

HOW THE GOOGLE CONSENT ORDER ALTERS THE PROCESS AND OUTCOMES OF FRAND BARGAINING

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INTRODUCTION

The Federal Trade Commission (“FTC”) recently closed its investigation of Google following a thorough analysis of numerous aspects of Google’s business conduct.¹ The Proposed Consent Order² into which the FTC and Google tentatively entered has garnered significant attention from the antitrust and intellectual property communities for a number of reasons.³ One important reason is that the Proposed Consent Order places serious limits upon Google’s ability to seek injunctive relief for its patents that are considered “standard-essential” and that are subject to fair, reasonable, and nondiscriminatory (“FRAND”) commitments. This limitation reflects the emerging tendency of competition agencies to consider the threat or pursuit of injunctive relief a serious competitive concern when the patent at issue is standard essential and the patent holder previously agreed to license that patent on FRAND terms.

The issue of whether, and if so, under what circumstances, standard essential patent (“SEP”) holders should be allowed to seek, and courts should grant, injunctive relief in cases involving FRAND bargaining has been the topic of considerable debate among intellectual property and antitrust scholars as well.⁴ With the closing of its Google investigation, the FTC

* Law Clerk, The Honorable E. Grady Jolly, United States Court of Appeals for the Fifth Circuit (2012-2013 term). We would like to thank Timothy J. Muris, Scott A. Sher, and Joshua D. Wright for valuable discussions. All views expressed here are our own.

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¹ Motorola Mobility LLC, FTC File No. 121-0120 (Jan. 3, 2013) [hereinafter FTC Google Decision], <http://ftc.gov/os/caselist/1210120/130103googlemotorolado.pdf> (decision and order).

² Motorola Mobility LLC, FTC File No. 121-0120 (Jan. 3, 2013), <http://ftc.gov/os/caselist/130103googlemotorolaagree.pdf> (agreement containing consent order).

³ Many commenters have criticized the FTC for not filing formal litigation or for not imposing harsher penalties. Conversely, others have criticized the FTC for attempting to utilize its stand-alone Section 5 authority to penalize Google without tying its Section 5 authority to traditional antitrust principles; for imposing penalties in the absence of any clear evidence of harm to consumers rather than to competitors; and for running afoul, perhaps, of Google’s ability to file legitimate legal claims in order to enforce its legal rights.

⁴ See, e.g., Mark A. Lemley, *Ten Things to Do About Patent Holdup of Standards (and One Not to)*, 48 B.C. L. REV. 149, 167 (2007) (“Denying [injunctive] relief is the most powerful way to prevent

has joined the United States Department of Justice (“DOJ”) in issuing official statements indicating that owners of SEPs who have agreed to bargain on FRAND terms may be subject to investigations and penalties simply for seeking an injunction against a member of the standard-setting organization (“SSO”). This new approach portends a significant shift in the way FRAND negotiations are conducted and in the outcomes they produce. The goal of this Essay is to raise some concerns regarding this issue, focusing in particular on the potential consumer welfare effects of essentially removing the possibility of injunctive relief for FRAND-encumbered SEPs.

Part I of this Essay describes SSOs and FRAND bargaining, highlighting the potential competitive benefits and pitfalls—most notably, patent holdup—associated with them. Part II articulates the developing approaches the FTC and DOJ have taken toward the possibility of injunctive relief for SEP holders subject to FRAND commitments, noting both how these approaches have evolved over the last few years and the most recent official decisions by each agency. Part III then analyzes the desirability of these approaches; it examines the limited available evidence regarding the extent of patent holdup in FRAND negotiations, how the agencies’ latest approach seemingly departs from the traditional patent law approach to remedies, and how the unintended consequences of disallowing injunctive relief in these cases may negatively affect consumer welfare. Part IV concludes.

patent holdup and realign the incentives in patent licensing negotiations. Applying equitable principles doesn’t mean eliminating patent injunctions. My guess is that the majority of infringement findings will still result in injunctive relief because the patentee is actually using the patent to exclude a competitor. But courts will be empowered in cases of holdup to remove the threat that induces defendants to settle for royalties far in excess of the patentee’s actual contribution.” (footnote omitted)); Doug Lichtman, *Understanding the RAND Commitment*, 47 HOUS. L. REV. 1023, 1043 (2010) (“Courts could interpret RAND as a public commitment that creates a defense of equitable estoppel. Under that estoppel, the patent holder would be deemed to have permanently waived his right to seek triple damages or to ask for injunctive relief, but would otherwise be allowed to invoke patent law’s damages regime.” (footnote omitted)); Suzanne Michel, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 ANTITRUST L.J. 889, 893 (2011) (“If negotiations break down, the implementer can bring a contract claim asking the court to enforce the patentee’s promise to license at RAND rates. The patentee can claim patent infringement, seeking remedies, including compensatory damages and a permanent injunction prohibiting future infringement.” (footnote omitted)); 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, 747–48 (2008) (“[R]emoving the presumption of injunctive relief would decrease dynamic efficiency.”); Herbert J. Hovenkamp, *Competition in Information Technologies: Standards-Essential Patents, Non-Practicing Entities and FRAND Bidding* 14 (Univ. of Iowa Legal Studies Research Paper No. 12-32, 2012), available at <http://ssrn.com/abstract=2154203> (“[T]he FRAND commitment effectively turns the royalty issues into a breach of contract claim rather than a litigated royalty claim. Permitting the owner of a FRAND-encumbered patent to have an injunction against someone willing to pay FRAND royalties is tantamount to making the patent holder the dictator of the royalties, which once again is the same thing as no FRAND commitment at all.”).

I. BACKGROUND

SSOs play an important role in the modern economy by fostering interoperability across numerous devices. This Part discusses SSOs and explains the role that patents play in the standard-setting process, highlighting why FRAND commitments are often desirable. It also addresses both the anticompetitive and procompetitive benefits of SSOs, focusing on how standardizing patented technologies alters both the patent holders' incentives and the market for their patented technologies.

A. *Standard-Setting Organizations and FRAND Commitments*

Standards—both interoperability standards, which ensure different companies' products are compatible, and minimum performance standards—are central to many modern innovations and provide substantial societal and consumer benefits.⁵ Interoperability standards, for example, have “paved the way for the complex communications networks and sophisticated mobile computing devices that have become hallmarks of the modern age.”⁶ SSOs arose as a means of facilitating interoperability and are primar-

⁵ See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 6-7 (2007) (“Industry standards are widely acknowledged to be one of the engines of the modern economy.”), available at <http://www.justice.gov/atr/public/hearings/ip/222655.pdf>. In July 2012, Joseph Wayland, Acting Assistant Attorney General for the Antitrust Division, testified before the Senate Judiciary Committee and stated: “Standards have a range of benefits, from helping to protect public health and safety to promoting efficient resource allocation and production by allowing for interoperability among complementary products.” *Oversight of the Impact on Competition of Exclusion Orders to Enforce Standards-Essential Patents Before the S. Comm. on the Judiciary*, 112th Cong. 2 (July 11, 2012) [hereinafter Statement of Joseph Wayland] (statement of Joseph Wayland, Acting Assistant Att’y Gen., Antitrust Division), available at <http://www.justice.gov/ola/testimony/112-2/07-11-12-atr-wayland.pdf> (“Innovation is the key to economic growth in the United States.”).

⁶ Statement of Joseph Wayland, *supra* note 5, at 3; see also Rudi Bekkers & Andrew Updegrove, *A Study of IPR Policies and Practices of a Representative Group of Standard Setting Organizations Worldwide*, NAT’L ACADS. OF SCI., 3-4 (Sept. 17, 2012), http://home.tn.tue.nl/rbekkers/nas/Bekkers_Updegrove_NAS2012_main_report.pdf; George T. Willingmyre, *Cooperation Between Patent Offices and Standards Developing Organizations*, NAT’L ACADS. OF SCI., 1-2 (Sept. 23, 2012), <http://sites.nationalacademies.org/PGA/step/IPManagement/> (“Information and Communication Technology (‘ICT’) standards are perceived as the foundation of interoperability and the success of new products . . . Standards development activities in the ICT sectors usually involve the review of many technology contributions . . . This large amount of innovation, often in emerging growth areas where companies invest heavily in research and development, may be covered by patents which are needed to implement a standard.”).

ily responsible for developing the standards used in these recent innovations.⁷

While diverse in their development practices,⁸ SSOs are, generally speaking, private entities that can tailor the standards-development process to the wants and needs of parties involved.⁹ And, relevant to the analysis here, each SSO is free to adopt different rules with respect to the handling of patented technology.¹⁰ SSOs often require patent holders to agree to various conditions to be eligible for inclusion within the standard; for example, a handful of SSOs require royalty-free licensing.¹¹ More frequently, however, SSOs require patent holders to agree to license patented technology on “reasonable and nondiscriminatory” or “fair, reasonable and nondiscriminatory” terms.¹² FRAND terms afford the parties meaningful benefits arising from their deliberate vagueness and allow SSOs to expeditiously adopt and implement standard technologies.¹³

⁷ See, e.g., Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1897-98, 1952-53 (2002); Willingmyre, *supra* note 6, at 1-2.

⁸ George S. Cary, Larry C. Work-Dembowski & Paul S. Hayes, *Antitrust Implications of Abuse of Standard-Setting*, 15 GEO. MASON L. REV. 1241, 1258 (2008).

⁹ See Bekkers & Updegrave, *supra* note 6, at 110 (“[T]here is a very large diversity in [intellectual property rights] policies . . . Much of this diversity is quite understandable, and results from a variety of causes, including: organizational based membership vs. individual members or contributors; the standardization process adopted; different legal settings; different technology areas associated with different legal concerns and technical issues; legacy issues; behavioral attitudes, and more.”).

¹⁰ Lemley, *supra* note 7, at 1904-06. In the past, some SSOs “did not require the disclosure of pending [patent] applications, which are ordinarily kept confidential.” *Id.* at 1904-05. But other SSOs have “required disclosure of all pending patent applications,” while a couple of SSOs have found a middle ground. *Id.* at 1905. At least one SSO has required participants “to give up patent rights,” but most SSOs “permit[] [participants] to own [intellectual property] rights in a standard.” *Id.* Antitrust concerns may arise in certain circumstances, as reflected in the DOJ’s business review letters. Professor Rudi Bekkers and Andrew Updegrave’s recent study suggests almost all SSOs now require disclosure. Bekkers & Updegrave, *supra* note 6, at 71.

¹¹ E.g., Lemley, *supra* note 7, at 1906; see also Mark A. Lemley & Carl Shapiro, *A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents 2* (Stanford Pub. Law Working Paper No. 2243026, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2243026.

¹² Bekkers & Updegrave, *supra* note 6, at 24; see also Lemley, *supra* note 7, at 1906; Lemley & Shapiro, *supra* note 11, at 2.

¹³ Professors Mark Lemley and Carl Shapiro also recognize the ambiguity inherent in FRAND terms, but rather than viewing this ambiguity as beneficial to the standard-setting process, they believe it has “undermined” FRAND commitments. Lemley & Shapiro, *supra* note 11, at 2-3. To cure this problem, they propose that SSOs require binding, “baseball-style” arbitration in the event that a willing licensee and SEP holder cannot agree on a royalty rate. *Id.* at 5. In this scenario, a patentee’s FRAND commitment would equate to a promise to “forego court enforcement of its standard-essential patents in favor of arbitration.” *Id.* at 3. Whether this system represents an improvement is an open question, but, as discussed below, existing FRAND commitments were not negotiated under this framework. See *infra* Section III.B.

B. *Anticompetitive Concerns and Procompetitive Benefits of Interoperability Standards*

The timely adoption of new technologies that SSOs foster engenders both potential anticompetitive concerns and significant procompetitive benefits. The predominant anticompetitive issues derive from lock-in and patent holdup. Lock-in occurs after an SSO has established and implemented a given technology, because employing that technology across numerous devices or products renders it more difficult and expensive for the SSO to subsequently alter the standard.¹⁴ Lock-in may also allow the patented technology to gain market power, which the patent holder could exploit by attempting to exclude a firm from the market or by demanding a license fee in excess of what could have been obtained before the standard was set.¹⁵

Moreover, lock-in facilitates patent holdup, which derives from one party's ex post incentive to opportunistically exploit the ex ante investments of another party.¹⁶ Patent holdup thus proves potentially problematic because, ex ante, "the patent holder would only be able to charge licensees a price that reflects the incremental value of its technology over the next best alternative technology for achieving the same goal,"¹⁷ but after an SSO has invested in implementing a patent as part of the standard, moving away from that patent is more expensive, and the SSO or licensee is accordingly more willing to pay a higher royalty fee to retain the standard and mitigate potential losses. Consumers may be harmed if licensees are able to pass on the added costs of patent holdup by charging higher prices, or if firms avoid using the standardized technology due to patent holdup.¹⁸

¹⁴ FED. TRADE COMM'N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 192 (2011) [hereinafter FTC 2011 IP REPORT], available at <http://www.ftc.gov/os/2011/03/110307patentreport.pdf> ("[T]echnologies often compete against each other for inclusion in the standard, but once a particular patented technology is incorporated in a standard, its adoption eliminates alternatives. . . . Switching costs can be prohibitively high when an industry standard is involved." (footnote omitted)); see also Lemley & Shapiro, *supra* note 11, at 5 n.13 (citing articles on the holdup problem).

¹⁵ This problem is particularly salient when the SSO could have chosen an alternative technology for the standard. See FTC 2011 IP REPORT, *supra* note 14, at 192; see also Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2037-38 (2007). In many cases SSOs are likely to have several ex ante options, given the proliferation of low-quality patents in today's world. See *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013).

¹⁶ Bruce H. Kobayashi & Joshua D. Wright, *Intellectual Property and Standard Setting* 33 (George Mason Univ. Law & Econ. Research Series, Paper No. 09-40, 2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1460997.

¹⁷ Cary, Work-Dembowski & Hayes, *supra* note 8, at 1258.

¹⁸ See Joseph Farrell et al., *Standard Setting, Patents, and Hold-Up*, 74 ANTITRUST L.J. 603, 608 (2007); Lemley & Shapiro, *supra* note 15, at 2038-39; see also Renata Hesse, Deputy Assistant Att'y Gen., Antitrust Div., U.S. Dep't of Justice, Six "Small" Proposals for SSOs Before Lunch, Remarks as

Although lock-in and patent holdup are serious problems with respect to the standard-setting process, there are also widely accepted procompetitive benefits associated with standardized technology.¹⁹ Importantly, intellectual property rights incentivize firms to develop and market new products. They allow inventors to profit from their costly research and development investments into new technologies by restricting access to their technologies in specific ways for a defined period of time.²⁰ For instance, during its exclusivity period,²¹ a patent holder is free to demand royalties for the right to use the patented technology and to sue for injunctive relief in the event that a third party infringes on the patent by using the technology without the patent holder's permission.²² Without the ability to recoup the cost of developing the new technology or to protect it from unconsented use, fewer firms would invest in developing new products because the incentive to do so would be reduced.²³ The possible anticompetitive effects of standards must be balanced with the procompetitive benefits in order to reach the optimal level of protection for the patent holder and for those that want to expand on the patented technology.²⁴

Thus, even though patent holdup is a concern, any regulatory efforts to mitigate holdup should be carefully tailored to avoid chilling innovation and the development of standards.²⁵ FRAND commitments are an example

Prepared for the ITU-T Patent Roundtable 5 (Oct. 10, 2012), available at <http://www.justice.gov/atr/public/speeches/287855.pdf>.

¹⁹ Kobayashi & Wright, *supra* note 16, at 3, 4 n.9 (citing sources discussing the benefits associated with network effects).

²⁰ See Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5 J. ECON. PERSP. 29, 31 (1991) ("Given that the length and breadth of patent protection cannot depend on the expected costs of an R&D project, the only way to ensure that firms undertake every research project that is efficient is to let the firms collect as revenue all the social value they create. Otherwise, some projects that are socially desirable will not be undertaken.")

²¹ Utility patents are effective for a term of 20 years. 35 U.S.C. § 154(a)(2) (2006). Design patents have a 14-year term. *Id.* § 173 (2006).

²² See Andrew Beckerman-Rodau, *The Supreme Court Engages in Judicial Activism in Interpreting the Patent Law* in *eBay, Inc. v. MercExchange, L.L.C.*, 10 TUL. J. TECH. & INTELL. PROP. 165, 167-68 (2007); see also *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1383 (Fed. Cir. 2006) ("We have long acknowledged the importance of the patent system in encouraging innovation. Indeed, the 'encouragement of the investment-based risk is the fundamental purpose of the patent grant, and is based directly on the right to exclude.'" (quoting *Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 599 (Fed. Cir. 1985))).

²³ See Vincenzo Denicolò et al., *Revisiting Injunctive Relief: Interpreting eBay in High-Tech Industries with Non-Practicing Patent Holders*, 4 J. COMPETITION L. & ECON. 571, 577 (2008) ("[S]trategies deliberately aimed at creating holdup should not be tolerated. But in attempting to reduce what appears to be a fairly narrow problem we must be careful to avoid the very real danger of under-compensating innovation and, in the process, reducing the incentives to create more of it.")

²⁴ See Kobayashi & Wright, *supra* note 16, at 5-6.

²⁵ The competition agencies have recognized that consumers have become extremely reliant on standardized technology and that, at least in the technology arena, standards are the key to continued economic growth. 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* 3-4 (Jan. 8, 2013)

of a tailored response SSOs have crafted to limit the potential for holdup while incentivizing patent holders to contribute their technology to the standard. These terms ensure that the patent holders are entitled to negotiate with licensees for the full ex ante value of their patented technology.²⁶

II. ANTITRUST, FRAND COMMITMENTS, AND INJUNCTIVE RELIEF: AGENCY APPROACHES

Because of the antitrust concerns associated with SSOs and FRAND negotiations, the FTC and DOJ have both wrestled with the question: what regulatory scheme would simultaneously encourage innovation and limit the risk of consumer harm arising from patent holdup when SSOs bargain for licenses to SEPs?²⁷ While agencies want to encourage such licensing, a patent holder's ability to seek injunctive relief for infringement of SEPs has nonetheless arisen as a key concern. This Part documents the agencies' evolving attitudes toward injunctive relief in this setting.

A. *Evolving Perspectives of Patent Rights in the Standard-Setting Context*

Competition agencies have struggled to reconcile potential anticompetitive concerns deriving from patent holdup with the clear consumer benefits from innovation, which is necessarily protected by strong patent rights.²⁸ The potential problems arising from the harmful behavior of SEP holders subject to FRAND commitments is a particularly familiar issue, as the FTC has been bringing cases against perceived FRAND violators for years.²⁹ For example, in *In re Rambus, Inc.*,³⁰ the FTC brought a Section 5

[hereinafter DOJ/USPTO 2013 Policy Statement] (“[V]oluntary consensus standards, whether mechanical, electrical, computer-related, or communications-related, have incorporated important technical advances that are fundamental to the interoperability of many of the products on which consumers have come to rely.”); *see also supra* note 5.

²⁶ *See* Cary, Work-Dembowski & Hayes, *supra* note 8, at 1258-59.

²⁷ As the FTC noted,

Innovation benefits consumers through the development of new products, processes and services that improve lives and address unmet needs. . . . But innovation is a complex process. It involves a series of steps from idea to invention through development to commercialization, each of which can be expensive, risky and unpredictable.

FTC 2011 IP REPORT, *supra* note 14, at 1.

²⁸ *Id.*

²⁹ Indeed, the FTC's history in this area dates back at least to its case against Dell in 1996. After alleging Dell misrepresented its intellectual property rights during the standard setting process, the FTC concluded,

[W]here there is evidence that the [SSO] would have implemented a different non-proprietary design had it been informed of the patent conflict during the certification process, and where Dell failed to act in good faith to identify and disclose patent conflicts—enforcement action is appropriate to prevent harm to competition and consumers.

claim against Rambus, alleging that Rambus concealed its existing patents and patent applications from the SSO when it applied for inclusion into the standard.³¹ The FTC believed this behavior constituted a deceptive means of gaining, and later exploiting, monopoly power.³² Similarly, in *In re Negotiated Data Solutions LLC*,³³ the FTC found N-Data violated its FRAND agreement when it refused to license its newly acquired patent for the previously agreed-upon one-time \$1,000 fee and allegedly threatened infringement actions against companies that used the standard without paying its desired fee.³⁴ The FTC further found that N-Data's actions constituted an unfair act or practice based, in part, upon the Commission's view that consumers would be harmed through increased costs incurred by companies practicing the standard which have the incentive to simply pass higher licensing fees on to consumers.³⁵

The concerns expressed in these early cases have evolved into a more nuanced concern with the availability of injunctive relief for FRAND-encumbered SEPs. Indeed, statements from ranking officials of both the FTC and DOJ indicate that the agencies have come to understand such injunctions as particularly problematic. The DOJ, for instance, recently stated that it believes a patent holder's commitment to license on FRAND terms may limit the type of remedy to which the holder is entitled in the event of an infringement suit. Thus, the DOJ argued that injunctive relief, a traditional remedy for patent infringement,³⁶ "may be inconsistent with the public interest."³⁷ Other DOJ public statements carry a similar message: alt-

Dell Computer Corp., 121 F.T.C. 616, 620-24 (1996).

³⁰ Rambus, Inc., FTC Docket No. 9302 (Aug. 2, 2006), <http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf>.

³¹ *Id.* at 5.

³² In *Rambus*, the FTC noted that "deceptive conduct" applies to "misrepresentations, omissions, or practices." *Id.* at 36-37. The D.C. Circuit, however, disagreed with the FTC's characterization of Rambus's behavior and reversed the FTC's decision in strong terms. *Rambus Inc. v. FTC*, 522 F.3d 456, 469 (D.C. Cir. 2008) ("Once again, the Commission has taken an aggressive interpretation of rather weak evidence.").

³³ *Negotiated Data Solutions LLC*, FTC File No. 051-0094 (Jan. 23, 2008) [hereinafter N-Data], <http://www.ftc.gov/os/caselist/0510094/080122analysis.pdf> (analysis of proposed consent order to aid public comment).

³⁴ *Id.* at 4-6. Note that N-Data entered into a consent decree with the FTC, meaning that the FTC's findings and conclusions were not subject to judicial review. Given the D.C. Circuit's holding in *Rambus*, it is unclear whether this decree would have survived judicial review. *But see* *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 313-14 (3d Cir. 2007).

³⁵ N-Data, *supra* note 33, at 7-8.

³⁶ See Elizabeth E. Millard, *Injunctive Relief in Patent Infringement Cases: Should Courts Apply a Rebuttable Presumption of Irreparable Harm After eBay Inc. v. MercExchange, L.L.C.*?, 52 ST. LOUIS U. L.J. 985, 993-94 (2008); Herbert F. Schwartz, Note, *Injunctive Relief in Patent Infringement Suits*, 112 U. PA. L. REV. 1025, 1041-43 (1964); see also *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 395 (2006) (Roberts, C.J., concurring).

³⁷ DOJ/USPTO 2013 Policy Statement, *supra* note 25, at 6.

though the agency respects the importance of intellectual property rights, traditional injunctive protection for patented technologies should be unavailable in the standard-setting context in cases in which the agency believes the harm to competition and consumers exceeds the harm the patent holder suffers due to infringement.³⁸ DOJ officials have suggested that as long as a licensee will subject itself to a third party's determination of the appropriate license fee, injunctive relief should be unavailable.³⁹

The FTC has similarly taken a firm stance against injunctive relief.⁴⁰ Chairman Leibowitz, for example, has stated that "it is unclear why a licensor [who has made a FRAND commitment] *should ever* be able to demand an injunction,"⁴¹ and argued that "demand[ing] [an injunction] may be an unfair method of competition under Section 5 of the FTC Act which . . . Congress intended to extend well beyond the reach of the anti-trust laws."⁴²

These statements signal a break from the agencies' previously articulated understanding of the role of injunctions. In its 2011 IP Report, for example, the FTC grounded its analysis of injunctive relief in economic understanding, specifically noting that, "to most benefit consumers," the availability of injunctive relief should be predicated upon an injunction's ability to promote patent law's goal of fostering innovation, and upon whether it aligns patent and competition law in a manner beneficial to consumers.⁴³ Moreover, the Commission found that "denying an injunction every time an infringer's switching costs exceed the economic value of the invention would dramatically undermine the ability of a patent to deter infringement and encourage innovation. For this reason, courts should grant

³⁸ See Hesse, *supra* note 18, at 9 ("To my mind, a patent holder who participates in the standard-setting activities and makes a F/RAND licensing commitment is implicitly saying that she will license the patent claims that must be used to implement the standard to any licensee that is willing and able to comply with the licensing terms embodied in the commitment. Thus, it would seem appropriate to limit a patent holder's right to seek an injunction to situations where the standards implementer is unwilling to have a neutral third-party determine the appropriate F/RAND terms or is unwilling to accept the F/RAND terms approved by such a third party . . ."); Fiona M. Scott-Morton, Deputy Assistant Att'y Gen. for Econ. Analysis, Antitrust Div., U.S. Dep't of Justice, *The Role of Standards in the Current Patent Wars*, Presented at Charles River Associates Annual Brussels Conference: Economic Developments in European Competition Policy 5-7 (Dec. 5, 2012), available at <http://www.justice.gov/atr/public/speeches/289708.pdf>.

³⁹ See *supra* note 38; see also Lemley & Shapiro, *supra* note 11, at 7.

⁴⁰ FTC 2011 IP REPORT, *supra* note 14, at 234-35; Jon Leibowitz, Chairman, Fed. Trade Comm'n, Remarks of FTC Chairman Jon Leibowitz as Prepared for Delivery at the Sixth Annual Georgetown Law Global Antitrust Enforcement Symposium 9 (Sept. 19, 2012), available at <http://www.ftc.gov/speeches/leibowitz/120919jdlgeorgetownspeech.pdf>.

⁴¹ Leibowitz, *supra* note 40, at 9 (emphasis added). Whether the FTC will in fact formally adopt a position this strongly opposed to injunctions remains to be seen.

⁴² *Id.* ("[W]e are pleased that a consensus seems to be developing, disfavoring injunctive relief where parties have made [F]RAND commitments.").

⁴³ FTC 2011 IP REPORT, *supra* note 14, at 26.

injunctions in the majority of cases”⁴⁴ These pronouncements, which carefully consider both the pro- and anticompetitive effects of injunctive relief, are difficult to reconcile with more recent agency statements expressing hostility to, and perhaps even an unwillingness to consider the benefits of, injunctions for FRAND-encumbered SEPs.⁴⁵

B. *Recent Agency Actions and the Apparent Move Away from Injunctive Relief for Holders of FRAND-Encumbered SEPs*

Three very recent agency actions indicate that the move toward disfavoring injunctive relief for holders of FRAND-encumbered SEPs is here to stay: (1) the DOJ’s statement closing its investigation of patent acquisitions by Google and a partnership known as Rockstar Bidco;⁴⁶ (2) the FTC’s Order following its investigation of Robert Bosch GmbH; and, finally, (3) the FTC’s Order in the Google investigation.

First, in closing its investigation into the acquisitions by various companies of several patents relevant in the smartphone patent wars,⁴⁷ the DOJ expressed serious skepticism toward an SEP holder’s ability to seek injunctive relief against licensees eligible for FRAND negotiations.⁴⁸ The DOJ noted with approval that Apple and Microsoft “made clear [in public statements] that they will not seek to prevent or exclude rivals’ products from the market in exercising their SEP rights,” but the agency was obviously wary of Google’s statement, which did not “directly provide the same assurance as the other companies’ statements concerning the exercise of its newly acquired patent rights.”⁴⁹ Although Google stated its policy is to refrain from seeking injunctive relief on SEPs against counterparties, its ad-

⁴⁴ *Id.*

⁴⁵ U.S. Dep’t of Justice, Statement of the Department of Justice’s Antitrust Division on Its Decision to Close Its Investigation of Google Inc.’s Acquisition of Motorola Mobility Holdings Inc. and the Acquisitions of Certain Patents by Apple Inc., Microsoft Corp. and Research in Motion Ltd. (Feb. 13, 2012) [hereinafter Rockstar], available at <http://www.justice.gov/opa/pr/2012/February/12-at-210.html>.

⁴⁶ See *infra* Section III.A (discussing how some commenters advocate for establishing a presumption that negative welfare effects derive from the availability of injunctive relief in such settings and dispensing with the requirement of empirical evidence demonstrating such effects).

⁴⁷ See, e.g., L. Gordon Crovitz, Op-Ed, *Google, Motorola and the Patent Wars*, WALL ST. J. (Aug. 22, 2011), <http://online.wsj.com/article/SB10001424053111903639404576518493092643006.html>; Alex Wagner, *Google Buys Motorola: The Patent Wars Ramp Up*, HUFFINGTON POST (last updated Feb. 16, 2012, 4:18 PM), http://www.huffingtonpost.com/2011/08/15/google-motorola-mobility_n_927670.html.

⁴⁸ Rockstar, *supra* note 45.

⁴⁹ *Id.* (quoting Apple as stating, “A party who made a FRAND commitment to license its cellular standards essential patents or otherwise acquired assets/rights from a party who made the FRAND commitment must not seek injunctive relief on such patents. *Seeking an injunction would be a violation of the party’s commitment to FRAND licensing*”; and Microsoft as stating, “Microsoft will not seek an injunction or exclusion order against any firm on the basis of those essential patents”).

mission that, in certain circumstances, injunctive relief may be appropriately sought was insufficient to completely alleviate the DOJ's concerns—even though the DOJ found Google's acquisition of these patents did not substantially lessen competition.⁵⁰

Next, the FTC investigated Robert Bosch GmbH (“Bosch”), alleging that Bosch harmed competition in the relevant market when it reneged on a commitment to license SEPs on FRAND terms by seeking injunctions against willing licensees.⁵¹ Bosch ultimately elected to abandon its injunctive claims, and the FTC warned in its closing statement that “[p]atent holders that seek injunctive relief against willing licensees of their FRAND-encumbered SEPs 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.”⁵²

Most recently, in closing the FTC's investigation of Google and announcing the settlement reached, Chairman Leibowitz declared, “Today's landmark enforcement action will set a template for resolution of SEP licensing disputes across many industries”⁵³ Leibowitz further noted that the settlement compelled Google to “abandon its claims for injunctive relief on any of its standard essential patents with a FRAND commitment, and to offer a license on FRAND terms to any company that wants to license these patents in the future.”⁵⁴ Indeed, in accordance with the Order, Google must meet two criteria prior to seeking an injunction on FRAND-encumbered patents: it “must (1) provide a potential licensee with a written offer containing all of the material license terms necessary to license its SEPs, and (2) provide a potential licensee with an offer of binding arbitration to determine the terms of a license that are not agreed upon.”⁵⁵ Moreover, if a potential licensee seeks a judicial determination of the FRAND rate, the

⁵⁰ *Id.* (noting Google's policy not to seek injunctions “apparently only [applies to] disputes involving future license revenues, and only if the counterparty: forgoes certain defenses such as challenging the validity of the patent; pays the full disputed amount into escrow; and agrees to a reciprocal process regarding injunctions”).

⁵¹ Robert Bosch GmbH, FTC File No. 121-0081, at 1 (Nov. 21, 2012), <http://www.ftc.gov/os/caselist/1210081/121126boschcommissionstatement.pdf> (statement of the Commission).

⁵² *Id.* at 2. Note the FTC's assertion that it has stand-alone Section 5 authority to pursue such claims, especially when such claims apparently cannot satisfy traditional antitrust requirements, has been a topic of significant debate since this order was released for public comment. Whether and when the FTC can utilize stand-alone Section 5 authority is an important question but is outside the scope of this Essay.

⁵³ Jon Leibowitz, Chairman, Fed. Trade Comm'n, Opening Remarks of Federal Trade Commission Chairman Jon Leibowitz as Prepared for Delivery 3 (Jan. 3, 2013), *available at* <http://www.ftc.gov/speeches/leibowitz/130103googleleibowitzremarks.pdf>.

⁵⁴ *Id.* at 2-3.

⁵⁵ Motorola Mobility LLC, FTC File No. 121-0120, at 6 (Jan. 3, 2013), <http://ftc.gov/os/caselist/1210120/130103googlemotorolaanalysis.pdf> (analysis of proposed consent order to aid public comment).

Order prohibits Google from seeking an injunction while that licensee's proceeding is pending.⁵⁶

The Order's broad prohibition against injunctions is subject to a few limited exceptions, including:

when the potential licensee (a) is outside the jurisdiction of the United States; (b) has stated in writing or sworn testimony that it will not license the SEP on any terms; (c) refuses to enter a license agreement on terms set in a final ruling of a court—which includes any appeals—or binding arbitration; or (d) fails to provide written confirmation to a SEP owner after receipt of a terms letter in the form specified by the Commission. They also include certain instances when a potential licensee has brought its own action seeking injunctive relief on its FRAND-encumbered SEPs.⁵⁷

These exceptions are consistent with the potential limitations on injunctive relief for SEP holders that the DOJ recently espoused.⁵⁸

The FTC's Order in Google is the most influential endorsement of the anti-injunction approach articulated thus far. Given the notoriety of Google, this Order has had a resonating effect and is likely to significantly affect both how parties to FRAND negotiations behave and how agencies react to this behavior moving forward.

III. IMPLICATIONS OF CHANGING AGENCY ATTITUDES

As evidenced above, the FTC and DOJ continue to grapple with the role that injunctions have in the standard-setting process, and the agencies have increasingly begun to focus upon the potential consumer welfare losses deriving from a patent holder's ability to threaten and obtain injunctions against licensees to SEPs. In other words, they have proffered that removing injunctive relief from the FRAND equation may alleviate patent holdup. But it is important to remember that patent holdup is fundamentally a problem of rent appropriation; that is, it is an issue of determining—as between patent holders, licensees, and, of course, end consumers—who gets which benefits and in what amounts. Potential competitive concerns arise in this context because consumers do not have an active voice in FRAND negotiations, meaning they could end up with the short end of the proverbial stick. Regulating the FRAND negotiation process thus only indirectly confronts

⁵⁶ *Id.* Indeed, the Order would not allow Google to seek an injunction until after any relevant appeals were resolved.

⁵⁷ Motorola Mobility LLC, FTC File No. 121-0120, at 2 n.11 (Jan. 3, 2013) [hereinafter Ohlhausen dissent] (citation omitted), <http://www.ftc.gov/os/caselist/1210120/130103googlemotorolaohlhausenstmt.pdf> (dissenting statement of Commissioner Maureen K. Ohlhausen).

⁵⁸ DOJ/USPTO 2013 Policy Statement, *supra* note 25, at 7-8 (“An exclusive order may still be an appropriate remedy in some circumstances, such as where the putative licensee is unable or refuses to take a F/RAND license and is acting outside the scope of the patent holder's commitment to license on F/RAND terms.”).

the patent holdup problem, as the rents continue to exist and each side will retain the incentive to fight for the percentage of rents to which it feels entitled. Before we can determine what, if anything, should be done to alter the FRAND bargaining process, we must consider several issues, including: (1) how significant the patent holdup problem is in cases in which SEP holders have agreed to license on FRAND terms; (2) the extent to which altering the well-established background of patent law remedies is likely to enhance outcomes of FRAND bargaining; and (3) the potential respects in which refusing to allow patent holders to seek injunctions in such cases alters the bargaining power between FRAND parties, and the likely effects of this alteration.

A. *Empirical Evidence of Patent Holdup in FRAND Negotiations over SEPs*

Both the FTC and DOJ have suggested that holders of FRAND-encumbered SEPs should not be allowed to seek an injunction except under strictly proscribed circumstances, as an injunction would exclude other firms from using the standard.⁵⁹ The agencies support this suggestion, in part, by noting that new standards may involve thousands of patents, and while an individual patent holder may only own 2 percent of the technology used in the standard, that patent holder can effectively exclude all other firms, or extort higher royalties, due to lock-in and holdup.⁶⁰ Such results could be bad for competition and could potentially reduce consumer welfare to the extent firms were able to pass on the excess licensing fees to consumers.

But there is an important predicate—and thus far unanswered—question of how pervasive these potential consumer harms actually are; that is, are these harms concrete, observable, and severe, or are they more a theoretical possibility than a real-world actuality?⁶¹ This distinction is important, especially when the agencies appear poised to adopt policies intended to solve theoretically identified, but practically questionable, problems.⁶² As Commissioner J. Thomas Rosch's statement accompanying the

⁵⁹ See *supra* Sections II.A-B.

⁶⁰ See FTC 2011 IP REPORT, *supra* note 14, at 221-23; see also Mark A. Lemley & Philip J. Weiser, *Should Property or Liability Rules Govern Information?*, 85 TEX. L. REV. 783, 797-98 (2007); Nicholas P. Chan, Comment, *Balancing Judicial Misvaluation and Patent Hold-Up: Some Principles for Considering Injunctive Relief after eBay*, 59 UCLA L. REV. 746, 769-72 (2012).

⁶¹ See, e.g., *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 889-90 (2007) (relying heavily upon empirical economics literature in analyzing whether minimum resale price maintenance should be per se illegal).

⁶² As former FTC Chairman Deborah Platt Majoras noted, "Broad regulatory mandates that employ a 'one size fits all' philosophy, without regard to specific facts, always have unintended consequences, some [of] which may be harmful and some of which may not be known until far into the fu-

proposed Google Order highlights, the agencies have yet to provide empirical evidence showing that injunctions are an actual problem in the standard-setting context.⁶³ While patent holdup and lock-in have been shown to be serious theoretical concerns, neither the DOJ nor the FTC has produced concrete evidence demonstrating that patent holders actually use the threat of an injunction to extract unreasonable or non-FRAND royalties from licensees in a manner harmful to consumers.⁶⁴

Indeed, measuring the precise effect of the injunctive threat in any given instance of SSO bargaining is likely infeasible. Too many moving parts exist for outside observers to capture the ideal level of precision, especially given the sheer proliferation of such negotiations. There are, however, some useful starting places for understanding the impact of injunc-

ture.” Deborah Platt Majoras, Chairman, Fed. Trade Comm’n, Remarks at the Progress & Freedom Foundation’s Aspen Summit 17 (Aug. 21, 2006), *available at* <http://www.ftc.gov/speeches/majoras/060821pffaspenfinal>; *see also* 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, 128 (2007). Professor Geradin and Rato state,

The most striking aspect of our survey of the literature is that, while the theoretical literature is fairly rich, the empirical literature testing the validity of the royalty stacking and anti-commons theories in the [real-world FRAND context] is sparse and often not very rigorous. More importantly, the existing evidence is mixed.

Geradin & Rato, *supra*, at 128. The authors purport to show that “such attacks [on the FRAND system] are often based on theories whose dire predictions have not been verified in practice.” *Id.* at 161.

⁶³ Google, Inc., FTC File No. 121-0120, at 3 (Jan. 3, 2013) [hereinafter Statement of Commissioner Rosch], <http://www.ftc.gov/os/caselist/1210120/130103googlemotorolaroschstmt.pdf> (separate statement of Commissioner J. Thomas Rosch regarding Google’s standard essential patent enforcement practices). Others have noted this dearth of empirical evidence as well. For example, in the wake of the FTC’s 2011 release of its report on “The Evolving IP Marketplace” and request for public comments, one author noted “[n]umerous commentators—including SSOs, academics, industry analysts, licensors, and potential targets of patent litigation—expressed the strong view that hold-up is not a significant problem in the real world.” Roger G. Brooks, Patent “Hold-Up,” Infringement Remedies, and the Operation of Standards-Setting Organizations: How the FTC’s Ill-Advised Campaign Against Innovators Threatens Incentives 8 (Sept. 2, 2011) (unpublished manuscript), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1923735. This author reported that the Alliance for Telecommunications Industry Solutions (“ATIS”), the Telecommunications Industry Association (“TIA”), the American National Standards Institute (“ANSI”), Microsoft, and Qualcomm, in addition to others, each concluded there was little empirical evidence of patent holdup, with some testifying that they had never experienced or received complaints regarding holdup. *Id.* at 8-9. Moreover, this same author found that, even among those commentators who claimed patent holdup is a problem, they “identified not a single concrete example of patent hold-up.” *Id.* at 9-10. The public comments from the FTC’s Workshop to Explore the Role of Patented Technology in Collaborative Industry Standards are available at <http://www.ftc.gov/os/comments/patentstandardsworkshop/>.

⁶⁴ The current lack of evidence also raises an interesting question of how much courts should defer to the FTC’s decision in such cases. This question is recurring and important in antitrust law and presents an interesting issue here, as the FTC normally predicates its argument for deference upon its perceived expertise—that is, when the FTC invests significant resources into discerning the competitive effects of specific conduct (by, for example, commissioning studies into the costs of that conduct), its argument for deference is strengthened, given its factual findings. In the case of standard essential patents subject to FRAND agreements, however, the FTC has yet to develop such clear evidence.

tions in such cases. For instance, we can observe the number of complaints that have actually been filed involving SEPs for which the patent holder has agreed to bargain on FRAND terms. While this measure is rough—litigated cases are necessarily those that will be the closest calls,⁶⁵ and this figure alone does not speak to the proportion of FRAND negotiations that have deteriorated to the point of seeking court intervention over the relevant time period⁶⁶—it can help shed some light on the potential magnitude of the patent holdup problem in this context.

A Westlaw search of all state and federal cases revealed about seven cases—total—that parties to FRAND bargains have filed.⁶⁷ Notably, these cases were filed both by the patent holders alleging infringement and by the licensees, who, in at least one case, asserted anticipatory breach of a FRAND agreement.⁶⁸ Although this measure certainly underestimates the number of negotiations in which the injunctive threat plays a—potentially very important—role, it does suggest that most negotiations do not deteriorate to the point that patent holders in fact endeavor to halt licensees' production. This finding is important, first because the most troubling aspects

⁶⁵ See George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1, 1-2 (1984).

⁶⁶ See, e.g., Joseph Farrell, Director, Fed. Trade Comm'n Bureau of Econ., Closing Remarks at Workshop on Tools to Prevent Patent "Hold-Up" 239 (June 21, 2011), available at <http://ftc.gov/opp/workshops/standards/transcript.pdf> (noting that the FTC, at a recent workshop, was presented with "evidence of problems and evidence of lack of problems . . . [but] [j]ust because there's a dispute doesn't mean that there is a breakdown of the system. . . . We also can't assume that the absence of a dispute means the absence of a problem").

⁶⁷ We ran an Advanced search in WestlawNext, searching all state and federal cases for the following: "advanced: (injunct! enjoin) & 'standard essential' & 'fair, reasonable, #and nondiscriminatory.'" This search revealed 18 total hits for trial court documents. Approximately seven of these appeared to be relevant hits; several hits were redundant, and there were some false positives. The relevant complaints were in the following cases: (1) Nokia Corp. v. Apple Inc., filed in the United States District Court for the District of Delaware; (2) Apple Inc. v. Motorola Mobility, Inc., filed in the United States District Court for the Southern District of California; (3) Nokia Corp. v. Qualcomm Inc., filed in the Chancery Court of Delaware; (4) Realtek Semiconductor Corp. v. LSI Corp., filed in the United States District Court for the Northern District of California; (5) Apple Inc. v. Motorola, Inc., filed in the United States District Court for the Western District of Wisconsin (which was later transferred, in part, to the Northern District of Illinois); (6) Huawei Technologies Co. v. InterDigital Technology Corp., filed in the Chancery Court of Delaware; and (7) Microsoft Corp. v. Motorola, Inc., filed in the United States District Court for the Western District of Washington. See also Jorge L. Contreras, *The Frand Wars: Who's on First?*, PATENTLYO (Apr. 17, 2012), <http://www.patentlyo.com/patent/2012/04/the-frand-wars-whos-on-first.html> (offering a "summary of some of the principal cases in which FRAND issues are currently being litigated in the U.S. and Europe," including cases brought by the European Commission investigating complaints by parties).

⁶⁸ See Second Amended Complaint at 2-3, Apple Inc. v. Motorola Mobility LLC, No. 3:12CV00355 (S.D. Cal. Aug. 3, 2012), 2012 WL 5403101, at ¶ 7. Given that such a small number of cases have been brought, and that as many suits appear to have been initiated by licensees as by patent holders, the filing of these suits may be just as indicative of licensees behaving anticompetitively as of patent holders behaving so.

of patent holdup derive from a patent holder actually preventing licensees from producing, and second because, for the injunctive threat to prove truly impactful, there must be some level of credibility behind it.⁶⁹ Note, moreover, that this measure says nothing about the consumer welfare effects of SEP holders seeking injunctions; that is, it is still steps removed from identifying any antitrust-relevant harm.⁷⁰

Proponents of disarming SEP holders, however, seem rather unconcerned with this lack of proof. Their argument is essentially that we should simply presume injunctive relief creates the type of antitrust harm this Essay and others seek empirically to identify. In other words, they proffer that injunctive relief for ostensibly valid patents produces anticompetitive effects. This proposition is not only at odds with law and economics theory—which recognizes that strong patent rights are essential to fostering innovation and to maximizing dynamic efficiency⁷¹—but is further contrary to antitrust law, within which presumptions are earned only through judicial or economic learning and are not tools utilized when empirics are lacking.⁷²

B. *Traditional Patent Remedies and FRAND Negotiations*

In essentially disallowing (or at least seriously burdening) an SEP holder's ability to seek an injunction, the FTC and DOJ appear to be effecting a significant alteration to the FRAND bargaining landscape.⁷³ In im-

⁶⁹ FTC 2011 IP REPORT, *supra* note 14, at 26.

⁷⁰ This lack of evidence is a problem arising in other settings the FTC is currently evaluating. For example, the FTC recently held a day-long workshop investigating the impact of patent assertion entities upon competition and innovation, in which the absence of empirical evidence of negative consumer welfare effects was a theme. *See, e.g.*, Joshua D. Wright, Commissioner, Fed. Trade Comm'n, What Role Should Antitrust Play in Regulating the Activities of Patent Assertion Entities?, Remarks at the Dechert Client Annual Antitrust Spring Seminar (Apr. 17, 2013), available at <http://www.ftc.gov/speeches/wright/130417paespeech.pdf>; *Patent Assertion Entity Activities Workshop*, FED. TRADE COMM'N, <http://www.ftc.gov/opp/workshops/pae/> (last visited May 18, 2013).

⁷¹ *See, e.g.*, FTC 2011 IP REPORT, *supra* note 14, at 26.

⁷² *See, e.g.*, *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 889-900 (2007); *NCAA v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85, 100 n.21 (1984) (“While judicial inexperience with a particular arrangement counsels against extending the reach of *per se* rules the likelihood that horizontal price and output restrictions are anticompetitive is generally sufficient to justify application of the *per se* rule without inquiry into the special characteristics of a particular industry.” (citations omitted)).

⁷³ Affected patent holders have noted the potential problems with this approach. The American Intellectual Property Law Association, for instance, has stated, “To best encourage invention and competition, [intellectual property rights (“IPR”)] owners *and* users—i.e., licensees—of IPR-protected technology must remain free to negotiate all the terms of their licenses to strike the right balance for their particular circumstances. Freely negotiated terms enable IPR owners to realize market-driven financial rewards of utilizing IPR-protected technology in the development and sale of their own products and services.” Letter from David W. Hill, President, Am. Intellectual Prop. Law Ass'n, to Donald

portant ways, recent agency actions that attempt to regulate the FRAND bargaining process and alter the rules and remedies available to SEP holders may be rendering FRAND negotiations more opaque. Thus, whether this new landscape benefits consumers is an open question.

In *eBay Inc v. MercExchange, L.L.C.*,⁷⁴ Chief Justice Roberts stated in his concurrence:

From at least the early 19th century, courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases. This “long tradition of equity practice” is not surprising, given the difficulty of protecting a right to *exclude* through monetary remedies that allow an infringer to *use* an invention against the patentee’s wishes⁷⁵

As the Chief Justice recognizes, injunctions are a traditional patent law remedy, commonly sought in cases of patent infringement.⁷⁶ We thus can expect patent holders to seek injunctive relief when they feel compelled to protect their property rights. Similarly, we can assume patent holders and would-be licensees agreed to vague FRAND terms knowing the patent holder has an established right to exclude others from using its technology for a set period of time; that is, we may presume these sophisticated parties are familiar with traditional patent negotiations and the available remedies for infringement, especially given that modern technological innovation revolves around interoperability and cooperatively set standards.⁷⁷

The agencies’ assertion that injunctions are antithetical to FRAND commitments and could subject SEP holders to antitrust liability risks unsettling the background assumptions—or the “shadow of the law”—under which both patent holders and would-be licensees were operating when developing the standard.⁷⁸ In making this assertion, the agencies may very well be sowing confusion in the FRAND bargaining process with respect to

S. Clark, Sec’y, Fed. Trade Comm’n 2 (June 14, 2011), available at <http://www.ftc.gov/os/comments/patentstandardsworkshop/00012-60634.pdf>.

⁷⁴ 547 U.S. 388 (2006).

⁷⁵ *Id.* at 395 (Roberts, C.J., concurring). While some have argued *eBay* dispenses with the previously forgone conclusion that a patent holder would receive an injunction following a finding of infringement, evidence suggests this case has had a less profound impact than expected. See Andrew Beckerman-Rodau, *The Aftermath of eBay v. MercExchange*, 126 *S. Ct. 1837* (2006): *A Review of Subsequent Judicial Decisions*, 89 *J. PAT. & TRADEMARK OFF. SOC’Y* 631, 633 (2007); Andrew Beckerman-Rodau et al., *eBay v. MercExchange and Quanta Computer v. LG Electronics*, 4 *J. BUS. & TECH. L.* 5, 35-36 (2009); Benjamin Petersen, Note, *Injunctive Relief in the Post-eBay World*, 23 *BERKELEY TECH. L.J.* 193, 195-96, 199-200 (2008).

⁷⁶ *eBay*, 547 U.S. at 394-95 (Roberts, C.J., concurring).

⁷⁷ See *Masimo Corp. v. Philips Elecs. N. Am. Corp.*, 742 *F. Supp. 2d* 492, 499-500 (D. Del. 2010).

⁷⁸ See Michel, *supra* note 4, at 889-90 (“Remedies for patent infringement are particularly important because they set the framework for licensing negotiations and provide the source of the patentee’s power to extract monopoly rents from standardized products.”).

what precisely “FRAND” means,⁷⁹ what remedies are available, and who (as between parties, agencies, and courts) has the authority to make these decisions. Because injunctions are such a fundamental aspect of patent holders’ rights, forgoing the ability to even seek an injunction appears to represent a significant value lost. And, absent empirical evidence that consumers are harmed by injunctive threats, it is unclear that the agencies can or should be making this decision, rather than the parties to FRAND bargains themselves.

Moreover, if patent holders in fact lose significant value from forfeiting their right to injunctive relief, they are likely to look for opportunities to mitigate this loss in other ways—by, for example, seeking more money up front or being less willing to be considered as part of a standard or to agree to FRAND terms in the first instance. Also note that patent holders with the best patents have the most to lose in this scenario; so, arguably, disallowing injunctions may cause consumers to lose out on some of the best technologies.

Additionally, seeking an injunction is not obviously a desirable strategy for patent holders, who forgo all royalties while an injunction is in effect. Sophisticated firms, like those involved in developing interoperability standards, also lack the incentive to demand unreasonable licensing terms because of the impact on their reputation and the risk that litigation could result in an unfavorable judgment.⁸⁰ These firms are repeat players and have concerns beyond individual licenses. FRAND negotiations do not occur in a vacuum; rather, they take place within the context of normal patent-licensing negotiations and the corresponding patent law remedies for infringement.⁸¹

⁷⁹ Ohlhausen Dissent, *supra* note 57, at 2. Many proponents of disallowing injunctions argue that “FRAND” necessarily means injunctions are not permitted. *See, e.g., Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 915 (N.D. Ill. 2012) (“A FRAND royalty would provide all the relief to which Motorola would be entitled if it proved infringement of the ‘898 patent, and thus it is not entitled to an injunction.”); *supra* note 3. As discussed below, however, parties to FRAND agreements often understand that injunctive relief remains viable *ex post*.

⁸⁰ Patent infringement litigation is costly for both patent holders and alleged infringers. *See* Jonathan M. Barnett, *Private Protection of Patentable Goods*, 25 CARDOZO L. REV. 1251, 1270 (2004) (“Patent prosecution and litigation costs alone are estimated to equal roughly \$4.33 billion and \$1 to \$2.1 billion annually, respectively.”); Mark A. Lemley, Essay, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1508-10 (2001).

⁸¹ James Ratliff and Professor Daniel L. Rubinfeld, for example, “model a dispute between the owner of a standard-essential patent and an implementer of the standard over whether the patentee’s license offer is reasonable and non-discriminatory (RAND).” James Ratliff & Daniel L. Rubinfeld, *The Use and Threat of Injunctions in the RAND Context*, 9 J. COMPETITION L. & ECON. 1, 1 (2013). Although they do not rule out injunctive relief, they find that threat does not lead to holdup. *Id.* at 22. “The key element of the model that allows this relatively benign impact of the injunctive threat is that the implementer always has a last-resort escape hatch to accept license terms that are either certified by a court as RAND or mutually agreed upon by the patentee and implementer.” *Id.* Their model allows for injunctive relief “only if a licensee refuses to accept court-certified RAND terms, which is unlikely to

Accordingly, recent agency actions, including the FTC's Google Order, appear to create uncertainty for SSOs and participants with respect to the agencies' positions on injunctions in the standard-setting context. Given the agency's statements, any SEP holder who seeks an injunction prior to a potential licensee's outright refusal to negotiate apparently risks Section 5 liability.⁸² Participants are further on notice that the FTC may interpret FRAND to mean that a patent holder is willing to have a court or arbitrator determine the ultimate license fee.⁸³ Beyond upsetting the status quo and engendering confusion over the meaning of FRAND, these agency actions call into question the agencies' authority to support broad prohibitions against injunctive relief for holders of FRAND-encumbered SEPs.⁸⁴ Changing the patent law framework underlying FRAND negotiations may reduce SSO participation and will likely have unintended consequences, as both patent holders and would-be licensees will attempt to use the changed circumstances to their benefit.⁸⁵

occur in practice (that is, 'along the equilibrium path')." *Id.* Moreover, they find injunctive relief can play a meaningful role in resolving patent disputes when used carefully by the courts. *Id.*

⁸² See FTC Google Decision, *supra* note 1; Google Inc., FTC File No. 121-0120, at 1 (Jan. 3, 2013) [hereinafter Statement of the FTC], <http://www.ftc.gov/os/caselist/1210120/130103googlemotorolastmtofcomm.pdf>. (statement of the Commission); Statement of Commissioner Rosch, *supra* note 63, at 3.

⁸³ FTC Google Decision, *supra* note 1, at 8-9; see also Statement of the FTC, *supra* note 82, at 1 ("If accepted by the Commission, the Proposed Order may set a template for the resolution of SEP licensing disputes across many industries . . .").

⁸⁴ There are limits on the conduct that antitrust can reach, as Commissioner Ohlhausen noted in her dissent. Ohlhausen Dissent, *supra* note 57, at 2. The *Noerr-Pennington* doctrine prevents a firm being held liable for antitrust violations when it, in good faith, petitions the government. See *Cal. Motor Transp. Co. v. Trucking Unlimited*, 404 U.S. 508, 510-11 (1972) ("We conclude that it would be destructive of rights of association and of petition to hold that groups with common interests may not, without violating the antitrust laws, use the channels and procedures of state and federal agencies and courts to advocate their causes and points of view respecting resolution of their business and economic interests *vis-à-vis* their competitors."); see also Letter from Jeffrey I. D. Lewis, President, Am. Intellectual Prop. Law Ass'n, to Donald S. Clark, Sec'y, Fed. Trade Comm'n (Feb. 22, 2013), available at <http://ftc.gov/os/comments/motorolagoole/563708-00021-85573.pdf> (discussing the constitutional problems, and possible *Noerr-Pennington* violations, deriving from disallowing patent holders to seek injunctions, as well as the possibility that the FTC's decision in *Google* may displace the proper role of the courts and the International Trade Commission). Moreover, antitrust is traditionally limited in regulating contracts problems. For instance, consider that the holdup problem is not unique to the SSO context; indeed, a new tenant who signs a lease with his landlord and subsequently moves all his belongings into his new home is just as susceptible to holdup—after he has committed to this new home, his landlord might attempt to extort the tenant's earlier investments by, for example, imposing a new parking fee. While this action clearly represents holdup, it is just as clearly not an antitrust problem.

⁸⁵ See *infra* Section III.C.

C. *Potential Effects of Altering Bargaining Power in FRAND Negotiations*

While preventing holders of SEPs subject to FRAND commitments from seeking injunctions will certainly alter the power dynamic between patent holders and SSOs or licensees in FRAND negotiations, the extent to which this alteration can alleviate the potential consumer welfare losses deriving from patent holdup is markedly less clear.⁸⁶ This alteration may profoundly affect dynamic efficiency, potentially diminishing firms' incentives to innovate and to compete for currently coveted places within the standard.⁸⁷ Indeed, whether such a fundamental alteration to FRAND bargaining would benefit or harm end consumers is a question not yet fully explored, and at least a couple of potential implications are worth raising here: (1) this alteration may change the timing of when FRAND parties bargain over licensing fees, thereby compelling earlier bargaining and dissipating various benefits; and (2) it may create the potential for a reverse-patent holdup problem, in which SSOs know they cannot be stopped from producing and accordingly have less incentive to agree to pay patent holders higher—or even just reasonable—licensing fees.

First, preventing holders of SEPs from seeking injunctions after they have agreed to bargain on FRAND terms might compel the parties to these agreements to bargain up front for specific licensing fees. This change to the bargaining process threatens to make FRAND bargaining more expensive for a few reasons. Notably, many SSOs opt not to require that patent holders forego the right to injunctive relief, despite having the ability—as expressed in the DOJ's business review letters⁸⁸—to establish requirements

⁸⁶ The consumer welfare effects of agency involvement in FRAND negotiations appear generally ambiguous. Bernhard Ganglmair, Professor Luke M. Froeb, and Gregory J. Werden, for example, analyze the welfare effects of implementing various means for solving patent holdup. Bernhard Ganglmair, Luke M. Froeb & Gregory J. Werden, *Patent Hold-Up and Antitrust: How a Well-Intentioned Rule Could Retard Innovation*, 60 J. INDUS. ECON. 249, 265 (2012). Although they find that a damages remedy for breaches of RAND commitments may solve the holdup problem and yield socially optimal investments in the implementation of standard technology, they further demonstrate that this remedy “reduces the welfare generated by new technology because it reduces the payoff from R&D and makes some projects no longer worth pursuing” when the potential value of the new technology and the licensee's bargaining power are both high. *Id.* In other words, enforcing a damages remedy for FRAND breaches may discourage investment into marginal projects, making consumers worse off in certain respects. Discouraging injunctions for FRAND-encumbered SEPs may similarly perversely affect consumers in certain circumstances.

⁸⁷ See, e.g., Sidak, *supra* note 4, at 719 (“[T]he Lemley-Shapiro framework does not properly account for the relevant error costs associated with weakening the presumption of injunctive relief. In particular, Lemley and Shapiro fail to consider how removing the presumption of injunctive relief could decrease dynamic efficiency.” (footnote omitted)).

⁸⁸ Letter from Thomas O. Barnett, Assistant Att'y Gen, Dep't of Justice, Antitrust Div., to Michael A. Lindsay, Dorsey & Whitney LLP (Apr. 30, 2007), available at <http://www.justice.gov/atr/public/busreview/222978.pdf>; Letter from Thomas O. Barnett, Assistant Att'y Gen., Dep't of Justice,

to which patent holders must agree before they can even be considered for adoption within the standard. And many SSOs and patent holders persist in agreeing to the vague FRAND standard rather than bargaining up front for licensing fees, despite the proliferation of literature identifying numerous problems potentially arising from such agreements.⁸⁹ In other words, SSOs and patent holders are voluntarily choosing to delay bargaining over specific prices and opting for a vague ex ante standard. Presumably, they are making these choices because they each gain some value by doing so. For SSOs, part of this value may be the ability to more expeditiously adopt and implement improved technologies. Note that consumers are also likely to benefit from a timely adoption and implementation of enhanced technologies—that is, because of the delay in negotiating over specific royalty fees, consumers gain access to better products more quickly.

Meanwhile, for patent holders, one aspect of this value may be an increased leverage in later negotiations. Again, consumers may benefit from patent holders' ability to realize this value, although perhaps in a less obvious way. If patent holders are gaining value from delayed negotiations, they may be more willing to allow SSOs and licensees to begin utilizing their patents before prices are firmly established, again affording consumers earlier access to better technologies; they may additionally be more willing to pass on other benefits to consumers, given the added value they received from the delay of royalty negotiations.

Indeed, the expressed desire of SSOs and patent holders to commit to FRAND agreements is quite interesting. Consider that, although ex ante SSOs do not know with certainty whether they will be subjected to opportunistic patent holdup, they certainly know it is a possibility.⁹⁰ And although they have the ability to eradicate this possibility, they often opt not to do so. Accordingly, there is a reasonable argument that SSOs know they are giving patent holders some extra value by delaying negotiations over prices, and further, that they are accepting the potential patent holdup risk associat-

Antitrust Div., to Robert A. Skitol, Drinker, Biddle & Reath, LLP (Oct. 30, 2006), available at <http://www.justice.gov/atr/public/busreview/219380.pdf>.

⁸⁹ See, e.g., Farrell et al., *supra* note 18, at 603-04; Damien Geradin & Anne Layne-Farrar, *The Logic and Limits of Ex Ante Competition in a Standard-Setting Environment*, 3 COMPETITION POL'Y INT'L 79, 82 (2007), available at <http://ssrn.com/abstract=987321>; Daniel G. Swanson & William J. Baumol, *Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power*, 73 ANTITRUST L.J. 1, 5-6 (2005); Anne Layne-Farrar, A. Jorge Padilla & Richard Schmalensee, *Pricing Patents for Licensing in Standard Setting Organizations: Making Sense of FRAND Commitments* 4 (CEMFI Working Paper No. 0702, 2007), available at <ftp://ftp.cemfi.es/wp/07/0702.pdf>; Damien Geradin, Anne Layne-Farrar & A. Jorge Padilla, *The Ex Ante Auction Model for the Control of Market Power in Standard Setting Organizations* 6 (CEMFI Working Paper No. 0703, 2007), available at <ftp://ftp.cemfi.es/wp/07/0703.pdf>.

⁹⁰ See Lemley, *supra* note 80, at 1517 (citing to literature analyzing potential for patent holdup).

ed with the vague FRAND standard.⁹¹ Whether or not SSOs have accepted this specific risk, forcing SSOs and patent holders to move bargaining over prices to an earlier stage of the process is likely to dissipate some of the current value each party associates with the FRAND standard. If the parties are losing value here, they are likely to seek to recoup this loss at other stages of the process. Precisely how these efforts will manifest is unclear, but presumably firms may invest less in research and development in such settings, which in turn would diminish innovation.⁹² It is thus not obvious that consumers will ultimately be better off when all is said and done.⁹³

Second, removing the possibility of injunctive relief does not remove the incentive of parties to FRAND agreements to appropriate as much of the value associated with a given technology as possible. Rather, it simply effects a significant shift in the balance of power between the bargaining parties. Whereas patent holders have the ultimate ability to shut down negotiations or production when injunctive relief is available, SSOs and licensees have this ability when injunctive relief is absent. Accordingly, SSOs' incentives to agree to reasonable royalty fees may be diminished when they know they cannot be prevented from implementing and utilizing a patented technology; at best, and only if a patent holder prevails after expensive and protracted litigation, SSOs could be forced to pay damages. These costs, however, may still be less than the benefit they receive from refusing a reasonable royalty rate. Indeed, if we assume patent holders have the incentive to exploit their ex post power to appropriate rents, it is only consistent to assume SSOs and licensees will do so as well, given the opportunity.⁹⁴ This

⁹¹ See, e.g., Rafael Rivera, *Antitrust Law, Variant Patent Holdup Theories, and Injunctive Relief in Standard Setting Organizations* 3 (2012) (Ill. State Bar Ass'n Section of Antitrust and Unfair Competition Law Newsletter, Vol. 50, Issue 2, Jan. 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2186037 ("SSOs have chosen to forgo ex ante negotiations. So even though an SSO may possess all the information needed to make informed decisions, which ensures that implementers are not surprised about having to negotiate royalties ex post, patentees can nonetheless rationally demand fees in excess of the value underlying the technology after an industry locks into a standard."); Geoffrey A. Manne, Comment Regarding the Proposed Consent Order, INT'L CTR. FOR LAW & ECON., at 5 (Feb. 22, 2013), available at http://laweconcenter.org/images/articles/icle_comment_google_order.pdf ("SSOs are intentionally structured to permit SEP holders to gain from ex post negotiation of licenses, fully able to capitalize on whatever monopoly power participation in the standard confers.").

⁹² See Ganglmair, Froeb & Werden, *supra* note 86, at 265. Ganglmair, Froeb and Werden note that providing damages for breach of a RAND commitment might reduce the welfare a patented technology yields because this remedy decreases the payoff from research and development, thereby rendering certain projects no longer profitable. There is reason to believe removing the possibility of injunctive relief—which similarly imposes greater costs upon the SEP holder—may similarly diminish the expected value of various projects.

⁹³ Indeed, query whether this shift, in actuality, merely effects a deadweight loss.

⁹⁴ The agencies seem to be making such opportunistic behavior especially easy for SSOs and licensees, given their recent statements indicating injunctive relief should be available to holders of

may be especially true given that FRAND commitments are asymmetric—while they compel patent holders to agree to fair, reasonable, and nondiscriminatory terms, they do not similarly require licensees or SSOs to agree to such terms, meaning these parties are free to demand an unreasonably low price, or even to refuse to license the technology at all.⁹⁵

Thus, while holdup arising from opportunistic patent holder behavior is a potentially significant problem, so is the corollary problem deriving from SSOs or licensees behaving opportunistically. This corollary presents a type of reverse-patent holdup,⁹⁶ or, as one commenter describes it, a problem of “[b]oth hold-up and hold-out.”⁹⁷ The reverse-patent holdup problem appears to be a serious complication that should be considered in analyzing the consumer welfare effects of FRAND negotiations over SEPs, as licensees have already initiated litigation arguing that patent holders have breached their FRAND agreements—in some cases, even before the patent holder actually has violated its FRAND commitment, and often before the patent holder itself files litigation.⁹⁸

CONCLUSION

The FTC and DOJ have each expressed serious concerns regarding the potential for significant consumer harm deriving from an SEP holder’s decision to agree to bargain on FRAND terms and later to seek injunctive relief against potential licensees. While the agencies identify legitimate theoretical concerns, it is yet unclear the extent to which such patent holdup in fact yields consumer welfare losses. Moreover, the agencies’ efforts so far to mitigate the patent holdup problem in the FRAND setting may have serious unintended consequences, including injecting ambiguity and confusion into the FRAND bargaining process, dissipating the value associated with the vague FRAND standard, and fostering an environment in which a reverse-patent holdup problem may emerge. Accordingly, the agencies should conduct a rigorous analysis of the likely intended and unintended

FRAND-encumbered SEPs only after a licensee has stated in a written or sworn statement that it will not agree to any FRAND royalty rate. *See supra* Section II.B.

⁹⁵ Ganglmair, Froeb & Werden, *supra* note 86, at 257; Mario Mariniello, *European Antitrust Control and Standard Setting* 8-11 (Bruegel Working Paper 2013/01, 2013), available at <http://www.bruegel.org/publications/publication-detail/publication/768-european-antitrust-control-and-standard-setting/#.UWI-GKtKIGR>.

⁹⁶ *See* Mariniello, *supra* note 95; Manne, *supra* note 91, at 5; Damien Geradin, *Reverse Hold-ups: The (Often Ignored) Risks Faced by Innovators in Standardized Areas* 3 (2010) (manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1711744; Farrell, *supra* note 66, at 243-45.

⁹⁷ Letter from David A. Balto & Brendan Coffman to Donald Clark, Sec’y, Fed. Trade Comm’n 1 (Feb. 22, 2013), available at <http://ftc.gov/os/comments/motorolagoogole/563708-00020-85576.pdf>.

⁹⁸ *See supra* note 67 (noting the cases that have been filed implicating FRAND negotiations over SEPs).

consequences of disallowing injunctive relief for FRAND-encumbered SEPs as they continue to craft and formalize policies intend to enhance consumer welfare.