
ABSTRACT

Antitrust law and patent law share the common goal of improving economic welfare by facilitating competition and innovation. But these legal fields conflict when baseless claims of patent infringement disrupt the competitive process. In its eBay decision, the Supreme Court muddied the precedential waters by promulgating a vague doctrine of injunctive relief in patent infringement cases. In the years since, a split has emerged in the district courts on the question of which entities generally qualify for injunctive relief as an additional remedy to damages. This uncertainty has failed to mitigate an antitrust phenomenon known as “patent holdup,” whereby an original patentee is able to “hold up” a downstream user of a particular patent by obtaining or threatening to seek an injunction in order to extract a supracompetitive royalty payment from the downstream licensee. The phenomenon implicates antitrust law when such litigation tactics, often pursued by patent-assertion entities (PAEs or “patent trolls”), produce deadweight loss, chill follow-on innovation, and reduce competition. Courts have generally not taken holdup considerations into account in applying the vague eBay standard, and they lack the economic expertise to do so properly. Guidance is needed from a specialized administrative agency that is sensitive to the nuances of both patent and antitrust law. This Note proposes that Congress give the Federal Trade Commission authority to promulgate substantive rules to guide the district courts in their application of permanent injunctions in patent disputes.
Silicon Valley is a region at war. Technology heavyweights such as Apple, Samsung, Google, and Microsoft are currently engaged in a race for mobile-computing supremacy reminiscent of the days of mutually assured destruction. In July of 2011, the now-defunct Nortel Networks agreed to sell more than six thousand patents to an alliance made up of Apple, Microsoft, and other technology giants for $4.5 billion in cash. Google was the losing bidder, falling $1.3 billion short.
discourage competitors from suing the company for patent infringement as the company moved deeper into the mobile computing business.\(^5\) Implicitly, Google was threatening to use the Nortel portfolio to countersue any adversaries (not to be outdone, Google eventually acquired Motorola Mobility and its patents for $12.5 billion).\(^6\) The technology giants are on notice: in the twenty-first-century patent wars, annihilation will be met with annihilation.\(^7\)

The proliferation of patent infringement suits will likely prove detrimental to US consumers and the economy as a whole.\(^8\) Of course, the US patent system serves the important role of incentivizing innovation by granting companies the exclusive right to commercialize their innovative products.\(^9\) Patentees protect their inventions through various patent-enforcement regimes, such as patent infringement suits.\(^10\) The high-tech sector reflects this truth, as patent holders have filed thousands of patent infringement suits in recent years.\(^11\) Indeed, patent infringement lawsuits in the United States increased by 70

---

5. See Mark Hachman, Google Bids $900M for Nortel Wireless Patents, PCMAG.COM (Apr. 4, 2011, 1:09 PM), http://www.pcmag.com/article2/0,2817,2383044,00.asp (quoting Google’s general counsel as saying their Nortel bid was a defensive measure). In a move related to the theme of this Note, Google subsequently accused the Microsoft-led consortium of anticompetitive practices in bidding up the price of the Nortel patents. See Mary Jo Foley, Google Calls Microsoft-Apple Collaboration on Nortel Patents Anti-Competitive, ZDNET.COM (Aug. 3, 2011, 1:06 PM), http://www.zdnet.com/blog/microsoft/google-calls-microsoft-apple-collaboration-on-nortel-patents-anti-competitive/10271.


10. Id.

percent between 2004 and 2009.\textsuperscript{12} Some commentators argue that the only “winners” from these legal battles are the lawyers who litigate the disputes and the patent holders who may or may not be the original inventors.\textsuperscript{13} The “losers” are US consumers, who ultimately pay the pass-through costs of this litigation, and potential inventors, who are either deterred by innovation bottlenecks or sued after bringing a product to market.\textsuperscript{14} The ultimate casualty may be the US economy, which becomes less competitive and innovative with every lawsuit.\textsuperscript{15}

So, while the average patent infringement suit may serve useful purposes, many scholars, antitrust regulators, and companies view spurious patent infringement suits as anti-competitive, especially when they are brought by patent assertion entities (PAEs) engaging in “patent holdup.”\textsuperscript{16} PAEs are often referred to as “patent trolls,” a term that describes patent owners who neither invent nor make products, but instead accuse large companies of patent infringement and use the threat of permanent injunctions to extract exorbitant fees in licensing and settlement negotiations.\textsuperscript{17} PAEs


\textsuperscript{13} Google's Schmidt Warns Europe to Avoid a System Prone to Patent Wars, WALL ST. J. (Dec. 5, 2011, 4:02 PM), http://online.wsj.com/article/BT-CO-20111205-712342.html (“When you pick these big patent fights, the winners are the lawyers.”).


\textsuperscript{15} See Kolawole, supra note 8.

\textsuperscript{16} See infra Part II.A (describing the antitrust concerns arising out of patent holdup). This Note uses the term “patent assertion entity” to refer to firms whose business model focuses on purchasing and asserting patents, rather than developing and/or manufacturing patented products. PAE is used instead of the more familiar “non-practicing entity” (NPE) because NPEs technically “encompass[] patent owners that primarily seek to develop and transfer technology, such as universities[, small inventors] and semiconductor design houses” whereas PAEs do not perform the valuable function of developing technology. FTC, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 8 n.5 (2011), available at http://www.ftc.gov/os/2011/03/110307patentreport.pdf.

\textsuperscript{17} See CARRIER, supra note 9, at 233-34. The term patent trolls “comes from fairy tales in which a troll hiding under a bridge leaps out to demand a toll before letting anyone cross. Certain patentees, so the analogy goes, wait until products incorporating the patented technology are marketed, at which point they surface to charge a toll of licensing fees.” Id. at 234. The term’s use has been subject to much debate. Some scholars and business commentators support the pejorative use of the term, while others view PAEs in a positive light. Compare Gerard N. Magliocca, Blackberries and Barnyards: Patent Trolls and the Perils of Innovation, 82 NOTRE DAME L. REV. 1809, 1810 (2007) (calling such entities patent “blackmailers”), with James F. McDonough III, The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy, 56 EMORY L.J. 189, 201 (2006) (referring to PAEs as “patent dealers” and extolling their virtues). Regardless of the appropriateness of the term “patent troll,” there are many real-world examples of PAEs extracting settlement awards in excess of the value
typically do not innovate because innovation requires additional development beyond simply purchasing a patent. Some academics believe this behavior is worthy of antitrust condemnation when it rises to the level of “patent holdup.” Patent holdup occurs when a downstream manufacturer makes or sells a multicomponent end product that incorporates patented technology and the manufacturer is then “held up” when a PAE obtains an injunction or threatens an injunction in order to extract a supracompetitive (i.e., above-market) royalty payment from the downstream manufacturer. PAEs use the threat of injunctions to extract royalty payments in excess of the economic value of their inventions. The strategy has raised antitrust concerns because it deters follow-on innovation and decreases competition.

The courts, thus far, have failed to address patent holdup concerns effectively. District courts have granted equitable relief to PAEs on an inconsistent basis, and the Supreme Court has only muddied the waters. In eBay, Inc. v. MercExchange, LLC, a unanimous Court held that the grant of permanent injunctive relief in a patent case should be governed by “traditional principles of equity.” But the Court ultimately punted on the question of whether the PAE that brought the suit against eBay was eligible for injunctive relief of the asserted patent. See, e.g., Rob Kelley, BlackBerry Maker, NTP Ink $612 Million Settlement, CNNMONEY (Mar. 3, 2006, 7:29 PM), http://money.cnn.com/2006/03/03/technology/rimm_ntp (describing one of the many high-profile examples where a large company (here, Research in Motion) was forced to pay millions in a settlement agreement to patent-holding company to avoid the shutdown of its service); see also Tom Krazit, RIM Calls for Patent Reform in Newspaper Ad, CNET News (Mar. 14, 2006, 2:37 PM), http://news.cnet.com/RIM-calls-for-patent-reform-in-newspaper-ad/2100-1047_3-6049699.html (describing that RIM was still forced to settle its patent dispute even though the USPTO rejected the validity of NTP’s patents while the case was on appeal because of the injunctive relief granted to NTP and fear that NTP would appeal the USPTO’s rejections for years on end). Another particularly egregious example of patent trolling involved TechSearch and Intel, where the former purchased a patent for $50,000 in bankruptcy proceedings and unsuccessfully sued the latter for $5 billion. See CARRIER, supra note 9, at 234-35.

20. See id. at 1153-54; see also infra Part I.B. Of course, there may be additional reasons to be concerned about patent trolls beyond the patent holdup concerns. See CARRIER, supra note 9, at 234 (discussing how PAEs have led to a proliferation of patent infringement suits because they are not as concerned with counterclaim liability exposure and because they “usually do not confront customers exerting pressure to settle litigation or shareholders skeptical of patent enforcement”).
22. See infra Part I.B.
23. See infra Parts I.D, II.A.
24. See infra Part I.D.
relief, which gave the lower courts no guiding principles. Consequently, neither district courts nor parties involved in patent disputes know whether and when an injunction is a proper remedy. This resulting uncertainty in the law has exacerbated the negative effects of patent holdup.

Congress and federal administrative agencies have also failed to resolve the patent holdup issue, despite the Federal Trade Commission’s (FTC) conclusion that spurious threats of injunction made by PAEs are hamstringing the high-tech industry. On March 7, 2011, the FTC released a report that made several specific recommendations for reforming patent remedies (both damages and injunctive relief), but these recommendations carry little weight as long as the FTC lacks effective and substantive rulemaking authority. Congress has the power to grant the FTC such rulemaking authority but has failed to do so; so far, Congress has only nibbled around the edges of the patent holdup debate. On September 16, 2011, Congress passed the Leahy-Smith America Invents Act, which limits the ability of PAEs to join unrelated parties to a suit. However, such actions ultimately do not go far enough. The government could, and should, do more to address patent holdup.

This Note explores an important and unresolved topic at the crossroads of intellectual property (IP) and antitrust law: namely, how the courts and the administrative state can prevent patent holdup. Part I introduces patent holdup and provides an overview of the

26. See infra Part I.C.
28. See infra Part I.D.
29. See infra Part II.E.
31. See FTC, supra note 16, at 3.
32. See infra Part III.A.
33. See infra Part III.A.
36. See infra Part III.A.
complex interplay between antitrust and patent law. It also discusses how the eBay decision promulgated a vague doctrine of injunctive relief in patent disputes, causing inconsistency in lower-court rulings. Part II argues that the uncertainty that eBay introduced likely increased the frequency of patent holdup. It also analyzes two cases to illustrate why solutions involving private ordering are inadequate, and suggests that there may be a need for governmental action in addressing patent holdup. Finally, Part III proposes that Congress grant the FTC substantive rulemaking authority so that the FTC can guide courts in their determinations of appropriate equitable remedies in patent disputes.

I. AT THE CROSSROADS OF ANTITRUST AND IP: AN OVERVIEW OF PATENT INJUNCTIONS

Some believe that IP rights contradict antitrust law’s goal of free market competition, but this view is simplistic and inaccurate. Indeed, IP and antitrust law are broadly consistent in their aims. Patent holdup, however, highlights a new area of tension in the antitrust-IP interface.

A. The Antitrust-IP Interface

Antitrust law and IP law interact in complex ways. Since the enactment of the Sherman Act in 1890, judges have perceived greater conflict between patents and antitrust policy than has actually existed. US patent laws grant inventors a twenty-year right to exclude others from making, using, selling, offering for sale, or importing a patentee’s invention. Thus, patents give inventors exclusive use of their ideas, which theoretically reduces the diffusion

37. See infra Part I.A.
38. See infra Part I.A.
41. See, e.g., United States v. Westinghouse Elec. Corp., 648 F.2d 642, 646 (9th Cir. 1981) (“There is an obvious tension between the patent laws and antitrust laws. One body of law creates and protects monopoly power while the other seeks to proscribe it.”). Even further back in history, courts assumed that patents were themselves “monopolies.” See, e.g., Henry v. A.B. Dick Co., 224 U.S. 1, 27 (1912) (describing a patent as a “true monopoly” with origins “in the ultimate authority, the Constitution”). Commentators at one time agreed. See, e.g., Donald S. Chisum, The Allocation of Jurisdiction Between State and Federal Courts in Patent Litigation, 46 Wash. L. Rev. 633, 658 (1971) (“A patent is a legalized monopoly. As such, it is the principal legal exception to our national policy of free economic competition.”).
of those ideas to other potential competitors during the patent term. Viewed through the antitrust lens, protecting an inventor from competition for a period of twenty years arguably gives that inventor the ability to restrict output or raise prices. Indeed, many courts have referred to patents as monopolies. Thus, because antitrust law is concerned with preventing the acquisition or maintenance of monopoly power, many courts and scholars viewed patents and antitrust as inherently at odds.

The historical view is oversimplified, however, and courts and antitrust agencies have moved away from the presumption that patents automatically create monopolies. In fact, patent rights do not in and of themselves confer monopoly power over a particular market. Although patentees possess an exclusive right to make, use, and sell their patented invention, the patent right is only a negative right to exclude; it is not a positive right to the commercial success of the resulting product(s). In addition, patented products must compete with substitute goods that patents may also protect. Thus, there is nothing stopping consumers from substituting away from a patented product to a different product if they feel the price for the patented product is excessive. In a monopolistic market, by way of contrast, consumers lack this choice.

Antitrust law and patent protection actually strive toward a common end. Each body of law shares the goal of maximizing

44. Id. at 9-10.
45. See, e.g., Int'l Salt Co. v. United States, 332 U.S. 392, 395-96 (1947) (“[P]atents confer a limited monopoly of the invention they reward.”), overruled by Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006). One scholar observed that patents were viewed as limited exceptions to anti-monopoly rules even in seventeenth-century England. Chisum, supra note 41, at 635 n.12 (“After the English Statute of Monopolies in 1624, which banned royal grants of monopolies but excepted letters patent to first inventors, infringement of a patent was considered a tort at common law for which the patent owner could recover consequential damages through an action for trespass on the case.”).
46. See Westinghouse, 648 F.2d at 646.
48. See Ill. Tool Works, 547 U.S. at 45 (“Congress, the antitrust enforcement agencies, and most economists have all reached the conclusion that a patent does not necessarily confer market power upon the patentee.”).
50. See Carrier, supra note 9, at 52-53.
51. Id.
52. See id.
53. See Atari Games Corp. v. Nintendo of Am., Inc., 897 F.2d 1572, 1576 (Fed. Cir. 1990) (observing that antitrust and patent law “are actually complementary, as both are aimed at encouraging innovation, industry and competition”).
wealth by producing what consumers want at the lowest cost.” The separate legal regimes strive to maximize consumer welfare—antitrust law by lowering barriers to entry and promoting competition, patent law by incentivizing innovation. Antitrust’s promotion of competition serves consumers by ensuring the lowest costs for the best products. Patent law’s effect is more indirect. The “temporary monopoly” afforded by a patent may increase prices and restrict output of a particular product in the short term. But because companies produce an invention only if it can be profitable, patent exclusivity allows an inventor to recover research and development costs, prevents free-riding, and thus creates incentives for innovation. As a result, both antitrust law and patent law promote “the efficient production of those things consumers value.”

This is not to say that antitrust and patent law never conflict. Although antitrust law and patent law have a common central economic goal of maximizing consumer welfare, the effects of antitrust policy and patent law are sometimes in tension. For example, in the past, courts have been wary of tying arrangements, patent pools, standard-setting organizations, and refusals to deal. In recent years, academics and antitrust regulators have identified patent holdup as an emerging area of tension.

B. Patent Holdup

Many commentators and antitrust authorities consider patent holdup anticompetitive and harmful to innovation, particularly when it arises out of spurious patent infringement suits brought by PAEs. Holdup arises in the context of a downstream manufacturer making, using, or selling products that unknowingly incorporate a patented technology. The manufacturer is “held up” when a PAE refuses to license on “fair, reasonable, and non-discriminatory” (FRAND) terms.

55. See id.
56. See id.
57. See id.
58. See id. at 3.
59. See id. at 2.
60. See id. at 3.
61. See id. at 1-3.
62. See id.
63. See Carrier, supra note 9, at 73-77.
64. See FTC, supra note 16, at 5; Cotter, supra note 19, at 1151-52.
65. See FTC, supra note 16, at 5, 8; Cotter, supra note 19, at 1160.
66. Cotter, supra note 19, at 1160.
and instead obtains or threatens to obtain an injunction in order to extract a supra-competitive royalty payment from the downstream manufacturer.\textsuperscript{67} PAEs use the threat of injunctions to extract royalty payments in excess of the economic value of their inventions.\textsuperscript{68} This phenomenon is most prevalent in multi-component technological products where the accused infringer is unable to separate the allegedly infringing component from the non-infringing ones after production.\textsuperscript{69} Holdup can arise when one party makes sunk-cost investments specific to a technology without realizing that the technology may implicate another party’s patents.\textsuperscript{70} In such cases, the availability of injunctive relief provides PAEs with an opportunity to seek royalties for its patents under the threat of litigation.\textsuperscript{71} When threatened with business shutdown, manufacturers with sunk costs will be forced to pay a royalty up to their “switching costs,” which would be in excess of the royalty the patentee would have received in ex ante (i.e., pre-infringement) negotiations.\textsuperscript{72} The patentee thus finds itself with excessive bargaining power, which allows it to capture value beyond that of its invention.\textsuperscript{73}

Patent holdup causes both static and dynamic efficiency losses.\textsuperscript{74} By taking advantage of a manufacturer’s dependence on a patented component in its technology and threatening an injunction, patentees engaging in holdup are able to earn more compensation than they would have earned via a reasonable royalty in the technology market.\textsuperscript{75} This is significant because the additional compensation represents an income transfer from the alleged infringer to the patentee, whether the alleged patent infringement is valid or not.\textsuperscript{76} Holdup creates static effects by increasing costs to innovators, discouraging invention (i.e., creating deadweight loss), and weakening

\begin{itemize}
  \item \textsuperscript{67} See FTC, supra note 16, at 5; Cotter, supra note 19, at 1160-61 n.200.
  \item \textsuperscript{68} FTC, supra note 16, at 5; Cotter, supra note 19, at 1160-61.
  \item \textsuperscript{70} See Cotter, supra note 19, at 1179 (“[T]he elements of patent hold up . . . are present [when] the patent reads on a component of a multicomponent end product, the owner is a non-manufacturing patentee, and the prospect of obtaining injunctive relief ex post facilitates the extraction of substantially higher royalties than would be attributable to the value of the patented feature alone.”).
  \item \textsuperscript{71} See id. at 1161-62.
  \item \textsuperscript{72} See FTC, supra note 16, at 5. “Switching costs” are “the costs that an infringer would incur as a result of switching from its current design to the best alternative, including any costs of redesign, investments in additional plant or equipment, any difference in incremental production costs, and any difference in consumers’ willingness to pay for the product.” Id. at 190.
  \item \textsuperscript{73} See Lemley & Shapiro, supra note 69, at 2009-10.
  \item \textsuperscript{74} Cotter, supra note 19, at 1162.
  \item \textsuperscript{75} FTC, supra note 16, at 5.
  \item \textsuperscript{76} See Cotter, supra note 19, at 1162.
\end{itemize}
competition in the market.\textsuperscript{77} It also causes dynamic effects\textsuperscript{78} by promoting rent-seeking by PAEs and reducing the incentives to innovate for manufacturers who produce complex, multi-component systems.\textsuperscript{79} Indeed, the availability of injunctive relief to PAEs incentivizes “lie-in-wait” behavior, where PAEs litigate ex post rather than license ex ante.\textsuperscript{80} Manufacturers fear exposure to PAEs that may ambush them once they are “locked in” to a particular technology.\textsuperscript{81} Uncertainty breeds risk aversion as companies become less willing to risk infringement, and risk aversion diminishes innovation.\textsuperscript{82} Holdup raises prices for consumers by depriving them of the benefit of “competition among technologies.”\textsuperscript{83} By deterring innovation and follow-on competition in the marketplace, patent holdup threatens the very purposes of patent and antitrust law.\textsuperscript{84}

\textbf{C. eBay’s Ambiguous Injunctive Relief Standard}

US patent law prescribes two main remedies for findings of patent infringement: injunctions and damages.\textsuperscript{85} Section 283 of the Patent Act of 1952 grants federal courts broad discretion to enjoin patent infringement.\textsuperscript{86} The frequency with which courts have granted injunctions in patent infringement cases has ebbed and flowed over the years.\textsuperscript{87} Before 2006, the US Court of Appeals for the Federal Circuit automatically granted injunctive relief to prevailing patentees

\begin{itemize}
  \item \textsuperscript{77} See \textit{id.} at 1155, 1167-68.
  \item \textsuperscript{78} See \textit{id.} at 1155.
  \item \textsuperscript{79} Lemley & Shapiro, \textit{supra} note 69, at 2010.
  \item \textsuperscript{80} FTC, \textit{supra} note 16, at 227.
  \item \textsuperscript{81} Id.
  \item \textsuperscript{82} Id.
  \item \textsuperscript{83} Id. at 5.
  \item \textsuperscript{85} This Note is primarily concerned with permanent injunctions. For a discussion of the unique issues involved in calculating damages in cases of patent infringement, see PTC, \textit{supra} note 16, at 137.
  \item \textsuperscript{86} 35 U.S.C. § 283 (1952) (“The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.”) (current version at 35 U.S.C. § 283 (2006)). As one scholar noted, although patentees have been entitled to damages through an action for trespass since at least 1624, the availability of injunctive relief was slow to emerge. Chisum, \textit{supra} note 41, at 635 n.12 (“The federal circuit courts were given equity jurisdiction over infringement actions in 1819.”).
  \item \textsuperscript{87} See CARRIER, \textit{supra} note 9, at 236-38.
\end{itemize}
upon a finding of infringement. In *eBay Inc. v. MercExchange, LLC*, the Supreme Court eliminated the presumption that a court should automatically grant an injunction, but failed to delineate when a patentee qualifies for injunctive relief.

The Supreme Court’s decision in *eBay* ignited a debate regarding the applicability of permanent injunctions in patent disputes. In *eBay*, respondent MercExchange, LLC was a PAE that “held a number of patents, including a business method patent for an electronic market designed to facilitate the sale of goods between private individuals by establishing a central authority to promote trust among participants.” Petitioner eBay, Inc. had willfully infringed one of MercExchange, LLC’s patents. In reversing the Federal Circuit, the Supreme Court specifically rejected a rule adopted by the Federal Circuit under which a prevailing plaintiff in a patent infringement case was automatically entitled to permanent injunctive relief absent exceptional circumstances. The Court reasoned that nothing in the Patent Act indicated that Congress intended a departure from the “long tradition of equity practice.” Instead, the Court noted that the Patent Act expressly provides that injunctions “may” issue “in accordance with the principles of equity.” Thus, the Court held that the propriety of injunctive relief under § 283 was governed by the traditional multi-factor test for suits in equity.

The Court listed four factors that a patentee must satisfy to obtain an injunction: a patentee must show (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public

---

88. The Federal Circuit treated injunctions after a finding of patent infringement as effectively mandatory, but the Supreme Court overruled that position. *See MercExchange, L.L.C. v. eBay, Inc.*, 401 F.3d 1323, 1339 (Fed. Cir. 2005) (“Courts will issue permanent injunctions against patent infringement absent exceptional circumstances.”), *vacated*, 547 U.S. 388 (2006); *see also* Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1246-47 (Fed. Cir. 1989) (“Infringement having been established, it is contrary to the laws of property, of which the patent law partakes, to deny the patentee’s right to exclude others from use of his property.”).

89. *eBay*, 547 U.S. at 390.


91. *Id.*

92. *eBay*, 547 U.S. at 390.

93. *Id.* at 390-91.

94. *Id.*

95. *Id.*

96. *Id.* at 392.

97. *Id.* at 390.
interest would not be disserved by a permanent injunction.\textsuperscript{98} Thus, the Court rejected per se rules in applying injunctive relief.\textsuperscript{99}

Chief Justice Roberts’s and Justice Kennedy’s concurring opinions foreshadowed a debate that continues in the district courts today.\textsuperscript{100} Chief Justice Roberts observed that courts historically granted injunctive relief upon a finding of infringement in the vast majority of patent cases and suggested that the district courts should use this as a rule of thumb.\textsuperscript{101} Justice Kennedy’s concurrence alluded to patent holdup as a reason why the general rule may be inappropriate in some cases.\textsuperscript{102} He observed that PAEs represent a new breed of patentees who “use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees,”\textsuperscript{103} and cautioned that PAEs could employ injunctive relief “as a bargaining tool to charge exorbitant fees.”\textsuperscript{104} In such cases, he argued that “legal damages may well be sufficient to compensate [PAEs] for the infringement and [that] an injunction may not serve the public interest.”\textsuperscript{105}

The majority opinion took no position on whether injunctive relief should or should not issue to PAEs in this case and did not indicate whether PAEs normally qualify for such relief.\textsuperscript{106} In dicta, the Court merely noted that a patent holder’s willingness to license its patents and “its lack of commercial activity in practicing patents” do not, by themselves, establish that the holder would not suffer irreparable harm or that injunctive relief should be denied.\textsuperscript{107} Hence, the Court’s decision gave district courts little guidance about which entities would generally qualify for injunctive relief.\textsuperscript{108} The decision left to the district courts the determination of whether and when PAEs would qualify for injunctive relief based on the four-factor test.\textsuperscript{109}

\begin{itemize}
\item \textsuperscript{98} \textit{Id.} at 391.
\item \textsuperscript{99} \textit{See Carrier, supra note 9}, at 236-38.
\item \textsuperscript{100} \textit{See eBay}, 547 U.S. at 394-95 (Roberts, J., concurring); \textit{id.} at 395-97 (Kennedy, J., concurring).
\item \textsuperscript{101} \textit{Id.} at 395 (Roberts, J., concurring).
\item \textsuperscript{102} \textit{Id.} at 396-97 (Kennedy, J., concurring).
\item \textsuperscript{103} \textit{Id.} at 396.
\item \textsuperscript{104} \textit{Id.}
\item \textsuperscript{105} \textit{Id.} at 396-97.
\item \textsuperscript{106} \textit{Id.} at 394.
\item \textsuperscript{107} \textit{Id.} at 393.
\item \textsuperscript{108} \textit{See Carrier, supra note 9}, at 244.
\item \textsuperscript{109} \textit{Id.}
\end{itemize}
D. Resulting Inconsistency in the District Courts

The *eBay* Court failed to offer sufficient guidance on the application of its multi-factor test for granting permanent injunctions in patent infringement cases.\textsuperscript{110} The ambiguity of the majority opinion and the divergent concurring opinions created significant uncertainty about the circumstances under which courts should deny permanent injunctions in patent infringement cases.\textsuperscript{111} This has led to a pronounced split in the federal district courts regarding whether and under what circumstances PAEs deserve injunctive relief.\textsuperscript{112} To make matters worse, the Federal Circuit has since taken a mostly passive approach by largely deferring to lower-court interpretations of the *eBay* test.\textsuperscript{113} As a result, courts have applied the *eBay* standard inconsistently in a number of factually similar cases.\textsuperscript{114}

As of March 31, 2010, of the seventy-six reported federal patent infringement cases since *eBay*, courts have denied permanent injunctions in twenty-one cases and granted permanent injunctions in fifty-five cases.\textsuperscript{115} Unfortunately, courts have not applied a consistent rule in these cases, but some trends have emerged.\textsuperscript{116} The inconsistency at the district court level involved three issues: (1) whether nonpracticing entities should receive injunctive relief; (2) whether the irreparable-harm prong focuses exclusively on harm to the patentee; and (3) whether the adversaries at trial must also be competitors in the market before the court will grant an injunction.\textsuperscript{117}

First, district courts have placed inconsistent emphasis on the patentee’s status as a practicing or nonpracticing entity.\textsuperscript{118} For example, on remand from the Supreme Court, the district court in *eBay* denied injunctive relief to MercExchange, LLC.\textsuperscript{119} The court stated, “MercExchange’s consistent practice of licensing, rather than developing, its patents . . . is one factor that [the] court must consider

---

\textsuperscript{110} Id.
\textsuperscript{111} Id.
\textsuperscript{112} HOVENKAMP ET AL., supra note 43, at 2-49. \textit{But cf.} Ecolab, Inc. v. FMC Corp., 569 F.3d 1335 (Fed. Cir. 2009) (holding that the district court abused its discretion by failing to consider the *eBay* factors when denying a permanent injunction).
\textsuperscript{113} HOVENKAMP ET AL., supra note 43, at 2-49.
\textsuperscript{114} See, e.g., Andrei Iancu & W. Joss Nichols, \textit{Balancing the Four Factors in Permanent Injunction Decisions: A Review of Post-*eBay* Case Law}, 89 J. PAT. & TRADEMARK OFF. SOC’Y 395, 404 (2007) (noting that most courts since the *eBay* decision continued to grant permanent injunctions, but denied such relief for patent trolls).
\textsuperscript{115} FTC, supra note 16, 272-78.
\textsuperscript{116} See supra Part I.D.
\textsuperscript{117} FTC, supra note 16, 262-68.
\textsuperscript{118} Id.
in weighing the equities.” Thus, despite the Supreme Court’s cautioning against inflexible rules, certain district courts have maintained the position that a patentee’s status as a PAE or a practicing entity strongly affects whether they will receive injunctive relief.

Similarly, the Federal Circuit affirmed a district court’s denial of injunctive relief in Paice L.L.C. v. Toyota Motor Corp. primarily because the patentee was a PAE. The court concluded that denial of the injunction would neither adversely affect the patentee’s ability to license its technology nor adversely affect its reputation or market share because Paice was not a manufacturer.

But some district courts have granted injunctive relief even though the patentee was a PAE. For instance, in Commonwealth Scientific & Industrial Research Organisations v. Buffalo Technology Inc., the court found that the plaintiff had lost irrevocable research opportunities and suffered reputational damage despite not commercializing its inventions in the marketplace. Consequently, it is unclear whether a party’s status as a PAE precludes it from injunctive relief.

Second, the courts lack consistency when deciding whether to look at only patentee harm in assessing the irreparable-harm and adequate-remedies factors of the four-factor test, or whether to consider harm to both the patentee and the alleged infringer. In many cases, courts have emphasized harm only to the patentee in the “balance of hardships” analysis. Some district courts decline to consider the harm to the defendant, relying on Federal Circuit precedent whereby a defendant “who elects to build a business on a product found to infringe cannot be heard to complain if an injunction against continuing infringement destroys the business so elected.” However, many courts will in fact consider harm to the alleged infringer, often looking at: (1) the infringing company’s size; (2) the effect of an injunction on the infringer’s total sales; and (3) other harmful effects of the injunction on the defendant. Therefore, the

120. *Id.* at 570.
121. See *id.* at 587-88.
122. 504 F.3d 1293, 1302, 1314-15 (Fed. Cir. 2007).
123. *Id.* at 1303.
125. *Id.* at 604.
126. See *id.*
127. FTC, supra note 16, at 268-70.
129. FTC, supra note 16, at 260.
law regarding whether to consider harm to the alleged infringer, or only to the patentee, is unsettled. 130

Third, in analyzing the irreparable-harm and adequate-remedies prongs, courts have also been inconsistent in granting permanent injunctions when patentees and infringers compete with each other in a market. 131 For example, in Verizon Services Corp. v. Vonage Holding Corp., the Federal Circuit held that evidence of competition that led to price erosion and Verizon’s “lost opportunities to sell other services to the lost customers” proved irreparable harm. 132 Indeed, some scholars have noted that, after eBay, this “market competition” issue has become an unofficial requirement for the issuance of injunctive relief in patent cases. 133 However, some courts have imposed a higher evidentiary standard and have declined to find the irreparable-harm and adequate-remedy prongs satisfied based merely on a general pleading of competition. 134 In Praxair, Inc. v. ATMI, Inc., a district court denied an injunction because, even though the parties were in “direct and head-to-head competition,” the patentee failed to provide specific data about lost market share, profits, and goodwill. 135 In short, the courts have not articulated a consistent rule regarding the “market competition” issue. 136

The inconsistencies in the district courts raise three questions that are analyzed in this Note: (1) whether there is any harm caused by the district courts’ inconsistent application of the eBay standard; (2) what factors should guide the district courts in their grant or denial of equitable relief; and (3) to whom should the responsibility of crafting these decisional factors fall?

130. See id.
132. 503 F.3d 1295, 1310 (Fed. Cir. 2007).
134. See, e.g., Praxair, Inc. v. ATMI, Inc., 479 F. Supp. 2d 440, 444 (D. Del. 2007) (denying injunction because patentee only made general arguments about economic harm, but did not support its arguments with data).
135. Id.
136. See id.
II. INCORPORATING PATENT HOLDUP INTO THE INJUNCTIVE-RELIEF DEBATE

From an antitrust perspective, the Supreme Court’s failure to provide clear guidance in eBay was deficient. At best, the district courts’ inconsistent approaches to injunctive relief has allowed the phenomenon of patent holdup to continue, resulting in static and dynamic efficiency losses. At worst, the district courts’ inconsistent approaches may have increased the frequency of patent holdup by injecting additional uncertainty into the patent-licensing negotiation process. Recent case studies from the high-tech sector illustrate the growing prevalence of holdup in the technology industry and call into question the adequacy of private (as opposed to government) solutions. The case studies also highlight the need for urgent corrective action. The courts, Congress, and administrative agencies have failed to address patent holdup due to a lack of institutional expertise, a lack of will, and a lack of authority, respectively. But sunlight is the best disinfectant, and perhaps by illuminating the causes of the government’s inaction, a solution to patent holdup will emerge.

A. eBay’s Failure to Address Patent Holdup

The main problem with the Supreme Court’s eBay decision is that it did not define the proper scope of patent remedies. Specifically, the Court provided unclear standards in determining which types of entities qualify for injunctive relief and what facts must be present for such relief to be warranted. In doing so, the Court failed to incorporate patent holdup concerns into a guiding standard for injunctive relief.

A large segment of patent law scholars support Justice Kennedy’s position in eBay—that PAEs do not deserve injunctive

137. See infra Part II.A.
138. See infra Part II.A.
139. See infra Part II.C.
140. See infra Part II.B, II.D.
141. See infra Part II.B, II.D.
142. See infra Part II.E.
143. See Louis D. Brandeis, Other People’s Money and How the Bankers Use It 92 (1914).
144. See infra Part II.E.
145. See Carrier, supra note 9, at 236-38.
146. Id. at 244.
147. See id. at 244-45.
relief.\textsuperscript{148} For example, Bernard Chao has noted that injunctions only help PAEs increase the settlement value of their patents, and thus any harm to PAEs from infringement “can be adequately addressed through monetary damages.”\textsuperscript{149}

By not categorically denying equitable relief to PAEs in patent disputes, the \textit{eBay} Court left intact the primary mechanism by which PAEs hold up downstream manufacturers: the threat of an injunction.\textsuperscript{150} Such threats may or may not be credible, since neither patentees nor licensees can be sure when an injunction will be granted.\textsuperscript{151} But given manufacturers’ unwillingness to bet the farm by litigating a patent dispute to final judgment, uncertainty in licensing and settlement negotiations can cause companies to err on the side of caution and “buy off” PAEs.\textsuperscript{152} Thus, in failing to eliminate injunctive relief for PAEs, the Supreme Court failed to mitigate patent holdup, a phenomenon that many scholars agree is threatening the very purposes of patent and antitrust law.\textsuperscript{153}

\textit{B. Holdup: Is It a Problem?}

As with any unsettled area of the law, there is a vibrant debate about whether the concerns of patent holdup should inform post-\textit{eBay} injunction doctrine.\textsuperscript{154} Critics raise two lines of attack.\textsuperscript{155}

First, holdup skeptics argue that withholding injunctive relief from PAEs will cause manufacturers to increasingly infringe patents rather than licensing a PAE’s technology.\textsuperscript{156} As the FTC notes, this argument makes two fatal assumptions: (1) that the manufacturer has preinfringement notice of the patent and a clear idea of the boundaries of the patent when it is designing its product; and (2) that a manufacturer, upon discovery of potential patent infringement, can quickly redesign its product, eliminating the use of the infringed
technology to avoid paying reasonable royalties. The first assumption is incorrect, according to the FTC, because, in the high-tech industry, software patents suffer from an ambiguity in scope, and manufacturers have no clear preinfringement notice about whether they are infringing. Second, as discussed above, manufacturers face problems of sunk costs and high switching costs, which means it is costly and inefficient to create a noninfringing product.

Critics also argue that if courts incorporate holdup analysis into the injunctive-relief doctrine, it would decrease the royalties earned by inventors, thereby reducing the incentive to innovate and harming consumers. As noted by the FTC, this argument is also unconvincing. In a holdup scenario, PAEs are able to extract more compensation than they would have otherwise in the competitive marketplace. But a patentee cannot assume this windfall when developing technology ex ante and filing for a patent because a patentee cannot anticipate whether follow-on innovators will use its technology. Thus, since patentees cannot know whether they will have the chance to earn a windfall via patent holdup, the availability of injunctive relief does not provide ex ante incentives to innovate. PAEs also typically do not innovate, since innovation requires additional development beyond obtaining a patent. PAEs simply amass patent portfolios and prepare for litigation to earn supracompetitive royalties. Thus, patent holdup is a legitimate concern to incorporate into the post-\textit{eBay} injunctive relief doctrine.

\section*{C. How Ambiguous Standards Exacerbate Patent Holdup}

By promulgating a vague standard for granting injunctive relief in cases of patent infringement, the Supreme Court may have unwittingly increased the prevalence of holdup in a post-\textit{eBay} world. This argument relies on two premises: (1) uncertainty regarding the applicability of injunctive relief to PAEs is a root cause of holdup, and

\begin{itemize}
  \item 157. \textit{Id.}
  \item 158. \textit{Id.}
  \item 159. \textit{Id.}
  \item 160. See \textit{Golden}, supra note 84, at 2111; \textit{Sidak}, supra note 84, at 734-36.
  \item 161. See FTC, \textit{supra} note 16, at 226.
  \item 162. \textit{Id.}
  \item 163. \textit{Id.} at 226-27.
  \item 164. \textit{Id.}
  \item 165. \textit{Id.} at 227.
  \item 166. See \textit{id.} at 225-27.
  \item 167. \textit{Id.} at 235.
\end{itemize}
(2) given the problem of patent notice, some companies misjudge the scope of existing patent claims, resulting in riskier patent filings and more holdups.

First, the uncertainty and inconsistency eBay created at the district court level increases the frequency of patent holdup. When follow-on inventors and downstream users face risk and uncertainty about the platform technology they use, such inventors cannot be sure if an injunctive threat is legitimate. Since eBay, PAEs have thrived in this uncertain environment because they can credibly threaten injunctions against a potential infringer. The potential infringer cannot rely on precedent suggesting that the PAE will be denied injunctive relief. Thus, companies must run the risk of courts finding in favor of PAEs shutting down their business, which increases uncertainty and costs and discourages innovation. Since the mere threat of a permanent injunction deters innovation, the uncertainty surrounding whether a PAE will qualify for such relief exacerbates the problem of patent holdup.

Second, eBay’s vague standards complicate business planning, leading to additional infringement. Aggressive business planners may view the ambiguity as a business opportunity and expand their manufacturing in a way that may run up against questionable patent boundaries. Alternatively, firms may simply find it more difficult to investigate and determine whether their manufactured product exceeds the boundaries of a patentee’s claims. Aggressive business planners might pursue a business model that exposes them to ambush by PAEs. Consequently, eBay exacerbates the frequency of patent holdup.

D. Case Studies in the High-Tech Sector and the Failure of Private Ordering

Two recent case studies show how spurious litigation can be particularly debilitating in the high-tech industry, where an unregulated approach to standard-setting organizations (SSOs) has

168. Note that holdup would be even more prevalent if the Supreme Court adopted the Federal Circuit’s general presumption in favor of injunctions, whether the patentee is a PAE or not. But in rejecting the Federal Circuit’s presumption, the Supreme Court acknowledged that such a universal standard ignores traditional principles of equity. In addition, the courts have generally been hesitant to grant injunctive relief to nonpracticing and noncompeting entities, such as PAEs. See supra Part I.C.

169. See generally Bessen & Meurer, supra note 8, at 1-2.

170. See id.

171. See id.

172. Id.
made the phenomenon of patent holdup increasingly prevalent. SSOs attempt to avoid the holdup problem by requiring participants in a standard-setting process to commit to license foundational patents on “Reasonable and Non-Discriminatory” (RAND) terms. Although RAND commitments are a possible solution to the holdup problem, two recent examples from the high-tech industry illustrate the shortcomings of the SSO approach.

In FTC v. Rambus, Inc., the FTC asserted that Rambus violated antitrust laws by abusing its dominant position in the market for DRAM chips. Specifically, the FTC claimed that Rambus engaged in “patent ambush,” a particularly egregious form of patent holdup, by intentionally concealing its patents and patent applications, which were essential to an ongoing industry-wide DRAM standard-setting process. The FTC accused Rambus of subsequently charging downstream chip manufacturers exorbitant royalties on its patents rather than licensing its technology on RAND terms. The D.C. Circuit held that Rambus had not violated antitrust laws. Nevertheless, in a settlement agreement, the FTC convinced Rambus to reduce the amount licensees paid.

In a second example, Qualcomm acquired monopoly power in the telecommunications industry after convincing a standard-setting organization for the Universal Mobile Telecommunications System to adopt a standard that incorporates its patents by promising to license its patents on RAND terms. Broadcom, a chipset manufacturer, alleged that Qualcomm violated antitrust laws by charging more than a RAND fee to licensees. In Broadcom Corp. v. Qualcomm Inc., the Third Circuit held that “a patent holder’s intentionally false promise to license essential proprietary technology on [RAND] terms . . . is actionable anticompetitive conduct.” Broadcom illustrates a second recent example in which the SSO system has failed.

173. See the discussion herein of Rambus Inc. v. FTC, 522 F.3d 456 (D.C. Cir. 2008) and Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297 (3d Cir. 2007).
175. See supra Part II.D.
176. See Rambus, 522 F.3d at 459.
177. Froeb et al., supra note 174, at 2.
178. Id.
179. Id. at 2 n.2.
180. See id.
181. Id. at 2 n.3
183. Id. at 314.
184. Id.
Those who disfavor government solutions might argue that the private sector can solve patent holdup. However, private ordering fails because of the inherent difference between “intellectual property” and other types of property. Patents differ from real property in that:

[T]he boundaries of a plot of land and the validity of a title usually can be verified at little cost and with little uncertainty. In contrast, the validity of a patent may be challenged and firms often have difficulty determining whether a technology infringes the boundaries of a patent’s claims.

The inherent uncertainty of patent validity affects the incentives of self-interested actors in the marketplace. Instead of licensing patents ex ante, “[s]ome firms ‘stumble’ and make unauthorized use of patented technology.” Other firms might inadequately investigate issued patents only to later find out that they are infringing. In essence, private agreements like SSOs will still lead to holdup and patent infringement suits because patents are rarely defined clearly.

Furthermore, once parties agree to enter an SSO, they may later discover that they are indeed in violation of some asserted patent, as seen in the cases above. In these situations, the patentee who promised to license on RAND terms has an incentive to cheat and demand supracompetitive royalties under the threat of an injunction. Clearly, private actors can exploit the SSO process, and private solutions can fail. While those in favor of private ordering might argue that companies can avoid patent holdup through private agreements, Rambus and Broadcom illustrate that private ordering is not the panacea for patent holdup. And where markets fail, there may be a need for governmental intervention.

186. Bessen & Meurer, supra note 8, at 1.
187. Id.
188. See id.
189. Id.
190. Id.
191. Id.
192. See supra notes 172-95 and accompanying text.
193. See supra Part II.
194. Supra Part II.
195. See supra Part II.D.
196. See infra Part II.E.
E. A Problem of Governmental Expertise, Will, and Authority

The case studies above highlight the need for urgent corrective action. This Note argues that three entities—the courts, Congress, and administrative agencies—have thus far failed to address patent holdup due to a lack of institutional expertise, a lack of will, and a lack of authority, respectively. But, in analyzing the causes of the government’s inaction, a solution for combatting patent holdup emerges.

As demonstrated by post-\textit{eBay} cases, the courts, thus far, have failed to address patent holdup in their injunctive-relief doctrines. Perhaps one reason why the district courts have promulgated such vague standards for injunctive relief is because they are not equipped with the appropriate expertise. In \textit{Northern Pipeline Construction Co. v. Marathon Pipe Line Co.}, Justice White admitted, “We are, on the whole, a body of generalists.” As seen in \textit{Paice}, courts are often called upon to assess economic arguments in deciding the merits of injunctive relief, such as market definition disputes, to determine whether or not the patentee and alleged infringer are competitors. But the courts primarily rely on amicus briefs from interested outsiders and are themselves inexpert at assessing the economic arguments. This has produced inconsistency in that some courts grant injunctive relief to PAEs, and some do not. Also, whereas some courts grant injunctive relief to competitors, others do not.

Ironically, since the Federal Circuit has primarily affirmed the lower courts’ economically inconsistent holdings, the court is undermining its own legitimacy. Indeed, Congress granted the Federal Circuit exclusive jurisdiction over claims arising under the patent laws specifically because the Federal Circuit was considered to

\begin{footnotes}
\item[197.] See supra Part II.D.
\item[198.] See infra Part II.E.
\item[199.] See infra Part III.
\item[200.] See \textit{Carrier}, supra note 9, at 236-38.
\item[201.] \textit{Id.} at 238.
\item[203.] See \textit{Carrier}, supra note 9, at 236; see also \textit{Paice LLC v. Toyota Motor Corp.}, 504 F.3d 1293, 1303 (Fed. Cir. 2007).
\item[205.] \textit{FTC}, supra note 16, at 272-78 (listing cases in which some courts grant injunctive relief and others do not).
\item[206.] See \textit{Chao}, supra note 131.
\end{footnotes}
have expertise in the field and because Congress wanted uniformity in the law.\textsuperscript{208} Unfortunately, the Federal Circuit has affirmed inconsistent applications of the eBay standard.\textsuperscript{209} What is required is guidance from elsewhere.\textsuperscript{210} One natural alternative is to look to Congress for guidance. Indeed, Congress has the power to promulgate the remedial scheme in the patent code.\textsuperscript{211} In fact, in an ideal world, Congress would be the best vehicle to promulgate laws about the availability of injunctive relief because courts generally view their role in statutory interpretation as giving effect to the will of Congress.\textsuperscript{212} Unfortunately, although the best solution to patent holdup may be legislative reform, Congress recently passed on an opportunity to resolve the issue.\textsuperscript{213}

On September 15, 2011, Congress passed the Leahy-Smith America Invents Act, which limited the ability of PAEs to join unrelated parties to a suit,\textsuperscript{214} but such actions ultimately do not address injunctive relief in patent disputes.\textsuperscript{215} This failure to address injunctive relief is unfortunate, especially considering how infrequently Congress enacts major patent law reform.\textsuperscript{216} Given Congress’s recent passage of major patent legislation and failure to address patent holdup, it is unlikely that Congress will take up the issue again in the near future.\textsuperscript{217}

The next-best-situated government entity to address the issue of patent holdup may be an independent administrative agency, such as the FTC or the US Patent and Trademark Office (PTO). Independent regulatory agencies are generally composed of nonpolitical bureaucrats that exercise expert judgment in carrying out congressional policy.\textsuperscript{218} “Regulation by means of administration

\begin{itemize}
\item 208. Id.
\item 209. See Chao, supra note 131.
\item 210. See supra Part I.
\item 212. Caleb Nelson, What Is Textualism?, 91 Va. L. Rev. 347, 353-54 (2005) (describing the widely held belief that in interpreting statutes the fundamental objective of courts is to act as faithful agents of Congress).
\item 213. See supra Part I.
\item 214. Gorenstein, supra note 34 (describing the Act’s joinder restrictions, but noting that it is so far unclear how courts will interpret this provision).
\item 217. See Leahy-Smith America Invents Act, 125 Stat. 284 (failing to address patent holdup).
\end{itemize}
agencies offer[s] the advantages of expertise and flexibility and promise[s] a rational, scientific method of controlling business activity.”

The advantage to the administrative approach is that agencies such as the FTC can better collect and analyze technical economic evidence that is required to craft efficient guidelines for the injunctive-relief doctrine. The FTC has frequent exposure to patent issues and a broad perspective of what economic factors are material in resolving disputes regarding injunctive relief. Of course, the PTO has even more frequent exposure to patent issues, but it seems unlikely that the government agency responsible for granting patents would promulgate guidelines for enjoining the exercise of patent rights, especially given the PTO’s alternative processes for patent reexamination.

Agencies such as the FTC are also able to investigate, while the district courts are not; agencies are able to gather data, conduct studies, and, in the case of the FTC, subpoena companies. These agencies are able to employ hundreds of economists, who would be able to draw on greater relevant knowledge and experience when fashioning rules that would promote efficient outcomes in the realm of patent injunctions. Agencies can also achieve regulation by rulemaking without the formal Article III requirements of a case or controversy, making the agencies nimbler than courts in promulgating rules and providing a forum for citizen participation.

The FTC has been involved in recent administrative efforts to reform patent law. On March 7, 2011, the FTC released a report that argued that spurious injunction threats are hamstringing the high-tech industry. The report made several specific recommendations for reforming patent remedies, including a recommendation that courts consider the public’s interest in avoiding

221. See FTC, supra note 16, at 2, 32.
224. Haw, supra note 218, at 1263-64.
225. Id. at 1267, 1285. This Note proposes a novel approach to patent law in one sense: since the patent code is viewed by many as a common-law-enabling statute, it is typically the courts that are the principal architects of patent law doctrine. See CRAIG A. NARD, THE LAW OF PATENTS 5 (2d ed. 2011). However, as this Note argues, courts have failed to address patent holdup due to a lack of will and institutional expertise. See supra Part II.
patent holdup.\textsuperscript{227} The FTC’s report stopped short of offering any rules to guide the courts, perhaps acknowledging the limits of its own power;\textsuperscript{228} Although the FTC may be the best-equipped government entity to provide rules of thumb to the courts, the agency currently lacks explicit congressional authority to engage in substantive rulemaking.\textsuperscript{229} This situation should change.\textsuperscript{230}

\textbf{III. AN ADMINISTRATIVE SOLUTION: EMPOWER THE FTC WITH SUBSTANTIVE RULEMAKING AUTHORITY OVER EQUITABLE PATENT REMEDIES}

This Note proposes that Congress give the FTC substantive rulemaking authority over injunctive relief in patent cases in order to combat the phenomenon of patent holdup.\textsuperscript{231} Courts have failed to embrace clear guiding principles with respect to injunctive relief and lack the expertise to formulate consistent doctrine involving complicated economic analysis.\textsuperscript{232} This observation strengthens the case for empowering the FTC with substantive rulemaking authority. Congress should take the task of weighing complicated economic arguments out of the hands of generalist courts and place it in the hands of institutions designed to deal with technical matters in a thorough and transparent manner.

\textbf{A. Outlining the FTC’s New Rulemaking Authority}

The US government has an elaborate administrative apparatus for the issuing of patents, but no regulatory body is tasked with the regulation of patents thereafter.\textsuperscript{233} Congress should change the FTC’s statutory authority to confer the agency with substantive rulemaking power over interpretations of patent and antitrust norms.\textsuperscript{234}

\textit{\textsuperscript{227} See id.}
\textit{\textsuperscript{228} See id. at 15 (declining to offer rules to guide courts).}
\textit{\textsuperscript{229} See infra Part III.A.}
\textit{\textsuperscript{230} See infra Part IIIA.}
\textit{\textsuperscript{231} Other scholars have raised the possibility of expanding the FTC’s power to engage in substantive rulemaking in other contexts. See Haw, supra note 218, at 1284-85 (arguing that Congress should grant the FTC substantive rulemaking authority to make definitive interpretations of the Sherman Antitrust Act); see also Daniel A. Crane, Technocracy and Antitrust, 86 Tex. L. Rev. 1159, 1212 (2008).
\textit{\textsuperscript{232} N. Pipeline Constr. Co. v. Marathon Pipe Line Co., 458 U.S. 50, 118 (1982) (White, J., dissenting) ("We are, on the whole, a body of generalists.").
\textit{\textsuperscript{233} See supra Part III.A.
\textit{\textsuperscript{234} Scanning other available agencies, the FTC is a superior option to the DOJ since the former is more insulated from political pressure. Additionally, the PTO is an inferior option, because the very agency that grants patents in the first place (often too many, in the eyes of scholars) cannot be expected to advocate necessary reform that would ultimately reduce the
Of course, the FTC Act theoretically gave the agency the power to make substantive antitrust rules. However, “during the Taft and Wilson administrations, the character of the proposed” and enacted FTC Act changed from “administrative agency to law-enforcement agency.” It is unclear whether the “institutional status quo” would thwart any effort by the FTC to promulgate substantive rules absent modern, explicit congressional approval.

A recent example involving the pharmaceutical industry illustrates the FTC’s current limitations given its uncertain rulemaking authority. The FTC attempted to establish industry-wide norms to guide lawsuits between manufacturers of branded drugs and their generic counterparts. Despite following procedures that roughly tracked the Administrative Procedure Act’s (APA) requirements for agency rulemaking (including an exhaustive study, public hearings, public comment, and a rule-like holding), the Eleventh Circuit reversed the FTC’s decision. The court deemed the FTC’s new rule undeserving of deference to the agency’s expertise on patent and settlements and instead followed a prior decision from the Eleventh Circuit. This development denied the FTC the ability to use its technocratic expertise to formulate broadly applicable public-policy prescriptions.

Congress should make explicit the FTC’s power to promulgate substantive rules. The FTC is a natural home for this type of rulemaking authority for several reasons. First, the agency has patent expertise. The FTC has already played an important role in formulating policy recommendations concerning injunctive relief in patent disputes. On March 7, 2011, the FTC released a report entitled “The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition.” The report represents the culmination of hearings, public comments, and panel discussions aimed at developing improvements to policies affecting patent notice

agency’s revenues. Thus, interpretive power should go to the more technocratic, independent agency, the FTC. See supra Part III.A.

236. Crane, supra note 231, at 1198.
237. Id. at 1199.
238. Id. at 1200.
239. Id.
240. Id. at 1200-01.
241. Id. at 1201.
242. Id. at 1202.
243. See generally FTC, supra note 16.
244. See id.; see also FTC, supra note 30.
245. FTC, supra note 16.
and remedies for patent infringement. The report makes several specific recommendations for changing the patent notification and remedy process. It argues that courts should “clearly define remedies that take into account the type of infringement that is alleged and the contributions made by the alleged infringer to innovation and competition.”

Also, extending the FTC’s power to include substantive rulemaking authority would be consistent with the agency’s enabling act. Congress enacted the FTC Act in 1914, creating the FTC and giving it authority to police “[u]nfair methods of competition.” Patent holdup certainly falls within the scope of this legislative authority because the threat of injunctions is used to extract supracompetitive royalties.

Most importantly, the FTC’s expertise in the areas of antitrust and patent law offers the best hope of resolving the problem of patent holdup. The agency can employ its expert perspective in the notice-and-comment rulemaking process to formulate efficient policy solutions that guide the courts about what circumstances should exist before those courts grant injunctive relief in patent disputes. This approach would gather many diverse perspectives and is transparent in process. Naturally, the agency’s rules would be subject to judicial review.

246. Id.
247. The FTC’s recommendations include: (1) “Courts should not presume irreparable harm based on a finding of infringement or the patentee’s use of the patent. Conversely, courts should recognize that infringement can irreparably harm the ability of patentees that primarily engage in technology transfer through licensing to compete in a technology market”; (2) “Courts should consider the hardship of an infringer facing hold-up under this prong. Courts should reject the statement that an infringer ‘cannot be heard to complain if an injunction against continuing infringement destroys the business’ except in those instances where an infringer ‘elects’ to infringe by copying a patented invention with knowledge of the patent”; and (3) “When warranted by the facts, courts should consider the public’s interest in avoiding patent hold-up, which can increase costs and deter innovation.” FTC, supra note 16, at 27-28.
250. Id. § 45.
252. See CARRIER, supra note 9, at 236.
B. What the FTC Should Consider in Promulgating Rules

Endowed with norm-creating authority over patent injunction rules, the FTC should promulgate rules outlining what circumstances should exist before a patentee receives full injunctive relief. This Note recommends that the FTC should consider some of the following factors in fashioning its rules:

- The extent to which there is clear evidence that the patentee is a PAE. Due to the antitrust considerations discussed above, the courts should deny PAEs injunctive relief in all but the most exceptional circumstances. The FTC might recommend that if there is clear and convincing evidence that the patentee is a PAE that obtains patents primarily to garner license fees and not to practice the invention, the courts should deny injunctive relief.

- The extent to which the patented technology is a minor component that an inventor could have easily designed around ex ante as part of a complex product. In such cases, injunctive relief might be inappropriate because the PAE is likely employing the threat of an injunction as undue leverage in negotiations, thereby increasing patent holdup.

- The extent to which the patentee and alleged infringer are competitors in the market affected by the patent. A patentee should not be allowed to simply assert that the defendant and it are competitors. Rather, a patentee should have to provide evidence, such as lost market share, lost customers, and price

255. Although this Note discusses incorporating holdup concerns into patent injunction doctrine, it does not recommend that patent holdup become an affirmative defense to patent infringement suits. Patent infringement should be punished with reasonable royalties in all cases and injunctive relief in some.

256. Compare Chao, supra note 131, at 557 (“An injunction only helps a non-practicing entity by increasing the settlement value of its patent . . . . By definition, this harm can be adequately addressed through monetary damages.”), with David B. Conrad, Note, Mining the Patent Thicket: The Supreme Court’s Rejection of the Automatic Injunction Rule in eBay v. MercExchange, 26 Rev. Litig. 119, 150 n.151 (2007) (“[T]here may be a situation in which a nonmanufacturing, non-competing patent owner would prefer the injunction to future royalties, perhaps because other potential licensees demand exclusivity. In such cases, the permanent injunction would serve a valid purpose.”). The only valid purpose for granting PAEs injunctive relief is to preserve exclusivity for other potential licensees.

257. See FTC, supra note 16, at 227.

258. See id.

259. See CARRIER, supra note 9, at 236-38.

260. See id.
erosion.\textsuperscript{261} Where the infringement affects the patentee’s ability to compete in a product or technology market, there are good reasons to grant injunctive relief.\textsuperscript{262}

This Note recommends that the FTC consider these factors in formulating guidance for the district courts in the application of the new injunctive-relief doctrine. Given the unique nature of patent holdup as an issue at the crossroads of antitrust and patent law, the FTC would be wise to draw lessons from both fields.

IV. CONCLUSION

In Silicon Valley, the patent wars continue apace, potentially undermining the United States’ ability to innovate and its competitiveness in the global marketplace. The rise of PAEs seeking injunctive relief has only exacerbated the problem. The Supreme Court had an opportunity in \textit{eBay} to clarify the law of equitable relief in patent disputes, but it failed to act. Confusion and inconsistency at the district court level demonstrate that clearer rules are needed. In the absence of such rules, innovators will continue to fall victim to patent holdup, which deters competition and innovation. The state of patent litigation today is a call to arms to transfer decision-making power out of the hands of the inexpert district courts and into the hands of a specialized agency. The FTC has unique capabilities of soliciting and understanding technical information to formulate new, effective patent law. Thus, Congress should give the FTC the power to promulgate rules for patent disputes that help combat the problem of patent holdup.

\textit{Niels J. Melius}\textsuperscript{*}

\footnotesize
\textsuperscript{261} See \textit{id.} at 236. \\
\textsuperscript{262} See \textit{id.} at 236, 239.

\* J.D. Candidate, Vanderbilt University Law School, 2013; BSFS, International Political Economy, Georgetown University, 2005. The Author would like to thank Professors Froeb, Seymore, Gervais, and Haw, and members of the \textit{Vanderbilt Journal of Entertainment and Technology Law} for their help in bringing this Note to publication.