suggesting that treble damages awarded in cases of willful infringement would suffice to deter an infringer from acting opportunistically during the negotiation of the licensing terms. It bears emphasis, however, that a court will not necessarily award treble damages to an SEP holder. First, to obtain treble damages, the SEP holder needs to prove that the infringer has willfully infringed the SEPs.[158]

[154] *See, e.g.*, Wright, Remarks at the Inaugural Academic Conference, *supra* note 152, at 29–30.

[155] Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1332 (Fed. Cir. 2014).

[156] USITC Inv. No. 337-TA-868 Initial Determination, *supra* note 108, at 118 (June 13, 2014).

[157] *See* Damien Geradin, *Reverse Hold-Ups: The (Often Ignored) Risks Faced by Innovators in Standardized Areas*, *in* THE PROS AND CONS OF STANDARD SETTING 101 (Konkurrensverket 2010); *see also* Brooks, *supra* note 139, at 435.

[158] *See* Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc., No. 2014–1114, slip op. at 3 (Fed. Cir. Jan. 13, 2015); *In re* Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007);

Second, the award of treble damages is subject to the court's discretion.[159] A court is free to reject an SEP holder's claim for treble damages, even if the jury finds willful infringement. Third, some commentators have argued that courts should categorically deny SEP holders that have committed to license their SEPs on FRAND terms the ability to obtain treble damages. Lemley has argued, for example, that after having made a FRAND commitment, an SEP holder has "only a contractual claim for a royalty, not a cause of action for patent infringement that might result in an injunction, treble damages, and attorneys' fees."[160] (Lemley's theory is doubtful for the reason discussed above—that an implicit waiver by contract of a statutory right must be unequivocal and is therefore disfavored.) If a court does address a FRAND dispute as a breach of contract case, as Judge Robart did in *Microsoft v. Motorola*, there will be no possible award of treble damages. Some courts have gone further, questioning not only the SEP holder's ability to obtain treble damages, but also its right to enforce the SEPs. For example, the District Court for the Northern District of Illinois has questioned whether an SEP holder that has failed to comply with a FRAND commitment should be able to enforce its SEP against a specific infringer.[161] In sum, although the award of treble damages could be a good mechanism to deter the infringer's opportunistic behavior, an SEP holder's ability to obtain such a remedy is uncertain. An SEP holder's theoretical ability to claim treble damages for willful infringement may not provide a sufficient incentive for implementers to negotiate licensing terms in good faith.

The Department of Justice and the U.S. Patent and Trademark Office (USPTO) have recognized that the risk of an infringer's opportunistic behavior increases when the infringer "believes its worst-case outcome after litigation is to pay the same amount it would have paid earlier for a license."[162] The implementer's incentive to refuse to license decreases when there are perceived costs of delay. When an infringer does not face the risk of its infringing products being enjoined or excluded from the market, the costs of infringing are litigation costs plus the expected monetary damages that the infringer would pay after the court's finding of infringement. Those expected damages are based on the probability that (1) the patent holder detects the infringement and

S. Chase Means, *The Trouble with Treble Damages: Ditching Patent Law's Willful Infringement Doctrine and Enhanced Damages*, 2013 U. ILL. L. REV. 1999, 2010–11.

159 *Id.* at 1999.

160 *See* Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, *supra* note 35, at 1925.

161 Order to Fujitsu Limited to Show Cause Why the '737 Patent Should Not Be Held Unenforceable as to Tellabs, Fujitsu Ltd. v. Tellabs Operations, Inc., No. 1:09-cv-04530 (N.D. Ill. July 23, 2014).

162 U.S. DEP'T OF JUSTICE & U.S. PATENT & TRADEMARK OFFICE, POLICY STATEMENT ON REMEDIES FOR STANDARDS-ESSENTIAL PATENTS SUBJECT TO VOLUNTARY F/RAND COMMITMENTS 7 n.15 (2013) [hereinafter DOJ-USPTO POLICY STATEMENT ON SEPS].

(2) the court finds the patents in suit valid, enforceable, and infringed. If an implementer believes that either probability is low enough, then the implementer would be better served by infringing and potentially paying damages *ex post*, than by agreeing upon a royalty *ex ante*.

Several commentators have emphasized that limiting the availability of injunctions might result in an SEP holder's undercompensation. Commissioner Wright has said that "weakening the availability of injunctive relief for infringement—including infringement of F/RAND-committed SEPs—may increase the probability of 'reverse holdup' (also defined as holdout) and weaken any incentives implementers have to engage in good faith negotiations with the patent holder."[163] Former Chief Judge Randall Rader similarly observed in *Apple v. Motorola* that "'hold out' . . . is equally as likely and disruptive as a 'hold up.'"[164] Judge Essex of the ITC has also recognized the risk of patent holdout in the matter of *Certain Wireless Devices with 3G and/or 4G Capabilities and Components Thereof*.[165] He wrote that, by using the SEP before obtaining the license, an implementer "puts pressure on the IPR owner to settle, as the owner is not compensated during a period of exploitation of the IP by the unlicensed parties."[166] He observed that an implementer can "shift the risk involved in patent negotiation to the [SEP] holder"[167] by forcing the patent owner to take legal action. An SEP holder "can lose the IPR [it] believe[s] [it] ha[s], but if the patent holder wins[, it] gets no more than a FRAND solution, that is, what [it] should have gotten under the agreement in the first place."[168] In contrast, there is no risk for an implementer, if the only consequence of using an SEP without a license "is to pay a FRAND based royalty or fee."[169] Judge Essex said that, by shifting the risk to the SEP holder, an implementer can force an SEP holder to accept a royalty rate that is "in the lower range of FRAND, or perhaps even lower than a reasonable FRAND rate."[170]

Reducing or eliminating the availability of injunctions for FRAND-committed SEPs would mean, on the margin, that fewer innovators would participate in SSOs. A patent holder that is constrained in its royalty negotiations and cannot seek to enjoin an infringer derives materially less benefit from participating in an SSO. For example, Nokia said in a 2013 *amicus* brief in the appeal of *Apple v. Motorola* that elimination of injunctive relief for SEP holders "could threaten the standardization process as a whole, as patent

[163] Wright, The Commercial Function of Patents, *supra* note 137, at 29.
[164] Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1333 (Fed. Cir. 2014) (Rader, C.J., dissenting in part).
[165] USITC Inv. No. 337-TA-868 Initial Determination, *supra* note 108, at 114.
[166] *Id.* at 113–14.
[167] *Id.*
[168] *Id.*
[169] *Id.*
[170] *Id.* at 114.

holders would be forced to consider the likely difficulties in obtaining fair compensation for the use of their patents before making FRAND commitments concerning them."[171] A Nokia executive similarly said in 2013, "Nokia has stepped back from the standardization process, electing either not to join certain [SSOs] or not to contribute certain technologies to these organizations."[172]

V. WHAT MAKES AN IMPLEMENTER "UNWILLING"?

There is a growing consensus among public enforcement agencies, industry participants, and scholars that, even after entering into a FRAND contract, an SEP holder may be able to request and obtain an injunction against an implementer that is unwilling to accept FRAND terms.[173] However, as of January 2015, no court had clearly defined an "unwilling" implementer. It therefore remains uncertain under what circumstances an SEP holder may obtain an injunction against an SEP infringer. I offer here an economic interpretation of "unwillingness" that courts can follow when deciding whether to grant an injunction against an implementer of SEPs.

A. Current Definitions of "Unwilling"

As of January 2015, courts had not commonly defined when an implementer is "unwilling" to accept FRAND terms. The FTC provided a problematic definition of "unwillingness" in two consent agreements—one from 2012 and another from 2013.[174] First, in *Robert Bosch*, the FTC characterized an implementer as "unwilling" when it (1) "states in writing that it will not license the SEP" or when the implementer refuses to enter into a license on terms that either the parties or the courts have confirmed comply with a FRAND commitment.[175] The FTC adopted the slightly different approach in *Motorola Mobility* that an unwilling licensee is one that (1) refuses to license consistent

[171] Brief for Nokia Corp. and Nokia Inc. as Amici Curiae Supporting a Reversal and Supporting Neither Party at 10 (Apr. 4, 2013), Apple Inc. v. Motorola, Inc., 757 F.3d 1286 (Fed. Cir. 2014) (Nos. 12–1548, 12–1549).

[172] Katy Oglethorpe, *Nokia Counsel: Major Companies "Wilfully Infringe" FRAND*, GLOBAL COMPETITION REV. (June 17, 2013), http://globalcompetitionreview.com/news/article/33655/nokia-counsel-major-companies-wilfully-infringe-frand/ (reporting remarks of Jenni Lukander, global head of competition law at Nokia).

[173] *See, e.g.*, Statement of the Fed. Trade Comm'n at 4 n.14, Motorola Mobility Inc., File No. 121–0120 (F.T.C. Jan. 3, 2013); Brief for Qualcomm Inc. as Amicus Curiae Supporting a Reversal at 7–11, Apple Inc. v. Motorola, Inc., 757 F.3d 1286 (Fed. Cir. 2014) (Nos. 12–1548, 12–1549); Ratliff & Rubinfeld, *supra* note 22, at 5–7; Vesterdorf, *supra note* 109, at 4.

[174] Decision and Order, Robert Bosch GmbH, No. C-4377 (F.T.C. Nov. 26, 2012) [FTC Decision and Order in *Bosch*]; Decision and Order, Motorola Mobility, L.L.C., No. C-4410 (F.T.C. Jan. 3, 2013) [hereinafter FTC Decision and Order in *Motorola Mobility*].

[175] FTC Decision and Order in *Bosch*, *supra* note 174, § IV.E.2.

with FRAND terms either in writing or in sworn testimony, (2) refuses to enter a license agreement on terms set by a court or a binding arbitration, or (3) fails to assure the SEP holder in writing that it will accept FRAND terms.[176] The FTC further said in *Motorola Mobility* that "challenging the validity, value, [i]nfringement or [e]ssentiality of an alleged infringing FRAND [p]atent does not constitute a statement that a [p]otential [l]icensee will not license."[177] The FTC evidently places the burden on an SEP holder to prove that a potential licensee is "unwilling" in accordance with the categories that the agency defines.

The FTC's definition sets a high bar for an SEP holder to prove that an implementer is unwilling to accept FRAND terms. The FTC's approach is flawed because it ensures that no potential licensee represented by counsel will be so careless as to certify in writing or in sworn testimony that it is unwilling to negotiate with an SEP holder on any terms. If extended to situations other than enforcement of section 5 of the FTC Act,[178] the FTC's definition of an unwilling licensee would give the implementer substantial bargaining power. An implementer could continue to refuse to negotiate with an SEP holder and continue infringing the SEP as long as it does not blunder into stating in writing or sworn testimony that it will not enter into a license and pay for the patented technology it is using. The likelihood that an implementer ever would be deemed an unwilling licensee under the FTC's approach, such that an SEP holder could seek an injunction, is illusory. Given the natural consequences of the FTC's approach, no one could seriously contend that the agency expects that a different outcome is possible.

The European Commission has defined "unwillingness" in its decision addressing Google's acquisition of Motorola Mobility: "it *may* be legitimate for the holder of SEPs to seek an injunction against a potential licensee which is not willing to negotiate in good faith on FRAND terms."[179] The Commission thus recognizes that, to foreclose an injunction, it is not sufficient that an implementer enter into a negotiation with the SEP holder; rather, the implementer must actually be willing to reach an agreement on FRAND terms. It is regrettable that the Commission did not provide more guidance. Google proposed to define a willing licensee as one who "has made . . . a binding and unconditional commitment to license . . . on FRAND terms"[180] and who "provides securities with regard to the royalty payments," yet the Commission would not define willingness in its decision.[181]

As I explain in Part VI.C.3, a German court has submitted questions concerning the limits on an SEP holder's right to seek an injunction from the Court

[176] FTC Decision and Order in *Motorola Mobility*, *supra* note 174, § II.E.
[177] *Id.* § II.E.2.
[178] 15 U.S.C. § 45.
[179] Google/Motorola Mobility, Case No. COMP/M.6381, *supra* note 39, ¶ 126 (emphasis added).
[180] *Id.* ¶ 141(a).
[181] *Id.* ¶ 142.

of Justice of the European Union (CJEU), emphasizing that there is a discrepancy in the approach that national courts and the European Commission have adopted so far. The CJEU has yet to rule on that question. In November 2014, Advocate General Melchior Wathelet opined on how the CJEU should address the questions. He said that "a mere willingness on the part of infringer to negotiate in a highly vague and non-binding fashion" cannot limit the SEP holder's right to request an injunction, and he consequently discouraged the CJEU from embracing the Commission's approach.[182]

The current statements of enforcement policy of antitrust agencies in Europe and the United States are vague, if not hostile to SEP holders. Under the current system, the antitrust agencies are more solicitous about an unwilling implementer who infringes an SEP than a willing licensor who seeks an injunction. The alternative is to hold an implementer to a good-faith standard in negotiation. Doing so would increase the incentives of both the implementer and the SEP holder to reach a prompt licensing agreement on FRAND terms.

B. When Is an Implementer "Unwilling" to Accept a FRAND Offer?

Remedies available in cases of patent infringement serve as a framework for the negotiation of FRAND licensing terms.[183] Parties bargain over licensing terms "in the shadow of the law."[184] The availability of an injunction will influence how an SEP holder and an implementer negotiate. A court's framework for deciding whether to grant an injunction in a FRAND licensing dispute should deter opportunistic practices and stimulate the parties to negotiate in good faith.

The decision to enjoin an implementer that has infringed an SEP should depend on whether the implementer has refused the SEP holder's FRAND offer. By making a FRAND offer and thereby giving the implementer the opportunity to access the SEP holder's standard-essential technology on FRAND terms, the SEP holder has discharged its FRAND obligation. An infringer that refuses to accept a FRAND offer is "unwilling" to accept FRAND terms.[185] Because the SEP holder has discharged its duties under the FRAND commitment, the SEP holder should be able to request and obtain an

[182] Opinion of Advocate General Wathelet ¶ 50, Case C-170/13 Huawei Tech. Co. v. ZTE Corp. (Nov. 20, 2014) (European Union) [hereinafter Opinion of Advocate General in *Huawei v. ZTE*].

[183] *See, e.g.*, Ratliff & Rubinfeld, *supra* note 22, at 1; *see also* Robert Cooter, Stephen Marks & Robert Mnookin, *Bargaining in the Shadow of the Law: A Testable Model of Strategic Behavior*, 11 J. LEGAL STUD. 225, 225 (1982).

[184] Cooter, Marks & Mnookin, *supra* note 183, at 228–29.

[185] *See, e.g.*, DOJ -USPTO POLICY STATEMENT ON SEPS, *supra* note 162, at 7 (discussing, in the context of exclusion orders, that, when "a putative licensee refuses to pay what has been determined to be a F/RAND royalty[,] . . . [s]uch a refusal could take the form of a constructive refusal to negotiate").

injunction, provided that the SEP holder satisfies the *eBay* criteria against such an infringer.

In determining whether an implementer has rejected a FRAND offer, the court needs to examine three questions. First, the court needs to evaluate whether the SEP holder has made an offer before seeking an injunction. Second, the court needs to evaluate whether that offer was FRAND. Third, the court needs to determine whether the implementer rejected the FRAND offer, actually or constructively. If the court answers those three questions affirmatively, the duties arising from a FRAND commitment do not restrain the SEP holder's ability to obtain an injunction, and the decision whether to grant an injunction should turn to the *eBay* criteria.

1. *Did the SEP Holder Make a Licensing Offer?*

In deciding whether to grant an injunction, a court first needs to decide whether the SEP holder has made a licensing offer to the implementer. The FRAND commitment obligates the SEP holder to make an offer to license (or otherwise provide access to) its SEPs, and the failure to discharge that duty constitutes a breach of the SEP holder's FRAND contract. An SEP holder that fails to make an offer (or otherwise provide access to its SEPs) should not be able to request an injunction against the implementer.[186]

The definition of what constitutes a licensing offer is a question of contract law, and may differ by jurisdiction. However, the mere fact that an SEP holder has contacted an implementer will generally not suffice to establish a licensing offer. Under U.S. contract law, courts have required that an SEP holder make an explicit licensing offer to an implementer so that its acceptance enables the parties to enter into a licensing agreement. The District Court for the Northern District of California adopted this approach in *Realtek v. LSI*, in which the SEP holder sent a letter to the implementer and, less than a week later, filed an action with the ITC to block importation of the implementer's allegedly infringing products.[187] The SEP holder's letter did not include a licensing offer, but merely demanded that the implementer immediately cease and desist its alleged infringement. The court found that the SEP holder's communication with the implementer did not constitute a licensing offer.[188] The court said that the SEP holder did not attempt to make a licensing offer before seeking an exclusion order from the ITC; consequently, there was no evidence that the implementer was unwilling to accept a FRAND license.[189] The FTC adopted a similar approach in its investigation into Motorola Mobility's conduct, in which the agency said that an SEP holder should not

[186] *See, e.g.*, Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1003 (N.D. Cal. 2013).
[187] *Id.* at 1002.
[188] *Id.*
[189] *Id.* at 1007–08.

seek to enjoin an implementer unless the SEP holder has "made [q]ualified [o]ffers to the [p]otential [l]icensee."[190] Advocate General Wathelet recommended that the CJEU adopt the same principle in the European Union by requiring the SEP holder to "present to the alleged infringer a written offer for a license on FRAND terms[, including] . . . the precise amount of the royalty."[191] In sum, only an SEP holder that has made a licensing offer to an implementer (or otherwise provided access to its SEPs) has fulfilled its obligations arising from the FRAND commitment and is eligible to receive an injunction against that implementer.

2. *Was the SEP Holder's Offer FRAND?*

Next, the court needs to determine whether an SEP holder's offer is within the FRAND range. In some cases, that determination is straightforward. Suppose, for example, that the parties previously asked a court or an arbitral tribunal to determine the FRAND royalty, yet the implementer subsequently refuses to pay the established royalty. The court need only verify whether the SEP holder's offer complies with what the parties or the third-party adjudicator determined to be a FRAND royalty. When the implementer refuses to accept what has been determined to be a FRAND license, the SEP holder should be entitled to enjoin the infringer from using the SEPs. However, this scenario will be rare. In most cases, determining whether an SEP holder's offer is FRAND is harder.[192] Indeed, the adjudicator should not conclude that the offer lies outside the FRAND range simply because the implementer considers it unreasonable. Chief Judge Davis said in *Ericsson v. D-Link* that an SEP holder "does not violate its RAND obligations by seeking a royalty greater than its potential licensee believes is reasonable."[193] His statement indicates an expectation that judges in FRAND cases will be called upon to do the quintessential thing that judges routinely do—exercise judgment. As an objective matter, an offer that an implementer considers unreasonable still might lie within the FRAND range and therefore suffice as a matter of law to discharge the SEP holder's FRAND obligation. Only the adjudicator will set this matter to rest.

Determining whether an initial offer is within the FRAND range generally requires detailed economic analysis.[194] The SEP holder may present evidence

[190] FTC Decision and Order in *Motorola Mobility*, *supra* note 174, § II.C.

[191] Opinion of Advocate General in *Huawei v. ZTE*, *supra* note 182, ¶ 85.

[192] Judge Learned Hand famously admitted that the "whole notion of a reasonable royalty" merely helps to approximate "that which is really incalculable." Cincinnati Car Co. v. N.Y. Rapid Transit Corp., 66 F.2d 592, 595 (2d Cir. 1933); *see also* Georgia-Pacific Corp. v. U.S. Plywood-Champion Papers Inc., 446 F.2d 295, 300 n.5 (2d Cir. 1971).

[193] Ericsson Inc. v. D-Link Sys., Inc., No. 6:10-CV-473, 2013 WL 4046225, at *25 (E.D. Tex. Aug. 6, 2013), *aff'd in part, rev'd in part, and vacated in part*, 773 F.3d 1201 (Fed. Cir. 2014).

[194] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 988–1025 (analyzing possible economic methodologies for determining a FRAND royalty).

showing that the license offer is comparable to the licensing terms upon which third parties have agreed. When evidence from comparable licenses imply that an SEP holder's offer is within the FRAND range, the court should consider that fact evidence that the SEP holder has discharged its FRAND commitment. It should be then the implementer's burden to prove that the SEP holder's offer is outside the FRAND range.

Courts also should not deem an offer to breach a FRAND obligation simply because the SEP holder has offered to license its SEPs as a portfolio, rather than individually. The U.S. Department of Justice and the FTC have emphasized that "fragmentation of [patent] rights can increase the costs of bringing products to market due to the transaction costs of negotiating multiple licenses and greater cumulative royalty payments."[195] Allowing an SEP holder to offer FRAND terms for an entire patent portfolio can reduce transaction costs—to the benefit of the SEP holder, the implementer, and ultimately consumers. Therefore, the requirement to license SEPs on FRAND terms does not preclude an SEP holder from licensing its SEPs as a portfolio. Moreover, one could argue that the nondiscrimination element of the FRAND commitment *requires* an SEP holder to license its SEPs as a portfolio, if the SEP holder has previously licensed its SEPs as a portfolio to other implementers and the specific circumstances of the case do not justify departing from that established licensing practice.

When the court determines that an SEP holder has made a FRAND offer (or otherwise has provided access to its SEPs[196]), the court confirms that the SEP holder has discharged its FRAND obligation. Conversely, an SEP holder that has made an offer outside the FRAND range breaches its contractual obligation and should not be able to request an injunction.[197]

Some courts have ruled that an SEP holder's *initial* offer need not be within the FRAND range. In *Microsoft v. Motorola*, Microsoft alleged that Motorola breached its FRAND commitment by making an unreasonably high initial offer.[198] Rejecting Microsoft's argument, Judge Robart said that, "under Motorola's agreements with the IEEE and the ITU, Motorola need *not* make initial offers on RAND terms."[199] Judge Robart found that an initial offer that is not RAND (or FRAND) does not itself violate the SEP holder's RAND commitment.[200] However, he said that an initial offer could serve as supporting

[195] U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 57 (2007), *available at* http://www.justice.gov/atr/public/hearings/ip/222655.pdf.

[196] As I explained in Part II.B.1, *supra*, an SEP holder may discharge its FRAND obligation by electing to license its SEPs only to downstream manufacturers, provided that the SEP holder grants access to its SEPs to implementers in the upper level of the value chain by some means other than entering into licenses with those upper-level implementers.

[197] *See, e.g.*, Ratliff & Rubinfeld, *supra* note 22, at 11.

[198] Microsoft Corp. v. Motorola Inc., 864 F. Supp. 2d 1023, 1038 (W.D. Wash. 2012).

[199] *Id.* at 1038 (emphasis added).

[200] *Id.*

evidence of a violation of a RAND commitment if other circumstances indicate that the SEP holder has not negotiated RAND licensing terms in good faith.[201]

Judge Robart's approach seems wrong because it ignores that, in a FRAND contract, time is of the essence.[202] Expeditious formation of a FRAND licensing agreement enables the implementer to commence the prompt production of standard-compliant devices. Consumers can sooner reap the benefits of standardization. And the SEP holder can sooner receive compensation for its invention, which strengthens the SEP holder's incentive to continue investing in developing technology for the SSO's *next* standard. Allowing the SEP holder knowingly to make an initial offer outside of the FRAND range would needlessly prolong the negotiation process and deprive consumers of their timely consumption of standard-compliant devices. As Jerry Hausman has observed, the delayed introduction of a new product is analogous to its having a "virtual price" so high as to drive demand for the product to zero.[203] The resulting welfare loss consists of the entire area beneath the demand curve for the device during the period of delay. This waste of resources is an irretrievable deadweight loss.[204] From an economic perspective, averting that loss of consumer surplus is the overriding public interest at stake.

It is also inconsistent for courts to emphasize, on the one hand, the harm to consumers that an injunction would cause but to neglect, on the other hand, the harm to consumers from the failure of the parties to reach a FRAND agreement expeditiously. The FTC, for example, argued in December 2012 that the issuance of an injunction against the infringer of an SEP harms the public interest, because "the alleged infringer likely will be forced out of the market" and "the public would face the immediate impact of an injunction by losing access to the affected products."[205] However, the FTC fails to recognize that

[201] *Id.* at 1038–39.

[202] *See, e.g.*, King v. Stevenson, 445 F.2d 565, 569 (7th Cir. 1971) (evaluating the parties' intent to determine whether time is of the essence in a contract).

[203] *See* Jerry A. Hausman, *Valuing the Effect of Regulation on New Services in Telecommunications*, 28 BROOKINGS PAPERS ON ECON. ACTIVITY 1, 2 (1997). Hausman explains:

> The basic idea underlying the economic approach to valuing new goods or services is the recognition that until these goods actually come on the market, consumers are unable to purchase them at any price, no matter how much they would like to buy them. Thus, in some sense, the price of the new good or service might as well be infinite. A more refined economic approach estimates the "virtual," or "reservation," price that sets demand for the new good or service to zero. At this virtual price, demand is zero, so a "virtual equilibrium" exists between demand and supply (which is zero).

Id. at 2. For an application of Hausman's insight to intellectual property, see Jerry A. Hausman & J. Gregory Sidak, *Google and the Proper Antitrust Scrutiny of Orphan Books*, 5 J. COMPETITION L. & ECON. 411, 414–16 (2009).

[204] *See* Sidak, Inaugural Address for the Ronald Coase Professorship of Law and Economics, Tilburg University: Is Harm Ever Irreparable?, *supra* note 110, at 21, 24.

[205] Press Release, Fed. Trade Comm'n, FTC Files Amicus Brief Explaining How Injunctions Related to Standard-Essential Patents Can Harm Competition, Innovation, and Consumers

the same qualitative effect arises if the parties fail to reach a FRAND agreement in a timely manner. The absence of a licensing agreement impairs an implementer's ability to produce standard-compliant devices and compete in the downstream market (unless the implementer willfully infringes the SEP). Failure to reach a licensing agreement harms consumers, because their access to the implementing devices will be delayed. Therefore, failure to reach a FRAND agreement promptly would have the same effect on the public interest that the FTC says would arise if a court were to enjoin an infringer of SEPs.

One could indeed argue that the harm related to a failure to reach a FRAND licensing agreement is merely theoretical, given that, in practice, a producer often implements SEPs before reaching a licensing agreement. Stated differently, willful infringement of SEPs is pervasive. As a result, an implementer can produce standard-compliant devices, even in the absence of a licensing agreement. A delay in the negotiation of licensing terms thus does not preclude the implementer from competing in the product market, nor does it deprive consumers from access to standard-compliant devices. However, any legal rule that was predicated on the expectation that an implementer will systematically infringe SEPs would punish those implementers that wait to use the SEPs until they have concluded a licensing agreement. Richard Epstein and David Kappos argue that the law should protect against the "willful dispossession of property," including intellectual property, such as patents.[206] The law should not create a competitive disadvantage for the implementer that does not use the SEPs until it has executed a licensing agreement and obtained the lawful right to use the SEPs.

3. *Did the Implementer Reject a FRAND Offer?*

If a court determines that an SEP holder has made a FRAND offer, it then needs to decide whether an implementer has rejected that offer. An SEP holder should be able to obtain an injunction against an implementer that has refused a FRAND offer.[207] In determining whether the implementer has rejected a FRAND offer, the court needs to examine the implementer's

(Dec. 5, 2012), http://www.ftc.gov/news-events/press-releases/2012/12/ftc-files-amicus-brief-explaining-how-injunctions-related.

206 Richard A. Epstein & David J. Kappos, *Legal Remedies for Patent Infringement: From General Principles to FRAND Obligations for Standard Essential Patents*, 9 COMPETITION POL'Y INT'L 69, 70 (2013).

207 The FTC has consistently supported the position that an SEP holder should be able to obtain an injunction against an implementer that refuses FRAND terms. *See, e.g.*, FTC Decision and Order in *Bosch*, *supra* note 174, § IV.E.2 (acknowledging that the SEP holder was entitled to seek injunctive relief where the implementer "states in writing it will not license one or more of the [SEPs]" or "refuses to license one or more of the [SEPs] on terms . . . through a process agreed upon by both parties or through a court"); FTC Decision and Order in *Motorola Mobility*, *supra* note 174, § II.E (discussing the various situations in which an SEP holder will not be prohibited from seeking an injunction against an implementer).

negotiating behavior. As Judge Essex has observed, "there appears to be no provision [in the SSO's rules] made for companies that simply choose to infringe, and then demand FRAND status when caught."[208] Further, Judge Vesterdorf has said that "[i]t is . . . not enough [for an implementer] to just declare [itself] to be willing [to accept FRAND terms]. This must be shown by concrete follow up actions such as signaling a commitment to conclude a binding license agreement and not frustrating negotiations."[209] U.S. agencies have expressed the view (although referring to exclusion orders rather than injunctions) that the implementer is obliged to enter into a negotiation with an SEP holder by stating that an injunctive remedy may be appropriate if an implementer acts "outside the scope of the . . . F/RAND [commitment]"—for example, by refusing to engage in a negotiation to determine FRAND terms.[210]

An implementer that is willing to accept FRAND licensing terms must respond promptly to an SEP holder's offer. The FTC adopted this approach in *Motorola Mobility* when it said that an SEP holder should be able to obtain an injunction if an implementer "does not provide the written confirmation requested in a FRAND Terms Letter within thirty (30) days."[211] Although one could question whether the deadline of 30 days is too long or too short, the idea behind the FTC's decision is sound—a putative licensee that does not respond to an SEP holder's offer in a timely manner shows that it has no intention to negotiate the FRAND terms in good faith. The consent order correctly recognizes that an implementer should have sufficient time to review the SEP holder's offer and, at the same time, that the SEP holder should be able to secure a return on its investment in a timely manner.[212] There is no valid justification for denying an injunction to an SEP holder that has made a FRAND offer, but to whom the implementer has not promptly responded.

However, courts have not always considered an implementer's failure to respond to an SEP holder's licensing offer to be evidence of the implementer's unwillingness to negotiate in good faith. In *Microsoft v. Motorola*, for example, Motorola made Microsoft a licensing offer for the use of Motorola's SEPs, but Microsoft did not respond. Instead, Microsoft directly filed a breach-of-contract lawsuit, arguing that Motorola's offer was outside the FRAND range and therefore violated its FRAND commitment.[213] It is striking that Judge

[208] USITC Inv. No. 337-TA-868 Initial Determination, *supra* note 108, at 114.

[209] Vesterdorf, *supra* note 109, at 6.

[210] DOJ-USPTO Policy Statement on SEPs, *supra* note 162, at 7.

[211] FTC Decision and Order in *Motorola Mobility*, *supra* note 174, § II.E.4.

[212] *See, e.g.*, Opinion of Advocate General in *Huawei v. ZTE*, *supra* note 182, ¶ 89 ("The timeframe for the exchange of offers and counter offers and the duration of the negotiations . . . must be assessed in the light of the 'commercial window of opportunity' available to the SEP holder for securing a return on its patent in the sector in question.").

[213] Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 877–78 (9th Cir. 2012); *see also* Defendants' Response to Microsoft's Motion for Partial Summary Judgment of Breach of Contract and Summary Judgment on Motorola's Third, Fourth, Fifth, Seventh, Eighth, and Ninth Affirmative Defenses and Second Counter Claim at 1, Microsoft Corp. v. Motorola, Inc.,

Robart did not discuss the significance of Microsoft's failure to respond to Motorola's licensing offer.[214] Ignoring an implementer's failure to respond to an SEP holder's licensing offer biases the negotiation in the implementer's favor. The court would allow a perverse situation in which an implementer does not explicitly refuse a FRAND offer, but nonetheless engages in a course of conduct that results in an actual refusal to negotiate licensing terms. This kind of ambiguity promotes economic inefficiency. It thwarts the expeditious formation of a contract and in that respect contravenes the purpose of the SSO in creating, and the purpose of the SEP holder in accepting, the FRAND obligation in the first place. To avoid being enjoined from using the SEPs in question, an implementer should be required to respond to what the SEP holder represents to be a FRAND offer *before* the implementer initiates litigation against the SEP holder. An implementer's failure to do so should weigh heavily in favor of the issuance of an injunction.

Next, if a court finds that the implementer has responded to the SEP holder's offer, the court needs to determine whether the implementer has implicitly or explicitly rejected a FRAND offer. An infringer can explicitly refuse an SEP holder's FRAND offer if, for example, it states in writing that it does not intend to accept the offer. However, this situation is relatively rare in practice. It is also relatively implausible. What rational infringer that is aware of the legal consequences attached to its refusal would explicitly refuse a FRAND offer?

It is, on the other hand, possible that an infringer implicitly rejects an SEP holder's FRAND offer. Suppose the implementer makes a counteroffer that is outside the FRAND range. The Department of Justice and the USPTO have soundly reasoned that an implementer that "insist[s] on [licensing] terms clearly outside the bounds of what could reasonably be considered to be F/RAND terms in an attempt to evade the . . . obligation to fairly compensate the patent holder" should be considered unwilling.[215] The implementer might also implicitly reject a FRAND offer by delaying the negotiation process. It does not suffice for an implementer to enter into a negotiation with an SEP holder. Rather, an implementer must negotiate the licensing terms in good faith with a genuine intent to reach an agreement on FRAND terms. The European Commission adopted this approach in its Motorola Mobility investigation, stating that an SEP holder may legitimately use an injunction "against a potential licensee which is not willing to negotiate in good faith on FRAND terms."[216]

No. 2:10-cv-01823-JLR (N.D. Ill. July 15, 2013), ECF No. 758 ("Microsoft . . . [took] the unprecedented step of filing a breach-of-contract lawsuit just 20 days after receiving Motorola's letter, without making any counteroffer.").

214 Microsoft Corp. v. Motorola, Inc., No. C10–1823JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013).

215 DOJ-USPTO POLICY STATEMENT ON SEPS, *supra* note 162, at 7.

216 Google/Motorola Mobility, Case No. COMP/M.6381, *supra* note 39, ¶ 126.

The implementer might delay the negotiation in an attempt to extract from the SEP holder a lower licensing rate. The implementer might reject the SEP holder's FRAND offer and counteroffer within the FRAND range. However, after an SEP holder has made a FRAND offer, any further negotiation of the licensing terms is solely at the SEP holder's discretion. An SEP holder that has made an offer within the FRAND range is not required to negotiate further the licensing terms with the implementer. An implementer cannot refuse an offer that is within the FRAND range on the grounds that it prefers a lower royalty and still avoid an injunction. An implementer that refuses a FRAND royalty as part of a strategy of continuing negotiation still has rejected a FRAND offer.

What if the implementer agrees to FRAND terms but cannot pay the FRAND royalty? Should such an implementer be considered unwilling?[217] By making a FRAND commitment, an SEP holder agrees only to license its standard-essential technology under FRAND terms. An SEP holder assumes no obligation under the FRAND commitment to an implementer that cannot pay the FRAND royalty. (And the SEP holder certainly bears no duty under any other body of law to subsidize impecunious implementers.) To maintain an SEP holder's incentive to contribute its future technologies to standards, a court must ensure that only an implementer willing and able to pay a FRAND royalty may use the SEPs. An SEP holder therefore should be able to enjoin an implementer unwilling or unable to pay a FRAND royalty.

VI. WHEN WOULD THE SEP HOLDER FACE ANTITRUST LIABILITY?

Antitrust authorities across the globe have initiated investigations into SEP holders that seek injunctions against infringers of SEPs, suggesting that such a request is anticompetitive.[218] However, an SEP holder's request for an injunction can be anticompetitive only in rare circumstances. Properly construed, antitrust law does not suspend or extinguish an SEP holder's right to request an injunction against infringers, and a request for an injunction should not automatically trigger antitrust scrutiny under U.S. antitrust law or EU competition law.

[217] DOJ-USPTO POLICY STATEMENT ON SEPS, *supra* note 162, at 7 ("An exclusion order may still be an appropriate remedy . . . [f]or example, if a putative licensee refuses to pay what has been determined to be a F/RAND royalty.").

[218] *See, e.g.*, Press Release, European Commission, Antitrust: Commission Finds that Motorola Mobility Infringed EU Competition Rules by Misusing Standard Essential Patents (Apr. 29, 2014), http://europa.eu/rapid/press-release_IP-14-489_en.html (reporting that the European Commission found that Motorola's use of an injunction against an infringer of its SEPs constituted an abuse of a dominant position); Takanori Abe, *Japan: IP High Court Rules in Apple v. Samsung FRAND Case*, MANAGING INTELLECTUAL PROPERTY (Sept. 1, 2014), http://www.managingip.com/Article/3375734/Latest-News-Magazine/Japan-IP-High-Court-rules-in-Apple-v-Samsung-FRAND-case.html (reporting the decision of the Grand Panel of the IP High Court holding that seeking an injunction based on a FRAND-committed patent is an abuse of a right unless exceptional circumstances are met).

A. Section 2 of the Sherman Act

Section 2 of the Sherman Act prohibits acts that "monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce."[219] For a monopolization claim to succeed, the plaintiff must prove that the defendant maintained or obtained market power through anticompetitive acts.[220] For an attempted monopolization claim to succeed, the plaintiff must prove the defendant's "dangerous probability of success" in monopolizing a market.[221]

In 1995, the Antitrust Division and the FTC jointly issued the Antitrust Guidelines for the Licensing of Intellectual Property.[222] The agencies recognize that "[i]ntellectual property law bestows on the owners of intellectual property certain rights to exclude others,"[223] and that a patent owner's "rights to exclude are similar to the rights enjoyed by owners of other forms of private property."[224] The exercise of intellectual property rights is "neither particularly free from scrutiny under the antitrust laws, nor particularly suspect under them."[225]

An implementer challenging on antitrust grounds an SEP holder's request for an injunction would first need to prove that the SEP holder has sufficient market power to trigger the application of section 2. The Supreme Court said in *Illinois Tool Works Inc. v. Independent Ink, Inc.* in 2006 that "a patent does not necessarily confer market power upon the patentee."[226] An SEP holder will have little or no market power if the standard faces strong competition from other standards or non-standardized products.[227] Again, the SEP holder will have little market power if the standard in which its technology has been implemented has not been successful—for example, because market participants do not adhere to the standard. One therefore needs to evaluate evidence of an SEP holder's market power on a case-by-case basis.

Courts also have yet to scrutinize whether an SEP holder's act of seeking an injunction violates antitrust law. Deputy Assistant Attorney General Renata Hesse questioned, in a speech in February 2013, whether an SEP holder's

[219] 15 U.S.C. § 2.
[220] *See* United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966).
[221] *See* Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 453 (1993).
[222] U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY (1995), *available at* http://www.justice.gov/atr/public/guidelines/0558.html [hereinafter ANTITRUST IP GUIDELINES].
[223] *Id.* § 2.1.
[224] *Id.*
[225] *Id.*
[226] 547 U.S. 28, 45 (2006).
[227] *See* Deborah Platt Majoras, Chairman, Fed. Trade Comm'n, Recognizing the Procompetitive Potential of Royalty Discussions in Standard Setting, Remarks at Standardization and the Law: Developing the Golden Mean for Global Trade 3 (Sept. 23, 2005), *available at* http://www.ftc.gov/speeches/majoras/050923stanford.pdf ("[I]f the chosen standard has to compete with rival standards, the owner of the SSO's chosen technology may end up with little market power.").

attempt to seek an injunction violates section 2 of the Sherman Act.[228] Judging from Hesse's speech, the Antitrust Division evidently believed that section 2 applies even when the SEP holder did not deceive other SSO members during the standardization process.[229] She stated that "the division has also been focused on the role that Section 2 of the Sherman Act might play in protecting competition in high-technology industries from certain exclusionary practices involving patent licensing."[230] Hesse did not specify when the Antitrust Division would consider an SEP holder's request for an injunction to violate antitrust law.

As of January 2015, the Antitrust Division had scrutinized an SEP holder's use of an injunction (or, more precisely, an exclusion order) only once—in the investigation initiated against Samsung Electronics.[231] The premise of the Division's investigation was a concern that the SEP holder would use the exclusion order to hold up implementers:

> While there are certain circumstances where an exclusion order as a remedy for infringement of [standard-essential] patents could be appropriate, in many cases there is a risk that the patent holder could use the threat of an exclusion order to obtain licensing terms that are more onerous than would be justified by the value of the technology itself, effectively exploiting the market power obtained through the standards-setting process.[232]

The Antitrust Division decided to close the investigation against Samsung after it became clear that Samsung could not enforce an exclusion order against the infringer of its SEPs.[233] Although the ITC initially granted Samsung an exclusion order regarding Apple's products infringing Samsung's SEPs,[234] President Obama, acting through the U.S. Trade Representative, vetoed the ITC's decision on the grounds that the exclusion order would disserve the public interest.[235] The Antitrust Division then said that "no further action [was] required"[236] with respect to its investigation.

Although the Antitrust Division's investigation did not result in an antitrust remedy, the Division's statement upon terminating the investigation raised

[228] Renata B. Hesse, Deputy Assistant Attorney Gen., Antitrust Div., U.S. Dep't of Justice, Speech at the Global Competition Review's 2d Annual Antitrust Law Leaders Forum (Feb. 8, 2013), *available at* http://www.justice.gov/atr/public/speeches/292573.pdf.

[229] *Id.* at 19 (recommending that SSOs adopt policies to mitigate patent holdup by "limiting injunction actions for F/RAND-encumbered SEP infringement claims").

[230] *Id.* at 15.

[231] Press Release, U.S. Dep't of Justice, Statement of the Department of Justice Antitrust Division on Its Decision to Close Its Investigation of Samsung's Use of Its Standards-Essential Patents (Feb. 7, 2014) [hereinafter *DOJ Closes Its Samsung Investigation*], *available at* http://www.justice.gov/atr/public/press_releases/2014/303547.pdf.

[232] *Id.* at 1.

[233] *Id.*

[234] Certain Electronic Devices, Including Wireless Communication Devices, Portable Music and Data Processing Devices, and Tablet Computers, USITC Inv. No. 337-TA-794 (July 5, 2013).

[235] Letter from Michael B.G. Froman, Exec. Office of the President, to the Honorable Irving A. Williamson, Chairman, U.S. Int'l Trade Comm'n (Aug. 3, 2013).

[236] *DOJ Closes Its Samsung Investigation*, *supra* note 231, at 1.

two significant concerns. First, having threatened Samsung with antitrust liability, the Antitrust Division, in its notice terminating the investigation, neglected to shed light on when the Antitrust Division *would* consider an SEP holder's request for an exclusion order to violate the Sherman Act. Second, the notice evidently rests on a simplistic and theoretical conjecture about patent holdup—a narrative for which the Division could never convey the burden of proof in actual litigation before a discerning judiciary.[237]

1. *Does an SEP Holder's Request for an Exclusion Order Reduce Competition in a Manner That Reduces Consumer Welfare?*

The Antitrust Division's notice terminating its investigation of Samsung fails to articulate a cognizable theory of harm under U.S. antitrust law. The Division does not say under which antitrust doctrine it would consider itself able to challenge Samsung's conduct. The scant analysis presented by the Antitrust Division suggests that Samsung's request for an exclusion order could be considered, at most, an act of unfair competition, which is actionable through section 5 of the FTC Act,[238] which the Antitrust Division has no authority to enforce. Alternatively, one might view the Antitrust Division's investigation of Samsung as treating the theory of patent holdup as an incipiency offense, akin to a potentially anticompetitive merger under section 7 of the Clayton Act.[239] But that law is irrelevant in Samsung's case, given that no merger was involved.

In that situation, the only appropriate antitrust tool that the Antitrust Division might have had in its arsenal would have been section 2 of the Sherman Act. However, even if one accepts that the Antitrust Division intended to challenge Samsung's request for an exclusion order under section 2, it is improbable that liability could arise. The publicly available documents do not clarify whether the Antitrust Division intended to prosecute Samsung's request for an exclusion order as an act of monopolization or an act of attempted monopolization. The Antitrust Division also failed to clarify in which relevant market Samsung's request for an exclusion order would have allegedly had an anticompetitive effect—the "market" for SEPs, standard-compliant goods, or something else altogether. The Antitrust Division merely stated that the SEP holder could use the threat of an exclusion order to "exploit the market power obtained through the standards-setting process."[240] That is hardly compelling reasoning. Market power with respect to what and whom? Moreover, the exploitation of legitimately obtained market power does

237 Ericsson Inc. v. D-Link Sys., Inc., No. 6:10-cv-00473, 2013 WL 4046225, at *18 (E.D. Tex. Aug. 6, 2013) (Davis, C.J.) ("The best word to describe Defendants' royalty stacking argument is theoretical."), *aff'd in part, rev'd in part, and vacated in part*, 773 F.3d 1201 (Fed. Cir. 2014).

238 15 U.S.C. § 45.

239 *Id.* § 18.

240 *DOJ Closes Its Samsung Investigation*, *supra* note 231, at 1.

not constitute an antitrust offense.[241] Unless Samsung's request for an exclusion order enabled the company to obtain or maintain market power—or unless there was a reasonable probability that Samsung could achieve such an effect—it is implausible that the Antitrust Division could have successfully challenged Samsung's actions under section 2 of the Sherman Act.

Commissioner Joshua Wright of the FTC has observed that the "position that an SEP holder violates the antitrust laws simply by seeking an injunction . . . clearly departs from the symmetry principle as antitrust law does not generally prohibit the holder of any other property right from seeking an injunction to vindicate that right."[242] The general assumption is that "property rights and their exercise . . . facilitat[e] economic exchange and growth."[243] Commissioner Wright has further noted that "there is no economic evidence available to support"[244] that "seeking injunctive relief . . . is itself anticompetitive."[245] Rather, a mere request for an exclusion order, even if illegitimate, is unlikely to lead to an anticompetitive acquisition of market power for at least three reasons. First, an SEP holder's request for an exclusion order will not necessarily be granted. The ITC might, for example, reject an SEP holder's request if it finds that the patent is not valid or not infringed. Second, even if the request for an exclusion order were granted, the exclusion order would not necessarily be enforced. Samsung's case before the ITC shows that the SEP holder could not enforce the obtained exclusion order. Third, even when an exclusion order is granted and enforced, it does not necessarily allow the SEP holder to maintain or obtain market power. Therefore, it is far from evident that an SEP holder's request for an exclusion order could have an anticompetitive effect and support a finding of antitrust liability under section 2 of the Sherman Act. Judge Douglas Ginsburg and other antitrust experts have observed that imposing an antitrust sanction on an SEP holder that requested an injunction will often be unnecessary as a remedy to prevent consumer harm.[246]

2. *The Antitrust Division's Incorrect Assumptions*

The Antitrust Division's notice terminating the investigation of Samsung also deserves criticism for relying on false assumptions. First, the Antitrust Division

241 *See, e.g.*, Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004).

242 Joshua D. Wright, Comm'r, Fed. Trade Comm'n, Remarks at the 2014 Milton Handler Lecture: Antitrust in the 21st Century, Does the FTC Have a New IP Agenda? 20–21 (Mar. 11, 2014), http://www.ftc.gov/system/files/documents/public_statements/288861/140311ipagenda.pdf.

243 *Id.* at 19.

244 *Id.* at 18.

245 *Id.*

246 Douglas H. Ginsburg, Taylor M. Owings & Joshua D. Wright, *Enjoining Injunctions: The Case Against Antitrust Liability for Standard Essential Patent Holders Who Seek Injunctions*, ANTITRUST SOURCE (Oct. 2014).

assumed that the mere "threat" of an exclusion order (or an injunction) could allow an SEP holder to engage in patent holdup.[247] That conjecture is wrong.[248] To support a strategy of holdup, the patent holder's threat of obtaining an exclusion order (or an injunction) must be credible. In reality, however, the issuance of an exclusion order (or an injunction) for a FRAND-committed patent is far from likely. U.S. courts and the ITC are reluctant to issue injunctions and exclusion orders to SEP holders. The Antitrust Division's notice terminating its investigation of Samsung erroneously suggests that an SEP holder's request for an exclusion order is so credible that it could sustain a strategy of patent holdup. That view is shrill and devoid of factual evidence.

Second, the Antitrust Division's notice erroneously assumes that licensing terms negotiated under the threat of an injunction necessarily will not produce FRAND prices. The Antitrust Division disregards an implementer's ability to seek a court determination of licensing terms if it believes that the offered terms are not FRAND and, in this way, effectively prevent the SEP holder from engaging in patent holdup.

Third, the Antitrust Division assumes that the risk of patent holdup is so strong that it requires departing from the established rules on exclusion orders (and perhaps also the established rules on injunctions). The Antitrust Division incorrectly treats the current legal rule, which gives the patent holder the right to request an exclusion order against products that infringe its patents, as the *exception*. The Antitrust Division incorrectly maintains that, in the context of SEPs, an exclusion order "could" be appropriate only in "certain circumstances."[249] Meanwhile, the Antitrust Division seems to assume that an SEP holder could systematically engage in opportunistic behavior when requesting exclusion orders. In other words, the Antitrust Division assumes that patent holdup is the norm. This assumption is unproven and, in my assessment, false. As I have explained elsewhere, empirical evidence does not support the patent-holdup conjecture.[250] Therefore, the Antitrust Division cannot credibly cite the risk of patent holdup as a justification for departing from the ITC's established rule for granting exclusion orders. Samsung's experience itself shows that, without any intervention by the Antitrust Division, the current legal system provides sufficient safeguards against patent holdup,[251] and that it would be difficult for an SEP holder to use an exclusion order opportunistically. In short, no valid antitrust rationale exists for departing from the established law regarding the grant of ITC exclusion orders—or, by extension, injunctions.

[247] *DOJ Closes Its Samsung Investigation*, *supra* note 231, at 1.
[248] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 1007–08.
[249] *DOJ Closes Its Samsung Investigation*, *supra* note 231, at 1.
[250] *See* Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 3, at 1021.
[251] *See* Peter Camesasca, Gregor Langus, Damien Neven & Pat Treacy, *Injunctions for Standard-Essential Patents: Justice Is Not Blind*, 9 J. COMPETITION L. & ECON. 285 (2013).

B. Section 5 of the FTC Act

An SEP holder's request for an injunction could also be challenged under section 5 of the FTC Act.[252] Congress passed the FTC Act in 1914 to address unfair practices not contemplated within the then-existing antitrust laws.[253] Section 5 gives the FTC the authority to prohibit "unfair methods of competition" and "unfair or deceptive acts or practices."[254] Section 5 prohibits conduct that "causes or is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition."[255] The Supreme Court held in *FTC v. Sperry & Hutchison Company* that section 5 applies to unfair acts "beyond simply those enshrined in the letter or encompassed in the spirit of the antitrust laws."[256] The FTC can base a section 5 allegation on two grounds: (1) violations of antitrust laws, such as the Sherman Act, or (2) stand-alone unfair acts that the antitrust laws do not prohibit.

The FTC first asserted a stand-alone violation of section 5 with respect to actions contravening commitments to an SSO in *Negotiated Data Solutions, LLC* (*N-Data*).[257] The FTC brought a claim under both the "unfair acts and practices" and the "unfair method of competition" clauses of section 5 against N-Data for failing to honor a flat-fee royalty rate that its predecessor-in-interest had committed to offer to an SSO.[258] The FTC concluded that N-Data violated section 5 when it charged a higher royalty rate, even though that action did not violate the Sherman Act.[259] The FTC alleged that N-Data's behavior "undermines the [standard-setting] process [and] may also undermine competition in an entire industry, raise prices to consumers, and reduce choices."[260] The case nonetheless concluded with a consent agreement, without any court determining whether the challenged conduct amounted to a stand-alone violation of section 5.[261] The FTC has since expressed interest in applying

[252] 15 U.S.C. § 45.

[253] *See, e.g.*, William E. Kovacic & Marc Winerman, *Competition Policy and the Application of Section 5 of the Federal Trade Commission Act*, 76 ANTITRUST L.J. 929, 930 (2010).

[254] 15 U.S.C. § 45.

[255] *Id.* § 45(n).

[256] FTC v. Sperry & Hutchinson Co., 405 U.S. 233, 244 (1972).

[257] Complaint, Negotiated Data Solutions, LLC, No. 0510094 (F.T.C. Sept. 22, 2008), *available at* http://www.ftc.gov/sites/default/files/documents/cases/2008/09/080923ndscomplaint.pdf.

[258] *Id.*

[259] Statement of the Commission, Negotiated Data Solutions, LLC, No. 0510094 (F.T.C. Jan. 23, 2008), *available at* http://www.ftc.gov/sites/default/files/documents/cases/2008/01/080122statement.pdf.

[260] *Id.* at 2.

[261] Agreement Containing Consent Order, Negotiated Data Solutions, LLC, No. 051–0094 (F.T.C. Jan. 23, 2008), *available at* http://www.ftc.gov/sites/default/files/documents/cases/2008/01/080122agreement.pdf. The FTC also sought to apply section 5 in *Rambus* and focused instead on its monopolization claims only when the case reached the D.C. Circuit on appeal. *See* Rambus Inc. v. Fed. Trade Comm'n, 522 F.3d 456, 462 (D.C. Cir. 2008) (expressing "serious concerns" about the FTC's evidence of alleged violations of section 5).

section 5 even more broadly, including using the statute to challenge an SEP holder's act of seeking an injunction against an infringer of a FRAND-committed SEP. In 2013, the FTC said that "[SEP] holders that seek injunctive relief . . . should understand that in appropriate cases the Commission can and will challenge this conduct as an unfair method of competition under section 5 of the FTC Act."[262]

The FTC has addressed an SEP holder's request for an injunction on two occasions. First, the FTC addressed the issue in reviewing the acquisition of SPX Service Solutions by Robert Bosch GmbH.[263] The FTC alleged that, by requesting an injunction against a willing licensee, SPX (the SEP holder) engaged in unfair acts of competition in violation of section 5. The FTC reasoned that the threat of an injunction "has the potential to cause substantial harm to U.S. competition, consumers and innovation."[264] The Decision and Order, through which the FTC approved the merger between the two companies, required Bosch to make a binding commitment to license SPX SEPs on FRAND terms.[265] The order also prohibited Bosch from seeking an injunction for any alleged infringement of SPX SEPs.[266] As explained earlier, the order allowed Bosch to seek an injunction only if (1) a court determines that the SEP is used for a different purpose than the one required to comply with the standard, (2) the implementer refuses in writing to accept the SEP holder's offer of a license on FRAND terms, or (3) the implementer refuses to license the SEPs on what has been determined to a be a FRAND royalty.[267]

Second, the FTC scrutinized the SEP holder's request for an injunction under section 5 in *Motorola Mobility*. The FTC alleged that Motorola Mobility, following its acquisition by Google, committed "unfair methods of competition and unfair acts or practices" when it sought injunctions against allegedly willing licensees of its SEPs for smartphones and tablet computers.[268] The FTC charged Motorola Mobility with violating section 5 for unfair practices that harmed competition in the market for electronic devices and were "likely to cause substantial injury to consumers."[269] Motorola Mobility's conduct would allegedly reduce incentives for the development of standard-compliant products, potentially exclude important consumer products, and

[262] Statement of the Federal Trade Commission at 2, Robert Bosch GmbH, No. C-4377 (F.T.C. Apr. 24, 2013), *available at* http://www.ftc.gov/sites/default/files/documents/cases/2012/11/121126boschcommissionstatement.pdf.
[263] *Id.* at 1.
[264] *Id.* at 1–2 n.4.
[265] Decision and Order § IV.D, Robert Bosch GmbH, No. C-4377 (F.T.C. Apr. 23, 2013).
[266] *Id.* § IV.E.
[267] *Id.*
[268] Complaint at 1, Motorola Mobility, L.L.C., No. 121–0120 (F.T.C. Jan. 3, 2013).
[269] Analysis of Proposed Consent Order to Aid Public Comment at 6, Motorola Mobility, L.L.C., No. 121–0120 (internal citations omitted) ("[C]onsumers will likely pay higher prices because many consumer electronics manufacturers will pass on some portion of unreasonable or discriminatory royalties they agree to pay to avoid an injunction or exclusion order.").

allow SEP holders to realize higher royalty payments—the cost of which the FTC believed licensees would pass on to consumers.[270]

It is telling that the FTC emphasized that section 5 may compensate for the fact that courts have found section 2 of the Sherman Act applicable only in cases of bad faith or deceptive behavior during the standardization process.[271] By pursuing actions under section 5, the FTC said that it "can reach opportunistic conduct that takes place *after* a standard is adopted that tends to harm consumers and undermine the standard-setting process."[272] Despite announcing this new legal risk for SEP holders, the FTC neglected to say what constitutes "opportunistic conduct." It said only that courts have traditionally viewed opportunistic conduct as "conduct devoid of countervailing benefits."[273]

With this vacuous guidance, the FTC, as in *Bosch*, settled its *Motorola Mobility* investigation with a consent agreement requiring Motorola to cease and desist from seeking injunctions against an alleged infringer. The FTC's consent agreement prohibits Motorola Mobility (and its owner, Google) from "directly or indirectly making any future claims for Covered Injunctive Relief based on alleged infringement" unless a potential licensee (1) refuses a FRAND offer either in writing or in sworn testimony, (2) refuses court-ordered or binding arbitration-determined FRAND terms, or (3) fails to communicate in writing its acceptance to an SEP holder.[274] The consent agreement also says that "challenging the validity, value, [i]nfringement or [e]ssentiality of an alleged infringing [SEP]" should not be considered evidence of the implementer's refusal of a FRAND offer.[275]

In dissent, Commissioner Maureen Ohlhausen refused to apply section 5 to a patent holder's seeking of injunctive relief, a position she also expressed in *Bosch*.[276] In both cases, Commissioner Ohlhausen criticized the FTC's proposed action to prosecute SEP holders for seeking injunctions against

[270] *Id.*

[271] *Id.* at 4. The Commission reasoned that "courts have found that patent holders may injure competition by breaching FRAND commitments they made to induce SSOs to standardize their patented technologies. Each of these cases, brought under Section 2 of the Sherman Act, involved allegations of bad faith or deceptive conduct by the patent holder before the standard was adopted." *Id.* (citations omitted).

[272] *Id.* (emphasis added).

[273] *Id.* at 5 (citing Negotiated Data Solutions L.L.C., File 051–0094, 2008 WL 258308, at *37 (F.T.C. Jan. 22, 2008)).

[274] FTC Decision and Order in *Motorola Mobility*, *supra* note 174, § II.E.

[275] *Id.*

[276] Dissenting Statement of Commissioner Maureen K. Ohlhausen, Motorola Mobility, L.L.C., No. 121–0120 (F.T.C. Jan. 3, 2013), *available at* http://www.ftc.gov/sites/default/files/documents/public_statements/statement-commissioner-maureen-ohlhausen/130103googlemotorolaohlhausenstmt.pdf; *see also* Statement of Commissioner Maureen K. Ohlhausen, Robert Bosch GmbH, No. C-4377, 2012 WL 5944820 (F.T.C. Nov. 21, 2012), *available at* http://www.ftc.gov/sites/default/files/documents/cases/2012/11/121126boschohlhausenstatement.pdf.

willing licensees. In her view, the *Noerr-Pennington* doctrine (which rests on the petition clause of the First Amendment) "precludes Section 5 liability for conduct grounded in legitimate pursuit of an injunction or any threats incidental to it."[277]

To the extent that it is constitutional and otherwise lawful and binding on third parties (none of which is self-evident), the FTC's settlement orders in *Bosch* and *Motorola Mobility* restrict an SEP holder's right to seek an injunction in an important way. Although, in theory, the consent agreement permits an SEP holder to seek an injunction, it fails to recognize that an implementer might act opportunistically during negotiations. In particular, the consent agreement neglects the possibility that an implementer might enter into a negotiation of FRAND terms without a genuine intention of reaching a FRAND agreement. The FTC enforcement action against an SEP holder that seeks an injunction for infringement of its SEPs also violates the SEP holder's First Amendment right to seek redress of grievances through the courts.[278] The Supreme Court's *Noerr-Pennington* doctrine long ago established that a petitioner's good-faith request for relief is immune from antitrust liability.[279]

The FTC's threat also contradicts its own policy statement that a claim under section 5 requires *actual* substantial harm resulting from the unfair act, not merely speculative harm—something evinced in the consumer-protection rhetoric concerning section 5.[280] One form of harm that the FTC repeatedly cites is an SEP holder's ability to engage in holdup by seeking an injunction. However, patent holdup is a conjecture, not a proven fact—let alone a proven fact of a magnitude that establishes that the harm it causes to consumers is substantial. It is reckless for the FTC to encroach on an explicit and unconditional First Amendment right in the name of preventing an alleged harm, whose existence and severity are matters of considerable scholarly dispute.

Finally, the FTC's approach conflicts with decisions of the ITC and consequently sends contradictory signals to SEP holders. The ITC has held that a FRAND-committed SEP holder is *not* precluded from seeking an ITC exclusion order.[281]

[277] Dissenting Statement of Commissioner Maureen K. Ohlhausen, *supra* note 276, at 1; *see also* United Mine Workers of Am. v. Pennington, 381 U.S. 657 (1965); Eastern R.R. Presidents Conference v. Noerr Motor Freight, 365 U.S. 127 (1961).

[278] U.S. CONST. amend. I.

[279] *Pennington*, 381 U.S. 657; *Noerr*, 365 U.S. 127; *see also* Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc., 508 U.S. 49, 56 (1993); City of Columbia v. Omni Outdoor Adver., Inc., 499 U.S. 365, 379–81 (1991).

[280] *See* FTC Policy Statement on Unfairness, Appended to Int'l Harvester Co., 104 F.T.C. 949, 1070 (1984).

[281] *See, e.g.*, Commission Opinion, Certain Electronic Devices, Including Wireless Communications Devices, Portable Music and Data Processing Devices, and Tablet Computers, USITC Inv. No. 337-TA-794 (July 5, 2013); *see also* Doris Johnson Hines & J. Preston Long, *The Continuing (R)evolution of Injunctive Relief in the District Courts and the*

In short, the FTC's settlement agreements constitute "soft law" that demonstrates the FTC's intention to initiate further stand-alone section 5 proceedings to prevent an SEP holder from seeking an injunction for infringement of its SEPs. However, because the FTC settled its claims against Bosch and Google, its consent agreements serve neither as an admission of liability by the parties nor as legal authority that section 5 applies to an SEP holder seeking an injunction. It is also evident that, if and when the FTC's enforcement efforts do generate an appealable order, the agency will face considerable skepticism in the Court of Appeals that an SEP holder's mere request for an injunction constitutes a stand-alone violation of section 5 of the FTC Act.

C. Abuse of Dominance Under Article 102 TFEU

The European Commission has also prosecuted an SEP holder's request for an injunction under Article 102 TFEU, which prohibits an undertaking from abusing its dominant position.[282] However, as I explain below, an SEP holder's request for an injunction should not be considered abusive without due evaluation.

1. The European Commission's Position

As of January 2015, the European Commission had reasoned in two investigations that an SEP holder's request for an injunction for the infringement of a FRAND-committed patent could constitute an abuse of a dominant position in violation of Article 102 TFEU.[283] The Commission first expressed its position in January 2012, during its investigation of Samsung, the holder of SEPs included in the 3G UMTS standard. Samsung requested an injunction against Apple from courts in various EU Member States.[284] The Commission ruled that the

> seeking of an injunction based on SEPs may constitute an abuse of a dominant position if a SEP holder has given a commitment to license its SEPs on [FRAND] terms and where the company against which an injunction is sought is willing to enter into a licence agreement on FRAND terms.[285]

International Trade Commission, IP LITIGATOR (2013), http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=3aad1da2-08a9-4f14-a147-611b1e39ff75.

282 *See, e.g.*, Urška Petrovčič, *Patent Hold-up and the Limits of Competition Law: A Trans-Atlantic Perspective*, 50 COMMON MKT. L. REV. 1363, 1373–74 (2013).

283 European Commission Opens Proceedings Against Samsung, *supra* note 18; Press Release, European Commission, Antitrust: Commission Sends Statement of Objections to Motorola Mobility on Potential Misuse of Mobile Phone Standard-Essential Patents (May 6, 2013), http://europa.eu/rapid/press-release_IP-13-406_en.pdf [hereinafter European Commission Sends Statement of Objections to Motorola Mobility]; *see also* EUROPEAN COMMISSION, STANDARD-ESSENTIAL PATENTS, COMPETITION POLICY BRIEF 8 (June 2014) [hereinafter EC POLICY BRIEF ON SEPS] (summarizing the European Commission's concerns with SEPs).

284 European Commission Opens Proceedings Against Samsung, *supra* note 18.

285 Press Release, European Commission, Antitrust: Commission Consults on Commitments Offered by Samsung Electronics Regarding Use of Standard Essential Patents 1 (Oct. 17, 2013),

In October 2013, Samsung offered the Commission commitments to address its concerns, including the commitment that Samsung will "abstain from seeking injunctions for mobile SEPs for a period of five years against any company that agrees to a particular licensing framework."[286] Samsung further agreed that, if a disagreement arises over FRAND terms, the matter would be submitted to an arbitrator or a court to determine the FRAND terms.[287] In April 2014, the Commission accepted Samsung's commitments, made them binding, and ended its investigation.[288] However, the commitment decision itself did not say whether or not Samsung's request for an injunction was an abuse of a dominant position.

In April 2012, the Commission initiated a similar investigation into Motorola Mobility's request for an injunction against Apple. Motorola Mobility sought to enjoin Apple's product that allegedly infringed certain Motorola Mobility SEPs implemented in the GPRS standard.[289] The Commission said that, although seeking an injunction is a legitimate remedy for patent infringement, it could be an abuse of dominance "where SEPs are concerned and the potential licensee is willing to enter into a license on [FRAND] terms."[290] The Commission said that an SEP holder should not use the threat of an injunction to distort licensing negotiations and impose licensing conditions that the licensee would otherwise not accept.[291]

In April 2014, the Commission adopted an infringement decision that found Motorola Mobility's behavior to be anticompetitive.[292] The Commission found that Apple made several license offers to Motorola Mobility during the injunction proceedings that Motorola Mobility had initiated before several German courts.[293] One of Apple's offers provided that Motorola Mobility could "set the royalties according to its equitable discretion and according to the 'FRAND standard in the industry.'"[294] The offer

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http://europa.eu/rapid/press-release_IP-13-971_en.pdf [hereinafter European Commission Consults on Samsung's Commitments].

286 *Id.*; *see also* Samsung Elecs. Enforcement of UMTS Standard Essential Patents, Commitments Offered to the European Commission, Case COMP/C-3/39.939, at 1–3, 7 (Sept. 23, 2013) [hereinafter Samsung Commitments], *available at* http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1301_5.pdf.

287 *Id.* § A.1.b.

288 Press Release, European Commission, Antitrust: Commission Accepts Legally Binding Commitments by Samsung Electronics on Standard Essential Patent Injunction (Apr. 29, 2014), http://europa.eu/rapid/press-release_IP-14-490_en.htm.

289 European Commission Sends Statement of Objections to Motorola Mobility, *supra* note 283.

290 *Id.* at 1.

291 *Id.* at 2.

292 Press Release, European Commission, Antitrust: Commission Finds that Motorola Mobility Infringed EU Competition Rules by Misusing Standard Essential Patents (Apr. 29, 2014), http://europa.eu/rapid/press-release_IP-14-489_en.htm.

293 European Commission, Commission Decision, Case 39985 ¶¶ 123–45 (Apr. 29, 2014) [hereinafter *Motorola Mobility* Infringement Decision].

294 *Id.* ¶ 303.

permitted "a full judicial review of the amount of FRAND royalties, where both [parties] could submit their own evaluation."[295] Apple's offer covered all products that allegedly infringed Motorola Mobility's SEPs, under the condition that these SEPs were actually infringed and not covered by other license agreements (such as a licensing agreement that Apple had signed with Qualcomm, which manufactures chipsets for mobile devices).[296] In the Commission's view, by making that offer, Apple showed that it "was not unwilling to enter into a license agreement on FRAND terms and conditions."[297] Motorola Mobility did not accept Apple's licensing terms and continued the infringement proceedings against Apple. The Commission said that Motorola Mobility's decision to continue to seek an injunction, although it did not actually exclude Apple's products from the market, "was capable of having . . . anti-competitive effects."[298] In the Commission's view, such effects included (1) a temporary ban on the online sales of Apple's products in Germany, (2) the inclusion of "licensing terms disadvantageous to Apple"[299] in the license agreement—in particular, "Motorola's entitlement to terminate the license if Apple challenges the validity of the SEPs covered by the settlement agreement,"[300] and (3) a negative effect on standard-setting.[301] The Commission concluded that, by seeking and enforcing an injunction against Apple,[302] Motorola Mobility abused its dominant position in violation of Article 102. The infringement decision adopted pursuant to the Motorola Mobility investigation was the first decision in which an SEP holder's request for an injunction has been ruled to be anticompetitive.

2. *Does Article 102 TFEU Support Banning Injunctions for FRAND-Committed Patents?*

Commentators have criticized the European Commission's response to SEP holders that have requested injunctions against infringers. Like Commissioner Ohlhausen in her analysis of the *Noerr-Pennington* doctrine under American law, Judge Vesterdorf emphasizes that the "right to access to a court is a fundamental right enshrined in Article 6(1) of the European Convention of Human Rights and in Article 47 of the Charter of Fundamental Rights of the European Union," and he says that "it is only for the national court in question to decide whether the case brought shall be admitted or dismissed."[303]

[295] *Id.*
[296] *Id.* ¶ 305. Apple argued that Motorola Mobility's patent rights with respect to the iPhone 4S were exhausted because the iPhone 4S was already licensed under an agreement between Motorola Mobility and Qualcomm. *Id.* ¶ 136.
[297] *Id.* ¶ 307.
[298] *Id.* ¶ 311.
[299] *Id.*
[300] *Id.* ¶ 322.
[301] *Id.* ¶ 311.
[302] *Id.*
[303] Vesterdorf, *supra* note 109, at 1.

Vesterdorf reasons that "it follows from this fundamental civil right that a person who has brought a case before a national court should not be prosecuted or punished for doing so" by a competition authority.[304]

Even if one accepts that an SEP holder could face antitrust liability for seeking an injunction, the doctrines developed to date do not support the presumption that a request for an injunction against an infringer of SEPs is anticompetitive. To prove that the SEP holder's request for an injunction constitutes an abuse of a dominant position, the Commission would need to prove the two elements of an Article 102 violation—in this case, that (1) the SEP holder holds a dominant position in the relevant market and (2) the SEP holder has abused that position.[305] An SEP holder's request for an injunction would not necessarily satisfy both elements.

First, an SEP holder would not necessarily hold a dominant position. Advocate General Wathelet emphasizes in his opinion in *Huawei v. ZTE* that "the fact that an undertaking owns an SEP does not necessarily mean that it holds a dominant position with the meaning of Article 102 TFEU."[306] He says that it is for the court to determine the existence of a dominant position on a case-by-case basis.[307] In the Guidelines on the Applicability of Article 101 TFEU to Horizontal Cooperation Agreements, the Commission similarly observed that, "even if the establishment of a standard can create or increase the market power of IPR holders . . . , *there is no presumption that holding or exercising IPR essential to a standard equates to the possession . . . of market power.*"[308]

However, Wathelet then inexplicably urges the CJEU to adopt a "rebuttable presumption [of] . . . a dominant position" for an SEP holder.[309] That suggestion contradicts Wathelet's statement that "it is only natural that" a holder of an *in*essential patent will have more bargaining power than an SEP holder, because an SEP holder has given a commitment to license on FRAND

[304] *Id.*

[305] Article 102 TFEU does not define the concept of abuse. It merely provides a nonexclusive list of examples of possible abuses:

> (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; (b) limiting production, markets or technical development to the prejudice of consumers; (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

TFEU , *supra* note 27, art. 102.

[306] *See, e.g.*, Opinion of Advocate General in *Huawei v. ZTE*, *supra* note 182, ¶ 57.

[307] *Id.*

[308] Commission Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union to Horizontal Co-operation Agreements, 2011 O.J. (C 11) 1, ¶ 269 (emphasis added).

[309] *Id.* ¶ 58.

terms.[310] In fact, when an SEP holder is bound by a FRAND commitment, the implementer can ask the court to determine FRAND licensing terms if the implementer asserts that the SEP holder's offer is not FRAND. An implementer's ability to seek the court's determination effectively precludes the SEP holder from freely setting licensing terms and thus also precludes the SEP holder from exercising market power. Consequently, an SEP holder may have less market power than a holder of an inessential (implementation) patent. Therefore, there is no valid justification to introduce a rebuttable presumption that an SEP holder possesses market power.

Second, even if the Commission finds that an SEP holder holds a dominant position, the Commission should not automatically characterize the SEP holder's request for an injunction as abusive. Parties regularly request that courts resolve their disputes in a final and binding manner. In *ITT Promedia v. Commission*, the CJEU ruled that access to courts is a "fundamental right and a general principle" guaranteeing the rule of law,[311] and that it is "only in wholly exceptional circumstances that [a] . . . legal proceeding," such as a request for an injunction, "is capable of constituting an abuse of an [sic] dominant position."[312] Wathelet suggests that the CJEU adopt a similar approach in the context of SEPs, although he does not explicitly cite *ITT Promedia*. Wathelet emphasizes that an SEP holder's mere request for an injunction "cannot in itself constitute an abuse of a dominant position."[313] He reiterates that the right to obtain an injunction "represents the essential means of asserting intellectual property" and that "any restriction of [that] right . . . necessarily constitutes a significant limitation" and can "be permitted only in exceptional and clearly defined circumstances."[314] Wathelet states that any limitation on an SEP holder's right to an injunction must comport with the principle of proportionality and should be possible only when "the limitation [is] necessary" and "meets objectives of general interest" that the European Union has recognized.[315] Put differently, even a dominant SEP holder has the right to request an injunction against an infringer, and only truly exceptional circumstances can justify limiting that right.

In *ITT Promedia v. Commission*, the European Commission said that initiating legal action can be anticompetitive only if two conditions are met. First, the legal action must be "manifestly unfounded," such that it "cannot reasonably be considered to be an attempt to enforce the rights" of the company in question and serves only to "harass" the other party.[316] Second, the legal action must be part of a plan designed to "eliminate competition."[317] However, an

[310] *Id.* ¶ 48.
[311] Case T-111/96, ITT Promedia NV v. Comm'n, 1998 E.C.R. II-2937, at 60.
[312] *Id.*
[313] Opinion of Advocate General in *Huawei v. ZTE*, *supra* note 182, ¶ 61.
[314] *Id.* ¶¶ 61–62.
[315] *Id.* ¶ 66.
[316] Case T-111/96, ITT Promedia NV v. Comm'n, 1998 E.C.R. II-2937, 55–56.
[317] *Id.*

SEP holder's request for an injunction does not plausibly satisfy either element of the *Promedia* test.

First, there is no reason to presume that the SEP holder's request for an injunction is "manifestly unfounded." An SEP holder's request for an injunction is justified if an implementer has not responded to the SEP holder's FRAND offer, has rejected that offer, or refuses to negotiate licensing terms. Wathelet says that an SEP holder should be able to request an injunction against an implementer that, although ostensibly negotiating licensing terms, does so in a manner that is "purely tactical and/or dilatory and/or not serious."[318] The European Commission itself confirmed this principle in 2012 in *Google/Motorola Mobility* when it said that an SEP holder's request for an injunction might be legitimate when applied "against a potential licensee which is not willing to negotiate in good faith on FRAND terms."[319]

Second, there is no reason to presume that the SEP holder's request for an injunction is part of a plan designed to "eliminate competition." An SEP holder supplies technology inputs to downstream firms. It benefits from selling to a competitive market and has no incentive to reduce the number of buyers to which it sells. Even if the SEP holder is vertically integrated into the manufacture of the downstream product practicing the standard, the SEP holder has agreed to be bound by the nondiscrimination component of the FRAND commitment with respect to supplying its downstream competitors. (And, in any event, vertical foreclosure by the SEP holder is not the theory of competitive harm that implementers typically assert when they complain about FRAND royalties.) In short, an SEP holder's request for an injunction need not—and most plausibly *would not*—have any exclusionary effect in the downstream market. Although an injunction can, in theory, allow the SEP holder to exclude the licensee's product from the market, at least for a limited period of time, courts typically *refuse* to enjoin infringement of FRAND-committed patents.[320] As of January 2015, European courts had issued few injunctions for the infringement of SEPs, and even fewer had been legally enforced. If a requested injunction is not issued or enforced, then an SEP holder's conduct cannot plausibly have an exclusionary effect on the market. The FRAND injunction is the Yeti of antitrust law.

The European Commission also can initiate legal action on the theory that an SEP holder's request for an injunction has an exploitative effect. The Commission has said that the mere threat of seeking an injunction may allow the SEP holder to extract licensing conditions that the implementer otherwise would not accept[321]—such as high royalties, an agreement not to challenge the SEP's validity, or an agreement to cross license its implementation patents to the SEP holder. In *Motorola Mobility*, for example, the Commission was

318 Opinion of Advocate General in *Huawei v. ZTE*, *supra* note 182, ¶ 88.
319 Google/Motorola Mobility, Case No. COMP/M.6381, *supra* note 39, ¶ 126.
320 *See* Camesasca, Langus, Neven & Treacy, *supra* note 251, at 293–98.
321 European Commission Sends Statement of Objections to Motorola Mobility, *supra* note 283, at 2.

particularly concerned with Motorola Mobility's insistence on including a termination clause in a license agreement, whereby Motorola Mobility could terminate the license if Apple challenged the validity of the SEPs included in the license agreement.[322] The Commission said that Apple had the choice to "either have its products excluded from the market or accept the disadvantageous licensing terms requested by Motorola."[323] The Commission disregarded that a termination clause is typical in portfolio licenses. The royalties determined in a license agreement account for the possibility that not all patents in the licensed portfolio would turn out to be valid and infringed if challenged.[324] Put differently, the parties to a portfolio license agreement typically discount the royalty payment by considering that some of the patents may actually be invalid or not infringed. If the parties knew that all patents included in the licensed portfolio are valid and infringed, the agreed royalty would be higher. Therefore, the Commission was correct in stating that, if Motorola Mobility's SEPs were found to be invalid or not infringed, Apple could have negotiated a lower royalty. But the Commission ignored the second of the two symmetric counterfactuals: If Motorola Mobility's patents were found to be valid and infringed, then its compensation should be adjusted *upward*. Furthermore, a finding that Motorola Mobility's SEPs are valid and infringed would increase the royalty not only for Apple, but also for other licensees. The Commission also disregarded that consumers and producers benefit from settlement agreements that end legal disputes between companies and allow them to redirect their focus on producing goods and services, rather than on litigation. In short, it is unjustifiable to presume that the inclusion of a termination clause in a FRAND license agreement harms consumer welfare and is anticompetitive.

More generally, it is unjustifiable to presume that an SEP holder's request for an injunction for infringement of an SEP is an abuse of dominance under Article 102 TFEU. To the contrary, an SEP holder that has made a FRAND offer should be able to request and enforce an injunction, without fear that its resort to a court to protect its patents might be condemned as an abuse of a dominant position.[325]

3. *The Proper Conditions on the Availability of the Competition Law Defense to an Injunction for Infringement of SEPs*

Manufacturers of standard-compliant goods have, at times, brought a "competition law defense" when facing a patent-infringement suit by an SEP holder. Those manufacturers have argued that an SEP holder's request for an

[322] *Motorola Mobility Infringement Decision*, *supra* note 293, ¶ 322.
[323] *Id.* ¶ 320.
[324] *See, e.g.*, Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSP. 75, 82 (2005).
[325] Vesterdorf, *supra* note 109, at 6.

injunction constituted anticompetitive conduct and, therefore, should not be granted by courts. The competition law defense has arisen mainly in Germany, where courts almost automatically grant an injunction after a finding of patent infringement. Therefore, it is useful to review the approach of the German courts and to evaluate the extent to which the competition law defense restricts an SEP holder's right to seek an injunction.

In the *Orange Book Standard* case, the German Federal Supreme Court in 2009 ruled for the first time that an alleged infringer could raise a competition law defense against a patent holder's request for an injunction.[326] The case established an important exception to the patent holder's general right to obtain an injunction. The German Federal Supreme Court said that an alleged infringer may invoke the defense if two conditions are met. First, the alleged infringer must have made an unconditional licensing offer that the patent holder may not reject without violating competition law. Second, the alleged infringer must act as if the patent holder had accepted that offer. In other words, the infringer must adhere to its contractual obligations (that is, the duty to pay for using the patent). The infringer need not directly pay the patent holder—the infringer may instead deposit the royalties into an escrow account and waive its right to withdrawal. Only when the alleged infringer has met those two conditions will a German court accept the competition law defense and reject the patent holder's request to enjoin the alleged infringer.[327]

In 2012, in *IPCom v. Deutsche Telekom & Vodafone*, the Regional Court in Düsseldorf evaluated how the competition law defense applies in cases involving the infringement of FRAND-committed patents.[328] The court evaluated whether a FRAND commitment changes the requirements with which the infringer must comply when invoking the competition law defense. In particular, the court examined whether an *SEP holder* must make the licensing offer first. The court rejected this proposition and instead ruled that a FRAND commitment is simply a declaration of an obligation to conclude a contract that already exists under German competition law. Consequently, the court found that a FRAND commitment does not lessen an alleged infringer's duty to make a licensing offer. The court found that the *Orange Book* criteria apply when an alleged infringer pleads a competition law defense against the holder of a FRAND-committed patent.[329]

[326] Bundesgerichtshof [BGH] [Federal Court of Justice] May 6, 2009, 180 ENTSCHEIDUNGEN DES BUNDESGERICHTSHOFES IN ZIVILSACHEN [BGHZ] 312, 2009 (Ger.), *available at* http://www.ipeg.eu/blog/wp-content/uploads/EN-Translation-BGH-Orange-Book-Standard-eng.pdf.

[327] *Id.* § 2(b).

[328] Landgericht Düsseldorf [LG Düsseldorf] [Civil Regional Court of First Instance] Apr. 24, 2012, IPCom v. Deutsche Telekom & Vodafone, Case Number 4b O 274/10 (Ger.), *available at* http://openjur.de/u/454915.html (in German).

[329] Michael Fröhlich & Gertjan Kuipers, *FRAND and Injunctive Relief*, 25 AIPPI E-NEWS (July 2012), https://www.aippi.org/enews/2012/edition25/Michael_Frohlich.html.

In *Huawei v. ZTE* in 2013, a German court again addressed an SEP holder's ability to enjoin an alleged infringer.[330] The Düsseldorf court acknowledged that there are conflicting views of when an implementer may invoke the competition law defense against the SEP holder's request for an injunction.[331] The main conflicting standards are *Orange Book*, applied by German courts, and the European Commission's informal approach under Article 102 TFEU, which places a lesser evidentiary burden on the implementer. The Düsseldorf court stayed the proceeding and referred the following questions to the CJEU:[332]

(1) Does the proprietor of a standard-essential patent who informs a standardization body that he is willing to grant any third party a license on fair, reasonable and non-discriminatory terms abuse his dominant market position if he brings an action for an injunction against a patent infringer although the infringer has declared that he is willing to negotiate concerning such a license?

or

is an abuse of the dominant market position to be presumed only where the infringer has submitted to the proprietor of a standard-essential patent an acceptable, unconditional offer to conclude a licensing agreement which the patentee cannot refuse without unfairly impeding the infringer or breaching the prohibition of discrimination, and the infringer fulfils his contractual obligations for acts of use already performed in anticipation of the license to be granted?

(2) If abuse of a dominant market position is already to be presumed as a consequence of the infringer's willingness to negotiate:

Does Article 102 TFEU lay down particular qualitative and/or time requirements in relation to the willingness to negotiate? In particular, can willingness to negotiate be presumed where the patent infringer has merely stated (orally) in a general way that he is prepared to enter into negotiations, or must the infringer already have entered into negotiations by, for example, submitting specific conditions upon which he is prepared to conclude a licensing agreement?

[330] Vorabentscheidungsersuchen des Landgerichts Düsseldorf (Deutschland) eingereicht am 5 Apr. 2013, Huawei Techs. Co. Ltd gegen ZTE Corp., ZTE Deutschland GmbH, Rechtssache C-170/13, *translated in* Request for a Preliminary Ruling from the Landgericht Düsseldorf (Germany) lodged on Apr. 5, 2013, Huawei Techs. Co. v. ZTE Corp., Case C-170/13, *available at* http://curia.europa.eu/juris/document/document.jsf?text=&docid=139489&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=42242.

[331] *See* Landgericht Düsseldorf Beschluss [LG Düsseldorf] [Civil Regional Court of First Instance] Mar. 21, 2013, Az.: 4b O 104/12, ¶ 52 (Ger.), *available at* http://www.justiz.nrw.de/nrwe/lgs/duesseldorf/lg_duesseldorf/j2013/4b_O_104_12_Beschluss_20130321.html. The original text in German reads: "Ob und unter welchen Voraussetzungen Rechte aus einem solchen [standardessentiellen] Patent hergeleitet werden können, insbesondere ob der Unterlassungsanspruch durchsetzbar ist, wird von maßgeblichen Stellen (Bundesgerichtshof, Europaïsche Kommission) nicht einheitlich beurteilt. Endgültige Klarheit kann nur eine Entscheidung des Gerichtshofs bringen." *Id.* [The questions of whether and under which conditions SEP rights could be asserted, and especially if an injunction would be enforceable, have not been treated consistently in previous decisions ([*Orange Book*] and the European Commission['s Press Release]). Only a decision of the European Court of Justice can give a definitive clarification.].

[332] *See* Vorabentscheidungsersuchen des Landgerichts Düsseldorf (Deutschland) eingereicht am 5. Apr. 2013, Huawei Technologies Co. Ltd gegen ZTE Corp., ZTE Deutschland GmbH, Rechtssache C-170/13, *supra* note 330.

(3) If the submission of an acceptable, unconditional offer to conclude a licensing agreement is a prerequisite for abuse of a dominant market position:

Does Article 102 TFEU lay down particular qualitative and/or time requirements in relation to that offer? Must the offer contain all the provisions which are normally included in licensing agreements in the field of technology in question? In particular, may the offer be made subject to the condition that the standard-essential patent is actually used and/or is shown to be valid?

(4) If the fulfillment of the infringer's obligations arising from the license that is to be granted is a prerequisite for the abuse of a dominant market position:

Does Article 102 TFEU lay down particular requirements with regard to those acts of fulfilment? Is the infringer particularly required to render an account for past acts of use and/or to pay royalties? May an obligation to pay royalties be discharged, if necessary, by depositing a security?

(5) Do the conditions under which the abuse of a dominant position by the proprietor of a standard-essential patent is to be presumed apply also to an action on the ground of other claims (for rendering of accounts, recall of products, damages) arising from a patent infringement?[333]

[333] The original German text reads:

(1) Missbraucht der Inhaber eines standardessentiellen Patentes, der gegenüber einer Standardisierungsorganisation seine Bereitschaft erklärt hat, jedem Dritten eine Lizenz zu fairen, angemessenen und nicht-diskriminierenden Bedingungen zu erteilen, seine marktbeherrschende Stellung, wenn er gegenüber einem Patentverletzer einen Unterlassungsanspruch gerichtlich geltend macht, obwohl der Patentverletzer seine Bereitschaft zu Verhandlungen über eine solche Lizenz erklärt hat,
oder
ist ein Missbrauch der marktbeherrschenden Stellung erst dann anzunehmen, wenn der Patentverletzer dem Inhaber des standardessentiellen Patentes ein annahmefähiges unbedingtes Angebot auf Abschluss eines Lizenzvertrages unterbreitet hat, das der Patentinhaber nicht ablehnen darf, ohne den Patentverletzer unbillig zu behindern oder gegen das Diskriminierungsverbot zu verstoßen, und der Patentverletzer im Vorgriff auf die zu erteilende Lizenz für bereits begangene Benutzungshandlungen die ihn treffenden Vertragspflichten erfüllt?
(2) Sofern der Missbrauch einer marktbeherrschenden Stellung bereits infolge der Verhandlungsbereitschaft des Patentverletzers anzunehmen ist:
Stellt Art. 102 AEUV besondere qualitative und/oder zeitliche Anforderungen an die Verhandlungsbereitschaft? Kann eine solche insbesondere bereits dann angenommen werden, wenn der Patentverletzer lediglich in allgemeiner Art und Weise (mündlich) erklärt hat, bereit zu sein, in Verhandlungen einzutreten, oder muss der Patentverletzer bereits in Verhandlungen eingetreten sein, indem er beispielsweise konkrete Bedingungen nennt, zu denen er bereit ist, einen Lizenzvertrag abzuschließen?
(3) Sofern die Abgabe eines annahmefähigen unbedingten Angebots auf Abschluss eines Lizenzvertrages Voraussetzung für den Missbrauch einer marktbeherrschenden Stellung ist:
Stellt Art. 102 AEUV besondere qualitative und/oder zeitliche Anforderungen an dieses Angebot? Muss das Angebot sämtliche Regelungen enthalten, die üblicherweise in Lizenzverträgen auf dem in Rede stehenden Technikgebiet enthalten sind? Darf das Angebot insbesondere unter die Bedingung gestellt werden, dass das standardessentielle Patent tatsächlich benutzt wird und/oder sich als rechtsbeständig erweist?
(4) Sofern die Erfüllung von Pflichten aus der zu erteilenden Lizenz seitens des Patentverletzers Voraussetzung für den Missbrauch einer marktbeherrschenden Stellung ist:
Stellt Art. 102 AEUV besondere Anforderungen bezüglich dieser Erfüllungshandlungen? Ist der Patentverletzer namentlich gehalten, über vergangene Benutzungshandlungen

The wording of these five questions shows that the Düsseldorf court implicitly asked the CJEU to endorse the *Orange Book* approach in cases concerning SEPs.

As of January 2015, the CJEU had yet to answer the questions of the Düsseldorf court. Consequently, it remained unclear under which exact conditions an implementer may raise a competition law defense. In November 2014, Advocate General Wathelet opined on the case and suggested that *Orange Book* should not apply in *Huawei v. ZTE*.[334] He emphasized that *Huawei v. ZTE* concerns a patent essential to the LTE standard, whereas in *Orange Book* the patent was included in a *de facto* standard (a standard *not* developed by an SSO), such that the patent holder consequently made no FRAND commitment.[335] Wathelet said that, because of this factual difference, *Orange Book* should not apply.[336] However, as explained above, neither did he endorse the European Commission's approach. Wathelet concluded that either approach would produce "over-protection or under-protection of the SEP-holder,"[337] and he recommended that the CJEU adopt a "middle path" between the two solutions.[338]

Presumably, the CJEU will say in 2015 whether *Orange Book* comports with Article 102 TFEU when applied to SEPs. A rule closer to *Orange Book* than the European Commission's approach would be judicious. *Orange Book* has important implications for the economic incentives of the SEP holder and the implementer expeditiously to execute a FRAND licensing agreement. By extending *Orange Book* to FRAND cases, German courts have created an efficient negotiation framework within which the implementer cannot avoid an injunction simply by claiming that the offered license is not FRAND and thereby postpone paying a FRAND royalty.

VII. CONCLUSION

An SEP holder is entitled to request and enforce an injunction against an unlicensed implementer if the SEP holder has discharged its FRAND obligation by having offered to license its SEPs to the implementer on FRAND terms (or

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Rechnung zu legen, und/oder Lizenzgebühren zu zahlen? Kann eine Pflicht zur Zahlung der Lizenzgebühren gegebenenfalls auch mittels Leistung einer Sicherheit erfüllt werden?
(5) Gelten die Bedingungen, unter denen ein Machtmissbrauch durch den Inhaber eines standardessentiellen Patents anzunehmen ist, auch für die klageweise Geltendmachung der sonstigen aus einer Patentverletzung herzuleitenden Ansprüche (auf Rechnungslegung, Rückruf, Schadenersatz)?

Id.

334 Opinion of Advocate General in *Huawei v. ZTE*, *supra* note 182, ¶ 48.
335 *Id.* ¶ 50.
336 *Id.* ¶ 48.
337 *Id.* ¶ 50.
338 *Id.* ¶ 52.

by having otherwise granted access to its SEPs). An infringer that rejects a FRAND offer is not immune from an injunction. This understanding of the law balances the implementer's need for access to standard-essential technology with the SEP holder's need to be fairly compensated for the use of its patented inventions contributed to the standard.

Determining whether the implementer is unwilling to reach a FRAND agreement begins by asking: Has the SEP holder made the implementer a licensing offer, and is it within the FRAND range? The failure to make any licensing offer, or the making of an offer that lies outside the FRAND range, indicates that the SEP holder is not willing to license its SEPs on FRAND terms. In that case, the SEP holder has not discharged its obligations under its FRAND commitment, and the court should deny the SEP holder's request for an injunction. When the court determines that the SEP holder has made a FRAND offer, the court should then ask: Has the implementer explicitly or implicitly rejected the offer? An implementer cannot refuse a FRAND offer and hope to avoid an injunction simply because it wants a better deal. (The implementer is free to keep making counteroffers, but not in the absence of a possible injunction.) After the SEP holder has made a FRAND offer, it has discharged its duties arising from the FRAND commitment, and any further negotiation of the licensing terms is at the sole discretion of the SEP holder. An SEP holder should be able to request and obtain an injunction against an implementer that refuses, or is unable, to pay a FRAND royalty, subject only to the condition (if American law applies) that the SEP holder satisfies the *eBay* factors. In sum, neither an SSO's rules, nor public law, nor first principles of economics give an implementer a safe haven if it infringes an SEP. An implementer cannot use the SEPs without a license, fail to negotiate the licensing terms in good faith, and yet expect to be immune from an injunction or an exclusion order.[339]

There is no intellectually rigorous basis for creating the legal presumption that an SEP holder's request for an injunction either breaches its FRAND commitment or violates antitrust law. A court's decision to enjoin an infringer of SEPs should depend on the facts of the case rather than presumptions erected upon conjectures about patent holdup, royalty stacking, harm to competition, or other predictions of woe that are empirically unsubstantiated if not also facially implausible. A categorical ban on injunctions for SEPs would indeed avoid the theoretical risk of patent holdup. However, if there were no threat of an injunction, an implementer's best strategy would be to infringe the SEPs and litigate FRAND terms, delaying the execution of a licensing agreement and burdening the courts in the meantime. An implementer would lose

[339] *See, e.g.*, USITC Inv. No. 337-TA-868 Initial Determination, *supra* note 108, at 125–26 (an implementer cannot "manufacture potentially infringing goods without license or consequence[,] . . . seek to invalidate the IPR in question, and yet [be] free from the risk of a remedy").

nothing by litigating the FRAND licensing terms given that, if the implementer lost, a court would simply order the implementer to pay a FRAND royalty that the implementer would have found acceptable in the voluntary negotiation. Therefore, a categorical ban on injunctions for SEPs would delay the execution of FRAND licenses and diminish the incentives for an SEP holder to contribute future technologies to the standard.