

STANDARD ESSENTIAL PATENTS AND ANTITRUST LAW: BALANCING INNOVATION AND COMPETITION

Kyle L. Greene*

Antitrust and patent law have always been uneasy allies. Although both seek to encourage innovation and competition in the long run, patent law does so primarily by granting creators exclusive fiefdoms over their intellectual property, and antitrust law does so primarily by proscribing firms from anticompetitive conduct. Yet today's world is flush with patent-rich products and industries that depend on the fruitful, simultaneous application of both of these bodies of law. Industries reliant on flourishing networks, such as those in the information and communication technology sector, are particularly influenced by the intersection of antitrust and patent law.¹ Because of the central importance of well-functioning networks to these industries, many have developed standard setting organizations ("SSOs") to designate technical standards that ensure product compatibility and interoperability between offerings from different firms. These standards incorporate many specific patents, known as standard essential patents ("SEPs"). Further, standards promulgated by SSOs oblige SEP holders to license their SEPs to implementers of the standard in a fair, reasonable, and non-

* J.D. Candidate 2020, Columbia Law School; B.A., 2016, University of Massachusetts, Amherst. Thanks to the board and staff of the *Columbia Business Law Review* for their editorial support. They have valiantly strived to keep this note free of errors, and any that remain are entirely my own.

¹ A. Douglas Melamed & Carl Shapiro, *How Antitrust Law Can Make FRAND Commitments More Effective*, 127 YALE L.J. 2110, 2111 (2018) ("Compatibility standards comprise a critical part of the information and communications technology sector . . . [M]any of the benefits generated by the recent and dramatic advances in information technology would have been difficult or impossible to achieve without compatibility standards.").

discriminatory (“FRAND”) fashion.² As a result, SEP holders and their counterparties stand, precariously, where antitrust and patent law meet.

This Note will argue that an SEP holder who violates their FRAND commitments by unilaterally refusing to deal with a prospective implementer of the relevant standard should be presumed to have antitrust liability under Section 2 of the Sherman Act. In other words, such a firm should be presumed to have market power and to have participated in exclusionary conduct with anticompetitive effects. Part I will describe the landscape of standard setting, its effect on competition, and the place of antitrust and patent law in the standards landscape. Part II will explore the antitrust case law concerning refusals to deal in greater depth, paying particular attention to cases involving intellectual property and patents. Finally, Part III will build off of the previous two Parts to make and justify the argument that SEP holders should face a presumption that they have violated Section 2 of the Sherman Act when they violate their FRAND commitments by refusing to deal.

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² NAT’L RESEARCH COUNCIL OF THE NAT’L ACADS., PATENT CHALLENGES FOR STANDARD-SETTING IN THE GLOBAL ECONOMY: LESSONS FROM INFORMATION AND COMMUNICATIONS TECHNOLOGY 17–18 (Keith Maskus & Stephen A. Merrill eds., 2013).

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I. THE BASICS: STANDARDS AND COMPETITION

A. Standards, SSOs, and SEPs

Standards are technical design specifications that detail how products or product components should be made in order to perform specific functions or successfully interact with other products and networks.³ Standards are important to many industries, but they are of critical importance to industries premised on the ability of products produced by different firms to work with each other and participate in a shared network.⁴ For instance, industries within the information and communication technology sector depend on compatibility standards for core product features, such as the ability of computers and cell phones to access Wi-Fi and broadband networks.⁵ Some industry standards emerge out of government regulation or the competitive dominance of a particular firm or product. However, many technology standards are developed by SSOs.⁶ These SSOs are private, cooperative organizations made up of members who communally agree to a process for developing and

³ See *id.* at 1.

⁴ See, e.g., Melamed & Shapiro, *supra* note 1, at 2112 (“The fundamental economics in the information technology sector, driven by *network effects*, implies that there is *enormous value associated with establishing compatibility standards.*”) (emphasis added).

⁵ See NAT’L RESEARCH COUNCIL OF THE NAT’L ACADS., *supra* note 2, at 16.

⁶ See Erik Hovenkamp, *Tying, Exclusivity, and Standard-Essential Patents*, 19 COLUM. SCI. & TECH. L. REV. 79, 81 (2017) (“When a complex technology requires widespread interoperability among different components, firms usually coordinate through a standard setting organization.”).

implementing standards, and then engage in that process together.⁷

Standards developed by SSOs almost always incorporate patent-protected technologies that are held by participating members in the SSO.⁸ Patents on a technology necessary to fulfill an industry standard are called standard essential patents.⁹ In practical terms, SEPs are patents which must either be licensed or infringed upon by implementers of the standard.¹⁰ As a result, the inclusion of a patented technology in an industry standard grants the SEP holder a great deal of power relative to any given implementer of the standard. In sectors that develop standards in order to coordinate and foster beneficial network effects, the market power of a SEP holder continues to grow as the standard becomes more widely used and access to the relevant network becomes more valuable.

SSOs have adopted rules and policies regarding intellectual property rights to prevent the abuse of this power. One set of rules is concerned with disclosures—they aim to make sure that participating members in an SSO are clear about which of their patents would be classified as SEPs under a given standard.¹¹ Of particular interest and importance are those rules which require SEP holders to license their SEPs to prospective and current implementers on “fair, reasonable, and non-discriminatory” terms.¹² “Fair and reasonable” refers to the price implementers must pay to license the SEP, commonly paid in the form of royalty

⁷ Examples of SSO-developed standards include internet standards (Ethernet, Wi-Fi, and TCP-IP), mobile standards (GSM, 3G, and CDMA), and many others (e.g., HDMI for audio/visual data and NFC for short-range wireless data transfers). See NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS., *supra* note 2, at 31–34.

⁸ *Id.* at 1 (“Incorporating patented or patent-pending technologies in standards is virtually inevitable and generally beneficial . . .”).

⁹ *Id.* (referencing SSO policies for “patents essential to the standards they create (so-called standard-essential patents or SEPs)”).

¹⁰ See *id.* at 38.

¹¹ See *id.* at 39–44 (discussing common features in a disclosure regime).

¹² See *id.* at 17–18 (generally, SSO's either encourage or require member firms to license under the FRAND framework).

payments.¹³ “Non-discriminatory” typically refers to an SEP holder’s obligation to license to all implementers and potential implementers of the standard, at prices and terms which are comparable to those offered to other implementers.¹⁴ FRAND commitments are a contractual limitation on what a SEP holder may do with its—otherwise more conduct-permissive—patent.¹⁵

Standard setting organizations, the standards they develop, and the rules and policies they agree to are the result of intense collaboration between horizontal competitors and parties normally engaged in vertical business dealings. Additionally, as noted above, standards often confer significant power to SEP holders. Despite this, the U.S. antitrust agencies recognize that standards are “widely acknowledged to be one of the engines driving the modern economy”¹⁶ and that the SSO process of developing standards “can produce substantial benefits.”¹⁷ In particular, the antitrust agencies recognize the value that compatibility standards add—for consumers as well as firms—in industries that rely on network effects.¹⁸ Still, the activity of SSOs, the

¹³ See Hovenkamp, *supra* note 6, at 31-35.

¹⁴ *Id.*

¹⁵ See Timothy J. Muris, *Bipartisan Patent Reform and Competition Policy*, AM. ENTERPRISE INST., May 2017, at 2 <http://www.aei.org/wp-content/uploads/2017/05/Bipartisan-Patent-Reform-and-Competition-Policy.pdf> [<https://perma.cc/L8HV-2PX5>].

¹⁶ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 33 (2007), <https://www.ftc.gov/sites/default/files/documents/reports/antitrust-enforcement-and-intellectual-property-rights-promoting-innovation-and-competition-report.s.department-justice-and-federal-trade-commission/p040101promotinginnovationandcompetitionrpt0704.pdf> [<https://perma.cc/WCK4-V2C9>] (the DOJ Antitrust Division and Federal Trade Commission are the primary enforcers of federal antitrust law).

¹⁷ *Id.* at 34.

¹⁸ See *id.* at 33 (“Standards make networks, such as the Internet and wireless telecommunications, more valuable by allowing products to interoperate.”); FED. TRADE COMM’N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 191 (2011), <https://www.ftc.gov/sites/default/files/documents/reports/evolving-ip->

standards they create, and the SEP holders they empower are not immune from antitrust liability.

B. SEP Holders and Patent Hold-up

Standard setting organizations, the antitrust authorities, and legal academics have historically focused on an abuse of SEP holder power known as “patent hold-up.”¹⁹ This makes hold-up an especially practical concept to examine in introducing the basics of SEP holder power, and a useful entry point for a discussion of refusals to deal by SEP holders. The theory of patent hold-up warns that SEP holders will be able to charge significantly higher licensing fees for their patents after they are included in the standard than they could have charged before. Any alternative technologies, even very similar alternatives, to the SEP-protected technology before the implementation of the standard are no longer viable alternatives after the standard has been developed and implemented. As a result, SEP holders find themselves in a position to “hold-up” prospective implementers of the standard. This vulnerability of standard implementers to abusive pricing emerges for two principle economic reasons.

First, standards implementers frequently engage in licensing negotiations with SEP holders *after* they have begun developing or selling a standard-dependent product or component. The sheer volume of patents involved in various standards makes it impractical for the implementer to negotiate each patent license *ex ante*.²⁰ As a result, when the implementer does begin to negotiate for the necessary

marketplace-aligning-patent-notice-and-remedies-competition-report-federal-trade/110307patentreport.pdf [https://perma.cc/US4P-GQ7] [hereinafter *The Evolving IP Marketplace*] (“In many IT industries, interoperability among products and their components is critical to developing and introducing innovative products that satisfy a range of consumer needs.”).

¹⁹ See Hovenkamp, *supra* note 6, at 84 (“[S]cholars agree that . . . [FRAND’s] general objectives are . . . to prevent SEP holders from engaging in ‘patent holdup’ . . .”).

²⁰ See NAT’L RESEARCH COUNCIL OF THE NAT’L ACADS., *supra* note 2, at 55.

licenses, they have already made investments into meeting the relevant standard. At that point, the cost of switching is high and thus implementers are essentially locked-in.²¹ Given this dynamic, it is rational for the implementer to pay an inflated licensing fee in order to avoid losing its previous investments.

The following is a stylized example demonstrating the basic logic of this situation. Suppose you could purchase a cone with a scoop of ice cream for \$5, or you could first purchase a scoop of ice cream for \$3 and then a cone separately—the price of the cone by itself is not clear *ex ante* but they are typically sold for around \$1. You decide to purchase the scoop of ice cream for \$3 and then go to buy the cone. However, the seller of the cone will now only offer it to you at \$3. While you would rather not pay \$3 for the cone—bringing your total to \$6—your only alternatives are to let the \$3 scoop go to waste and leave, or let the \$3 scoop go to waste and buy a new combined cone plus scoop of ice cream for \$5. The first alternative means you have simply lost \$3, and the second alternative means you have paid \$8 total for a \$5 cone with ice cream scoop (i.e. also lost \$3 by throwing your first scoop away). As a result, a rational purchaser would purchase the cone at its inflated \$3 price and end up paying \$6 for what you could have purchased for \$5 (and have effectively lost \$1). Because of this “lock-in” pricing dynamic between buyer and seller, you have been held-up for \$1.

Network effects are the second major source of implementer vulnerability to abusive pricing by the SEP holder. The presence of strong network effects, which are purposefully accentuated by many industry standards, dictates that much of the value of a standard comes from the fact that other firms and consumers are building and buying standards-compliant products.²² Although a patent

²¹ See Melamed & Shapiro, *supra* note 1, at 2113 (“[A]t the time of negotiation, implementers are locked into the standard and the technologies claimed by the SEPs . . .”).

²² See Marina Lao, *Networks, Access, and “Essential Facilities”: From Terminal Railroad to Microsoft*, 62 SMU L. REV. 557, 560 (2009) (“The defining characteristic of network industries is the increasing value of their

incorporated into a standard may only have been incrementally superior to other alternatives at the time the standard was created, the value of that patent to prospective implementers of the established standard following the standard's promulgation derives from the need to license it to access an extremely valuable network. SEP holders will then try to capture some of this network-derived value in their licensing fee, demanding a price that reflects both the incremental value of the patent itself and a portion of the value of the standard's total network effects.²³ Implementers who pay this inflated licensing fee have, because of network effects, been effectively "held-up."

The antitrust agencies have been seriously concerned by the negative effects of hold-up for decades.²⁴ In particular, the FTC has brought seven actions based on the hold-up theory.²⁵ Numerous private suits have been brought alleging that SEP holders violated their FRAND commitments and attempted to engage in a hold-up.²⁶ The "FR" in "FRAND"—standing for "fair" and "reasonable"—was largely put in place by SSOs to prevent SEP holders from profitably engaging in hold-up after their inclusion in the standard.

Recently, there has been some debate over whether or not hold-up is as problematic as advertised. Critics of antitrust

products to users as the number of users increases, a phenomenon called 'network effects' or demand-side economies of scale.").

²³ See Melamed & Shapiro, *supra* note 1, at 2114 ("If the standard is commercially successful, implementers are willing to pay a much larger royalty for use of the patented technology than they would have paid ex ante, when the SEP holder faced competition from other technologies.").

²⁴ See Statement of Terrell McSweeney, Comm'r, Federal Trade Commission, Holding the Line on Patent Holdup: Why Antitrust Enforcement Matters 2 (March 21, 2018) https://www.ftc.gov/system/files/documents/public_statements/1350033/mcsweeney_-_the_reality_of_patent_hold-up_3-21-18.pdf [<https://perma.cc/YE26-L4T9>] ("The agencies' 2007 Report devoted over 20 pages to discussing the patent 'holdup problem.'").

²⁵ *Id.* at 6 n.21.

²⁶ See, e.g., *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023 (W.D. Wash. 2012); *Realtek Semiconductor Corp. v. LSI Corp.*, 946 F. Supp. 2d 998 (N.D. Cal. 2013); *Apple, Inc. v. Motorola Mobility, Inc.*, 886 F. Supp. 2d 1061 (W.D. Wis. 2012).

concern with hold-up have attacked the theory on two grounds. First, critics say the problem is overstated and lacks empirical evidence.²⁷ Second, they say that the proper way to address hold-up problems is through contract law, rather than antitrust law.²⁸ Makan Delrahim, the Assistant Attorney General in charge of the Antitrust Division of the Department of Justice, has repeatedly questioned the severity of hold-up and whether or not there is an important role for antitrust to play in combating it. In a 2017 speech, he argued that “[i]f a patent holder is alleged to have violated a commitment to a standard setting organization, that action may have some impact on competition. But . . . that does not mean the heavy hand of antitrust necessarily is the appropriate remedy for the would-be licensee.”²⁹ Delrahim is not alone in his skepticism. Richard Epstein and Kayvan Noroozi, for example, have also

²⁷ See, e.g., Jonathan M. Barnett, *Has the Academy Led Patent Law Astray?*, 32 BERKELEY TECH. L.J. 1316, 1344–61 (2017) (disputing the prevalence of hold-up problems); Alexander Galetovic et al., *An Empirical Examination of Patent Holdup*, 11 J. COMPETITION L. & ECON. 549, 572 (2015) (arguing that the empirical evidence does not support hold-up problems).

²⁸ Assistant Attorney General Makan Delrahim spoke directly to this point, noting that:

It . . . would be a mistake to infer that a contractual FRAND commitment somehow establishes a duty under the antitrust laws to license on terms demanded by a licensee or that violations of an ambiguous FRAND term become an antitrust violation. Transforming such a contract obligation into an antitrust duty would undermine the purpose of the antitrust laws and the patent laws themselves

Makan Delrahim, Assistant Attorney Gen., Antitrust Div., U.S. Dep’t of Justice, *Antitrust Law and Patent Licensing in the New Wild West*, Remarks as Prepared for IAM’s Patent Licensing Conference 8–9 (Sept. 18, 2018), <https://www.justice.gov/opa/speech/file/1095011/download> [<https://perma.cc/QK75-FBA6>].

²⁹ Makan Delrahim, Assistant Attorney Gen., Antitrust Div., U.S. Dep’t of Justice, *Take It to the Limit: Respecting Innovation Incentives in the Application of Antitrust Law*, Remarks as Prepared for Delivery at USC Gould School of Law 8 (Nov. 10, 2017), <https://www.justice.gov/opa/speech/file/1010746/download> [<https://perma.cc/68ZX-DUB7>].

questioned the focus on hold-up in a recent article and suggested that, “courts and policymakers in the United States should be far more concerned with the risk of ‘patent holdout.’”³⁰

In spite of these rebuttals to the dangers of hold-up and to the relevance of antitrust, most academics and practitioners continue to take seriously the problem of hold-up and the place for antitrust law in ameliorating the problems it creates. Technology industry participants,³¹ legal academics, corporations,³² and current antitrust enforcers³³ have all reaffirmed their view of SEP hold-up as a relevant practice that is dangerous to competition and best addressed, at least

³⁰ Richard A. Epstein & Kayvan B. Noroozi, *Why Incentives for “Patent Holdout” Threaten to Dismantle FRAND, and Why It Matters*, 32 BERKELEY TECH. L. J. 1381, 1384 (2017). The “holdout” problem emphasized by Epstein and Noroozi refers to the situation where a standard implementer (or any other patent infringer) willfully negotiates in bad faith over patent licensing, infringes on the patent, and forces the patent holder to either accept the mediocre licensing terms or bear the risk and cost of litigation. Epstein and Noroozi are particularly concerned with the threat this type of behavior poses to the incentive to innovate, noting that:

[I]nnovators will have no interest in entering such a marketplace unless they first receive assurances that they can expect a reasonable risk-adjusted profit that exceeds their opportunity cost The FRAND contract is thus meant to solve a host of coordination problems between potential bilateral monopolists seeking technology-driven standardization. Their goal is to create innovation-driven standards that reward the efforts of each contributor.

Id. at 1392–93.

³¹ See Response from the App Ass’n et al., Standards, Licensing, and Innovation: A Response to DOJ AAG’s Comments on Antitrust Law and Standard-Setting 4, 8–21 (May 30, 2018), https://www.ftc.gov/system/files/documents/public_comments/2018/08/ftc-2018-0055-d-0031-155033.pdf [<https://perma.cc/AJ3V-92XG>].

³² See Letter from Aces Health et al., Industry Letter to Assistant Attorney Gen. Delrahim Regarding Standards, Innovation and Licensing 1 (Jan. 24, 2018), <http://www.ccianet.org/wp-content/uploads/2018/01/Industry-Letter-to-DOJ-AAG.pdf> [<https://perma.cc/BH6A-CJAS>].

³³ See McSweeney, *supra* note 24, at 1.

in some cases, by antitrust law. As A. Douglas Melamed and Carl Shapiro write in the *Yale Law Journal*, “[w]e believe that those who share our concerns [about hold-up] have by far the stronger argument. The risk of ex post opportunism [by SEP holders] is very real.”³⁴ While there is a livelier debate on the issue now than there has been in the recent past, there is no reason to think that antitrust is—or should be—retreating from its engagement with the problem of hold-up or abusive behavior by SEP holders in general.

C. SEP Holders and Refusals to Deal

The problem of patent hold-up and the inflated prices that SEP holders are able to charge implementers are well-known and extensively discussed among policymakers, academics, and practitioners. However, an SEP holder can engage in other anticompetitive practices subsequent to the inclusion of its patent in an industry standard. The practice of an SEP holder unilaterally refusing to deal—where an SEP holder selectively refuses to license its essential patent to a potential implementer—is especially noteworthy. Firms and individuals typically have broad latitude to deal or not deal with whomever they please,³⁵ an affordance even more clear in the realm of patents.³⁶ Yet the refusal to deal is not an absolute or unqualified right, even for a patent holder.³⁷ Given

³⁴ See Melamed & Shapiro, *supra* note 1, at 2116.

³⁵ See *Verizon Commc’ns., Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 408 (2004) (“Thus, as a general matter, the Sherman Act ‘does not restrict the long-recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal.’”) (alteration in original) (quoting *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919)).

³⁶ See *In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322, 1328 (Fed. Cir. 2000) (“It is the infringement defendant and not the patentee that bears the burden to show that one of these exceptional situations exists and, in the absence of such proof . . .”).

³⁷ See *id.* at 1326 (“The patentee’s right to exclude, however, is not without limit.”); see also *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 601 (1985) (“The absence of a duty to transact business with another firm is . . . the counterpart of the independent businessman’s cherished right to select his customers and his associates. The high value

the powerful position that an SEP holder is in, its right to refuse to deal with standard implementers should be constrained to prevent abuses. When a patent holder is transformed into a SEP holder by inclusion in an industry standard, a refusal to license its SEP should trigger aggressive antitrust skepticism that recognizes the powerful market position the patent holder suddenly occupies and the contractual (FRAND) commitments that were made in order to be granted that position.

There are three key theories of the harm brought about by an SEP holder's refusal to license. First, by selectively refusing to deal with potential implementers who compete directly with the SEP holder in a secondary component market, an SEP holder could use its SEP to gain or maintain control of the component market.³⁸ Those implementers wishing to purchase fully built components from the SEP holder would be permitted to do so, but those implementers who would use the SEP to build a competing component would not be.

Second, even if the SEP holder did not produce the component—or, in this case, the consumer product—in question, the SEP holder could create a monopolist or cadre of oligopolists in the secondary market through its selective refusals to deal. Then, the SEP holder could charge inflated licensing fees to those producers that remain in the secondary market.³⁹ In this scenario, the inflated fees paid by the remaining producers function as a bribe to the SEP holder; in exchange for inflated fees, the SEP holder confers market

that we have placed on the right . . . does not mean that [it] is unqualified.” (footnote omitted)).

³⁸ See Melamed & Shapiro, *supra* note 1, at 2126 (“[A] SEP holder’s refusal to license in violation of FRAND commitment under circumstances that enable or enhance the creation of market power in a related market not subject to a FRAND commitment would seem to violate Section 2.”).

³⁹ See *id.* (“[It] would seem to violate Section 2 . . . if the SEP holder’s refusal to deal enabled an unaffiliated implementer to gain market power for which it compensated the SEP holder by inflated royalties for a license to the SEPs or otherwise.” (footnote omitted)).

power to the producers.⁴⁰ This allows the SEP holder to impose inflated licensing fees that violate its FRAND commitments without any concern that the implementers being forced to pay those fees would challenge them.

Third, an SEP holder could use refusals to license as a negotiating tool. By selectively refusing to deal, the SEP holder could signal to other prospective licensees that it is willing to aggressively test the limits of its FRAND commitments in order to maximize licensing profits. For many implementers, it would be less costly to simply pay more to license the patent than it would be to aggressively negotiate for a fair rate and risk a refusal to license by the SEP holder, protracted litigation (potentially initiated by either party), or even a potential injunction that could block the implementer's ability to fulfill the standard in question.⁴¹ This course of conduct highlights how an SEP holder's refusal to license can accentuate the danger and damage of hold-up by setting the boundaries on licensing negotiation and vastly increasing the downside risk of the negotiation's failure for the implementer. Although FRAND commitments seek to constrain both parties as they negotiate over price, the SEP holder always has an asymmetrically powerful position. A breakdown in negotiations—and the resulting failure to reach a licensing arrangement—effectively excludes the implementer from using the relevant patent and, more importantly, from fulfilling the standard. If this breakdown occurs and the implementer presses on and fulfills the standard anyway, it risks a court finding that the SEP holder did in fact offer a FRAND-compliant rate and that the implementer has infringed on the SEP holder's patent. As a result, the implementer could face substantial damages liability or an

⁴⁰ See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, *supra* note 16, at 24 (“[I]f the intellectual property holder is able credibly to commit to selling a limited number of licenses, and thus to limiting competition in the downstream market, each potential licensee will be willing to pay more for a license.” (footnote omitted)).

⁴¹ See NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS., *supra* note 2, at 68 (noting the risk of injunctive relief for the SEP holder).

injunction blocking it from fulfilling the relevant standard.⁴² Meanwhile, the SEP holder faces only the risk that the court will find it has violated its contractual FRAND commitments. If the implementer wants to avoid this scenario, it either has to forego fulfilling the standard (and suffer the costs resulting from the lock-in and network effects described above) or avoid the entire problem by initially acquiescing to an inflated licensing fee that may actually be in violation of the SEP holder's FRAND commitments.

In addition to Delrahim's skepticism of patent hold-up, he has also asserted that, "[u]nder the antitrust laws . . . a unilateral refusal to license a valid patent should be per se legal."⁴³ This cannot be correct. Under the first two theories of harm, the SEP holder's refusal to license a patent in violation of its FRAND commitments clearly results in substantial anticompetitive effects that directly implicate both antitrust and contract law. Under the third theory of harm, the implementer requires an additional arrow in its quiver to vitalize FRAND commitments and balance the negotiating position of the implementer with that of the SEP holder. In the event of a refusal to deal, both parties have contract law claims, the SEP holder has potential patent law claims, and the implementer has potential antitrust law claims.⁴⁴

⁴² Melamed & Shapiro commented on this possibility in observing that:

[P]atent holders are generally able to recover more than the ex ante value of the patent when litigation occurs A court-ordered injunction involving such products would deprive the implementer of not only the value of the technology covered by the patent-in-suit, but also the value of the entire product.

See Melamed & Shapiro, *supra* note 1, at 2114–15 (footnote omitted).

⁴³ Delrahim, *supra* note 29, at 8.

⁴⁴ This is in contrast to the reality of today, where an implementer has only contract law claims. See, e.g., Jorge Padilla & Koren W. Wong-Ervin, *Portfolio Licensing to Makers of Downstream End-User Devices: Analyzing Refusals to License FRAND-Assured Standard-Essential Patents at the Component Level*, 62 ANTITRUST BULL. 494, 496–98 (2017) (“[U]nder U.S. law . . . [conduct resulting in a breach of a FRAND contract is] properly analyzed under contract, not antitrust law [T]he evasion of a FRAND

There are, however, impediments to aggressive application of the antitrust laws against refusals to license by an SEP holder. As a general matter, antitrust recognizes only a limited range of situations where a refusal to deal is illegal.⁴⁵ Additionally, the rights bestowed on the owner of a patent make it even more difficult to establish antitrust liability for what might be considered anticompetitive conduct in a different context. However, it is not the case that antitrust disappears whenever a patent is involved, and it is not the case that a SEP holder can be considered a typical patent holder. As the D.C. Circuit stressed, echoing the Federal Circuit, “Intellectual property rights do not confer a privilege to violate the antitrust laws.”⁴⁶ That is undoubtedly true, and it should be taken seriously.

II. THE CASES: REFUSALS TO DEAL

A. Refusals to Deal at the Supreme Court

The most recent major Supreme Court decision addressing whether there was antitrust liability for a refusal to deal came in 2004 with *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko* (“*Trinko*”).⁴⁷ The defendant, Verizon, failed to meet its obligation under the Telecommunications Act of 1996 when it neglected to provide operations support to competitors who had purchased network elements from Verizon—thus preventing those competitors from meeting customer requests and orders.⁴⁸

assurance . . . does not constitute an antitrust violation.” (footnotes omitted)).

⁴⁵ See *supra* note 35 and accompanying text.

⁴⁶ *United States v. Microsoft*, 253 F.3d 34, 63 (D.C. Cir. 2001) (quoting *In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322, 1325 (Fed. Cir. 2000)).

⁴⁷ 540 U.S. 398, 404–07 (2004) (“The complaint alleges that Verizon denied interconnection services to rivals in order to limit entry. If that allegation states an antitrust claim at all, it does so under § 2 of the Sherman Act, 15 U.S.C. § 2, which declares that a firm shall not ‘monopolize’ or ‘attempt to monopolize.’”).

⁴⁸ See *id.* at 398–402.

Verizon was penalized by state and federal communications agencies, but the class action suit filed by affected customers failed to return a successful verdict, casting doubt on the future of antitrust liability for refusals to deal in two ways.⁴⁹ First, the Court failed to adopt or employ the “essential facilities” doctrine that had previously seen some light at the Supreme Court and had been adopted by many lower courts. Second, the court declined to extend the spirit and logic of the holding in *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.* (“*Aspen Skiing*”)⁵⁰ to new, more marginal facts. But while *Trinko* restricted the scope of antitrust liability for refusals to deal and signaled an unwillingness by that Court to entertain such claims, it did not extinguish the category of claims altogether.

1. The Essential Facilities Doctrine

Broadly speaking, the essential facilities doctrine states that a firm may incur antitrust liability if it refuses to provide other firms access to a necessary facility when, (1) providing that access would have been possible and, (2) there is no way for the other firms to duplicate or substitute for that access.⁵¹ The typical requirements of the doctrine have been described in many lower court opinions, and are clearly expressed in the canonical Seventh Circuit case *MCI Communications Corp. v. American Telephone & Telegraph Co.* (“*MCI*”).⁵² In *MCI*, AT&T was a monopolist with control over local telephone networks.⁵³ MCI was a long-distance competitor of AT&T that needed to interconnect to AT&T’s local networks to complete MCI customers’ long-distance calls.⁵⁴ AT&T refused to provide those interconnections on various grounds, and the Seventh

⁴⁹ *See id.*

⁵⁰ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

⁵¹ *See* 2 JULIAN O. VON KALINOWSKI ET. AL., ANTITRUST LAWS AND TRADE REGULATION § 25.04(3)(b) (2d ed. 2018).

⁵² *MCI Commc’ns Corp. v. Am. Telephone & Telegraph Co.*, 708 F.2d 1081 (7th Cir. 1983).

⁵³ *See id.* at 1093.

⁵⁴ *See id.* at 1095–98.

Circuit found AT&T liable under the essential facilities doctrine as a result.⁵⁵ According to the Court, the necessary elements to establish liability under the doctrine were: “(1) control of the essential facility by a monopolist; (2) a competitor’s inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility.”⁵⁶ While lower courts have gradually reduced the application of the essential facilities doctrine over time—primarily by restricting when a facility is considered truly essential versus when it is merely difficult or expensive to go without—the doctrine still sees use today.⁵⁷

The essential facilities doctrine has not been invoked by name at the Supreme Court, but some variation of the concept has been in force since at least 1912 with the holding in *United States v. Terminal Railroad Ass’n of St. Louis*.⁵⁸ That case, brought under both Sherman Act Section 1 and Section 2 theories, involved a group of firms that controlled railroad

⁵⁵ See *id.* at 1133.

⁵⁶ *Id.* at 1132–33.

⁵⁷ See Brett Frischmann & Spencer Weber Waller, *Revitalizing Essential Facilities*, 75 ANTITRUST L.J. 1, 7 (2008) (stating that courts still return to the doctrine because “it represents a fundamental understanding of the misuse of monopoly power”).

⁵⁸ *United States v. Terminal R.R. Ass’n of St. Louis*, 224 U.S. 383, 404 (1912) (“While, therefore, the mere combining of several independent terminal systems into one may not operate as a restraint upon the interstate commerce which must use them, yet there may be conditions which will bring such a combination under the prohibition of the Sherman Act.”). The Court went on to conclude that:

[W]hen, as here, the inherent conditions are such as to prohibit any other reasonable means of entering the city, the combination of every such facility under the exclusive ownership and control of less than all of the companies under compulsion to use them violates both the first and second sections of the act, in that it constitutes a contract or combination in restraint of commerce among the States and an attempt to monopolize commerce among the States which must pass through the gateway at St. Louis.

Id. at 409.

access over the Mississippi River to St. Louis.⁵⁹ The Court found that these firms had violated the Sherman Act because of the actual control the defendants enjoyed, their intentions for acquiring such control, and the actions they took with that control.⁶⁰ The Court held that the defendant firms had to make railroad access available to all potential users on fair and equal terms.⁶¹

A similar principle—although dealing with intellectual property rather than physical infrastructure—motivated the Court to decide in favor of the government in *Associated Press v. United States* (“*Associated Press*”).⁶² The Supreme Court held that the combined effect of the Associated Press By-Laws violated the Sherman Act by preventing prospective competitors from gaining access to the Associated Press’s crucial collection of news.⁶³ The Associated Press (“AP”) was (and remains) a massive cooperative association of newspapers and journalists who collected and shared news with other members.⁶⁴ Participants in the association were barred from selling their news to any newspapers not affiliated with the association.⁶⁵ Meanwhile, any new applicants to the Associated Press who would be in competition with current AP members had an incredibly difficult time gaining admission.⁶⁶ This allowed existing AP members to use the power of the cooperative association to deny prospective competitors the chance to enter their respective news market and fruitfully compete.⁶⁷ Although

⁵⁹ *See id.* at 390–91.

⁶⁰ *See id.* at 409–10 (“This control and possession constitutes such a grip upon the commerce of St. Louis and commerce which must cross the river there, whether coming from the east or west as to be both an illegal restraint and an attempt to monopolize.”).

⁶¹ *See id.* at 411–13.

⁶² *Associated Press v. United States*, 326 U.S. 1 (1945).

⁶³ *See id.* at 15–16.

⁶⁴ *See id.* at 3–4.

⁶⁵ *Id.* at 9 (“All members are prohibited from selling or furnishing their spontaneous news to any agency or publisher except to AP.”).

⁶⁶ *See id.* at 10 (“Historically, as well as presently, applicants who would offer competition to old members have a hard road to travel.”).

⁶⁷ *See id.* at 10–11.

not impossible, the Court found that it would be difficult for a market entrant to overcome their “competitive disadvantage”⁶⁸ and compete without access to the substantial pool of Associated Press news.⁶⁹ The Court, therefore, held that restrictive conduct by members of an association that controlled crucial intellectual property resources was deadly to competition and anathema to the Sherman Act.

An inability to buy news from the largest news agency, or any one of its multitude of members, can have most serious effects on the publication of competitive newspapers . . . Trade restraints of this character, aimed at the destruction of competition, tend to block the initiative which brings newcomers into a field of business and to frustrate the free enterprise system which it was the purpose of the Sherman Act to protect.⁷⁰

Of note, the Court was unimpressed by the classic principle that “the owner of the property can choose his associates and . . . decide for himself whether and to whom to sell or not to sell.”⁷¹ As the Court saw it, the right of an individual property owner to dispose of one’s property as one willed was fundamentally altered by that owner’s membership in an organization that wielded such substantial market power that it could create rules to accentuate that power and suppress new competition.⁷² Although the factual structure of this case is not exactly equivalent to the environment of standards, SSOs, and SEP holders, the *Associated Press* decision is a useful model of how antitrust law can deal with organizations that develop coordinated intellectual property management

⁶⁸ *See id.* at 18.

⁶⁹ *See id.* (“It is true that the record shows that some competing papers have gotten along without AP news, but morning newspapers, which control 96% of the total circulation in the United States, have AP news service.”).

⁷⁰ *Id.* at 13–14.

⁷¹ *See id.* at 14–15.

⁷² *See id.* at 15 (“Victory of a member of such a combination over its business rivals achieved by such collective means . . . can only be attributed to that which really makes it possible—the collective power of an unlawful combination.”).

schemes that are then used by members to stifle competition and innovation.

The most clear-cut and recent case contributing to the development of an essential facilities-adjacent Supreme Court jurisprudence is *Otter Tail Power Co. v. United States* (“*Otter Tail*”).⁷³ *Otter Tail Power Co.* was an electric utility company that both sold electric power wholesale over transmission lines to distributors and itself acted as a retail distributor of electric power in over 400 municipalities.⁷⁴ Some of the municipalities that *Otter Tail* had previously served as a distributor attempted to establish their own municipal power systems and handle their own distribution after their contracts with *Otter Tail* expired.⁷⁵ However, *Otter Tail* refused to wholesale electric power to those municipal distribution systems and attempted to restrict their access to other sources of power.⁷⁶ *Otter Tail* tried to claim to the Court that it was immunized from antitrust liability because the Federal Power Commission had authority to regulate and compel the behavior of *Otter Tail*, therefore preempting the antitrust authorities.⁷⁷ However, the court found that “[t]here is nothing in the legislative history which reveals a purpose to insulate electric power companies from the operation of the antitrust laws.”⁷⁸ *Otter Tail* is an important case because it the notion that courts will be particularly skeptical of a defendant who uses its control over an essential facility (here, the wholesale provision of electrical power) to gain and benefit from market power in a downstream market (here, the retail distribution of electrical power).⁷⁹

⁷³ *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973).

⁷⁴ *Id.* at 368.

⁷⁵ *See id.*

⁷⁶ *See id.* at 368–69. In addition to refusing to supply electric power to the municipal distribution systems themselves, *Otter Tail* also refused to “wheel” electrical power from other suppliers to municipal distribution systems over *Otter Tail*’s transmission lines. *Id.*

⁷⁷ *Id.* at 373.

⁷⁸ *Id.* at 373–74.

⁷⁹ *See Melamed & Shapiro, supra* note 1, at 2126.

When the Supreme Court denied that Verizon had antitrust liability in *Trinko*, it did so without directly recognizing or refuting the essential facilities doctrine. Instead, Justice Scalia stated that the Court's conclusion in the case would have been unchanged if it had applied the doctrine.⁸⁰ While the lower courts had previously narrowed the doctrine over the years by limiting what qualified as an essential facility, Scalia took another approach to the retrenchment and instead emphasized that the existence of a regulatory scheme with the power to impose sharing duties on the owner of a critical or unique facility made it unnecessary to "impose a judicial doctrine of forced access."⁸¹ Thus, the Court deemed antitrust, and the essential facilities doctrine, superfluous when there was already a government agency with the ability to create access to the essential facility in question.

Justice Scalia distinguished the importance of the regulatory powers present in the background of *Trinko* from those in *Otter Tail*—where the defendant had also argued that a regulatory scheme insulated it from antitrust liability—by pointing out that "the services allegedly withheld [in *Trinko*] are not otherwise marketed or available to the public," but were instead created by Verizon to comply with the 1996 Telecommunications Act.⁸² This was unlike the situation in *Otter Tail*, where "the defendant was already in the business of providing a service to certain customers . . . and refused to provide the same service to certain other customers."⁸³ As the Court said in *Otter Tail*, the market relationships in that case were "governed in the first instance by business judgment and not regulatory coercion" and "the limited authority of the Federal Power Commission to order interconnections" did not

⁸⁰ See *Verizon Commc's, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 410 (2004) ("[The Court's] conclusion would be unchanged even if we considered to be established law the 'essential facilities' doctrine crafted by some lower courts . . .").

⁸¹ See *id.* at 411.

⁸² *Id.* at 410.

⁸³ *Id.*

displace the role of antitrust law.⁸⁴ Of course, one can question the actual importance of these distinctions and see the inflection point in the diverging decisions as a change in the court's approach to the impact of regulatory frameworks on the application of antitrust law.

Clearly, *Trinko* did not contribute to the vitality of the essential facilities doctrine at the Supreme Court level. However, neither did it create forceful or specific precedent that went *against* the doctrine. *Trinko* was more noteworthy as a clear signal of how skeptical *that* Court would be of Section 2 cases in general—and refusal to deal cases in particular—than it was as a direct repudiation of previous decisions. But the composition of the court changes over time, and it would not be difficult for a future Supreme Court to take up a refusal to deal case sharply distinguished⁸⁵ from the facts of *Trinko* and apply a version of the essential facilities doctrine.

2. The Logic of *Aspen Skiing*

The *Trinko* Court also declined the opportunity to follow in the footsteps of *Aspen Skiing* and extend antitrust liability for refusals to deal based on the holding in that case. The defendant in *Aspen*, Aspen Skiing Co., refused to continue offering a six-day pass that could be used at any of three ski mountains owned by the defendant and one owned by the plaintiff, Aspen Highlands.⁸⁶ Prior to the litigation, the parties had jointly offered the pass—or some substantially similar variation of the pass—for years and profitably divided the revenues it generated based on customer usage of their respective mountains.⁸⁷ While recognizing that a firm typically has no general duty to cooperate or deal with any

⁸⁴ *Otter Tail Power Co. v. United States*, 410 U.S. 366, 374 (1973).

⁸⁵ In particular, a case where the market in question was not already closely and comprehensively regulated by Congress and government agencies—a market dependent on private interests.

⁸⁶ *See Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 590–94 (1985).

⁸⁷ *See id.* at 587–93.

another firm, the *Aspen Skiing* Court noted that, “[t]he high value that we have placed on the right to refuse to deal with other firms does not mean that the right is unqualified.”⁸⁸ That right ran aground on its antitrust limits in *Aspen Skiing*. The Court held that there was a Section 2 violation because the defendant was a monopolist that had terminated a prior course of dealing⁸⁹ at the expense of short-run profits—without any “efficiency” (i.e. valid business) justification.⁹⁰

The *Trinko* Court distinguished Verizon’s behavior from that of Aspen Skiing Co. by pointing to the fact that the prior course of dealing in *Aspen Skiing* had been voluntary, while Verizon had been obligated to deal with competitors by the Telecommunications Act of 1996 and ongoing regulation from various government agencies. As a result, Verizon’s cessation of dealings or reluctance to engage in further dealings had no probative value regarding its anticompetitive intent.⁹¹ Verizon was simply backing away from a course of commercial conduct that it had never willingly entered into in the first instance. In addition to highlighting the differences between the two cases, Justice Scalia also emphasized that *Aspen Skiing* itself was a fringe Section 2 case rather than something

⁸⁸ *Id.* at 601.

⁸⁹ *See id.* at 603 (“[T]he monopolist did not merely reject a novel offer to participate in a cooperative venture that had been proposed by a competitor. Rather, the monopolist elected to make an important change in a pattern of distribution that had originated in a competitive market and had persisted for several years.”).

⁹⁰ *See id.* at 608 (“The jury may well have concluded that Ski Co. elected to forgo these short-run benefits because it was more interested in reducing competition in the Aspen market over the long run by harming its smaller competitor. That conclusion is strongly supported by Ski Co.’s failure to offer any efficiency justification”); *see also id.* at 610–11 (“[T]he evidence supports an inference that Ski Co. was not motivated by efficiency concerns and that it was willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival.”).

⁹¹ *See Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004) (“The complaint does not allege that Verizon voluntarily engaged in a course of dealing with its rivals, or would ever have done so absent statutory compulsion. Here, therefore, the defendant’s prior conduct sheds no light upon the motivation of its refusal to deal”).

at the core of antitrust doctrine that future plaintiffs could confidently rely on.⁹²

The skepticism towards Sherman Act Section 2 claims and the applicability of *Aspen Skiing* evinced by the Court in *Trinko* cast a pall on antitrust litigation, especially litigation based on refusals to deal. However, it did not reject the concepts and precedent which would be necessary to sustain future refusal to deal claims based primarily on some version of the essential facilities doctrine.⁹³ Meanwhile, facts analogous to those in *Aspen Skiing* remain at least a point in favor for plaintiffs alleging an anticompetitive refusal to deal. Therefore, antitrust liability for refusals to deal may still be established through the historically valid methods: by a showing of anticompetitive intent or through the essential facilities doctrine.⁹⁴ It remains a possibility that arguments—and potentially even arguments in the context of intellectual property—based on the logic of the essential facilities doctrine and the general circumstances of *Aspen Skiing* could be successfully employed in the lower courts and eventually at the Supreme Court.

⁹² *Id.* (“*Aspen Skiing* is at or near the outer boundary of § 2 liability.”).

⁹³ See Joseph P. Bauer, *Refusals to Deal with Competitors by Owners of Patents and Copyrights: Reflections on the Image Technical and Xerox Decisions*, 55 DEPAUL L. REV. 1211, 1245 (2006) (“Thus, *Trinko* does not undermine the Supreme Court’s earlier decisions that refusals to deal may form the predicate of a violation of § 2 of the Sherman Act.”).

⁹⁴ See Simon Genevaz, *Against Immunity for Unilateral Refusals to Deal in Intellectual Property: Why Antitrust Law Should Not Distinguish Between IP and Other Property Rights*, 19 BERKELEY TECH. L.J. 741, 752 (2004) (“The illegality of a refusal to deal may be proved by a plaintiff using either: (1) the so-called ‘intent’ test, which is the traditional analysis of monopolization under Section 2 of the Sherman Act; or (2) the essential facilities doctrine.” (footnote omitted)); see also Seungwoo Son, *Selective Refusals to Sell Patented Goods: The Relationship Between Patent Rights and Antitrust Law*, 2002 U. ILL. J.L. TECH. & POL’Y 109, 118 (2002) (“In condemning refusals to deal, courts have applied two theoretical tests – ‘intent’ and ‘essential facility.’ A combination of these two approaches is also available.” (footnotes omitted)).

B. Refusals to Deal and Intellectual Property in the Courts of Appeal

Although the following cases do not directly address the situation of a refusal to deal by a *standard essential* patent holder, a set of important circuit court decisions establish a spectrum of approaches to refusals to deal by patent holders in general.⁹⁵ As standard essential patent holders are a subset of this larger group, it is obvious that this set of cases structures the litigation landscape for SEP holders and their potential antitrust liability. Some circuit courts take a position that is contrary to presumptive Section 2 liability for refusals to deal by SEP holders, and even the circuits more skeptical of refusals to deal by patent holders fail to go as far as establishing presumptive liability. Of course, the inclusion of a patent in a standard fundamentally alters the power of the patent holder and makes aggressive antitrust treatment more sensible than it would be if applied to a typical patent holder. Despite this distinction, the position of a circuit which has held that there is near immunity for refusals to deal by a patent holder is irreconcilable with a presumption of liability approach for SEP holders who do the same.

One of the most widely discussed—and criticized—cases affording patent holders near-immunity from antitrust liability is the 2000 Federal Circuit case, *In re Independent Service Organizations Antitrust Litigation* (“*CSU v. Xerox*”).⁹⁶ Xerox manufactured and serviced its own high-volume copying equipment, and eventually took steps to restrict independent service operators’ (ISOs) access to replacement parts for Xerox copiers.⁹⁷ Xerox first refrained from selling replacement parts for one line of copiers to a select group of large ISOs, and then further restricted sales by shutting out

⁹⁵ The Supreme Court has not directly addressed SEP refusals to license, or even IP refusals to license. See Michael A. Carrier, *Refusals to License Intellectual Property After Trinko*, 55 DEPAUL L. REV. 1191, 1209 (2006).

⁹⁶ *In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322 (Fed. Cir. 2000).

⁹⁷ See *id.* at 1324.

more ISOs from more copier lines and forcing other replacement parts retailers to stop selling to ISOs.⁹⁸ In 1994, CSU opted out of a class action settlement that other ISOs agreed to and then sued Xerox for violating the Sherman Act.⁹⁹ CSU alleged that Xerox attempted to eliminate CSU and other ISOs from the high-volume copier and printer service market by selling its patented parts to ISOs for higher prices than it did to end-users, making it impossible for ISOs to compete with Xerox on price.¹⁰⁰

The court decided in favor of Xerox, holding that intellectual property holders could refuse to deal—and thereby exclude competitors from as many markets as they saw fit¹⁰¹—without the fear of antitrust liability, provided that they were operating “within the scope” of their copyright or patent.¹⁰² This remained true regardless of the “subjective motivation” for the holders’ refusal to sell or license their intellectual property.¹⁰³ The only exceptions to this antitrust immunity were if a patent holder engaged in illegal tying,

⁹⁸ *See id.*

⁹⁹ *See id.*

¹⁰⁰ *See id.*

¹⁰¹ *See id.* at 1327 (“In fact, we have expressly held that, absent exceptional circumstances, a patent may confer the right to exclude competition altogether in more than one antitrust market.”).

¹⁰² Responding to this possibility, the court remarked:

[Cited language from precedent] does nothing to limit the right of the patentee to refuse to sell or license in markets within the scope of the statutory patent grant We therefore will not inquire into his subjective motivation for exerting his statutory rights, even though his refusal to sell or license his patented invention may have an anticompetitive effect, so long as that anticompetitive effect is not illegally extended beyond the statutory patent grant.

See id. at 1327–28.

¹⁰³ *See id.* at 1327 (“We see no more reason to inquire into the subjective motivation of Xerox in refusing to sell or license its patented works than we found in evaluating the subjective motivation of a patentee in bringing suit to enforce that same right.”).

fraud in the acquisition of the patent, or sham litigation.¹⁰⁴ The resulting rule on refusals to deal provided unique privileges to intellectual property holders far greater than those enjoyed by other property holders.¹⁰⁵ With *CSU v. Xerox*, the Federal Circuit took a much more confident stand in favor of intellectual property holders over their competitors than other circuits had. Although the decision did not set out to derogate antitrust law to second-class status under patent and copyright law, the effect of the decision was to do just that.¹⁰⁶

The case that stands most obviously in opposition to *CSU v. Xerox* is the Ninth Circuit's 1997 decision in *Image Technical Services v. Eastman Kodak Co.* ("*Image Technical*").¹⁰⁷ These cases are excellent foils for many reasons, but the sheer similarity of their facts makes them particularly ripe for comparison. Kodak was also a manufacturer and repairer of its own high-volume photocopiers.¹⁰⁸ As competitive pressure for repair services from ISOs mounted against them, Kodak too began refusing

¹⁰⁴ *Id.* ("In the absence of any indication of illegal tying, fraud in the Patent and Trademark Office, or sham litigation, the patent holder may enforce the statutory right to exclude others . . .").

¹⁰⁵ See Genevaz, *supra* note 94, at 744 ("*Xerox* establishes a rule of *pe se* legality. The Federal Circuit's solution thus sets forth a novel test of legality of refusals to deal specific to intellectual property that is separate and distinct from the test applicable to other types of property." (footnote omitted)).

¹⁰⁶ See Bauer, *supra* note 93, at 1216–17 ("The Federal Circuit's conclusion in *Xerox* is not the product of an express elevation of intellectual property law over antitrust. As a practical matter, however, it reaches precisely that result . . ."); see also A. Douglas Melamed & Ali M. Stoeppelwerth, *The CSU Case: Facts, Formalism and the Intersection of Antitrust and Intellectual Property Law*, 10 GEO. MASON L. REV. 407, 414 (2002) ("Not surprisingly, *CSU* and similar cases pay scant attention to the legal basis for an antitrust immunity and focus, instead, on notions of policy. These cases appear to be based on a belief that antitrust immunity is necessary in order to further the objectives of the intellectual property laws . . .").

¹⁰⁷ *Image Tech. Servs., Inc., v. Eastman Kodak Co.*, 125 F.3d 1195 (9th Cir. 1997).

¹⁰⁸ See *id.* at 1200.

to sell photocopier replacement parts to ISOs and signed agreements with third party parts manufacturers to have them do the same.¹⁰⁹ Some ISOs alleged that this parts shortage drove them out of business.¹¹⁰ In 1987, a class of ISOs filed a lawsuit against Kodak; the class action suit went up to the Supreme Court¹¹¹ before eventually finding its way back to the Ninth Circuit for a review of the jury verdict and the District Court's ten year injunction.¹¹²

The Ninth Circuit held that a fact-finder should presume that the refusal to deal by an intellectual property holder was done for legitimate business reasons—including a desire to profit from its IP rights—and was therefore procompetitive and legal.¹¹³ But this presumption of legitimacy could be rebutted by evidence that the proffered business reasons were a pretext for anticompetitive conduct.¹¹⁴ Kodak argued that its subjective motivation for refusing to license was irrelevant¹¹⁵ (just as the Federal Circuit held in *CSU v. Xerox*), but the *Image Technical* court disagreed¹¹⁶ and found that the evidence available made it “more probable than not that the jury would have found Kodak’s presumptively valid business justification rebutted on the grounds of pretext.”¹¹⁷

¹⁰⁹ *See id.* at 1201.

¹¹⁰ *Id.* at 1200–01.

¹¹¹ The Court ruled against Kodak on its motion for summary judgement. *See Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451 (1992).

¹¹² 125 F.3d at 1200.

¹¹³ *See id.* at 1219 (“Kodak may assert that its desire to profit from its intellectual property rights justifies its conduct, and the jury should presume that this justification is legitimately procompetitive.”).

¹¹⁴ *Id.* (“The presumption may also be rebutted by evidence of pretext. Neither the aims of intellectual property law, nor the antitrust laws justify allowing a monopolist to rely upon a pretextual business justification to mask anticompetitive conduct.”).

¹¹⁵ *See id.*

¹¹⁶ *See id.* (“Evidence regarding the state of mind of Kodak employees may show pretext, when such evidence suggests that the proffered business justification played no part in the decision to act.”).

¹¹⁷ *Id.* at 1219–20 (footnote omitted).

Neither the Federal Circuit nor the Ninth Circuit approached their cases by relying on the essential facilities doctrine. Instead, the Federal Circuit held that intellectual property holders could refuse to deal without antitrust liability in all but a very few circumstances—basically, where the IP right was acquired or used fraudulently. The Ninth Circuit differed in a crucial respect, holding that the presumptive legality of a refusal to deal was rebuttable by evidence—including evidence of subjective motivation—that the rights holder had only pretextual procompetitive justifications that actually shielded an anticompetitive intent.

Both courts referenced an influential 1994 First Circuit decision, *Data General Corp. v. Grumman Systems Support Corp.* (“*Data General*”),¹¹⁸ in grounding their own decisions. The *Data General* court was the first to use the rebuttable presumption of legality framework for refusals to deal by IP holders.¹¹⁹ The First Circuit noted that a “unilateral refusal to deal is prima facie exclusionary if there is evidence of harm to the competitive process[.]”¹²⁰ but that this could be rebutted by a valid business justification. Valid business justifications were plentiful, so liability for unilateral refusals to deal largely remained a “theoretical possibility.”¹²¹ For instance, when it came to copyright, the simple *desire to exclude others from use of the protected work* was a presumptively valid business justification even in the face of evidence of harm to the competitive process or consumers.¹²² The disparate interpretations of *Data General* by the courts in *CSU v. Xerox* and in *Image Technical* stem from the relative ambiguity in the First Circuit’s opinion¹²³ and from a footnote that says the presumption of a valid business justification can be rebutted

¹¹⁸ *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147 (1st Cir. 1994).

¹¹⁹ *Carrier*, *supra* note 95, at 1194.

¹²⁰ *Data General*, 36 F.3d at 1183.

¹²¹ *See id.*

¹²² *See id.* at 1187.

¹²³ To be fair, it was a ground-breaking opinion addressing a problem that remains unsettled to this day.

in “rare cases.”¹²⁴ Those rare cases were not expounded upon, and so *CSU v. Xerox* filled in evidence of fraud or abuse and *Image Technical* filled in evidence of subjective, anticompetitive intent.

C. *FTC v. Qualcomm Inc.*: A First Embrace of Antitrust Liability for SEP Holders

The Ninth Circuit now has the opportunity to squarely address whether an SEP holder who refuses to license its SEPs to competitors has violated antitrust laws when it hears *FTC v. Qualcomm Inc.* (“*FTC v. Qualcomm*”) on appeal from a jury trial in the Northern District of California.¹²⁵ In *FTC v. Qualcomm*, the district court issued a more than 200 page opinion that addressed a litany of FRAND, antitrust, and contract claims brought against Qualcomm.¹²⁶ Among those issues was whether Qualcomm “ha[d] a duty under the Sherman Act to license its SEPs to rival modem chip suppliers.”¹²⁷ The district court found that Qualcomm did.¹²⁸

The *FTC v. Qualcomm* court first discussed the Supreme Court precedent on refusals to deal from both *Aspen Skiing* and *Trinko*, highlighting the factual differences in those cases that resulted in liability for the defendant in *Aspen Skiing* and none for the defendant in *Trinko*.¹²⁹ Next, the district court

¹²⁴ See *Data General*, 36 F.3d at 1187 n.64.

¹²⁵ *FTC v. Qualcomm Inc.*, No. 17-CV-00220-LHK, 2019 WL 2206013 (N.D. Cal. May 21, 2019), *reh’g granted*, *FTC v. Qualcomm Inc.*, 935 F.3d 752, 757 (9th Cir. 2019) (granting stay of the injunction and setting the hearing for January 2020).

¹²⁶ See *generally Qualcomm*, 2019 WL 2206013.

¹²⁷ *Id.* at *81. Qualcomm’s refusal to license its SEPs to rival modem chip makers—instead licensing its SEPs only to modem manufacturers who purchased Qualcomm chips for use in their products—is a version of the first theory of anticompetitive harm described in this Note, *supra* Section II.C.

¹²⁸ See *Qualcomm*, 2019 WL 2206013 at *81.

¹²⁹ See *id.* at *82 (“[T]he United States Supreme Court in *Trinko* held that the plaintiffs had failed to show that Verizon’s conduct fell within *Aspen Skiing*’s exception to the general no-duty-to-deal rule.” (citing *Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 408–09 (2004))).

turned to *MetroNet Services Corporation v. Qwest Corporation* (“*MetroNet*”)¹³⁰—a Ninth Circuit case that reconciled the different outcomes in *Aspen Skiing* and *Trinko* by identifying three factors that the Supreme Court considered relevant to finding antitrust liability for a refusal to deal.¹³¹ Those factors,—which were present for the defendant in *Aspen Skiing* but not *Trinko*—were: (1) the defendant’s “unilateral termination of a voluntary and profitable course of dealing[.]”¹³² (2) that the circumstances of defendant’s refusal to deal suggested that the defendant had anticompetitive intent,¹³³ and (3) that the defendant refused to sell a product to a competitor when that product was sold to other customers.¹³⁴

The district court applied the *MetroNet* test and found that Qualcomm’s refusal to license SEPs to competitors met the first factor for antitrust liability: “Qualcomm previously licensed [rival chip makers], as its FRAND commitments require,”¹³⁵ but then voluntarily ceased licensing despite the fact that the collection of patent royalties was still “profitable for Qualcomm.”¹³⁶ The court found that Qualcomm’s conduct also fulfilled the second factor: statements by Qualcomm officers and internal Qualcomm documents indicated that it refused to license to rival chip makers in order to exclude those rivals from the market and protect the “unreasonably high royalty rates” that Qualcomm earned from modem manufacturers.¹³⁷ Finally, the court found that the third factor was present as well: Qualcomm did not refuse to license modem chip SEPs to rivals because doing so would have

¹³⁰ See *MetroNet Servs. Corp. v. Qwest Corp.*, 383 F.3d 1124 (9th Cir. 2004).

¹³¹ See *Qualcomm*, 2019 WL 2206013 at *82–85 (citing *MetroNet*, 383 F.3d at 1131–32).

¹³² *Id.* at *82 (internal quotation marks omitted).

¹³³ See *id.* (citation omitted).

¹³⁴ See *id.* (citation omitted).

¹³⁵ *Id.* at *83.

¹³⁶ *Id.*

¹³⁷ See *id.* at *83–84.

required it to enter a new market.¹³⁸ To the contrary, it opted to cease licensing to rival chipmakers despite “an existing market for modem chip SEPs.”¹³⁹ With all three factors suggesting antitrust liability satisfied, the district court found that “Qualcomm has an antitrust duty to license its SEPs to rival modem chip suppliers.”¹⁴⁰ It remains to be seen if the Ninth Circuit agrees.

III. ANTITRUST LIABILITY: WHEN SEP HOLDERS REFUSE TO DEAL

A. Reasons for a Presumption of Antitrust Liability

The affirmative case for a presumption of antitrust liability when a SEP holder refuses to deal with a prospective standard implementer in violation of its FRAND commitments proceeds, from the above discussion, as follows: (1) the standard setting process is of vital importance for many industries and technologies, but confers incredible and abusable power to SEP holders,¹⁴¹ (2) despite *Trinko*, the Supreme Court has not ruled out either the essential facilities doctrine or an intent-based inquiry for a Sherman Act Section 2 refusal to deal case,¹⁴² and (3) the leading circuit court decisions that consider refusals to deal by patent holders *in general* do not offer policy or legal objections which support an argument against presuming antitrust liability when the patent holder owns a *standard essential* patent.¹⁴³ As a result, a refusal to deal by an SEP holder is dangerously anticompetitive conduct that is—on its face—exactly the sort of conduct which has been, and should be, condemned by the antitrust laws.

Standards are crucial to the modern economy. But the factors that make standards valuable, even necessary, in so

¹³⁸ See *id.* at *84–85.

¹³⁹ *Id.* at *85.

¹⁴⁰ *Id.*

¹⁴¹ See *supra* Part II.

¹⁴² See *supra* Section III.A.

¹⁴³ See *supra* Section III.B.

many industries are the same factors that lead to SEP holders occupying a dangerous position from the perspective of the antitrust laws: standards help coordinate disparate technologies and products from many firms into a consolidated, cohesive set. This enables interoperability, access, and the accumulation of massive network effects.¹⁴⁴ Given those valuable network effects, SEP holders who engage with the process of standards development and make FRAND commitments become ex post gatekeepers—regardless of their ex ante position in the market—to the implementation of standards and thereby control access to the entire market. If an SEP holder then violates its FRAND commitments by refusing to deal, the SEP holder has exhibited all of the markers of a Section 2 case that results in liability.

First, the SEP holder has acquired control over access to an essential facility (the relevant standard) and then denied competitors access to that facility (by refusing to license a patent necessary to fulfill the standard).¹⁴⁵ Although the same refusal to license its patent might have been acceptable if the SEP holder was not part of the SSO and the patent was not part of the standard, the market power and bargaining position of the patent holder is fundamentally altered when a patent becomes standard essential. This is reminiscent of *Associated Press*, except here the coordinating organization attempted to prevent the abuse of the SEP holder's position by securing FRAND commitments from them.¹⁴⁶ It is therefore

¹⁴⁴ See NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS., *supra* note 2, at 16.

¹⁴⁵ See Lao, *supra* note 22, at 561–62 (“Because of network effects, markets tend to ‘tip’ toward a ‘winner-take-all’ . . . scenario, where a single standard emerges to control the market . . . [A] monopolist controlling the link has the ability to foreclose competition” (footnote omitted)).

¹⁴⁶ In *Associated Press*, participants in the association used AP by-laws to prevent new applicants from entering the association in order to keep those new applicants from gaining access to the massive pool of AP news material and becoming a competitor. This transformed the cooperative purpose of the association into an anticompetitive sword. Likewise, SEP holders who refuse to license a SEP to a prospective implementer of a given standard turn that cooperatively built standard into an anticompetitive

the deviant behavior of the SEP holder, not the SSO itself, that is to blame for the anticompetitive harm.¹⁴⁷

Second, the salient facts of a refusal to deal by an SEP holder are closely analogous to those of *Aspen Skiing*. The defendant monopolist was found liable in *Aspen Skiing* for two primary reasons: it had terminated a prior course of voluntary dealing and it had sacrificed short-run profits in order to harm a competitor.¹⁴⁸ Although an SEP holder may not have previously dealt with any given prospective standard implementer, the SEP holder's participation in the SSO and its FRAND commitments constitute a prior course of dealing with *all* fellow participants and implementers of the standard. The subsequent violation of contractual FRAND commitments is a clear termination of that course of dealing. Additionally, licensing an SEP at a reasonable rate is, in isolation, obviously profitable for an SEP holder in the short-run (compared to an alternative world where the SEP holder earns no licensing revenue). The failure to profitably license at a reasonable rate raises, as it did in *Aspen Skiing*, a strong inference that the goal of the refusal to deal is

sword. The added wrinkle is that this anticompetitive behavior violates the rules of the organizing entity (the SSO), which requires SEP holders to make FRAND licensing commitments. See *Associated Press v. United States*, 326 U.S. 1, 26–27, 29 (1945).

¹⁴⁷ Recently, scholars have discussed the possibility of greater antitrust scrutiny of SSOs and their rules in order to combat the abuse of standards. Specifically, Melamed & Shapiro have noted that:

The antitrust principle is straightforward: industry-wide collaboration through SSOs to establish procompetitive standards is permitted only if it is no more restrictive of competition than reasonably necessary to enable creation of the standards . . . Under this principle, SSO procedures and FRAND rules should be evaluated based on whether they lead to reasonable SEP royalties

Melamed & Shapiro, *supra* note 1, at 2134.

¹⁴⁸ Note that this could either be taken as a set of facts generally relevant for Section 2 cases or just a subset of how to show anticompetitive intent in a refusal to deal. In either case, the similarity of the facts is the relevant consideration.

anticompetitive.¹⁴⁹ Even if the conduct in *Aspen Skiing* is at the outer edge of Section 2 liability, it still falls within the boundaries of Section 2 liability. A FRAND-violating refusal to deal by an SEP holder, resembling the important features of *Aspen Skiing* as closely as it does, must also fall within that boundary.¹⁵⁰

Finally, the burden of an inquiry into the intent of the SEP holder should be exactly reversed from what it was when the circuit courts considered refusals to license intellectual property more broadly. In those circuit court cases, the business justifications of the rights holders were treated as presumptively valid and defensible in light of the point of the intellectual property laws. Rather than appearing to be anticompetitive on its face, a refusal to deal seemed well within the ambit of reasonable, legislatively-permitted behavior by a firm holding valuable patents or copyrights. But the inclusion of a patent in a standard is transformative for a firm, and the firm becomes something much more than just another intellectual property rights holder. At that point, the subsequent violation of FRAND commitments is actually anticompetitive on its face: it loudly proclaims that the SEP holder has recognized its power in the market and decided to turn that power toward damaging the competitive process that it had previously contracted to protect and promote.¹⁵¹

¹⁴⁹ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. at 610–611 (“[T]he evidence supports an inference that Ski Co. was not motivated by efficiency concerns and that it was willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival.”).

¹⁵⁰ See, e.g., *FTC v. Qualcomm Inc.*, No. 17-CV-00220-LHK, 2019 WL 2206013 at *82–85 (N.D. Cal. May 21, 2019), *reh’g granted*, *FTC v. Qualcomm Inc.*, 935 F.3d 752, 757 (9th Cir. 2019).

¹⁵¹ The district court in *FTC v. Qualcomm* did not take a presumptive antitrust liability approach to Qualcomm’s conduct in that case. *Qualcomm*, 2019 WL 2206013, at *82–85. However, the three *MetroNet* factors that the court relied on to find Qualcomm liable for an antitrust violation would each be present in the typical case of an SEP holder’s refusal to license. See *supra* Section III.C. This further suggests that a presumption of liability would be warranted (and particularly useful in cases with less overtly anticompetitive statements and documents than were present in *FTC v. Qualcomm*).

The presumption of antitrust liability for a SEP holder suggests that it should be presumed to *not* have a valid business justification when refusing to deal. The SEP holder would have the burden of rebutting this presumption before the court and substantiating a legitimate, procompetitive business justification for the refusal to deal.

B. Contrary Considerations

The strongest counterargument against presumptive antitrust liability for SEP holders who violate their FRAND commitments with a refusal to deal—and against any version of the essential facilities doctrine—is based in the fear that this approach to competition policy would lead to reduced investment and innovation.¹⁵² The general form of the argument is that forcing firms to deal with competitors might increase competition in the short-run, but in the long-run it will reduce the incentive to innovate¹⁵³ because innovative firms will know that they will not be able to fully capitalize on a successful investment.¹⁵⁴ This concern is particularly strong in the realm of intellectual property. After all, these rights were specifically developed to give innovators and creators the ability to exclude others from copying and devaluing their work.¹⁵⁵ This increases the value of intellectual property to the

¹⁵² See Frischmann & Waller, *supra* note 57, at 31–32 (“[A]n overly expansive application of the essential facilities doctrine will reduce the incentives of the incumbent firm to invest in the facility in the first place, [and] reduce the incentives for the unintegrated competitor to seek to innovate or invent, encourage free riding on the incumbent’s facility . . .”).

¹⁵³ Or—in the case of the traditional essential facilities doctrine—reduce the incentive to make the large investments necessary to develop critical infrastructure that then becomes an essential facility.

¹⁵⁴ See Howard A. Shelanski, *Unilateral Refusals to Deal in Intellectual and Other Property*, 76 ANTITRUST L.J. 369, 371 (2009) (“It is commonly argued that if a firm must share with competitors the gains derived from costly innovation, it will innovate less than if it can decide for itself when, with whom, and on what terms it will trade.”).

¹⁵⁵ See FED. TRADE COMM’N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 1 (2011), <http://www.ftc.gov/os/2011/03/110307patentreport.pdf> [<https://perma.cc/A2HU-KWTN>].

owner and, in turn, encourages the creation of more intellectual property. Without the power to exclude competitors, a patent holder would have very little reason to take the risks and make the investments needed in order to develop a new idea or technology.

However, arguments of this form are often true at the extreme but not necessarily correct at the margin.¹⁵⁶ The complete lack of protection for intellectual property rights would be devastating for creators and inventors and would drastically reduce the incentives to innovate. But this does not mean that reducing the protections for intellectual property will always reduce the incentives for innovation to a greater degree than it will have positive, structural effects on the market.¹⁵⁷ To the contrary, this Note argues that antitrust liability will have positive, structural effects on the market which benefit competition and innovation more than the reduced incentives will harm competition and innovation. Still, this debate is fertile ground for further discussion, inquiry, and empirical research.

Another possible objection to antitrust liability—this time on statutory rather than policy grounds—is that the Patent

¹⁵⁶ See the discussion of Katz & Shelanski, who state that:

[T]here is a fear that [antitrust policy typically imposing duties to deal or share assets with rivals] might increase competition in the short run but discourage investment in the long run. *Nevertheless, the force of this argument is a limited one.* At some point, the benefits of an incremental increase in innovation incentives will be outweighed by the harms from the loss of static competition.

Michael L. Katz & Howard A. Shelanski, “Schumpeterian” Competition and Antitrust Policy in High-Tech Markets, 14 COMPETITION 47, 8 (2005) (emphasis added), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=925707 [<https://perma.cc/EN4N-U5PH>].

¹⁵⁷ See Shelanski, *supra* note 154, at 370–71 (“There is also consensus that the short-run and long-run effects of refusals to deal often, if not usually, move in opposite directions *Where the consensus breaks down* is over views of how successfully courts and the agencies can identify and balance the effects”(emphasis added) (footnote omitted)).

Act¹⁵⁸ created immunity for unilateral refusals to license patents.¹⁵⁹ The Federal Circuit adopted a version of this approach in *CSU v. Xerox*. The court based its decision, in part, on an inference that, “[t]he patentee’s right to exclude is further supported by [S]ection 271(d) of the Patent Act.”¹⁶⁰ But this view is not widely held by academics,¹⁶¹ other courts,¹⁶² or the DOJ or FTC.¹⁶³ A full examination of the Patent Act is outside the scope of this Note, but the idea that § 271(d) created broad antitrust immunity for intellectual property owners is a relatively fringe view.

Finally, it could be argued that the Supreme Court has recently expressed a reluctance to endorse either the essential facilities doctrine or the logic of *Aspen Skiing*. So, a new presumption of antitrust liability grounded in their fruitful combination is extremely unlikely in the near term. This argument is probably correct. But the question of what the law affords and what should be done with that affordance is separate from the question of what a particular court is likely

¹⁵⁸ See 35 U.S.C. § 271(d) (2012).

¹⁵⁹ The First Circuit mused about this possibility in its 1994 *Data General* decision. “Section 271(d) clearly prevents an infringer from using a patent misuse defense when the patent owner has unilaterally refused a license, and *may even herald the prohibition of all antitrust claims and counterclaims premised on a refusal to license a patent.*” *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1187 (1st Cir. 1994) (emphasis added).

¹⁶⁰ *In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322, 1326 (Fed. Cir. 2000).

¹⁶¹ See e.g., Melamed & Stoepelwerth, *supra* note 106, at 411 (“Neither the general language in that section nor any other provision in either the Patent Act or the Copyright Act compels the conclusion that Congress intended the exercise of those property rights to be exempt from the antitrust laws.”).

¹⁶² See *Image Tech. Servs. v. Eastman Kodak Co.*, 125 F.3d 1195, 1214 n.7 (9th Cir. 1997) (“The amended statutory language does not compel [antitrust immunity], and Calkins and other commentators agree that § 271(d)(4) merely codified existing law.”).

¹⁶³ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, *supra* note 16, at 6 (“Section 271(d)(4) of the Patent Act does not create antitrust immunity for unilateral refusals to license patents.”).

to do. Presumptive antitrust liability for SEP holders may be wise today, unlikely tomorrow, and a reality the day after.

IV. CONCLUSION

This Note does not argue that an SEP holder should be prevented from benefiting when its patents lend value to a standard; this Note argues that an SEP holder should be prevented from benefiting when it attempts to abuse its position as a gatekeeper to a vital, collaborative standard. A presumption of antitrust liability for an SEP holder who refuses to deal in violation of its FRAND commitments accomplishes this balance. In some dynamic markets, the returns to innovation and the cycle of creative destruction are enough to ensure competition and progress.¹⁶⁴ But in standards-driven markets that derive their value from the coordinated creation of networks, the antitrust laws are an important bulwark of continued competition and growth.¹⁶⁵ They should be used accordingly.

¹⁶⁴ See Katz & Shelanski, *supra* note 156, at 5 (“Creative destruction means that a firm’s acquisition of possession of market power may be fleeting and that firms must protect such power through ongoing innovation efforts. Under constant pressure from actual and potential innovators, the incumbent firm itself produces better products on better terms for consumers . . .”).

¹⁶⁵ See Lao, *supra* note 22, at 562 (“Combined with a closed network system, network effects can, therefore, effectively create or reinforce existing entry barriers, insulate the monopolist from competition, and lock consumers into the existing technology.”).