TAMING THE TROLLS: WHY ANTITRUST IS NOT A VIABLE SOLUTION FOR STOPPING PATENT ASSERTION ENTITIES

John “Jay” Jurata, Jr. and Amisha R. Patel

When enforcers engage in “mission creep” and attempt to expand the application of the antitrust laws . . . to new business models or conduct before they are sufficiently well understood, or to alleged inefficiencies not arising from the acquisition or creation of monopoly power, they risk unhinging antitrust law from sound economic foundations, introduce greater unpredictability into antitrust enforcement, and raise uncertainty and risks for the business community at large as well as for consumers.¹

INTRODUCTION

It is a rare day that goes by without a headline that highlights patent trolls in one way or another.² Members of Congress, the White House, government agencies, state attorneys general, academics, trade organizations, and industry leaders have all chimed in on the debate.³ Common complaints


about trolls include the uptick in infringement lawsuits and corresponding litigation costs, as well as the enforcement of low-quality patents and the resultant harm to innovation and consumers. On the other hand, proponents argue that trolls are able to compensate small, otherwise-ignored inventors and contribute to a necessary secondary market for patents.

Patent assertion entities (“PAEs”), commonly referred to as “patent trolls,” are firms that engage in the business of purchasing patent portfolios in order to monetize these portfolios through licensing arrangements and infringement suits against manufacturers. Concerns relating to patent trolls have proliferated such that three years ago, the Federal Trade Commission (“FTC”) issued a report that examined PAEs. The report identified several underlying challenges within the patent system and suggested ways in which the Patent and Trademark Office (“PTO”) and courts could improve patent transparency and narrow available remedies for PAEs.

In December 2012, the FTC and the Department of Justice (“DOJ”) held a joint public workshop to explore the effects of PAE activities on innovation and competition and to discuss potential implications for antitrust enforcement policy. The agencies accepted public comments for approximately five months after the workshop, and commentators included


_Wright, supra note 1, at 1-2; eBay Inc. v. MercExchange, LLC, 547 U.S. 388, 396 (2006) (Kennedy, J., concurring) (“An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees.”)._.


_Id. at 9-17, 21-30._

leaders in the technology industry, academics, economists, and industry and trade organizations. Recently, the FTC called further attention to PAEs by invoking its investigative authority under Section 6 of the Federal Trade Commission Act (“FTC Act”) to examine PAE assertion activity and its impact on innovation and competition.

Certain operating companies, including Google Inc., as well as consumer protection advocates, trade organizations, academics, and antitrust enforcement agencies, have suggested that antitrust law may offer a solution to concerns over PAE behavior. These arguments, taken together with the FTC’s continued interest in the effects of PAE assertion activity, beg the question: is antitrust enforcement a viable solution for patent assertion entities? Some have suggested yes. Proponents of antitrust enforcement solutions argue that PAE behavior raises antitrust policy concerns because it results in patent holdup, raised rivals’ costs, exclusion of companies from markets, and/or harms to innovation. But few specifics have been offered to back up these various theories.

This Article seeks to apply a disciplined antitrust analysis to these theories. This Article undertakes a traditional antitrust analysis under Sections 1 and 2 of the Sherman Act and Section 7 of the Clayton Act to assess

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13 See, e.g., #501: Agency Information Collection Activities; Proposed Collection; Notice and Request for Public Comment; Patent Assertion Entities (PAE Reports); FTC Project No. P131203, Fed. Trade Comm’n, http://www.ftc.gov/policy/public-comments/initiative-501 (last visited May 21, 2014) (providing links to seventy public comments received in response to the FTC’s proposed inquiry into PAE practices, some of which propose antitrust enforcement against PAEs).
PAE conduct. The analysis examines whether the alleged harms associated with PAE behavior are harms to competition or the competitive process—a necessary element for antitrust liability. Ultimately, this Article concludes that, outside limited scenarios, antitrust laws are not a solution to the problematic aspects of PAE behavior.

Part I of this Article discusses the emergence of PAEs and highlights policy concerns raised by their behavior. Part II analyzes the sources of the alleged harms inflicted by PAEs and engages in a systematic analysis to determine if they violate traditional antitrust principles. Finally, Part III concludes with a brief overview of recent developments and an examination of other avenues that may better address concerns over PAE behavior.

I. DEFINING PAES AND POLICY CONCERNS RAISED BY PAE ACTIVITIES

A. Patent Assertion Entities Versus Other Entities

The term “patent assertion entity” was recently coined in the FTC’s 2011 IP Report. The FTC defines PAEs as firms whose business model “focuses on purchasing and asserting patents against manufacturers already using the technology, rather than developing and transferring technology.”

PAEs are different than practicing entities in several respects. Practicing entities, also known as operating companies, often accumulate significant patent portfolios primarily as a byproduct of research and investment. Sometimes practicing entities enforce those patents to keep competitors from incorporating the technology that differentiates the practicing entity’s products. Other times practicing entities seek to recoup research and develop-

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16 This Article does not analyze PAE behavior as an “unfair method of competition” under Section 5 of the FTC Act (i.e., a standalone Section 5 violation). Although the FTC has occasionally reached consent decrees with companies under a standalone Section 5 theory (see, e.g., Motorola Mobility LLC, FTC File No. 121-0120, at 1-2 (July 24, 2013) (decision and order)), its authority to do so has been highly criticized and enforcement actions based solely on Section 5 have been reversed on appeal. See, e.g., E.I. du Pont de Nemours & Co. v. FTC, 729 F.2d 128, 139 (2d Cir. 1984) (“[T]he Commission owes a duty to define the conditions under which conduct . . . would be unfair so that businesses will have an inkling as to what they can lawfully do rather than be left in a state of complete unpredictability.”). For this reason, we believe the proper analysis for PAE behavior is under the primary antitrust statutes.

17 This Article only analyzes antitrust arguments specific to PAEs, as opposed to antitrust arguments that could be asserted against any entity (e.g., tying or excessive grant backs).

18 FTC IP REPORT, supra note 7, at 50 n.2.

19 Id. at 8.

20 Practicing entities also sometimes buy patents from the secondary marketplace. Anne Kelley, Practicing in the Patent Marketplace, 78 U. CHI. L. REV. 115, 120 (2011) (“Operating companies with product lines, large and small, make up approximately 25 percent of all patent sales, though these sales represent more than 60 to 65 percent of the value of all transactions.”).
opment (“R&D”) costs by enforcing their patents against non-competitors that use the patented technology without authorization. Regardless of motivation, however, the practicing entity always is subject to potential patent infringement countersuit on its own products.

PAEs also are different from nonpracticing entities (“NPEs”). The FTC defines NPEs as “patent owners that primarily seek to develop and transfer technology.” While both PAEs and NPEs do not practice the patents they either internally develop or purchase, and are consequently immune from patent countersuit, NPEs are similar to practicing entities in that their patents primarily result from internal R&D, as opposed to purchasing patents from others. NPEs, for example, include universities, R&D laboratories, and design firms. NPEs also include operating companies that apportion part of their business to generating revenue by asserting of patents that they themselves do not practice.

Thus, the term PAE applies to a narrow set of actors who are thought to significantly impact innovation and competition in the marketplace. They include, for example:

1. “Lottery-ticket” trolls. Companies that enforce patents that purport to cover one or more important areas of technology in hopes of obtaining large jury awards against one or more major industry players;
2. “Bottom-feeder” trolls. Companies that aggressively enforce low-value patents against smaller technology firms to induce settlement over the cost of litigation; and
3. Patent aggregators. Companies such as Intellectual Ventures (“IV”) and Acacia Research Group (“Acacia”), which acquire vast portfolios of patents that they seek to monetize via licensing arrangements.

21 FTC IP REPORT, supra note 7, at 50 n.2.
22 Wright, supra note 1, at 3. Such NPEs primarily engage in patent transfer or licensing to obtain return on investment for their R&D efforts on internally developed patents. Id. at 8.
23 Id. at 3.
24 Peter N. Detkin, Rebuttal: A Tale of Two HPs, LAW 360 (Mar. 15, 2012, 3:25 PM), http://www.law360.com/articles/319207/rebuttal-a-tale-of-two-hps (subscription required). In contrast, operating companies that create products using the technology covered by their patents often seek to exclude their competitors from using that differentiating technology.
There are, of course, variations within these categories and entities that fall somewhere in between. The narrower category of PAEs—as opposed to the broader category of NPEs—is the focus of this Article.

B. Policy Concerns over PAE Behavior

Concerns over PAE behavior are widespread and well documented. Recent spikes in PAE lawsuits and the accompanying rise in the cost of litigation draw particular attention. For example, the American Intellectual Property Law Association recently estimated that the cost of defending against a low-stakes PAE infringement suit (less than $1 million) approaches the amount in controversy at trial. The bulk of such costs (over $500,000) are incurred during the discovery stage of litigation, which occurs well before claim construction narrows the scope of infringement allegations. Because patent holders can threaten overwhelming discovery costs to extract settlements from alleged infringers, critics argue that PAE litigation is an area ripe for abuse.

Indeed, critics argue that PAE demand letter campaigns threatening litigation unless the recipient pays exorbitant licensing fees are often made without regard to the validity of the patents at issue or the merits of such allegations. These “bottom feeder” negotiation tactics inappropriately target unsuspecting small businesses that are likely to cave when faced with.

28 For example, certain PAEs are independently run entities that may be initially funded by operating companies pooling together their purchasing power. The most well known of this kind of patent pool arrangement is the Rockstar Consortium. See infra Part II.B.2.
30 But see U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-13-465, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE PATENT QUALITY 45 (2013) (recognizing that focusing on patent infringement plaintiffs, including NPEs, to account for the increase in litigation may be misplaced).
32 U.S. GOV’T ACCOUNTABILITY OFFICE, supra note 30, at 3 n.8; Professors’ Patent Reform Letter, supra note 29, at 1.
33 U.S. GOV’T ACCOUNTABILITY OFFICE, supra note 30, at 3 n.8; Professors’ Patent Reform Letter, supra note 29, at 1.
34 Demand letters are commonly at the center of complaints about PAEs. Generally, patent holders make infringement claims and corresponding offers to license in these letters. Critics argue that the letters arrive unexpectedly “and often allege that mere use of everyday technology violates the patent holders’ rights.” Brian Mahoney, Congress Asked to Curb Patent Trolls’ Use of Demand Letters, LAW 360 (Nov. 6, 2013, 5:19 PM), http://www.law360.com/articles/486891/congress-asked-to-curb-patent-trolls-use-of-demand-letters (subscription required).
such daunting demands.\textsuperscript{35} Moreover, PAE reliance on low-quality patents is said to harm innovation, in direct contravention of the type of invention the U.S. patent system is designed to protect.\textsuperscript{36} In addition, notice and ownership transparency issues that plague the current patent system allow PAEs to steadily aggregate large patent portfolios through complex business arrangements. These portfolios have the potential to increase market power and impact competitive pricing.\textsuperscript{37}

Critics also argue that “hybrid PAEs” (i.e., PAEs in contractual relationships with operating companies) raise “patent privateering” concerns when operating companies allegedly use PAEs as proxies to assert their patents against competitors.\textsuperscript{38} Similarly, some have argued that operating companies might try to evade Standard-Setting Organization (“SSO”) commitments to license patents essential to a formal standard on fair, reasonable, and nondiscriminatory (“FRAND”) terms by disaggregating essential patents amongst one or more PAEs.\textsuperscript{39}

II. TRADITIONAL ANTITRUST LAWS ARE NOT A SOLUTION TO THE PAE PROBLEM

Numerous creative antitrust arguments have been raised to address PAE activity. At their core, however, these arguments concern three different types of allegedly harmful activity: (1) the acquisition of patents by PAEs; (2) posttransfer coordination between PAEs and operating companies; and (3) posttransfer assertion of patents by PAEs against alleged infringers. Each type of alleged harm raises different legal standards to evaluate such behaviors, which are briefly described below:

(1) Acquisition. Some argue that the mere acquisition of patents raises the alleged harm because it results in increased market power and changed enforcement incentives. Similar to other transfers of property, such theories must be evaluated under traditional merger analysis pursuant to Section 7 of the Clayton Act.\textsuperscript{40} For this inquiry, the central focus should be on whether

\textsuperscript{35} Id.

\textsuperscript{36} See 35 U.S.C. §§ 101-103 (2012); cf. U.S. CONST., art. 1, § 8, cl. 8 (“Congress shall have the power . . . to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”).

\textsuperscript{37} Professors’ Patent Reform Letter, supra note 29, at 3.

\textsuperscript{38} Popofsky & Laufert, supra note 15, at 6.

\textsuperscript{39} Morton & Shapiro, supra note 15, at 475, 491-92.

the transfer of patents at issue has the potential to substantially lessen competition.41

(2) Coordination. Some argue that posttransfer coordination between PAEs and operating companies raises the alleged harm, because it results in “hybrid PAEs” and “patent privateering.” Similar to other alleged agreements that unreasonably restrain trade, such theories must be examined under Section 1 of the Sherman Act.42 This inquiry requires an initial assessment of whether the alleged agreements are horizontal or vertical in nature.43 Further, since relationships between PAEs and operating companies are a relatively new development for which courts and agencies lack experience in addressing (making per se treatment inappropriate), coordinated activity needs to be evaluated under a traditional rule of reason analysis.44

(3) Assertion. Some argue that the alleged harm arises from posttransfer assertion of patents by PAEs. Assertion concerns include PAEs raising rivals’ costs, making “outsized litigation threats,” and facilitating evasion of industry commitments. Such theories must be evaluated similar to other unilateral conduct scenarios under Section 2 of the Sherman Act.45 Again, liability requires showing that the assertion fails a traditional rule of reason analysis.46 Further, because it is well recognized that the assertion of patents is protected petitioning activity, the First Amendment immunizes enforcement of patent rights from antitrust liability unless it falls within the “sham litigation” exception to the Noerr-Pennington doctrine.47

Though proponents argue that the problems caused by PAEs can be solved by antitrust enforcement, a disciplined look at traditional antitrust laws makes it clear that antitrust enforcement is not a viable solution to PAE behaviors. Indeed, many of the harms alleged regarding PAE behavior

43 DOJ/FTC ANTITRUST IP LICENSING GUIDELINES, supra note 40, § 3.3.
44 Texaco Inc. v. Dagher, 547 U.S. 1, 5 (2006) (expressing the Supreme Court’s reluctance to adopt per se rules for conduct “where the economic impact of certain practices is not immediately obvious” (quoting State v. Oil Co. v. Khan, 522 U.S. 3, 10 (1997) (internal quotation marks omitted))).
47 Prof’l Real Estate Investors v. Columbia Pictures Indus., Inc., 508 U.S. 49, 51 (1993) (quoting E. R.R. Presidents Conference v. Noerr Motor Freight, Inc., 365 U.S. 127, 144 (1961)). Courts have extended Noerr-Pennington immunity to prelitigation activity, including sending demand letters that detail the bases of allegations of infringement. Va. Panel Corp. v. MAC Panel Co., 133 F.3d 860, 869 (Fed. Cir. 1997) (“[A] patentee must be allowed to make its rights known to a potential infringer so that the latter can determine whether to cease its allegedly infringing activities, negotiate a license if one is offered, or decide to run the risk of liability and/or the imposition of an injunction.”).
are not harms to the competitive process, which is a prerequisite for finding antitrust liability. The analysis below demonstrates that, outside limited scenarios, these three theories fail to satisfy the legal elements necessary to find an antitrust violation under Sections 1 or 2 of the Sherman Act.

A. Traditional Merger Analysis of Patent Acquisition Under Section 7

Patent acquisition by PAEs might raise antitrust concerns depending upon the nature of the asset transfer that occurs between a PAE and the originating patent owner (e.g., an inventor or an operating company). The alleged harm arises from the acquisition or accumulation of patents by PAEs. Consequently, such acquisitions of property should be analyzed under the traditional merger approach of Section 7 of the Clayton Act. The two common theories advanced in support of imposing Section 7 liability are (1) the acquisition and/or aggregation of large patent portfolios by PAEs harms competition; and (2) patent acquisition by PAEs changes enforcement incentives and increases the likelihood of patent assertion. The overarching concern for both theories is that patent acquisition by PAEs disrupts “patent peace” between operating companies because PAEs are generally immune to patent countersuit.

Section 7 of the Clayton Act prohibits acquisitions of productive assets of another firm where the effect “may be substantially to lessen competition, or to tend to create a monopoly” in a relevant market. It is well accepted that patents are “assets” subject to Section 7 liability. A transaction is likely to lessen substantial competition when it enables the merging entity to profitably increase prices postmerger (i.e., unilateral effects) or in-
creases the likelihood of price coordination (i.e., coordinated effects) in a relevant antitrust market.\textsuperscript{53}

Under this framework, the relevant inquiry becomes does the patent acquisition at issue have the potential to “substantially lessen” competition? First, the Section 7 inquiry requires defining a relevant antitrust market.\textsuperscript{54} A relevant antitrust market is not the same as the scope of the patent grant.\textsuperscript{55} Rather, the relevant market is defined by the patent at issue as well as its close technology substitutes.\textsuperscript{56} The second part of the Section 7 inquiry requires an examination of potential posttransfer effects in that market.\textsuperscript{57} Harm to competition under Section 7 is measured by the acquisition’s effect on market power in the relevant market.\textsuperscript{58} “Market power” is the ability of a market participant to profitability charge prices above one’s competitors for a sustained period of time.\textsuperscript{59}

1. Patent Acquisition by PAEs Usually Does Not Affect Market Power

The first argument in support of Section 7 antitrust liability for PAEs is that acquisition of a large patent portfolio by PAEs will harm competition.\textsuperscript{60} Assessment of the alleged harm requires an examination of whether a patent confers market power.

Prior to the influence of economics in modern antitrust law, it was commonly believed that a patent created a presumption of market power.\textsuperscript{61} However, in \textit{Illinois Tool Works Inc. v. Independent Ink, Inc.},\textsuperscript{62} the Supreme Court reached the same conclusion as “Congress, the antitrust enforcement agencies, and most economists . . . that a patent does not necessarily confer

\textsuperscript{53} Id. § 7.

\textsuperscript{54} Id. § 4.

\textsuperscript{55} DOJ/FTC ANTITRUST IP LICENSING GUIDELINES, supra note 40, § 3.2.2.

\textsuperscript{56} Id. An effective substitute in the patent context is a patent that is technologically close enough to the patent at issue that it has the potential to become a substitute if the price of the acquired patent rises. Id.

\textsuperscript{57} Illene Knable Gotts & Scott Sher, \textit{The Particular Antitrust Concerns with Patent Acquisitions}, COMPETITION L. INT’L, Aug. 2012, at 30, 34. Unilateral effects are most apparent in a merger to monopoly scenario where the transfer of patents represents a significant transfer of productive potential. DOJ/FTC HORIZONTAL MERGER GUIDELINES, supra note 53, § 6. Coordinated effects occur when a merger diminishes competition by enabling or encouraging postmerger coordinated action among firms. Id. § 7.

\textsuperscript{58} Gotts & Sher, supra note 57, at 34.


\textsuperscript{60} Popofsky & Laufert, supra note 15, at 11-12.

\textsuperscript{61} Int’l Salt Co. v. United States, 332 U.S. 392, 395-96 (1947).

market power upon the patentee."63 While a patent confers the right to seek to exclude others from practicing the claimed invention,64 its market power “is limited when alternative technologies exist.”65 The existence of substitute technologies limits the economic power of a patent by lowering the price the market will bear for the patented technology.66

Even if a patent enjoys market power, its transfer does not, in itself, alter the competitive landscape. In general, a patent transfer does not increase market power because it is the “lawful shift of market power from the hands of one company to another.”67 Indeed, there is no rule against the transfer or assignment of patent rights.68 The Supreme Court has recognized that the “mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system.”69

Applying the Section 7 legal framework to the PAE patent acquisition context, the transfer of a patent to a PAE cannot violate Section 7 of the Clayton Act absent the patent owner engaging in some conduct “other than the creative process of invention or conduct authorized by the Patent Act.”70 Here, acquisition of a patent by a PAE is the lawful transfer of an asset—a transaction fully authorized by the Patent Act.71 Mere patent acquisitions by PAEs, therefore, generally do not violate Section 7 of the Clayton Act.

An exception to this general rule is where a PAE aggregates patents for substitute technologies to create market power. This behavior could occur when a PAE acquires multiple patents for performing the same tech-

63 Id. at 45-46; see also DOJ/FTC ANTITRUST IP LICENSING GUIDELINES, supra note 40, § 2.2. Courts nonetheless often refer to the “monopoly power” of patents that arises from a patent holder’s right to exclude others from practicing or monetizing the technology protected by the patent grant. See, e.g., Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 307 (3d Cir. 2007); SCM Corp. v. Xerox Corp., 645 F.2d 1195, 1204 (2d Cir. 1981).

64 DOJ/FTC ANTITRUST IP LICENSING GUIDELINES, supra note 40, § 1.

65 Broadcom Corp., 501 F.3d at 314.

66 DOJ/FTC ANTITRUST IP LICENSING GUIDELINES, supra note 40, § 3.2.2.


68 The patent system allows inventors to assign their ownership interest in patents when filing an application with the PTO. 35 U.S.C. § 261 (2012). This practice does not run afoul of antitrust concerns and has proliferated for decades.


When substitute technologies are available, PAE patent acquisition generally does not affect pricing constraints. However, the situation changes when patent aggregation creates a lack of technology alternatives, which allows a PAE to influence pricing. This scenario requires careful analysis of the acquired technologies and other available patented and unpatented substitutes, as well as an assessment of whether pricing is in fact affected by the aggregation of patents. While it is theoretically possible that a PAE could substantially lessen competition by acquiring multiple substitute technologies, the practical reality is that such scenarios likely are limited.

2. “Changed Enforcement Incentives” Is Not a Proper Antitrust Theory

The second argument in support of Section 7 antitrust liability is that patent acquisition by PAEs changes patent enforcement incentives, thereby negatively impacting competition. Under this commonly advanced theory, the PAE business model evades patent enforcement constraints faced by

72 Morton & Shapiro, supra note 15, at 464, 487. An alternative antitrust theory that is often raised in the context of the aggregation of substitute technologies is that PAEs should be held liable under Section 2 of the Sherman Act for illegally monopolizing a technology. Gotts & Sher, supra note 88, at 31-32. Although a plausible theory, for the purposes of this Article, patent aggregation is more properly addressed under Section 7 and the patent transfer context. Such treatment is appropriate because the alleged source of harm is the acquisition of patents by PAEs.

73 Morton & Shapiro, supra note 15, at 487.

74 Intellectual Ventures I LLC v. Capital One Fin. Corp., No. 1:13-cv-00740 (AJT/TRJ), 2013 WL 6682981, at *9 (E.D. Va. Dec. 18, 2013). Transfer of FRAND-encumbered standard-essential patents (“SEPs”) to one or more PAEs also can affect competition in certain situations. See infra Part II.C.3. SEPs are declared by patent owners in the information and communications technology (“ICT”) sector to ensure interoperability and compatibility among products in a certain market. Once adopted, there are no alternative technologies to the standard. Therefore, SEPs that cover the standard have market power and their assertion in the relevant market would need to be examined to determine whether there are any associated anticompetitive effects.

75 Some have suggested that by acquiring multiple, complementary technologies covering a specific product, PAEs obtain a “patent thicket” that can be used to attack a downstream product. While that might be true, the existence of alternative technologies defeats any claim that the PAE is gaining market power in a properly defined antitrust market. Intellectual Ventures I LLC, 2013 WL 6682981, at *5. And, to the extent that the PAE acquires complementary technologies, the cumulative licensing of those patents can be efficiency enhancing. U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, supra note 46, at 12.

76 In 2013, the DOJ expressed concern that a patent pool’s aggregation of substitutes could raise competitive concerns. Letter from William J. Baer, Assistant Att’y Gen., U.S. Dep’t of Justice, to Gar- rard R. Beeney, Sullivan & Cromwell LLP (Mar. 26, 2013) (concluding that the DOJ could not “engage in the fact-intensive analysis necessary to assess the likely competitive effects of IPXI’s pooled [patents], which may include substitute[s]”).

77 Carrier, supra note 14, at 7-10; Morton & Shapiro, supra note 15, at 472-73.
operating companies, such as the threat of countersuit or reputational harms associated with enforcement. Shielded from reputational harms and the risks of counterassertion, PAEs have a greater financial incentive than the original patent owner to enforce acquired patents.

The primary concerns associated with this “changed incentives” argument are best illustrated by former FTC Commissioner J. Thomas Rosch’s concurrence in the FTC’s 2006 complaint against Ovation Pharmaceuticals, Inc. (“Ovation”). In *FTC v. Ovation Pharmaceuticals, Inc.*, the FTC challenged Ovation’s acquisition of NeoProfen, a Merck & Co., Inc. (“Merck”) drug that treated a deadly congenital heart defect in premature newborns known as patent ductus arteriosus (“PDA”). Commissioner Rosch voted for the complaint, but also stated that he would have challenged Ovation’s earlier 2005 acquisition of Indocin, another Merck drug used to treat PDA (and NeoProfen’s only competitor). Although the FTC’s complaint against Ovation did not address this previous transaction, Commissioner Rosch believed that the earlier transfer violated Section 7.

At the time of Ovation’s acquisition of Indocin, it was the only FDA-approved drug to treat PDA. Merck, however, did not sell Indocin at a monopoly price due to risk of a customer backlash against Merck’s many other drugs (which faced competition from substitutes). As a result, Commissioner Rosch argued, the transfer to Ovation (which did not have a large portfolio of drugs) removed Merck’s reputational constraints associated with monopoly pricing of Indocin and changed the incentives associated with its sale. Ovation was then able to sell Indocin at a monopoly price—

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78 *Carrier, supra* note 14, at 6-10.
79 *Weight, supra* note 1, at 6.
81 650 F.3d 1236 (8th Cir. 2011).
83 Rosch Concurrence, *supra* note 80, at 1.
84 *Id.*
85 *Id.*
86 *Id.* (“If [Merck] profitably could have sold Indocin at a monopoly price it arguably would have done so. However, there is evidence that Merck had a large product portfolio that included a number of pharmaceutical products that were more profitable than Indocin.”). In order to sell Indocin at its monopoly price, Merck risked losing sales for its other products that had competitive substitutes in the marketplace. Therefore, Merck could not raise prices on Indocin without potentially harming the sales of its other drugs. *Id.*
87 *Id.*
something Merck was unable to profitably do prior to the transfer. In other words, Commissioner Rosch believed that Ovation had stronger incentives than Merck to sell the acquired drug at a substantially higher monopoly price.

Although Commissioner Rosch’s Ovation concurrence offers plausible arguments in support of a changed incentives theory, the posttransfer exercise of preexisting—but underutilized—market power is, without more, unlikely to violate Section 7. Patent ownership, by its very nature, confers the right to exclude and monetize a patent. But that right does not change with the transfer of the patent to another entity. As noted above, acquisition of a patent by a PAE is a lawful asset transfer that neither alters the nature of competition in the relevant market nor changes the competitive process. Therefore, regardless of the price at which a PAE may seek enforcement of its newly acquired patent, “[c]hanges in pricing incentives that do not arise from changes in competition are outside the appropriate scope of antitrust.”

The “changed incentives” argument also fails for a host of other reasons. First, the authors are aware of no adjudicated cases that impose antitrust liability in the merger context under a “changed incentives” theory. Second, the theory is premised on the unproven factual assumption that transfer of ownership disrupts “patent peace” between rivals. To the contrary, the enforcement of patents against rivals is commonplace in the information and communications technology (“ICT”) sector, as evidenced by the so-called smartphone patent wars involving Samsung, Motorola, HTC, RIM, Nokia, Apple, and Microsoft, among others. Historically, the emergence of new disruptive technologies, including sewing machines, railroads, and semiconductor microchips, has also spurred vigorous enforcement of patents. Finally, as warned by FTC Commissioner Joshua Wright, the “changed incentive” merger argument is a slippery slope that condemns any changes to a company’s business strategy that would have the effect of

88 Id. at 2 (classifying Ovation’s acquisition as anticompetitive and “pernicious . . . because its effect would be to eliminate a constraint on the exercise of monopoly power”).
89 DOJ/FTC ANTITRUST IP LICENSING GUIDELINES, supra note 40, § 1.
91 See supra Part II.A.1.
92 Wright, supra note 1, at 19.
93 Popofsky & Laufert, supra note 15, at 4-5 (internal quotation marks omitted).
increasing its incentives to enforce its patents. Such regulation overreach- es and stifles the naturally occurring efficient allocation of resources in the marketplace.

Ultimately, patent acquisitions by PAEs generally do not pose competition concerns under Section 7 of the Clayton Act absent the seemingly rare circumstance where a PAE seeks to aggregate numerous substitute patents to increase market power. Even this exception to the rule requires a fact-intensive investigation of the substitute technologies at issue and their impact, if any, on prices. In most patent transfer scenarios, the legal transfer of the right to exclude and monetize a patent neither harms the relevant market nor disrupts the competitive process.

B. Analysis of PAE Coordination Activity Under Section 1

Some have alleged that PAE posttransfer collaboration activities raise antitrust and collusion concerns. As noted above, the alleged harm here arises from posttransfer coordination between PAEs and operating companies. The types of scenarios at issue here include (1) “hybrid PAEs” and “patent privateering”; and (2) patent “blocking” pools. “Hybrid PAEs” and “patent privateering” involve situations where an operating company retains an interest in the assertion of its transferred patents against others, including its downstream competitors. Patent “blocking” pools form where multiple operating companies transfer their patents into a PAE that asserts those patents against downstream competitors of the original owners. Under both scenarios, the potential for multiple companies to collude in attacking the competitors of the original patent owner have led some commenters to raise antitrust concerns about the arrangements.

Section 1 of the Sherman Act prohibits agreements that unreasonably restrain trade and affect interstate commerce. Restraints on trade can be vertical (among firms at different levels of distribution such as suppliers

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96 See Joshua D. Wright, No Ovation for FTC’s Latest Enforcement Theory, TRUTH ON THE MKT. BLOG (Dec. 17, 2008), http://truthonthemarket.com/2008/12/17/no-ovation-for-ftcs-latest-enforcement-theory/ (“[R]eliance on the general principle that evasion of pricing constraints through merger or other conduct is a sufficient condition for antitrust liability is misguided and unsound policy precisely because it . . . threatens to turn antitrust enforcement into more general regulation of prices and optimal allocation of resources . . . ”). Commissioner Rosch recognized the difference between a competitive pricing constraint and a reputational pricing constraint. Rosch Concurrency, supra note 80, at 2 (“To be sure, the source of the pretransaction constraints on pricing are different (the source in the maverick case being the maverick’s pricing and the source in this case being the reputational effects arguably constraining Merck) . . . ”).


98 See supra Part II.

99 15 U.S.C. § 1 (2012) (“Every contract, combination . . . or conspiracy, in restraint of trade or commerce . . . is declared to be illegal.”).
and manufacturers) or horizontal (among competitors at the same level of distribution). The distinction between the types of agreement is important. Vertical restraints are normally subject to traditional rule of reason analysis. The rule of reason inquiry examines "specific information about the relevant business," including "the restraint’s history, nature, and effect," as well as the restraint’s procompetitive benefits and anticompetitive effects. A traditional rule of reason analysis asks whether an agreement creates market power and has anticompetitive effects. In determining whether an agreement has anticompetitive effects, “antitrust plaintiffs must demonstrate that a particular contract or combination is in fact unreasonable and anticompetitive before it will be found unlawful.” This analysis of anticompetitive effects examines (1) the nature of the agreement; (2) the agreement’s potential anticompetitive effects; and (3) whether the agreement is reasonably necessary to achieve procompetitive benefits.

Certain horizontal restraints, on the other hand, are ordinarily considered per se illegal. Per se illegality applies when the probability that such arrangements are anticompetitive is extremely high and/or when “the practice facially appears to be one that would always or almost always tend to restrict competition and decrease output.” Per se treatment, however, is reserved for conduct that agencies and courts have considerable experience addressing. Additionally, antitrust law permits horizontal competitors to jointly collaborate when that collaboration creates certain efficiency gains. When that happens, horizontal restraints that are ancillary to a

100 ABA SECTION OF ANTITRUST LAW, INTELLECTUAL PROPERTY AND ANTITRUST HANDBOOK 142-43 (2007).
103 Euromodas, Inc. v. Zanella, Ltd., 368 F.3d 11, 16 (1st Cir. 2004).
104 Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 768 (1984). As discussed in Part II.A, patents are not presumed to confer market power, but do confer the right to seek to exclude others from practicing the IP. DOJ/FTC ANTITRUST IP LICENSING GUIDELINES, supra note 40, § 1.
107 Dagher, 547 U.S. at 5.
110 See Dagher, 547 U.S. at 5 (expressing the Supreme Court’s reluctance to adopt per se rules for conduct “where the economic impact of certain practices is not immediately obvious” (quoting State Oil Co. v. Khan, 522 U.S. 3, 10 (1997) (internal quotation marks omitted))).
111 DOJ/FTC COMPETITOR COLLABORATION GUIDELINES, supra note 106, § 2.
procompetitive joint venture are permissible if the restraints are reasonably necessary to realize the efficiency gains.\textsuperscript{112}

1. Aligned Financial Interests Are Not an Unlawful Agreement

The first argument in support of Section 1 antitrust liability is that posttransfer coordination between a PAE and an operating company is collusive behavior designed to exclude competitors of the transferring company.\textsuperscript{113} This scenario arises when a single operating company transfers a set of patents to a PAE at a discounted price (i.e., less than the full value of the patents) but retains a “back-end” financial interest in the assertion of those patents. This type of arrangement has been referred to as a “hybrid PAE” because the arrangement between the operating company and PAE aligns their respective incentives.\textsuperscript{114} Some have alleged that hybrid PAEs engage in “patent privateering,” wherein the originator uses the PAEs to enforce the transferred patent rights, thereby evading constraints upon the operating company.\textsuperscript{115}

A threshold issue in any analysis of a hybrid PAE arrangement is the extent to which a posttransfer “agreement” between the PAE and the transferring entity influences the PAE’s assertion of patents. In other words, one must examine the existence and extent of “control” over the PAE by the original patent owner. Critics argue that the alignment of financial incentives between a PAE and an operating company in transferring agreements may constitute de facto “control” over the PAE.\textsuperscript{116} For example, critics allege that operating companies enter into agreements with minimal revenue requirements with the knowledge that PAEs will have no choice but to target the transferring company’s competitors in the downstream product mar-

\textsuperscript{112} Dagher, 547 U.S. at 7 (“Under the [ancillary restraints] doctrine, courts must determine whether the nonventure restriction is a naked restraint on trade, and thus invalid, or one that is ancillary to the legitimate and competitive purposes of the business association, and thus valid.”); cf. Polygram Holding, Inc. v. FTC, 416 F.3d 29, 37 (D.C. Cir. 2005) (“An agreement between joint venturers to restrain price cutting and advertising with respect to products not part of the joint venture looks suspiciously like a naked price fixing agreement between competitors, which would ordinarily be condemned as \textit{per se} unlawful.”).

\textsuperscript{113} Morton & Shapiro, supra note 15, at 489-93.

\textsuperscript{114} Popofsky & Laufert, supra note 15, at 6. MOSAID-Nokia is often cited as a hybrid PAE arrangement. In 2011, to raise capital for the transformation of its mobile phone business, Nokia transferred a subset of its patent portfolio to Core Wireless, a subsidiary of MOSAID, a well-known PAE. As part of that transaction, Microsoft paid Nokia a lump sum payment in return for a back-end royalty preference to Nokia’s share of the royalties generated by Core Wireless in enforcing those patents. Thus, Nokia, Core Wireless and Microsoft share in the royalties generated by the enforcement of the former Nokia patents. \textit{Id.} at 6-8.

\textsuperscript{115} \textit{Id.} at 2-3.

\textsuperscript{116} \textit{Id.} at 6.
ket in order to achieve sufficient revenues required under the transfer terms.\textsuperscript{117}

It is the lack of posttransfer control, however, that leads operating companies to demand contractual protections in the first place. In that regard, this scenario is similar to other asset investments, where minority investors seek contractual safeguards to protect their financial interests.\textsuperscript{118} Typically, minimum revenue requirements are the most common example of structural protections put in place to protect the interests of minority investors in patent sale transactions. However, the mere existence of a minority investor provision in a patent transfer contract is insufficient proof of an agreement in which an operating company exerts actual control over a PAE.\textsuperscript{119} Only a fact-intensive analysis of the patent sale transaction can determine whether there is an actual agreement in which the transferring entity controls postsale conduct. Absent any such agreement, the inquiry would end.

Nonetheless, any agreement on postsale conduct between a PAE and the operating company from which it obtained its patents would be vertical in nature because operating companies do not compete horizontally with PAEs in any products markets.\textsuperscript{120} Therefore, traditional rule of reason analysis requires an examination of whether the agreement creates market power and has anticompetitive effects.\textsuperscript{121} As explained above, however, patents do not confer market power unless no substitutes for the patented technology exist, which is the exception not the norm.\textsuperscript{122}

If an agreement allows the transferring operating company to exert control over the PAE and the transfer of the patent at issue somehow increases market power, Section 1 only condemns agreements that unreasonably restrain trade.\textsuperscript{123} Even critics of PAEs recognize that hybrid PAE arrangements may result in some efficiencies.\textsuperscript{124} These efficiencies include a PAE’s ability to negotiate profitable royalties for a patent where the origi-

\textsuperscript{117} Id. at 6, 9-10. The PAEs must target the transferring company’s competitors, critics argue, in order to generate the necessary return on investment from licensing fees and/or infringement suits that will allow PAEs to satisfy minimum revenue requirements associated with the transfer. An example of such a term is a reversionary interest in the patents if the PAE does not meet certain revenue benchmarks.

\textsuperscript{118} Minority investors seek such protection to ensure that their investments are not exploited by the majority owners.

\textsuperscript{119} “Minority” investor interests are commonly defined as noncontrolling ownership interests of less than 50%.

\textsuperscript{120} If both the operating company and a PAE possess a similar technology in a properly defined technology market, horizontal analysis might be necessary.

\textsuperscript{121} Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 768 (1984).

\textsuperscript{122} See supra Part II.A.

\textsuperscript{123} Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 1, 58, 75 (1911).

\textsuperscript{124} Morton & Shapiro, supra note 15, at 479.
nal inventor might have lacked the ability to do so.\textsuperscript{125} Take, for example, an operating company that decides to shift its R&D efforts from one sector to another and no longer needs the patents in which it invested substantial resources to develop. By transferring ownership of unneeded patents to a PAE and maintaining a back-end interest in licensing revenues, the operating company is free to focus on future R&D and product development rather than contemplating enforcement of unneeded patents. The PAE, in turn, focuses exclusively on ensuring that other companies pay for the use of the transferred patents that might otherwise go unenforced. This division of labor maximizes the value of the patents and more efficiently allocates resources in the market.

Therefore, hybrid PAE arrangements are unlikely to be seen as unreasonable restraints on trade. This is consistent with the fact that, as of the date of this writing, the DOJ Antitrust Division has not initiated an enforcement action against any hybrid PAE arrangement despite multiple complaints from companies.\textsuperscript{126} Indeed, Deputy Assistant Attorney General Renata Hesse of the DOJ’s Antitrust Division confirmed that the DOJ often does not see a “connection between the agreement and the impact on a rival and the desire to impact the rival.”\textsuperscript{127}

2. The Procompetitive Benefits of Patent Pools Outweigh Anticompetitive Harms

The second argument in support of Section 1 liability is that the pooling of patents by multiple operating companies into a PAE, with the ultimate goal of enforcing those patents against competitors of the operating companies, negatively impacts competition.\textsuperscript{128} This is essentially a hub-and-spoke conspiracy argument in which the PAE is the alleged hub and the operating companies are the alleged spokes.\textsuperscript{129}

In a patent pool, none of the operating companies enter into any agreements with each other. Rather, each operating company member enters into an individual agreement with the PAE hub. Such arrangements,

\begin{itemize}
\item \textsuperscript{125} Id.
\item \textsuperscript{126} See Leah Nylen, DOJ Monitoring ’Royalty-Stacking’ Allegations, M.LEX (Mar. 25, 2014) (on file with author).
\item \textsuperscript{127} Id. (internal quotation marks omitted).
\item \textsuperscript{128} Popofsky & Laufert, supra note 15, at 1.
\item \textsuperscript{129} A hub-and-spoke arrangement becomes an actionable conspiracy where there is evidence of an agreement connecting the horizontal competitors (the spokes) of the arrangement (i.e., the “rim” of the wheel). 1 ABA SECTION OF ANTITRUST LAW, ANTITRUST LAW DEVELOPMENTS 24-25 (Jonathan M. Jacobson et al. eds., 6th ed. 2007). However, where information is not shared directly among competitors, but is instead exchanged through the PAE “hub” as an intermediary, it is difficult to find an actionable conspiracy arrangement.
\end{itemize}
critics nonetheless argue, are designed to exclude and/or eliminate competitors that threaten the interested operating companies.\footnote{Balto, supra note 15, at 1-2.}

Again, a threshold issue in any analysis of patent pools is whether an agreement to restrain trade exists. Such an agreement presumably would be horizontal in nature if the multiple operating companies involved compete with each other.\footnote{See supra Part II.B.} Patent pools involving some of the most sophisticated companies, each with separate antitrust counsel, will likely have structural protections in place to ensure compliance with antitrust laws.\footnote{For example, the Rockstar Consortium—one of the most publicly attacked arrangements involving a PAE and multiple operating companies—was carefully studied by the DOJ’s Antitrust Division before receiving merger clearance. Press Release, U.S. Dep’t of Justice, Statement of the Department of Justice’s Antitrust Division on Its Decision to Close Its Investigations 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), http://www.justice.gov/opa/pr/2012/February/12-at-210.html.} Similar to the theory on vertical patent transfer agreements discussed above, demonstrating a horizontal pooling agreement will require a fact-intensive analysis to assess whether the operating companies collectively “control” PAE behavior.\footnote{See supra Part II.B.1.}

Nonetheless, if “control” of the PAE by competitors exists, a collective horizontal agreement likely would need to be evaluated similar to other joint ventures involving competitors.\footnote{See DOJ/FTC COMPETITOR COLLABORATION GUIDELINES, supra note 106, § 3.34.} As discussed at the beginning of Part II, per se treatment is inappropriate where courts and agencies lack experience addressing novel arrangements.\footnote{See Texaco Inc. v. Dagher, 547 U.S. 1, 5 (2006) (expressing the Supreme Court’s reluctance to adopt per se rules for conduct “where the economic impact of certain practices is not immediately obvious” (quoting State Oil Co. v. Khan, 522 U.S. 3, 10 (1997) (internal quotation marks omitted))).} Therefore, traditional joint venture analysis under the rule of reason requires proving that (1) the patents at issue have market power; (2) the arrangement results in anticompetitive effects; and (3) any restraints placed upon the PAE are not reasonably necessary for accomplishing the procompetitive purpose of the joint venture.\footnote{Id. See also DOJ/FTC COMPETITOR COLLABORATION GUIDELINES, supra note 106, § 2.} This is a high bar indeed.\footnote{Patent pools have long been recognized to have procompetitive benefits. See, e.g., Letter from Joel I. Klein, Assistant Att’y Gen., U.S. Dep’t of Justice, to Gerrard R. Beeney, Sullivan & Cromwell LLP (June 26, 1997) (noting that the DOJ had no intention to take antitrust enforcement action against MPEG, an SEP patent pool). In the typical patent pool arrangement, members agree to license at preset royalties both within and outside of the pool. The DOJ has recognized the procompetitive benefits associated with such arrangements and has declined to pursue enforcement action absent affirmative efforts to fix downstream product pricing or restrict the market.}

A recent example of a patent pool highlights the potential for procompetitive benefits from pooling arrangements. In June 2011, the
Rockstar Consortium (“Rockstar”)—a conglomerate of major operating companies including Apple Inc., Research in Motion (now Blackberry), Ericsson, Sony, and Microsoft Corporation—submitted a winning bid for a set of wireless patents from the now-bankrupt Canadian telecommunications equipment maker Nortel Networks Corporation (“Nortel”). At the time of the auction, bidding was fierce with Google initially raising the price for the portfolio up to $900 million. Unable to top such a bid individually, the companies that ultimately formed Rockstar collectively pooled their resources to submit the winning bid of $4.5 billion for more than 6,000 Nortel patents. Several of the consortium members then transferred many of the acquired patents to Rockstar, an independently run PAE that monetizes the Nortel patents through licensing efforts. None of the major operating companies that subsidized the winning bid exerted any control over Rockstar’s licensing efforts.

Several procompetitive benefits may stem from Rockstar’s ownership of the patents from the Nortel patent portfolio. Like and related patents remain together, so that licensing negotiations can occur on a broader portfolio basis rather than an individual patent-by-patent basis. In addition, ownership of the patents within a single entity reduces negotiation and administrative costs associated with licensing the Nortel portfolio for all parties. Consolidation of the patents within one entity also economizes on monetization efforts associated with the portfolio and produces an efficient division of labor between an entity that specializes in licensing efforts and the operating companies whose business strengths lie elsewhere. As such,

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139 Id.
140 Id. Google was invited to join the collective bid, but declined to do so. Brad Smith, Gen. Counsel, Microsoft Corp., TWITTER (Aug. 3, 2011, 4:44 PM), https://twitter.com/BradSmi/statuses/98902130412355585.
142 Robert McMillan, How Apple and Microsoft Armed 4,000 Patent Warheads, WIRED (May 21, 2012, 6:30 AM), http://www.wired.com/wiredenterprise/2012/05/rockstar/all/1. It has been publicly reported that the operating companies retained only minority investor protections similar of the type discussed earlier in this article. See supra Part II.B.1.
143 U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, supra note 46, at 65.
144 See id.
145 Treating NPEs differently as a class is also undesirable because doing so creates incentives for inefficient vertical integration. For example, differential treatment of NPEs forecloses maximally efficient allocation of resources between manufacturers focused on R&D efforts and PAEs exclusively focused on licensing efforts. But see United States v. Singer Mfg. Co., 374 U.S. 174 (1963) (holding that cross-license arrangements between the United States and foreign sewing machine manufacturers violated the Sherman Act where the purpose of the arrangement was a broader combination to exclude a Japanese competitor). Though Singer has not been formally overruled, it predates the modern era of antitrust and does not analyze potential procompetitive effects. For example, patent pools help achieve interoperability goals and eliminate problems associated with upholding industry-wide commitments.
this and similar pooling arrangements are unlikely to violate Section 1 of the Sherman Act.

Ultimately, ongoing relationships between PAEs and operating companies likely are not unreasonable restraints on trade under Section 1 of the Sherman Act. Whether vertical or horizontal, such arrangements can create efficiencies and carry procompetitive benefits. Proper antitrust analysis requires a fact-intensive inquiry to assess control. Minority investor protections, which are present in most financial transactions, likely do not sufficiently show actual control over a PAE. Moreover, the potential efficiencies and procompetitive benefits from these kinds of arrangements generally foreclose the possibility that ongoing relationships between PAEs and operating companies unreasonably restrain trade.

C. Unilateral Conduct Analysis of Patent Assertion by PAEs

Numerous critics have alleged that patent assertion by PAEs raises antitrust concerns due to the potential negative economic impact of such behavior. As noted above, the alleged harm arises from posttransfer unilateral enforcement of patents by PAEs. The most commonly expressed concerns are (1) PAE assertion raises costs for the original patent owner’s rivals; (2) PAEs engage in “outsized litigation threats” that result in supracompetitive pricing; and (3) PAEs evade FRAND and SSO commitments through their enforcement of unbundled patent portfolios.

Curiously, all three of these theories apply to any entity asserting its patents. It would be odd for antitrust law to impose special rules on PAEs based solely on the fact that they practice a different business model than operating entities. Nonetheless, the section below analyzes each of the three theories under traditional antitrust principles.

Section 2 of the Sherman Act prohibits unlawful monopolization as well as attempts to monopolize. Unilateral actions are traditionally subject to rule of reason analysis to assess the reasonableness of the conduct at

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See, e.g., Klein, supra note 137 (declining to initiate an antitrust enforcement action against joint venture MPEG LA, for offering a packaged license for patents “essential” to compliance with the MPEG-2 compression technology standard); Letter from Joel I. Klein, Assistant Att’y Gen., U.S. Dep’t of Justice, to Cary R. Ramos, Paul, Weiss, Rifkind, Wharton & Garrison (June 10, 1999) (declining to initiate an antitrust enforcement action against Toshiba for offering one license for a package of patents “essential” for compliance with DVD formats).

146 Popofsky & Laufert, supra note 15, at 1.
147 See supra Part II.
148 While unilateral conduct is generally not an antitrust problem, unilateral action might violate consumer protection laws if deceptive conduct is involved. See discussion infra Part III.C.
149 See supra note 145 and accompanying text.
issue.\textsuperscript{151} Under traditional rule of reason analysis, unlawful monopolization requires both monopoly power and willful acquisition or maintenance of that power.

Monopoly power is the power to “control prices or exclude competition.”\textsuperscript{152} Monopoly power is conventionally demonstrated by showing that the firm has a high share of a properly defined relevant market and that entry barriers permit the firm to exercise substantial market power for an appreciable period.\textsuperscript{153} Alternatively, “direct evidence of supracompetitive prices and restricted output” or inferences of such harms “from the structure and composition of the relevant market” can prove monopoly power.\textsuperscript{154}

Monopoly power alone is not unlawful unless accompanied by anticompetitive conduct.\textsuperscript{155} Anticompetitive conduct must harm the competitive process, not just competitors.\textsuperscript{156} Hence, willful acquisition or maintenance of market power, which harms the competitive process, distinguishes unlawful monopoly power from monopoly power for which growth is the consequence of a superior product, business acumen, or historic accident, wherein only competitors are harmed.\textsuperscript{157}

1. PAE Patent Assertion Does Not Artificially Raise Rivals’ Costs

One theory that has been advanced in support of Section 2 antitrust liability argues that unilateral enforcement activity by PAEs raises costs for rivals of the original patent owner.\textsuperscript{158} Similar to the Section 7 “changed incentives” argument, this theory alleges that PAEs raise rivals’ costs by vigorously enforcing patent rights unencumbered by the reputational constraints and risks of countersuit that curb operating companies from otherwise asserting their valid and infringed patents.\textsuperscript{159} Alternatively, others have

\textsuperscript{151} Because there is no arrangement between separate parties to fix prices or to negatively impact competition, per se treatment would not be appropriate.

\textsuperscript{152} United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 391 (1956). “Monopoly power” is a term often used interchangeably with the term “market power,” which is the power to charge profitable prices above one’s competitor for a sustained period of time. Nat’l Collegiate Athletic Ass’n v. Bd. of Regents, 468 U.S. 85, 109 n.38 (1984). Though related, the terms are distinct. The Supreme Court held that “[m]onopoly power under § 2 [of the Sherman Act] requires, of course, something greater than market power under § 1 [of the Sherman Act].” Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 481 (1992). Nonetheless, due to their analogous effects on competition, the terms are sometimes used interchangeably in the analysis that follows.

\textsuperscript{153} W. Parcel Express v. UPS, 190 F.3d 974, 975 (9th Cir. 1999).

\textsuperscript{154} Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 307 (3d Cir. 2007).


\textsuperscript{156} United States v. Microsoft Corp., 253 F.3d 34, 58 (D.C. Cir. 2001).

\textsuperscript{157} United States v. Grinnell Corp., 384 U.S. 563, 570-71 (1966); LePage’s Inc. v. 3M, 324 F.3d 141, 147 (3d Cir. 2003).

\textsuperscript{158} Popofsky & Laufert, supra note 15, at 4-5.

\textsuperscript{159} Id. at 4.
argued that disaggregating a larger patent portfolio to one or more PAEs will lead to increased licensing and litigation costs. As noted above, traditional rule of reason analysis of unilateral conduct first requires that the asserted patent have monopoly power. And as previously discussed above, the ability to control or exclude competition (i.e., monopoly power) exists only in limited circumstances where either no substitute technologies exist or the PAE has acquired all or most patents for substitute technologies.

Even if the patent at issue has monopoly power, unilateral assertion can only violate Section 2 of the Sherman Act if it artificially raises rivals’ costs. It is uncontroversial that patent owners have a right to seek compensation for other companies’ use of their intellectual property. Such royalties cannot be characterized as “artificially raising” rivals’ costs, because a royalty is no different than any other input cost needed to operate a business. Asking a company to pay for the input used in its business—whether labor, a physical input, or intellectual property—does not give rise to an antitrust claim. Rather, patent assertion is the valid exercise of intellectual property rights that does not harm competition.

Far from artificially raising rivals’ costs, patent licenses lower costs because the licensee avoids the presumably higher cost it would have to incur to design around those patents.

2. Antitrust Law Does Not Normally Condemn “Excessive Pricing”

A second theory in support of Section 2 antitrust liability is that unilateral PAE assertion activity is opportunistic behavior designed to create “outsized litigation threats.” In other words, the theory suggests that PAE assertion activity is designed to seek out licenses and/or settlements from alleged infringers that far exceed the actual value of the patent being asserted.

For example, critics argue that PAEs may target small companies on the eve of their initial public offerings because such defendants are more

160 Id. at 5-6.
161 See supra Part II.B.
162 See supra Part II.A.1.
163 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 651b5, (3d ed. 2008) (“[M]any practices that raise rivals’ cost, such as innovation that either deprives rivals or [sic] revenue or forces them to innovate in return, are also welfare enhancing.”).
165 Morton & Shapiro, supra note 15, at 471.
likely to settle out of fear that potential investors would devalue a company entangled in infringement litigation. Critics also argue that PAEs strategically extract settlements disproportionate to the value of the underlying technology by threatening small businesses who cannot afford the expense of litigation, and discovery in particular. Such efforts “to extract payments from downstream firms that exceed reasonable royalties,” critics argue, are common PAE tactics to effectively monetize their weak patent portfolios.

Aside from the threshold issue of whether the patent at issue has monopoly power (which it likely does not), the concept that a PAE can be held liable for charging royalties in excess of the value of the underlying technology is inconsistent with antitrust law. Excessive pricing is not a recognized liability theory under U.S. antitrust law. There is no basis for treating patents differently. Indeed, the Supreme Court has stated that “[a] patent empowers the owner to exact royalties as high as he can negotiate with the leverage of that monopoly.” Such power exists whether the patent holder is the original inventor or a PAE.

Some critics argue that PAEs extract supracompetitive royalties through corporate shell arrangements. Proponents of this theory argue that by hiding the identity of the real patent owner behind another company’s name, PAEs can extract piecemeal settlements for the shell’s patents, as opposed to a single license for the PAE’s entire portfolio. But even if a PAE uses deception or complex corporate shell arrangements to extract

\begin{footnotes}
\item 166 Id. at 474-75.
\item 167 Mahoney, supra note 34.
\item 168 Morton & Shapiro, supra note 15, at 470.
\item 169 See supra Part II.C.
\item 170 Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004). (“The opportunity to charge monopoly prices—at least for a short period—is what attracts ‘business acumen’ in the first place; it induces risk taking that produces innovation and economic growth.”). FRAND commitments, where a patent holder agrees to license a patent on specific terms and at certain rates, are an obvious exception to this rule.
\item 171 Brulotte v. Thys Co., 379 U.S. 29, 33 (1964). Brulotte dealt with the doctrine of patent misuse, id. at 34 (Harlan, J., dissenting), which negates a patent’s enforceability when used by its owner to expand the scope of the patent beyond its statutory grant. Morton Salt Co. v. G.S. Suppiger Co., 314 U.S. 488, 491 (1942), abrogated by Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006). In Brulotte, the Supreme Court condemned the collection of royalties by the patent holder after the patent had expired, noting that postexpiration royalties unlawfully expanded the temporal grant of the patent. In doing so, the Court contrasted collection of postexpiration royalties with the patent owner’s right to charge the highest royalties it could collect during the patent term. Brulotte, 379 U.S. at 33-34.
\item 172 FTC v. Actavis, Inc., 133 S. Ct. 2223, 2231 (2013) ("[A] valid patent excludes all except its owner from the use of the protected process or product." And that exclusion may permit the patent owner to charge a higher-than-competitive price for the patented product.” (alteration in original) (citation omitted) (quoting United States v. Line Material Co., 333 U.S. 287, 308 (1948))).
\item 173 Morton & Shapiro, supra note 15, at 476.
\item 174 Popofsky & Laufert, supra note 15, at 6.
\end{footnotes}
enhanced royalties, this strategy does not distort the competitive process absent proof of foreclosure in a downstream product market.\textsuperscript{175} Higher prices alone are not a violation of the antitrust laws. Instead, antitrust plaintiffs must prove that the deceptive act “impaired rivals in a manner tending to bring about or protect a defendant’s monopoly power.”\textsuperscript{176}

Applying Section 2’s legal framework to the allegation of “outsized threats” demonstrates that enforcement of patent rights alone cannot be deemed anticompetitive. Indeed, PAE patent assertion exercises the legal right to exclude and to demand the highest price that is fundamental to all property ownership.\textsuperscript{177} Condemning a PAE’s “hardball” negotiating tactics would require similar treatment for all business disputes that seek to take advantage of leverage over the other party. Moreover, this theory of monopolization based on the coercion of settlements clashes with strong public policy arguments that favor settlement of disputes.\textsuperscript{178}

The analysis does not change even if the patents are of uncertain or dubious value. That is because enforcement of questionable patents through infringement litigation is uniquely protected petitioning conduct.\textsuperscript{179} The \textit{Noerr-Pennington} doctrine protects patent holders from antitrust liability for lobbying for relief from courts, even if that petitioning results in anticompetitive effects.\textsuperscript{180} This immunity stems from the recognition that the First Amendment constitutional right to petition the government for redress of grievances trumps enforcement of congressional statutes such as the Sherman Act.\textsuperscript{181} The protection exists regardless of whether the patentee is the originating inventor or a later acquirer of the patent.

There is one exception to the doctrine: \textit{Noerr-Pennington} immunity fails when a suit constitutes “sham litigation.”\textsuperscript{182} In order to be considered “sham litigation,” a lawsuit must be both objectively and subjectively base-
In other words, only if the patents being asserted are invalid or noninfringed (i.e., the suit is objectively baseless) and the PAE knows this fact (i.e., the suit is subjectively baseless) may antitrust liability arise.\(^{184}\)

The extension of *Noerr-Pennington* protection to prelitigation activity compounds the challenge of applying antitrust law to PAE assertion activity.\(^{185}\) In *In re Innovatio IP Ventures, LLC Patent Litigation*,\(^{186}\) a PAE sent presuit demand letters to small businesses and end users of wireless internet technology allegedly covered by the PAE’s patents.\(^{187}\) A group of manufacturers whose customers received the demand letters responded by suing the PAE.\(^{188}\) These manufacturers alleged that the presuit demand letters sent by the PAE to their customers included numerous misrepresentations and constituted “bad faith” litigation efforts.\(^{189}\) After finding that *Noerr-Pennington* protected the presuit communications, the district court systematically addressed each of the manufacturers’ separate allegations that the PAE’s licensing campaign was a sham.\(^{190}\) The court concluded that the allegations did not rise to the level of “sham litigation” and dismissed the manufacturers’ antitrust claims.\(^{191}\) *Innovatio* demonstrates that the *Noerr-Pennington* doctrine applies even to dubious prelitigation behavior unless such conduct constitutes “sham litigation.”

3. **PAE Assertion Activity Does Not Necessarily Evade SSO, FRAND, and “Royalty Cap” Commitments**

A third theory in support of Section 2 antitrust liability is that PAE assertion can evade industry commitments to SSOs, FRAND terms, and royalty cap agreements.\(^{192}\) Critics argue that the unbundled sale of patent portfolios encumbered by industry-wide agreements to PAEs for subsequent unilateral enforcement may work to evade these preexisting commitments.\(^{193}\) In other words, even if PAEs adhered to the prior patent owner’s

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\(^{183}\) *Prof’l Real Estate Investors*, 508 U.S. at 60-61.

\(^{184}\) Id.; see also Complaint at 40-41, MPHJ Tech. Invs., LLC v. FTC No. 6:14-cv-11, (W.D. Tex. Jan. 13, 2014) (claiming that MPHJ’s sending of letters to end user customers seeking proof of noninfringement was mandatory presuit investigation required to avoid sanction under Rule 11).

\(^{185}\) Va. Panel Corp. v. MAC Panel Co., 133 F.3d 860, 869 (Fed. Cir. 1997).

\(^{186}\) 921 F. Supp. 2d 903 (N.D. Ill. 2013).

\(^{187}\) Id. at 906, 911.

\(^{188}\) Id. at 906.

\(^{189}\) Id. at 907-08.

\(^{190}\) Id. at 913-14.

\(^{191}\) Id. at 922.


\(^{193}\) Id.
pledges for the transferred patents, the enforcement of the unbundled portfolio by multiple PAEs could result in collective royalties that exceed what the original patent owner could have charged for the entire portfolio.

SSOs allow for industry-wide adoption of common technologies, which in turn ensures interoperability and fosters competition. In doing so, SSOs adopt policies that often require members to license their patents to potential licensees on FRAND terms. Such promises are typical for standard-essential patents (“SEPs”), which are patents technically essential to the implementation of a standard. In addition, patent holders sometimes promise to limit royalties to a capped level (e.g., 2 percent) in an effort to encourage market adoption of that technology.

Critics argue that PAE assertion of patents encumbered by such commitments may result in enforcement behavior inconsistent with the promises on encumbered patents. Take, for example, a bundled portfolio of related telecommunications patents. The bundled portfolio includes patents subject to industry-wide commitments on pricing, such as a FRAND promise or a royalty cap. The concern under this theory is that if the bundled patent portfolio is unbundled and sold off to separate PAEs, the individual enforcement of the segregated patents by PAEs may result in licensing arrangements whose collective value exceeds the original industry-wide promises on pricing. In other words, disaggregation of the patent portfolio can create collective royalties that may exceed the original, agreed-to promises for the bundled portfolio. This practice is often referred to as “royalty stacking.” Critics argue that this can occur even if a PAE abides by the

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195 The terms FRAND and RAND (reasonable and nondiscriminatory) are often used interchangeably, but they denote the same industry-wide commitment to offering such terms to potential licensees. See Anne Layne-Farrar et al., Pricing Patents for Licensing in Standard-Setting Organizations: Making Sense of FRAND Commitments, 74 ANTITRUST L.J. 671, 671-72 (2007).
197 Morton, supra note 192, at 4-5 (discussing hypothetical frameworks). See also Eric Stasik, Royalty Rates And Licensing Strategies For Essential Patents On LTE (4G) Telecommunication Standards, LES NOUVELLES, Sept. 2010, at 114, 117 (showing declarations made to ETSI and received by ETSI).
199 See supra notes 138-144 and accompanying text.
200 For example, if a portfolio of ten patents is subject to an aggregate 2 percent royalty cap and the portfolio is subsequently disaggregated and individually sold to two or more PAEs, the PAEs could then license each unbundled patent at an amount less than 2 percent (e.g., 1.5 percent), the combined result of which exceeds the royalty cap on the bundled portfolio (i.e., 1.5 percent + 1.5 percent = 3 percent).
201 Alternatively, a patent holder may withhold a license until after his or her technology is adopted as part of a technical standard—a practice known as “hold up”—which also results in higher royalty rates on the patent at issue.
original promise to license on FRAND terms or to cap royalties because individual enforcement at the previously agreed-upon rates adds up to collective enforcement exceeding the original promise on the portfolio as a whole.\textsuperscript{202}

In theory, conduct of this nature might run afoul of Section 2. When a party voluntarily agrees to FRAND terms or other SSO commitments and participants in that standard adopt that technology in reliance on that promise, the patents at issue gain market power through the adoption of the standard.\textsuperscript{203} Indeed, SEPs in particular have been found to possess market power due to the absence of substitute technologies.\textsuperscript{204} As such, an initial hurdle to antitrust liability in Section 2 analysis may not be present here.

Moreover, it is unclear whether Noerr-Pennington would protect patent assertion activity in this situation. Here, the parties voluntarily waive the right to petition the government for redress by making the FRAND pledge.\textsuperscript{205} In other words, by agreeing to license on FRAND terms, a patent owner waives the right to otherwise enforce its patent at a price other than the FRAND rate. Therefore, it is conceivable that enforcement of a FRAND or otherwise encumbered patent could pose an antitrust risk under Section 2.

That said, proving antitrust liability might be difficult in reality. Similar to the Section 7 analysis,\textsuperscript{206} demonstrating Section 2 liability here requires a fact-intensive inquiry. Indeed, to demonstrate that the collective royalties being charged exceed FRAND, an antitrust plaintiff would need to (1) identify what patents are encumbered by the earlier FRAND promise; (2) determine the FRAND royalty rate for those patents combined; and (3) prove that the collective royalties for the separate enforcement of the unbundled portfolio exceed the FRAND royalty for the bundled portfolio. Though a difficult bar to satisfy, if proven, FRAND, SSO, and royalty cap commitments are one of the few instances where antitrust liability under Section 2 may be available.

Ultimately, PAE patent assertion activity generally does not constitute unlawful monopolization under Section 2. Assertion by PAEs amounts to the proper exercise of preexisting monopoly power that neither harms com-

\textsuperscript{202} Morton, supra note 192, at 4-5.
\textsuperscript{204} See Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 876 (9th Cir. 2012) (“[S]tandards threaten to endow holders of standard-essential patents with disproportionate market power.”).
\textsuperscript{205} Greg Sivinski, Patently Obvious: Why Seeking Injunctions on Standard-Essential Patents Subject to a FRAND Commitment Can Violate Section 2 of the Sherman Act, CPI ANTITRUST CHRON. Oct. 2013, at 1, 6-7.
\textsuperscript{206} See supra Part II.A.1.
petition nor artificially raises rivals’ costs. Indeed, PAE assertion can, in certain situations, offer procompetitive benefits such as the efficient allocation of resources in the marketplace. PAE assertion also is not opportunist. A patent owner, like any property owner, is entitled to seek a higher-than-competitive price for his patents, and assert his or her exclusive rights. In addition, the unique context of patent infringement enforcement is entitled to constitutional protections from antitrust liability unless it is “sham litigation.”

III. OTHER POSSIBLE SOLUTIONS TO CONCERNS OVER PAES

If antitrust is not the solution to the policy concerns raised by PAEs, then what is? Recent developments in the patent troll debate offer alternative and perhaps superior solutions to address concerns over PAE behavior. Judicial, legislative, and administrative developments at both the state and federal level illustrate other, more practical solutions to PAE activity.

A. Judicial Patent Reform

Recognizing the problems posed by some PAEs, courts are starting to act. Two recent Supreme Court decisions overhauled “unduly rigid” and “mechanical” Federal Circuit precedent regarding “loser pays” rules in patent infringement litigation—making it considerably easier for courts to impose sanctions on PAEs and raising the bar for challenges to such sanctions on appeal. In Octane Fitness, LLC v. ICON Health & Fitness, Inc., the Supreme Court unanimously granted district court judges wide discretion to order a losing party to pay a prevailing party’s attorneys fees in patent infringement cases that “stand[] out from others” as “exceptional.” In Highmark Inc. v. AllCare Health Mgmt. Sys., Inc., the Supreme Court unanimously held that attorneys fee awards in such cases are entitled to deference on appeal, and therefore are reviewed for “abuse of discretion.” These recent decisions undoubtedly will affect the particularity and

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210 Id. at 1, 7-8 (“We hold, then, that an ‘exceptional’ case is simply one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.”).
211 No. 12-1163, slip op. (U.S. Apr. 29, 2014).
212 Id. at 4 (“[T]he exceptional-case determination is to be reviewed only for abuse of discretion.”).
frequency with which PAEs make patent infringement claims. In fact, imposition of these rules may effectively establish restraints on PAEs that are closer to those faced by operating companies.\textsuperscript{213}

In addition, recent jurisprudence from the U.S. International Trade Commission raises issues related to the coordinated enforcement of patents between PAEs and operating companies. In a recent patent dispute between HTC and Apple, Administrative Law Judge (“ALJ”) Thomas B. Pender dismissed HTC’s infringement claims after concluding that HTC was not the legal holder of “all substantial rights” in the patents at issue.\textsuperscript{214} The ALJ determined that Google retained so many rights in the patent transfer agreement that it was more akin to a loan than a sale.\textsuperscript{215} As a result, HTC lacked the requisite legal standing to enforce the patents.\textsuperscript{216} Although the patent transfer in that case involved two operating companies, the implication of this decision for PAEs is clear: if operating companies retain posttransfer control over patents transferred to PAEs (i.e., patent "privateering"), the PAE may lack the necessary legal standing to enforce those patents.\textsuperscript{217}

B. Federal and State Patent Reform

The topic of patent reform is not limited to the courts. At the time of this writing, numerous bills are pending in Congress to overhaul patent litigation standards, including efforts to combat patent trolls.\textsuperscript{218} With some differences, these bills seek to impose changes such as (1) heightened pleading requirements to weed out baseless infringement claims;\textsuperscript{219} (2) “loser pays” rules to discourage frivolous litigation;\textsuperscript{220} (3) limited dis-
covery prior to claim construction to contain litigation costs;\textsuperscript{221} (4) increased patent ownership transparency at the PTO and in prelitigation assertion activities to allow parties to better assess licensing demands and/or threats of infringement;\textsuperscript{222} and (5) measures allowing large technology firms to intervene in smaller cases against consumers.\textsuperscript{223}

States are also pursuing legislative reforms. At the time of this writing, four states—Oregon, Vermont, Virginia, and Wisconsin—have passed legislation that targets PAE assertion activity.\textsuperscript{224} Specifically, the new laws target bad-faith patent infringement assertions by empowering state attorneys general to file actions for civil penalties and equitable relief against PAEs.\textsuperscript{225} Collectively, the bills cite various characteristics of bad-faith assertions, including, but not limited to (1) demand letters that lack sufficient information for targets to evaluate infringement claims;\textsuperscript{226} (2) spurious threats of legal action;\textsuperscript{227} and (3) offers to license that far exceed a reasonable estimate of the value of the patent.\textsuperscript{228}

\textsuperscript{221} See, e.g., id. § 285A(c)(1).

\textsuperscript{222} See, e.g., H.R. 2024 § 2(a), (e).

\textsuperscript{223} See, e.g., H.R. 3309 § 285(c)-(d).


\textsuperscript{226} This information includes details on who owns the patent and what products, services, and technology are covered by the patent. See, e.g., Or. S.B. 1540 § 2(4).

\textsuperscript{227} See, e.g., Vt. H. 299 § 4197(b)(6)-(8).

\textsuperscript{228} Moreover, the bills characterize “good-faith” assertion behavior as including (1) efforts to engage in reasonable due diligence under the circumstances to establish infringement by the target and to negotiate an appropriate remedy; (2) substantial investments in a patent itself or a product that is covered by the patent; (3) successful enforcement of a patent or substantially similar patents through litigation; or (4) affiliation with an institution of higher education. See, e.g., Va. H.B. 375 § 59.1-215.2; Vt. H. 299 § 4197(b); Or. S.B. 1540 § 2(4). Many of these factors correspond to the indicators of “sham litigation” as an exception to \textit{Noerr-Pennington} immunity, which will factor into regulation of prelitigation petitioning activity.
These various state legislative reforms have the potential to decrease incentives for PAEs to enforce their patents and impose restraints that might contribute to “patent peace” in the marketplace. For example, measures aimed at increased transparency of patent ownership allow consumers and potential licensees to better assess allegations of infringement.

C. Consumer Protection Statutes

Finally, FTC and state consumer protection enforcement offer additional mechanisms to address concerns relating to PAEs. Section 5 of the FTC Act prohibits “[u]nfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce.”229 Many states have passed similar versions of Section 5.230 The FTC Act and its state law corollaries231 are important enforcement tools that can be used to police many types of behavior not captured by traditional antitrust laws.232

While no consensus exists on whether Section 5 treatment is appropriate for PAEs under an unfair competition theory of liability,233 there is less controversy regarding the FTC’s authority to pursue claims against dece-

229 15 U.S.C. § 45(a)(1) (2012). “Unfair” practices are defined as acts that “cause[] or [are] likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition,” Id. § 45(n). Deceptive conduct is generally accepted as a material misrepresentation, omission, or practice that is likely to mislead a consumer, considered from the perspective of the reasonable consumer. Letter from James C. Miller III, Chairman, Fed. Trade Comm’n, to John D. Dingell, Chairman, U.S. House of Representatives Comm. on Energy & Commerce (Oct. 14, 1983), available at http://www.ftc.gov/policy-statement-on-deception.


231 State-level FTC corollaries are sometimes referred to as “Little” FTC Acts.

232 See, e.g., CAL. BUS. & PROF. CODE § 17200; N.Y. GEN. BUS. LAW §§ 340-47.

233 Compare Maureen K. Ohlhausen, Comm’r, Fed. Trade Comm’n, A Pragmatist’s Approach to Navigating the Intersection of IP and Antitrust, Special Address at the 2013 Standards and Patents Conference 24 (Dec. 4, 2013), available at http://www.ftc.gov/sites/default/files/documents/public_statements/pragmatists-approach-navigating-intersection-ip-antitrust/131204ukantitrust.pdf (“I would be very cautious about expanding Section 5 unfair methods of competition liability to attach to basic claims of infringement by PAEs. Only where there is some evidence of additional conduct by a PAE that tends for instance to undermine the patent process or that falls within a recognized exception to the basic right to seek relief in court, like sham or repetitive litigation, would I be compelled to intervene.”), with Wright, supra note 1, at 23 (“Applying Section 5 to condemn PAE conduct as a sort of end-around to traditional antitrust analysis perfectly inverts the ideal response. . . . Novel applications of Section 5 to condemn PAEs before this understanding is complete commit the cardinal antitrust sin: conforming the law (and economics) to condemn a disapproved-of practice, rather than condemning a practice because it fails to conform to the law.”).
tive conduct.\textsuperscript{234} Earlier this year, well-known patent troll MPHJ Technology Investments, LLC (“MPHJ”) filed suit against the FTC in the Western District of Texas in an attempt to stop the FTC from taking action against MPHJ under a Section 5 deceptive conduct theory of liability.\textsuperscript{235} Several state attorneys general also have filed suit to stop MPHJ from sending deceptive demand letters to unsophisticated end users.\textsuperscript{236} Regardless of the outcome of these disputes, the message is clear: if PAEs engage in activity that is deceptive, they may be held liable under consumer protection laws.

All told, these recent developments present concrete alternatives to address antitrust concerns over PAE behavior. Indeed, many of the proposed patent reforms are aimed at eliminating behavior that harms consumers and innovation in the marketplace. Recent consumer protection enforcement actions are also aimed at eliminating and deterring the most pernicious PAE assertion behavior. Whether any of these alternatives serve as a better solution than antitrust law for PAEs remains debatable. But collectively, these developments help create a framework for assessing PAE activity.

**CONCLUSION**

Unquestionably, PAEs impose costs on today’s ICT sector. Vigorous enforcement of traditional antitrust laws towards PAEs, however, is not an appropriate tool for addressing those costs.

\textsuperscript{234} The FTC may protect consumers through enforcement of Section 5(a) of the FTC Act, which prohibits “unfair or deceptive acts or practices in or affecting commerce . . . .” 15 U.S.C. § 45(a)(1) (2012). The fact-intensive inquiry required to determine whether PAE activity constitutes unfair practices makes prosecution under such a theory somewhat more difficult than prosecution of deceptive acts.

\textsuperscript{235} Complaint at 41, MPHJ Tech. Invvs., LLC v. FTC, No. 6:14-cv-11, (W.D. Tex. Jan. 13, 2014). In its complaint, MPHJ also alleges that it is bound by Federal Rule of Civil Procedure Rule 11 to engage in presuit investigation (i.e., infringement due diligence) by sending out demand letters, which were designed to identify potential infringers. Id. at 21; see also Hoffman-La Roche Inc. v. Invamed Inc., 213 F.3d 1359, 1360-61 (Fed. Cir. 2000). As with traditional allegations of antitrust liability, the FTC faces the same Noerr-Pennington hurdles that protect PAE enforcement activity absent proof of “sham litigation” efforts. See supra Part II.C.2.

An analysis of traditional antitrust principles reveals the weaknesses of theories that advocate applying antitrust law to check the harms of PAEs. Absent the aggregation of substitute technologies by a PAE, the acquisition of large patent portfolios is unlikely to substantially lessen competition. Section I theories regarding hybrid PAE activity face difficult evidentiary hurdles regarding market power, unlawful restraints, and procompetitive efficiencies. Any inquiry into whether PAE conduct violates traditional antitrust laws will require a fact-intensive inquiry. Finally, outside of the FRAND portfolio disaggregation context, PAE enforcement of patent rights does not artificially raise rivals’ costs and likely is constitutionally protected petitioning activity.

But the conclusion that antitrust should play a limited role in taming PAEs does not foreclose the possibility that other tools could and should achieve these ends. Widespread concerns over PAE behavior have prompted the development of policy solutions at the state and federal judicial, legislative, and administrative levels. Given that PAEs exploit imperfections within the patent system, reforming the patent system is preferable to twisting the antitrust laws to perform a job for which they are ill-suited.