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Trolling for Trolls: The Pitfalls of the Emerging Market Competition Requirement for Permanent Injunctions in Patent Cases Post-*eBay*

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NOTE

TROLLING FOR TROLLS: THE PITFALLS OF THE EMERGING MARKET COMPETITION REQUIREMENT FOR PERMANENT INJUNCTIONS IN PATENT CASES POST-EBAY

*Benjamin H. Diessel**

In eBay v. MercExchange, a unanimous Supreme Court announced that a new four-factor test should be employed by district courts in determining whether to award an injunction or damages to an aggrieved party whose intellectual property has been infringed. In the context of permanent injunctions in patent cases, district courts have distorted the four-factor test resulting in a “market competition requirement.” Under the new market competition requirement, success at obtaining an injunction is contingent upon a party demonstrating that it is a market competitor. After consistent application in the first twenty-five district court cases post-eBay, the market competition requirement is becoming an entrenched doctrine. However, the divergent legal standards used by district courts turning on market competition contravenes the Supreme Court’s holding that courts should not apply the four-factor test in a manner that makes the injunctive remedy unavailable based on broad classifications. The market competition requirement may solve some of the problems resulting from holdup by so-called “patent trolls,” but at a cost potentially too high to bear. The market competition requirement may insulate inefficient markets from meaningful competition and decrease incentives to innovate for individual self-made inventors, who drive a large segment of patenting activity. Because the market competition requirement is without foundational support from eBay and is of questionable utility in incentivizing innovation, its continued use is a cause for serious concern.

* J.D. candidate, December 2007; M.S. Computer Science and Engineering, May 2008. Thank you to Professor Omri Ben-Shahar for his guidance in writing this Note, Professor Joseph Scott Miller for keeping me abreast of new cases through his blog, *The Fire of Genius*, Jeanne Long and Andrea Loh, my Note Editors, and the entire Notes Office for their helpful feedback, Smita for her inspiration and support, and my parents for all of their love and encouragement.

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INTRODUCTION

In response to the perceived “holdup problem”¹ created by the threat of injunction in patent litigation brought by patent trolls,² the availability of the injunctive remedy in patent law has recently been increasingly scrutinized.³ Just as legislative reform of the injunctive remedy in patent law was gaining steam,⁴ the Supreme Court addressed the issue head on in *eBay v. MercExchange*.⁵ The Court, in a unanimous eight-justice⁶ opinion authored by Justice Thomas, overruled the Federal Circuit’s application of a sui generis “general rule” for patent law that an injunction will issue upon a

1. The holdup problem exists when a party makes an inefficient threat of litigation just to obtain bargaining power. *See, e.g.*, *N. Ind. Pub. Serv. Co. v. Carbon County Coal Co.*, 799 F.2d 265 (7th Cir. 1986) (denying specific performance because it would produce an inefficient result that the plaintiff was seeking only for bargaining power); *see also* Ian Ayres & Kristin Madison, *Threatening Inefficient Performance of Injunctions and Contracts*, 148 U. PA. L. REV. 45 (1999) (discussing holdup in the context of threats to perform inefficiently).

2. Patent trolls have been described in many ways. One popular way to describe patent trolls is to emphasize their lack of commercialization and their business model of thriving off of litigation and settlements. *See* Steve Seidenberg, *Troll Control: The Supreme Court’s eBay Decision Sets Back Pesky ‘Patent Trolls’ or American Innovation, Depending Upon Which Side You’re On*, 92 A.B.A. J. 50, 51 (2006) (noting that patent trolls have been described as “businesses that produce no products or services and have the sole purpose of obtaining money by licensing patents they own and winning infringement lawsuits against others”). *But see* Terrence P. McMahon et al., *Who is a Troll? Not a Simple Answer*, 7 SEDONA CONF. J. 159, 163 (2006) (“[T]he line between troll and non-troll remains unclear.”). This has caused renewed focus on finding a new definition that provides greater clarity. McMahon and his coauthors have proposed a new definition: (1) “First, a patent troll would be a company that receives no benefit from excluding others because it does not have a competitive product nor does it plan to develop one,” *id.* at 166, and (2) “Second, a patent troll’s tactic would be to use threat of litigation and its associated costs to force others into licensing agreements without closely scrutinizing the validity and strength of the patent,” *id.* I will use the term “patent troll” to encapsulate the colloquial understanding as described by Steve Seidenberg above. It is important, however, to distinguish from patent trolls individual small-scale inventors who may wish to license their inventions. *See infra* text accompanying notes 207–208, 240–243. For recent scholarship discussing patent trolls post-*eBay*, *see*, in general, Leslie T. Grab, Recent Development, *Equitable Concerns of eBay v. MercExchange: Did the Supreme Court Successfully Balance Patent Protection Against Patent Trolls?*, 8 N.C. J.L. & TECH. 81 (2006); Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809 (2007) (analogizing the current patent troll to the gilded age equivalent, the “patent shark”); Rebecca A. Hand, Note, *eBay v. MercExchange: Looking at the Cause and Effect of a Shift in the Standard for Issuing Patent Injunctions*, 25 CARDOZO ARTS & ENT. L.J. 461, 473–79 (2007); Damian Myers, Note, *Reeling in the Patent Troll*, 14 J. INTELL. PROP. L. 333 (2007).

3. *See, e.g.*, FED. TRADE COMM’N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY ch. 3, at 40–41 (2003) [hereinafter FTC REPORT], available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>.

4. *See* David L. McCombs & Phillip B. Philbin, *2005 Year in Review: Intellectual Property*, 69 TEX. BAR J. 29, 30 (2005) (discussing how the Patent Reform Act would authorize courts to limit the availability of the injunctive remedy based on equitable considerations); *cf.* Patent Reform Act, H.R. 2795, 113th Cong. (2005) (“In determining equity, the court shall consider the fairness of the remedy in light of all the facts and the relevant interests of the parties associated with the invention.”).

5. *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837 (2006).

6. This case was decided without Justice O’Connor, before Justice Alito was confirmed.

showing of patent validity and infringement absent “exceptional circumstances.”⁷ The central holding reads as follows:

According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief. A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be diserved by a permanent injunction.⁸

The Court was clear that neither the district court’s nor the Federal Circuit’s approach to injunctions was appropriate. The district court’s application of its newly created four-factor test in denying MercExchange an injunction was flawed because it allowed the decision to turn on plaintiff’s “willingness to license its patents” and “lack of commercial activity in practicing the patents.”⁹ The Federal Circuit’s general rule of awarding an injunction, reversing the district court, was also flawed.¹⁰ The short, unanimous opinion, however, gave no bright-line rules and few guideposts to district judges. It emphasized instead that awarding injunctions was up to the discretion of trial courts, subject to the ground-rule that discretion be “exercised consistent with traditional principles of equity.”¹¹

But while the Supreme Court unanimously agreed that equity demanded vesting discretion in district judges, the justices split on how the four-factor test should be applied.¹² Chief Justice Roberts, joined by Justices Scalia and Ginsburg, argued that application of the four-factor test by district judges should be informed by substantial Federal Circuit precedent regarding injunctions,¹³ and that the bounds of discretion should be circumscribed by reference to the principle of *stare decisis*.¹⁴ Chief Justice Roberts’s concurrence showed that at least three of the seven concurring Justices thought courts should apply the four-factor test in a manner more in keeping with

7. *eBay Inc.*, 126 S. Ct. at 1841 (quoting *MercExchange, L.L.C. v. eBay Inc.*, 401 F.3d 1323, 1338–39 (Fed. Cir. 2005)).

8. *eBay Inc.*, 126 S. Ct. at 1839.

9. *Id.* at 1840 (quoting *MercExchange, L.L.C. v. eBay Inc.*, 275 F. Supp. 2d 695, 712 (E.D. Va. 2003)).

10. *eBay Inc.*, 126 S. Ct. at 1840.

11. *Id.* at 1841.

12. *Id.* (Roberts, C.J., concurring, joined by Scalia & Ginsburg, JJ.); *id.* at 1842 (Kennedy, J., concurring, joined by Stevens, Souter & Breyer, JJ.); *see also* Hand, *supra* note 2, 464–65 (2007) (summarizing the opposite stances of the two concurring opinions).

13. *eBay Inc.*, 126 S. Ct. at 1841 (Roberts, C.J., concurring) (“At the same time, there is a difference between exercising equitable discretion pursuant to the established four-factor test and writing on an entirely clean slate.”).

14. *Id.* at 1841–42 (“Discretion is not whim, and limiting discretion according to legal standards helps promote the basic principle of justice that like cases should be decided alike.” (quoting *Martin v. Franklin Capital Corp.*, 126 S. Ct. 704, 710 (2005))).

the Federal Circuit's general rule that injunctions should issue absent exceptional circumstances.¹⁵

Justice Kennedy, joined by Justices Stevens, Souter, and Breyer, argued that the historical granting of injunctions should only bear on modern decisions to the extent that the modern and historical cases were factually similar.¹⁶ Justice Kennedy urged that the business model of firms *licensing* patents, rather than *practicing* their inventions, is a modern phenomenon that justifies a change in how readily district judges grant injunctions.¹⁷ He cautioned courts that damages might be the preferred remedy when plaintiffs sought injunctions simply to extract negotiating advantages or if the patent covers only a small piece of the accused invention.¹⁸

Judges will be forced to seek guidance in the two concurring opinions in order to make up for the unanimous holding's failure to deal extensively with how to apply the four-factor test. But in seeking guidance, judges should not rely too heavily on either standard.¹⁹ The two concurring opinions advocate for very different standards, making it possible that two district courts faced with the same factual circumstances could reach different conclusions regarding the awarding of injunctions depending on whether they lean on the standard proposed by Chief Justice Roberts or Justice Kennedy. Indeed, a wide span of district court judicial conduct could be legitimized as falling between the bookends of the concurring opinions' different standards. A hidden danger of giving the concurring opinions too much weight is that narrow factual distinctions could form the basis for choosing between the competing legal standards, in essence stampeding the four-factor test and replacing it with a binary inquiry—alignment or divergence with the distinct fact.

This Note analyzes the use by district courts of such a binary inquiry—a “market competition requirement” for obtaining a permanent injunction in patent cases after *eBay*—and concludes that this market competition requirement runs contrary to the *eBay* decision, is unsound policy, and should therefore be abandoned. Part I examines all patent cases applying the four-factor test in the context of permanent injunctions post-*eBay*, and confirms that district courts have continued to make commercializing and competing in the market with a patented invention a necessary precondition to gaining

15. See Sharon R. Barner & Gregory S. Norrod, *A Changing Landscape*, NAT'L L.J., Aug. 2, 2006, at 9, 9 (“Chief Justice John G. Roberts Jr.’s concurrence emphasized that the long history of routinely granting injunctions should inform courts’ exercise of discretion in applying the equitable balancing.”); Mark Vorder-Bruegge Jr., *Injunctive Relief for Patent Infringement—A New Era?*, FED. LAW., Jul. 2006, at 14, 15 (“[Justice Roberts’s] concurrence arguably indicates that at least three justices are very comfortable with something close to the general rule the Court overturned.”).

16. *eBay Inc.*, 126 S. Ct. at 1842 (Kennedy, J., concurring) (“The lesson of the historical practice, therefore, is most helpful and instructive when the circumstances of a case bear substantial parallels to litigation the courts have confronted before.”).

17. *Id.* Justice Kennedy implicated “patent trolls” without explicitly calling them out by name. See *id.* For a competing definition of patent trolls, see *supra* note 2.

18. *eBay Inc.*, 126 S. Ct. at 1842 (Kennedy, J., concurring).

19. For a discussion of the guidance given by the Supreme Court in applying the four-factor test, see *infra* notes 170–172 and accompanying text.

an injunction.²⁰ Part I concludes that district judges have created and employed a “market competition requirement,” or phrased more colloquially, district judges are essentially “trolling for trolls.” Part II explores whether one can reconcile district courts’ adoption of a market competition requirement with the Supreme Court’s unanimous opinion, but ultimately finds a lack of support for the market competition requirement in *eBay*. Part III analyzes the utility of the market competition requirement as a tool for combating ex post losses due to holdup by patent trolls, and argues that use of the market competition requirement may itself cause losses in allocative efficiency due to overinclusiveness and reduced competition. Part III argues further that the market competition requirement threatens to harm incentives to innovate, especially for small-scale inventors. This Note concludes that courts should dismantle the market competition requirement as lacking persuasive jurisprudential or economic support.

I. SURVEY OF POST-*EBAY* DISTRICT COURT CASES: THE EMERGING “MARKET COMPETITION REQUIREMENT”

Practitioners and commentators have suggested, based on the early round of district court cases, that direct competition is the key to obtaining an injunction. Texas practitioners Robert J. Garrey and John M. Jackson initially analyzed the first four Eastern District of Texas cases applying the *eBay* standard and made the preliminary observation that “it appears that plaintiffs that use their patents to produce goods and services are far more likely to obtain injunctive relief against competitors adjudged to infringe their patents than are plaintiffs who merely license their patents.”²¹ Other commentators have also posited that direct competition determines whether an injunction will be granted. Jeremy Mulder surveyed five district court cases post-*eBay* and suggested a predictive model that “the type of competition between the plaintiff-patentee and the defendant-infringer determines whether district courts grant permanent injunctions in patent cases.”²² Rebecca Hand examined four Fifth Circuit post-*eBay* cases and argues that competition was the deciding factor in granting an injunction, footnoting non-Fifth Circuit cases that appear to follow the same rule.²³ Professors Lemley and Weiser advocate that courts should be wary of granting injunctions to a patent holder who is not a direct competitor of

20. For a discussion of other commentators hypothesizing a similar rule based on initial post-*eBay* cases, see *infra* notes 21–24 and accompanying text.

21. ROBERT J. GARREY & JOHN M. JACKSON, THE PERMANENT INJUNCTION THREAT IN PATENT CASES: HAS *Ebay v. MercExchange* CHANGED THE LANDSCAPE FOR PATENT LITIGATION IN TEXAS DISTRICT COURTS? 11 (2006), <http://images.jw.com/com/publications/626.pdf>.

22. Jeremy Mulder, Note, *The Aftermath of eBay: Predicting When District Courts Will Grant Permanent Injunctions in Patent Cases*, 22 BERKELEY TECH. L.J. 67, 80 (2007).

23. Hand, *supra* note 2, at 479–84 (arguing that four Fifth Circuit cases decided after *eBay* stand for the proposition that direct competition is the deciding factor and noting non-Fifth Circuit cases following the same rule).

the defendant and find that an early Eastern District of Texas case supports this position.²⁴

This Part tests the hypothesis of these practitioners and commentators by examining a larger set of every patent case for which permanent injunctions were granted and denied post-*eBay*²⁵ and confirms that commercialization within the invented area covering the patent determines whether an injunction will be granted.²⁶ In addition to expanding the set of cases considered, this Part provides a new framework for emphasizing the significance of competition by first analyzing factors such as inventive area, jurisdiction, willfulness—which this Note finds non-controlling—before finding commercialization and licensing activity to be dispositive. As of the writing of this Note, twenty-five district court cases have applied the four-factor test in determining whether to grant or deny a permanent injunction in cases where plaintiffs have shown patent infringement and patent validity. Out of these cases, courts denied injunctions to seven plaintiffs²⁷ and granted injunctions to eighteen plaintiffs.²⁸

The following tables present data relevant to this hypothesis, including inventive area, whether the plaintiff had commercialized the invention covered by the patent and used it to compete in the market, whether the plaintiff was willing to license the patent or had tried to license it to the defendant, and whether the court found willful infringement. The tables group cases together based on whether the court granted or denied the injunction. A discussion of the results presented in the tables—framed around inventive area, jurisdiction, willfulness, and market competition and licensing—directly follows.

24. Mark A. Lemley & Philip J. Weiser, *Should Property or Liability Rules Govern Information?*, 85 TEX. L. REV. 783, 799–800 (2007) (“[C]ourts should cast a skeptical eye at claims for injunctive relief where the patent owner is not a direct competitor of the defendant . . .”).

25. As of July 27, 2007.

26. District court cases applying the four-factor test in other contexts such as copyright, trademark, and preliminary injunctions are beyond the scope of this Note, which deals specifically with permanent injunctions in patent cases.

27. See *infra* Table 1.

28. See *infra* Table 2.

TABLE I
CASES DENYING INJUNCTIONS

TABLE 1 Cases Denying Injunctions	Technology	Plaintiff Commercialized Patent / Market Competition?	Plaintiff Willing to License Patent?	Plaintiff Tried to License Patent to Defendant?	Willful Infringement?
<i>z4 Techs., Inc. v. Microsoft Corp.</i> ²⁹ (E.D. Tex.)	Product activation / anti-piracy software	NO	YES	N/A	YES
<i>Finisar Corp. v. DirecTV Group, Inc.</i> ³⁰ (E.D. Tex.)	Data transmission (electronic television program guide)	NO	YES	YES	YES
<i>Paice LLC v. Toyota Motor Corp.</i> ³¹ (E.D. Tex.)	Hybrid powertrains for vehicles	NO	YES	PROBABLY	NO
<i>Voda v. Cordis Corp.</i> ³² (W.D. Okla.)	Angioplasty guide catheter	NO	YES	YES	YES
<i>Sundance, Inc. v. DeMonte Fabricating Ltd.</i> ³³ (E.D. Mich.)	Tarp covering	NO	YES	YES	N/A
<i>IMX, Inc. v. LendingTree, LLC</i> ³⁴ (D. Del.)	Method and system for trading loans	N/A ³⁵	YES	N/A	YES
<i>Praxair, Inc. v. ATMI, Inc.</i> ³⁶ (D. Del.)	Apparatus for safely handling toxic fluids	YES	N/A	N/A	N/A

29. *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437 (E.D. Tex. 2006).

30. *Finisar Corp. v. DirecTV Group, Inc.*, No. 1:05-CV-264, 2006 WL 2709206 (E.D. Tex. Sept. 1, 2006).

31. *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139 (E.D. Tex. Aug. 16, 2006).

32. *Voda v. Cordis Corp.*, No. CIV-03-1512-L, 2006 WL 2570614 (W.D. Okla. Sept. 5, 2006).

33. *Sundance, Inc. v. DeMonte Fabricating Ltd.*, No. 02-73543, 2007 WL 37742 (E.D. Mich. Jan. 4, 2007).

34. *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203 (D. Del. 2007).

35. "N/A" for this cell and all others means that there is no clear answer in the opinion or in related litigation documents.

36. *Praxair, Inc. v. ATMI, Inc.*, 479 F. Supp. 2d 440 (D. Del. 2007).

TABLE 2
CASES GRANTING INJUNCTIONS

TABLE 2 Cases Granting Injunctions	Technology	Plaintiff Commercialized Patent / Market Competition?	Plaintiff Willing to License Patent?	Plaintiff Try to License Patent to Defendant?	Willful Infringement?
Wald v. Mudhopper Oilfield Servs. ³⁷ (W.D. Okla.)	Polymer sticks used for drilling bores	YES	N/A	N/A	YES
Telequip Corp. v. Change Exch. ³⁸ (N.D.N.Y.)	Coin-operated products	YES	N/A	N/A	YES
TiVo Inc. v. Echostar Commc's Corp. ³⁹ (E.D. Tex.)	DVR	YES	N/A	N/A	YES
Floe Int'l, Inc. v. Newmans' Mfg. Inc. ⁴⁰ (D. Minn.)	Trailer frame for hauling snowmobiles	YES	N/A	N/A	YES
3M Innovative Properties Co. v. Avery Dennison Corp. ⁴¹ (D. Minn.)	Film for use in adhesives	YES	N/A	NO	N/A
Rosco, Inc. v. Mirror Lite Co. ⁴² (E.D.N.Y.)	Cross-view mirrors for school buses	YES	N/A	N/A	N/A
Smith & Nephew, Inc. v. Synthes (U.S.A.) ⁴³ (W.D. Tenn.)	Medical device for treating leg fractures	YES	YES	YES	N/A

37. Wald v. Mudhopper Oilfield Servs., No. CIV-04-1693-C, 2006 WL 2128851 (W.D. Okla. July 27, 2006).

38. Telequip Corp. v. Change Exch., No. 5:01-CV-1748, 2006 WL 2385425 (N.D.N.Y. Aug. 15, 2006).

39. TiVo Inc. v. Echostar Commc'ns Corp., 446 F. Supp. 2d 664 (E.D. Tex. 2006).

40. Floe Int'l, Inc. v. Newmans' Mfg. Inc., No. 04-5120, 2006 WL 2472112 (D. Minn. Aug. 23, 2006).

41. 3M Innovative Props. Co. v. Avery Dennison Corp., No. 01-1781, 2006 WL 2735499 (D. Minn. Sept. 25, 2006).

42. Rosco, Inc. v. Mirror Lite Co. (*Rosco II*), No. CV-96-5658, 2006 WL 2844400 (E.D.N.Y. Sept. 29, 2006).

43. Smith & Nephew, Inc. v. Synthes (U.S.A.), 466 F. Supp. 2d 978 (W.D. Tenn. 2006).

TABLE 2 Cases Granting Injunctions	Technology	Plaintiff Commercialized Patent / Market Competition?	Plaintiff Willing to License Patent?	Plaintiff Try to License Patent to Defendant?	Willful Infringement?
Black & Decker Inc. v. Robert Bosch Tool Corp. ⁴⁴ (N.D. Ill.)	Consumer electronics; rugged radio	YES	N/A	N/A	N/A
Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp. ⁴⁵ (S.D. Tex.)	Deep water oil drilling	YES	N/A	N/A	N/A
MPT, Inc. v. Marathon Labels, Inc. ⁴⁶ (N.D. Ohio)	Labeling reusable containers	YES	N/A	N/A	NO
Novozymes A/S v. Genencor Int'l, Inc. ⁴⁷ (D. Del.)	Enzymes used to produce ethanol	YES	N/A	N/A	YES
Ortho-McNeil Pharmaceutical, Inc. v. Mylan Labs. Inc. ⁴⁸ (D.N.J.)	Patent covering TOPOMAX® pharmaceutical products	YES	N/A	N/A	N/A
O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co. ⁴⁹ (E.D. Tex.)	High efficiency AC/DC converter	YES	N/A	N/A	YES
800 Adept, Inc. v. Murex Securities, Ltd. ⁵⁰ (M.D. Fla.)	Telephone call routing	YES	N/A	N/A	YES

44. Black & Decker Inc. v. Robert Bosch Tool Corp., No. 04-C-7955, 2006 WL 3446144 (N.D. Ill. Nov. 29, 2006).

45. Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp., No. H-03-2910, 2006 WL 3813778 (S.D. Tex. Dec. 27, 2006).

46. MPT, Inc. v. Marathon Labels, Inc., No. 1:04-CV-2357, 2007 WL 184747 (N.D. Ohio Jan. 19, 2007).

47. Novozymes A/S v. Genencor Int'l, Inc., 474 F. Supp. 2d 592 (D. Del. 2007).

48. Ortho-McNeil Pharm., Inc. v. Mylan Labs. Inc., Nos. 04-1689, 06-757, 06-5166, 2007 WL 869545 (D.N.J. Mar. 20, 2007).

49. O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., No. 2-04-CV-32, 2007 WL 869576 (E.D. Tex. Mar. 21, 2007).

50. 800 Adept, Inc. v. Murex Sec., Ltd., No. 6:02-cv-1354-Orl-28DAB, 2007 WL 1101238 (M.D. Fla. Apr. 12, 2007).

TABLE 2 Cases Granting Injunctions	Technology	Plaintiff Commercialized Patent / Market Competition?	Plaintiff Willing to License Patent?	Plaintiff Try to License Patent to Defendant?	Willful Infringement?
MGM Well Services, Inc. v. Mega Lift Systems, LLC ⁵¹ (S.D. Tex.)	Gas drilling system	YES	NO	NO	NO
Brooktrout, Inc. v. Eicon Networks Corp. ⁵² (E.D. Tex.)	Fax server boards	YES	NO	N/A	NO
Commonwealth Scientific & Industrial Research Organisation v. Buffalo Technology Inc. ⁵³ (E.D. Tex.)	Wireless Local Area Network (WLAN) technology	YES, though only in the past ⁵⁴	YES	N/A	N/A
Sanofi-Synthelabo v. Apotex Inc. ⁵⁵ (S.D.N.Y.)	Pharmaceutical product for reduction of thrombotic events (Plavix)	YES	N/A	YES	NO

In many ways, the set of cases in which courts denied plaintiffs injunctions are indistinguishable from the set of cases in which courts granted injunctions. Factors including inventive area, jurisdiction, and willfulness do not sufficiently distinguish the cases granting and denying injunctions such that one can tell, given these factors alone, whether an injunction will issue. As predicted, only one factor—market competition using the patent—accurately determines when a district court is likely to grant an injunction in a given litigation.

51. MGM Well Servs., Inc. v. Mega Lift Sys., LLC, No. H-05-1634, 2007 WL 1231682 (S.D. Tex. Apr. 25, 2007).

52. Brooktrout, Inc. v. Eicon Networks Corp., No. 2:03-CV-59, 2007 WL 1730112 (E.D. Tex. June 14, 2007).

53. Commonwealth Scientific & Indus. Research Organisation v. Buffalo Tech. Inc., 492 F. Supp. 2d 600 (E.D. Tex. 2007).

54. Commonwealth Scientific and Industrial Research Organisation (CSIRO) formed Radiata Communications Pty Ltd., with Macquarie University in 1997, in order to commercialize the patented wireless technology, but Radiata was acquired by CISCO Systems in 2001. *Id.* at 602. The court, however, found that CSIRO “does not compete with [the defendant] for marketshare,” but “does compete internationally with other research groups—such as universities—for resources, ideas, and the best scientific minds to transform those ideas into realities.” *Id.* at 604.

55. Sanofi-Synthelabo v. Apotex Inc., 492 F. Supp. 2d 353 (S.D.N.Y. 2007).

A. Inventive Area

Inventive or technological area does not predict whether a court will grant an injunction. In the set of cases denying injunctions, the inventive areas included software, electronic programming guides for browsing television offerings, hybrid powertrains for vehicles, angioplasty guide catheters, tarp coverings, methods and systems for trading loans, and an apparatus for safely handling toxic fluids.⁵⁶ In the set of cases granting injunctions, the inventive areas included drilling, coin-operated products, DVRs for televisions, adhesive film, mirrors for school buses, medical devices, radios, deepwater drilling, pharmaceutical products, telephone call routing, gas drilling systems, fax server boards, and WLAN technology.⁵⁷ Both sets of cases include a diverse range of commercial technology—both high-tech and otherwise—that overlap to a large degree. For example, for patents in inventive categories such as mechanical devices, DVR technology, and medical devices, courts have both granted and denied injunctions.⁵⁸ Interestingly, even when the same inventive area—consumer electronics for home television—was involved, one court awarded the plaintiff an injunction, while another denied an injunction.⁵⁹ Because no pattern exists regarding the inventive area within and across the groups of cases granting and denying injunctions, one cannot draw any meaningful categorical distinction based on technology or inventive area.

B. Jurisdiction

The jurisdiction out of which the case arises does not accurately predict when courts will grant or deny injunctions. The Eastern District of Texas has heard seven cases—more than any jurisdiction thus far—and has granted an injunction in four cases⁶⁰ and denied an injunction in three cases.⁶¹ The District of Minnesota has granted an injunction in both of its cases, and the Western District of Oklahoma has granted one injunction⁶² and denied another.⁶³ The District of Delaware has denied two injunctions⁶⁴ and granted one.⁶⁵ The Northern and Eastern Districts of New

56. See *supra* Table 1.

57. See *supra* Table 2.

58. See *supra* Tables 1 & 2.

59. Compare *Finisar Corp. v. DirecTV Group, Inc.*, No. 1:05-CV-264, 2006 U.S. Dist. LEXIS 76380, at *4 (E.D. Tex. July 7, 2006) (denying an injunction though DirecTV's electronic programming guide infringed on Finisar's patent), with *TiVo Inc. v. Echostar Commc'ns Corp.*, 446 F. Supp. 2d 664 (E.D. Tex. 2006) (granting an injunction).

60. See *supra* Table 2.

61. See *supra* Table 1.

62. See *supra* Table 2.

63. See *supra* Table 1.

64. See *supra* Table 1.

65. See *supra* Table 2.

York have both granted injunctions, while the Eastern District of Michigan has denied one injunction.⁶⁶ The Southern District of Texas has granted two injunctions.⁶⁷ The Western District of Tennessee, Northern District of Illinois, Northern District of Ohio, Middle District of Florida, and Southern District of New York have all granted injunctions, but each has only heard one post-*eBay* case.⁶⁸ Both *Finisar* and *TiVo* involved similar technology and were both venued in the Eastern District of Texas, yet came out differently with respect to injunction.⁶⁹ As such, there is no clear trend at present such that jurisdictional placement can be used to predict whether an injunction will be granted.

C. Willfulness

Whether infringement was willful does not bear on whether a plaintiff obtains an injunction. Although historically willfulness has weighed heavily on the decision to grant an injunction, it has not proven significant in cases applying the four-factor analysis.⁷⁰ Courts have found willful infringement⁷¹ in all but five of the cases in which willfulness was discussed in the opinion.⁷² In cases where the court denied an injunction, only one court specifically mentioned that infringement was non-willful.⁷³ Where courts granted an injunction, they found infringement was not willful in four cases.⁷⁴ On the other hand, willful infringement was found in roughly equal proportion in cases granting and denying injunctions.⁷⁵ The absence of any discernable trend with respect to willfulness in these cases shows that the

66. See *supra* Tables 1 & 2.

67. See *supra* Table 2.

68. See *supra* Table 2.

69. See *supra* note 59.

70. See Mitchell G. Stockwell, *Implementing eBay: New Problems in Guiding Judicial Discretion and Enforcing Patent Rights*, 88 J. PAT. & TRADEMARK OFF. SOC'Y 747, 751–52 (2006) (offering that judicial discretion in patent infringement cases post-*eBay* should be informed by the traditional rule that any hardship the injunction would pose to the defendant should not be considered when the defendant's conduct was willful). For an example of how willful conduct affects the availability of an injunction in land encroachment cases, see *Ariola v. Nigro*, 156 N.E.2d 536, 540 (Ill. 1959), in which the court stated that “if the encroachment is intentional, neither the expense involved, nor the absence of damage to the land encroached upon will defeat the right to an injunction.”

71. Willfulness refers to whether an infringing defendant is found by the court to have infringed deliberately or intentionally. *Knorr Bremse Systeme Fuer Nutzfahrzeuge GMBH v. Dana Corp.*, 383 F.3d 1337, 1342–44 (Fed. Cir. 2004) (en banc). If so, the defendant may be liable for increased damages for past infringement. 35 U.S.C. § 284 (2000).

72. See *supra* Tables 1 & 2. Entries labeled “N/A” indicate that willfulness was not discussed in the opinion.

73. See *supra* Table 1.

74. See *supra* Table 2.

75. See *supra* Tables 1 & 2 (showing that 4 out of 7 cases denying injunctions found willful infringement and that 7 out of 18 cases granting injunctions found willful infringement).

awarding of injunctions is not dependent on whether the defendant willfully committed the infringement.

D. Market Competition and Licensing

In contrast to the above factors, the plaintiff's status as a market competitor in the inventive area covering the patent is indicative of whether a court will grant an injunction. Denying injunctions to plaintiffs who do not compete in the market with their invention yet are willing licensors and granting injunctions to plaintiffs who compete in the market against the defendant are consistent with a rule that requires market competition to obtain a permanent injunction, and thus far courts have followed these practices. This Note calls this rule the "market competition requirement." The market competition requirement, more than merely correlating with results, appears to be dispositive in determining whether to grant an injunction.⁷⁶ Section I.D.1 shows that courts have denied injunctions to plaintiffs who did *not* compete using their invention and *had* been willing to license⁷⁷ their patent. Section I.D.2 explores the corollary finding that where courts have found that the plaintiff competed in the market of the patent's inventive area, they have universally awarded injunctions against the defendant.

1. Plaintiffs Denied Injunctions Are Not Market Competitors and Are Willing Licensors

In cases where courts denied plaintiffs injunctions, plaintiffs did not practice their invention and did not compete in the market in the area covered by the patent.⁷⁸ Instead, these plaintiffs sought to market their patent indirectly, by licensing them in exchange for royalties.⁷⁹ In *Paice LLC v. Toyota Motor Corp.*,⁸⁰ for example, Paice had patents that covered part of Toyota's hybrid powertrain, but did not commercialize its own powertrain, choosing instead to profit by licensing the patents covering the powertrain.⁸¹ In *z4 Technologies, Inc. v. Microsoft Corp.*, z4 Technologies claimed that they had tried to commercialize their product activation software covered by the patent in dispute, but conceded that ultimately they had failed.⁸² In *Voda*

76. See *infra* Section II.C.

77. The importance of licensing makes sense, since willingness to license can be viewed as concomitant to a business model that is not based on profits earned through *direct* market competition of the invention. That is, licensing revenues may sustain those entities that do not practice their inventions directly by, for example, manufacturing a product.

78. See, e.g., *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 225 (D. Del. 2007).

79. *Id.*

80. No. 2:04-CV-211-DF, 2006 WL 2385139 (E.D. Tex. Aug. 16, 2006).

81. *Id.* at *2 (noting that Paice "does not manufacture competing vehicles, but rather is geared toward licensing its technology").

82. 434 F. Supp. 2d 437, 440 (E.D. Tex. 2006).

v. Cordis Corp.,⁸³ the plaintiff was a cardiologist who had a patent covering an angioplasty guide catheter.⁸⁴ Dr. Voda was a willing licensor who had licensed the patent to Scimed⁸⁵ and had also unsuccessfully tried to obtain a license from the defendant before suing them.⁸⁶ In *Sundance, Inc. v. DeMonte Fabricating Ltd.*, plaintiffs had an active business of licensing their patent, including failed attempts to license to the defendant.⁸⁷ In *IMX, Inc. v. LendingTree, LLC*, plaintiff was a willing licensor and defendant contended that plaintiff “d[id] not provide its technology directly to the public.”⁸⁸ The court denied plaintiffs in *Finisar Corp. v. DirecTV Group Inc.* an injunction even though they were a publicly traded corporation that sold and marketed products.⁸⁹ However, en route to denying Finisar an injunction, the court noted that Finisar never used their patent or tried to sell it.⁹⁰

Under the market competition requirement, even entities that *appear* to be market competitors cannot obtain an injunction absent proof of actual market harm. Of the plaintiffs for whom courts denied injunctions, only the plaintiff in *Praxair, Inc. v. ATMI, Inc.* was potentially a market competitor in the inventive area covered by its patent.⁹¹ In this case, Praxair bore the outward appearance of a market competitor for business related to safe handling of toxic fluids and gases.⁹² The court nevertheless denied Praxair an injunction.⁹³ *Praxair* may stand for the proposition that assertions of market competition absent proof thereof may be insufficient, but that *proof* of market competition and market harm *is* in fact sufficient for an injunction. The *Praxair* court, in denying an injunction, appeared to be toeing this line when it noted that “Praxair has not provided or described any specific sales or market data to assist the court, nor has it identified precisely what market share, revenues, and customers Praxair has lost to ATMI.”⁹⁴ Therefore, Praxair may show that, for one court, proof of at least market competition and possibly market harm is necessary for injunctive relief.

83. No. CIV-03-1512-L, 2006 WL 2570614 (W.D. Okla. Sept. 5, 2006).

84. Complaint at 1–3, *Voda*, 2006 WL 2570614 (No. CIV-03-1512-L).

85. *Voda*, 2006 WL 2570614, at *6.

86. Complaint, *supra* note 84, at 3.

87. No. 02-73543, 2007 WL 37742, at *2 (E.D. Mich. Jan. 4, 2007).

88. 469 F. Supp. 2d 203, 226 (D. Del. 2007). The record was incomplete as to whether or not the plaintiff had in fact commercialized the invention. *Id.*

89. No. 1:05-CV-264, 2006 U.S. Dist. LEXIS 76380, at *4 (E.D. Tex. July 7, 2006).

90. See GARREY & JACKSON, *supra* note 21, at 10 (citing Transcript of Post Jury Verdict Hearing at 125, *Finisar Corp. v. DirecTV Group, Inc.*, No. 1:05-CV-264, 2006 U.S. Dist. LEXIS 76380 (E.D. Tex. July 7, 2006)).

91. 479 F. Supp. 2d 440, 443 (D. Del. 2007). There was insufficient information in the opinion in *IMX* to determine whether the plaintiff was a market competitor. See *supra* note 88.

92. *Praxair*, 479 F. Supp. 2d at 443.

93. *Id.* at 444.

94. *Id.*

2. Plaintiffs Granted Injunctions Do Practice Their Patent and Are Market Competitors

Plaintiffs who win injunctions practice their inventions and are market competitors with the defendant.⁹⁵ In *Wald v. Mudhopper Oilfield Services, Inc.*,⁹⁶ the plaintiff was in the mining business and was a market competitor with the defendant in the area of the invention—polymer sticks for treating well bores.⁹⁷ In *Telequip Corp. v. Change Exchange*,⁹⁸ the plaintiff marketed and sold coin dispensers for use in, among other things, checkout lines.⁹⁹ The court found that the defendant sold infringing coin dispensers.¹⁰⁰ In *TiVo Inc. v. Echostar Communications Corp.*,¹⁰¹ the court found the plaintiff and defendant, who both sold digital video recorders for home television use, to be direct competitors.¹⁰² In *Floe International, Inc. v. Newmans' Manufacturing Inc.*,¹⁰³ the court emphasized that plaintiff and defendant were “direct competitors in the snowmobile trailer market.”¹⁰⁴ In *3M Innovative Properties Co. v. Avery Dennison Corp.*,¹⁰⁵ the defendant, Avery, sold “EZ Series Fleet Marketing Film” which the court found to infringe 3M’s patent covering an improvement applicable to graphical adhesives.¹⁰⁶ 3M sold competing adhesives for home, office, and industrial applications.¹⁰⁷ The court took special notice that 3M “consistently refused to execute a licensing agreement with Avery.”¹⁰⁸ In *Rosco, Inc. v. Mirror Lite Co.*,¹⁰⁹ Mirror Lite and Rosco produced and sold cross-view mirrors for use in school buses,¹¹⁰ and Mirror Lite manufactured cross-view mirrors covered by their own patent.¹¹¹ In *Smith & Nephew, Inc.*

95. See *supra* notes 21–24 and accompanying text.

96. No. CIV-04-1693-C, 2006 WL 2128851 (W.D. Okla. July 27, 2006).

97. *Id.* at *5 (noting that defendant’s infringement would decrease plaintiff’s “market share”).

98. No. 5:01-CV-1748, 2006 WL 2385425 (N.D.N.Y. Aug. 15, 2006).

99. See Telequip Home Page, <http://www.telequip.com> (last visited Aug. 25, 2007).

100. *Telequip*, 2006 WL 2385425, at *1.

101. 446 F. Supp. 2d 664 (E.D. Tex. 2006).

102. *Id.* at 669 (“Defendants compete directly with Plaintiff—Defendants market their infringing products to potential DVR customers as an alternative to purchasing Plaintiff’s DVRs.”).

103. No. 04-5120, 2006 WL 2472112 (D. Minn. Aug. 23, 2006).

104. *Id.* at *1.

105. No. 01-1781, 2006 WL 2735499 (D. Minn. Sept. 25, 2006).

106. *Id.* at *1.

107. See 3M US: Products and Services, http://solutions.3m.com/en_US/Products/ (last visited Aug. 25, 2007).

108. *3M Innovative Props. Co.*, 2006 WL 2735499, at *1.

109. *Rosco II*, No. CV-96-5658, 2006 WL 2844400 (E.D.N.Y. Sept. 29, 2006).

110. See *Rosco, Inc. v. Mirror Lite Co. (Rosco I)*, 139 F. Supp. 2d 287, 291 (E.D.N.Y. 2001).

111. *Rosco II*, 2006 WL 2844400, at *4 (“In this case it is undisputed that Mirror Lite manufactures mirrors covered by its 984 patent.”).

v. Synthes (U.S.A.), the plaintiff “compet[ed] in the market for the patented invention.”¹¹² In *Black & Decker Inc. v. Robert Bosch Tool Corp.*, plaintiff and defendant competed against each other in the rugged radio market.¹¹³ In *Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, plaintiff and defendant were in “direct competition” in the deepwater drilling business.¹¹⁴ In *MPT, Inc. v. Marathon Labels, Inc.*, the plaintiff “invented a method, actively created a market, and established a strong market position.”¹¹⁵ In *Novozymes A/S v. Genencor International, Inc.*, plaintiff’s subsidiary and defendant were in competition in the fuel ethanol market.¹¹⁶ In *Ortho-McNeil Pharmaceutical, Inc. v. Mylan Laboratories, Inc.*, plaintiff and defendant were competitors in the pharmaceutical industry.¹¹⁷ In *O2 Micro International Ltd. v. Beyond Innovation Technology Co.*, the court found that defendant “competes directly” with plaintiff.¹¹⁸ In *800 Adept, Inc. v. Murex Securities, Ltd.*, the court found that plaintiff and defendant were in “direct competition” and that defendant was taking customers from plaintiff.¹¹⁹ In *MGM Well Services, Inc. v. Mega Lift Systems, LLC*, the court highlighted that defendant was a “direct competitor” of plaintiff.¹²⁰ In *Brooktrout, Inc. v. Eicon Networks Corp.*, plaintiff and defendant were “competitors in the fax server board market.”¹²¹ In *Sanofi-Synthelabo v. Apotex Inc.*, plaintiff marketed the drug Plavix, and defendant sought to market a competing generic.¹²²

The requirement of market competition to obtain an injunction has been remarkably consistent in cases granting injunctions. Out of the eighteen cases surveyed where plaintiffs were granted injunctions, only one case presents a slight aberration where a court granted an injunction to a plaintiff that was not a *current* market competitor, though this case easily fits within the framework of the market competition requirement. In *Commonwealth Scientific & Industrial Research Organisation v. Buffalo Technology Inc.*, the plaintiff, CSIRO, was a research organization run by the Australian Federal Government, comparable to the National Science Foundation in the United States.¹²³ CSIRO had formed Radiata Communications, a joint venture with a university, in order to commercialize its patent covering WLAN

112. 466 F. Supp. 2d 978, 984 (W.D. Tenn. 2006).

113. No. 04—C-7955, 2006 WL 3446144, at *4 (N.D. Ill. Nov. 29, 2006).

114. No. H-03-2910, 2006 WL 3813778, at *3 (S.D. Tex. Dec. 27, 2006).

115. No. 1:04-CV-2357, 2007 WL 184747, at *14 (N.D. Ohio Jan. 19, 2007).

116. 474 F. Supp. 2d 592, 597–600 (D. Del. 2007).

117. See First Amended Complaint at 1–2, *Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, No. 06-5166, 2007 WL 869545 (D.N.J. Mar. 20, 2007).

118. No. 2-04-CV-32, 2007 WL 869576, at *2 (E.D. Tex. Mar. 21, 2007).

119. No. 6:02-cv-1354-Orl-28DAB, 2007 WL 1101238, at *7 (M.D. Fla. Apr. 12, 2007).

120. No. H-05-1634, 2007 WL 1231682, at *14 (S.D. Tex. Apr. 25, 2007).

121. No. 2:03-CV-59, 2007 WL 1730112, at *1 (E.D. Tex. June 14, 2007).

122. 492 F. Supp. 2d 353 (S.D.N.Y. 2007).

123. 492 F. Supp. 2d 600 (E.D. Tex. 2007).

technology.¹²⁴ Radiata was purchased after five years in 2001 by CISCO Systems.¹²⁵ At the time of the suit, however, the court found that “CSIRO does not compete with [the defendant] for marketshare.”¹²⁶ CSIRO was nevertheless granted a permanent injunction after the court noted that “CSIRO *does compete* internationally with other research groups—such as universities—for resources, ideas, and the best scientific minds to transform those ideas into realities.”¹²⁷ *Commonwealth Scientific* may show that at least one court is more receptive to granting an injunction to a research company that competes for ideas if, at some point in the past, they were a market competitor. Because the facts are so unique, however, with the plaintiff being a research entity run by a foreign sovereign government—implicating comity concerns—this single case does not significantly affect the force of the market competition requirement’s central thesis, that market competition of one’s patent is necessary for an injunction.

II. IS THE MARKET COMPETITION REQUIREMENT CONSISTENT WITH *EBAY*?

The unanimous opinion authored by Justice Thomas in *eBay* supplied two salient guideposts for district courts to follow in applying the four-factor test. First, Justice Thomas wrote that courts should not deny an injunction if they base a finding of no irreparable harm only on the “plaintiff’s willingness to license its patents” and “its lack of commercial activity in practicing the patents.”¹²⁸ Justice Thomas emphasized that any denial of injunction based on “broad classifications” was improper.¹²⁹ This principle, aside from being unanimously supported in Justice Thomas’s opinion, is also directly supported by Justice Kennedy’s concurring opinion.¹³⁰ Second, the unanimous opinion provides that “discretion must be exercised consistent with traditional principles of equity.”¹³¹

This Part considers whether these two considerations can justify the market competition requirement, and concludes that they cannot. Section II.A considers whether the market competition requirement can be defended on the ground that all of the district courts did in fact apply the four-factor

124. *Id.* at 600–02.

125. *Id.* at 602.

126. *Id.* at 604.

127. *Id.* (emphasis added).

128. *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1840 (2006) (quoting *MercExchange, L.L.C. v. eBay Inc.*, 275 F. Supp. 2d 695, 712 (E.D. Va. 2003)).

129. *eBay Inc.*, 126 S. Ct. at 1837.

130. *Id.* at 1842 (Kennedy, J., concurring) (“[C]ourts should apply the well-established, four-factor test—without resort to categorical rules—in deciding whether to grant injunctive relief in patent cases.”). Justice Kennedy’s support for this principle is notable because his concurring opinion takes the most aggressive stance against plaintiffs that do not commercialize their inventions. *See id.*

131. *Id.* at 1841.

test such that lack of commercialization did not act as a per se bar to injunction. It argues that this defense lacks merit because district courts are adopting a different standard for plaintiffs that are not market competitors, making it all but impossible to meet the irreparable injury rule and other parts of the four-part test, and concludes that the availability of injunctions impermissibly turns on the “broad classification” of market competition. Section II.B weighs whether the market competition requirement can be defended as an application of “traditional principles of equity” with district courts simply utilizing their discretion to carry forward the Supreme Court’s implicit goal¹³² to deny injunctions to suspicious plaintiffs, that is, “patent trolls.”¹³³ It concludes that even if the market competition requirement is sound policy, district courts still must limit their discretion by reference to “traditional principles of equity,”¹³⁴ which precludes use of a market competition requirement that preempts relevant equitable considerations. Section II.C examines the effect the market competition requirement has on courts’ granting of injunctions. It argues that the market competition requirement causes courts to deny plaintiffs injunctions, and that absent such a rule, many of these plaintiffs would qualify for injunctive relief under the four-part test. Section II.C concludes that, because the market competition requirement contravenes *eBay* and alters the outcome of the remedy received by the plaintiff, it should be abandoned.

*A. The Market Competition Requirement Employs “Broad Classifications”:
Different Implicit Standards of Review Under the Four-Factor Test Result in
a Bar to Injunctions for Non-Practicing and Non-Competing Plaintiffs*

Under *eBay*, district courts are operating within their discretion in denying injunctive relief as long as the licensing and commercialization behavior of the plaintiff is not “sufficient to establish that the patent holder would not suffer irreparable harm if an injunction did not issue.”¹³⁵ In the district court cases applying the test, plaintiffs that exhibited willingness to license and did not commercialize their patents received the benefit of analysis under the four-part test, including irreparable injury analysis. Under this individualized standard, one could argue that district courts are successfully avoiding the Supreme Court’s main concern that consideration of equitable standards should not allow “broad classifications” to preclude injunctive

132. DOUGLAS LAYCOCK, *MODERN AMERICAN REMEDIES* 45 (3d ed. Supp. 2006) (“The only hint of what should have been the real issue in *Ebay* comes in the penultimate paragraph of Justice Kennedy’s concurring opinion.”). The penultimate paragraph of Justice Kennedy’s concurring opinion is the only place where the Supreme Court mentions the elephant in the room: “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.” *eBay Inc.*, 126 S. Ct. at 1842 (Kennedy, J., concurring).

133. *See supra* note 2.

134. *eBay Inc.*, 126 S. Ct. at 1841.

135. *Id.* at 1840.

relief.¹³⁶ Of course, this line of justification requires that courts' findings of "no irreparable injury" for plaintiffs are not based solely on the "broad classification" that they did not market their patented invention.¹³⁷

The market competition requirement *does*, however, create a "broad classification" contrary to *eBay*'s holding that irreparable injury analysis should not turn only on licensing behavior and commercialization, undermining this justification. District courts have been careful not to allow plaintiffs' willingness to license their patent and a lack of commercialization to appear determinative in denying injunctions and will at least give lip service to the four-factor analysis. However, by taking account of harm to market-competing plaintiffs flowing from the loss of exclusivity and by explicitly taking notice of commercialization in the application of the four-factor test and allowing it to drive their decisions, courts have created a regime that allows availability of an injunction to turn on market competition.

This Section demonstrates how post-*eBay* cases employ "broad classifications." Courts selectively apply an impossible standard to non-market-competing plaintiffs causing them to flunk the irreparable injury and inadequacy of damages¹³⁸ prongs of the four-part test. In cases where courts granted injunctions and plaintiffs commercialized their inventions, courts found both irreparable injury and inadequate remedy at law. In cases where courts denied injunctions and plaintiffs were willing licensors and did not commercialize their inventions, courts found neither irreparable injury nor inadequate remedy at law.¹³⁹ Thus, the irreparable injury and inadequacy of damages analysis can be seen as the two pillars supporting the market competition requirement. Section II.A.1 examines how courts implement the market competition requirement through use of an impossible-to-meet legal standard for non-market competitors, resulting in a *per se* denial of injunctions to plaintiffs in that group. It argues that the market competition requirement, therefore, violates *eBay* by denying injunctions based on the "broad classification" of market competition. Subsection II.A.2 argues that this impossible standard exists in part because courts have gone beyond using

136. *See id.*

137. *See id.*

138. Though the Supreme Court in *eBay* states that irreparable injury and inadequacy of damages are two separate factors in the four-factor test, they are really corollaries of each other. In *Wald v. Mudhopper Oilfield Services, Inc.*, the court noted that irreparable injury typically occurs where damages are inadequate. No. CIV-04-1693-C, 2006 WL 2128851, at *5 (W.D. Okla. July 27, 2006) (awarding an injunction to the plaintiff after applying the four-factor analysis, and noting that irreparable harm "is often suffered when the injury can[not] be adequately atoned for in money . . . or when the district court cannot remedy [the injury] following a final determination on the merits" (alterations in original) (quoting *Prairie Band of Potawatomi Indians v. Pierce*, 253 F.3d 1234, 1250 (10th Cir. 2001))). This Section treats the two factors as one, consistent with how district courts have applied the test. *See Wald*, 2006 WL 2128851, at *5; *see also* 3M Innovative Props. Co. v. Avery Dennison Corp., No. 01-1781, 2006 WL 2735499, at *1 (D. Minn. Sept. 25, 2006); Paice LLC v. Toyota Motor Corp., No. 2:04-CV-211-DF, 2006 WL 2385139, at *5 (E.D. Tex. Aug. 16, 2006) ("Irreparable harm lies only where injury cannot be undone by monetary damages."); Telequip Corp. v. Change Exch., No. 5:01-CV-1748, 2006 WL 2385425, at *2 (N.D.N.Y. Aug. 15, 2006).

139. *See Mulder*, *supra* note 22 (finding that the irreparable injury and inadequacy of damages analyses drive the outcome of the four-factor test in the first five post-*eBay* district court cases).

the concurring opinions for guidance and instead selectively apply a favorable legal standard from Chief Justice Roberts's concurrence to grant injunctions based on the binary fact of presence, or absence, of market competition.

1. An Impossible Standard: Courts Use Different Standards Based on Plaintiffs' Market Presence, Resulting in a Per Se Denial of Injunctions to Non-Market Competitors

The market competition requirement creates a "broad classification" contrary to *eBay's* implicit holding that irreparable injury and inadequacy of damages analysis should not turn only on licensing behavior and commercialization. Courts have applied an impossible-to-meet standard for a finding of irreparable injury for plaintiffs who do not compete in the marketplace. The result of district court hypersensitivity to market competition appears to be a per se finding of irreparable injury and inadequacy of damages for plaintiffs that market their invention, and a per se finding of *no* irreparable harm to plaintiffs that do not market their inventions. Since irreparable injury is the engine that drives the market competition requirement, an adverse finding as to irreparable injury means an injunction will not be granted.¹⁴⁰

In cases where plaintiffs did not market their invention, courts have used this unachievable standard to scrutinize plaintiffs' licensing and commercialization profiles, which upon application causes plaintiffs to fail the first and second factors—irreparable injury and adequacy of damages. In *Paice*, the district court found that irreparable injury and inadequacy of damages were corollaries and then found that the plaintiff's licensing behavior showed that damages *were* adequate.¹⁴¹ The *Paice* court all but announced a rule that plaintiffs cannot meet when they are willing licensors and do not practice the invention.¹⁴² In *Finisar*, the court likewise relied on plaintiff's lack of commercialization and willingness to license to find that it had suffered no irreparable injury and had adequate remedies at law.¹⁴³ The court

140. See *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 443 (E.D. Tex. 2006) (relying on defendant's licensing and lack of market competition in order to find that any hardships suffered by plaintiff were "reparable," essentially collapsing the hardship inquiry into the irreparable injury and adequacy of damages inquiries).

141. *Paice LLC*, 2006 WL 2385139, at *5.

142. *Id.* at *4–5. The court stated as follows:

It . . . should also be noted that because Plaintiff does not compete for market share with the accused vehicles, concerns regarding loss of brand name recognition and market share similarly are not implicated.

. . . .

. . . [Plaintiff's] offer [to license] further demonstrates the adequacy of monetary relief from Plaintiff's point of view. Thus, the Court finds that Plaintiff has not demonstrated monetary damages are an inadequate remedy to compensate for Defendants' infringement.

Id.

143. *Finisar Corp. v. DirecTV Group, Inc.*, No. 1:05-CV-264, 2006 WL 2709206 (E.D. Tex. Sept. 1, 2006).

held that an injunction was not appropriate because Finisar did not have the capability or the intention to commercialize its patent.¹⁴⁴ The *z4* court went even further and created a category of “type[s] of injuries that are often incalculable” which covered “lost profits, the loss of brand name recognition or the loss of market share.”¹⁴⁵ The enumerated irreparable harms all share the attribute that they can only befall a market competitor. If these are the kinds of harms that are cognizable as irreparable and for which damages will not adequately compensate, then it is hard to see how any plaintiff who does not market its invention could show irreparable injury.

In cases granting injunctions, on the other hand, courts have overtly stated that commercialization concerns motivated their finding of irreparable injury and inadequacy of damages. In *Rosco, Inc. v. Mirror Lite Co.*, the district court distinguished a case that was factually similar, but in which an injunction was denied and the plaintiff did not practice the patent.¹⁴⁶ The court noted that the plaintiff in the distinguished case did not manufacture products covered by the patent, and an injunction would have given that plaintiff an unfair bargaining advantage.¹⁴⁷ The *Rosco* court then found that Mirror Lite, a counterclaim plaintiff, *would* suffer irreparable injury because it manufactured the invention underlying the patent.¹⁴⁸ In *O2 Micro International Ltd. v. Beyond Innovation Technology Co.*, the court noted that the Eastern District of Texas has “recognized the high value of intellectual property when it is asserted against a direct competitor in the plaintiff’s market.”¹⁴⁹ In *Novozymes A/S v. Genencor International, Inc.*, the court used particularly strong and clear language and noted that “head-to-head competitors . . . ha[ve] a right, granted by Congress, not to assist [their] rival[s] with the use of proprietary technology.”¹⁵⁰ In *Brooktrout, Inc. v. Eicon Networks Corp.*, the competition between plaintiff and defendant “weigh[ed] heavily in the court’s analysis.”¹⁵¹ Cases granting injunctions have focused on lost sales to the plaintiff or a loss in market share as irreparable injury.¹⁵²

144. See GARREY & JACKSON, *supra* note 21, at 9.

145. *z4*, 434 F. Supp. 2d at 440.

146. *Rosco II*, No. CV-96-5658, 2006 WL 2844400, at *5 (E.D.N.Y. Sept. 29, 2006).

147. *Id.*

148. *Id.*

149. No. 2-04-CV-32, 2007 WL 869576, at *2 (E.D. Tex. Mar. 21, 2007).

150. 474 F. Supp. 2d 592, 613 (D. Del. 2007); see also *800 Adept, Inc. v. Murex Sec., Ltd.*, No. 6:02-cv-1354-Orl-28DAB, 2007 WL 1101238, at *6 (M.D. Fla. Apr. 12, 2007) (quoting *Novozymes A/S*).

151. No. 2:03-CV-59, 2007 WL 1730112, at *1 (E.D. Tex. June 14, 2007).

152. *Smith & Nephew, Inc. v. Synthes (U.S.A.)*, 466 F. Supp. 2d 978, 983 (W.D. Tenn. 2006); see, e.g., *800 Adept*, 2007 WL 1101238, at *6; *MPT, Inc. v. Marathon Labels, Inc.*, No. 1:04-CV-2357, 2007 WL 184747, at *14 (N.D. Ohio Jan. 19, 2007); *Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, No. H-03-2910, 2006 WL 3813778, at *5 (S.D. Tex. Dec. 27, 2006); *Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04—C-7955, 2006 WL 3446144, at *4 (N.D. Ill. Nov. 29, 2006); *3M Innovative Prods. Co. v. Avery Dennison Corp.*, No. 01-1781, 2006 WL 2735499, at *1 (D. Minn. Sept. 25, 2006); *TiVo Inc. v. EchoStar Commc’ns Corp.*, 446 F. Supp. 2d 664, 669 (E.D. Tex. 2006) (“Loss of market share in this nascent market is a key consideration in finding that Plaintiff suffers irreparable harm . . .”); *Wald v. Mudhopper Oilfield Servs.*, No. CIV-04-1693-C,

2. *Courts Selectively Apply Chief Justice Roberts's Principle that Loss of Right to Exclude can be Irreparable, Resulting in Inconsistent Irreparable Injury Analysis*

The market competition requirement gets its teeth from courts' selective adoption, based on market competition, of a standard developed in Chief Justice Roberts's concurring opinion for irreparable injury analysis. The Chief Justice wrote in his concurring opinion in *eBay* that precedent had favored granting injunctions upon a showing of validity and infringement because protecting one's right to exclude with damages was difficult.¹⁵³ Chief Justice Roberts emphasized that the difficulty of enforcing one's right to exclude often manifests itself as irreparable injury and inadequacy of damages.¹⁵⁴ The Chief Justice emphasized that this historical practice did not amount to an entitlement of an injunction, but that the historical practice and precedent should guide and inform application of the four-part test.¹⁵⁵ Commentators argue that Chief Justice Roberts contemplated that application of the standard should produce results similar to those reached under the Federal Circuit's analysis, with injunctions issuing routinely.¹⁵⁶

District courts have embraced Justice Roberts's reasoning, but only when the plaintiff and defendant are competitors in the area covered by the patent. Cases denying injunctions to non-market competitors apply an inconsistent irreparable injury standard and omit the standard recited for plaintiffs who are market competitors, where the right to exclude has been a substantial consideration. One can observe this by looking at the set of district court cases decided post-*eBay*. In cases where plaintiffs have commercialized their inventions, courts have either explicitly or implicitly adopted Chief Justice Roberts's suggestion that courts lean heavily on substantial precedent that irreparable and uncompensable harm flows from the loss of the right to exclude.¹⁵⁷ *Telequip* illustrates the standard used in

2006 WL 2128851, at *5 (W.D. Okla. July 27, 2006). *But cf.* *Praxair, Inc. v. ATMI, Inc.*, 479 F. Supp. 2d 440, 443-44 (D. Del. 2007) (denying an injunction to a plaintiff who did not supply proof of lost market share, revenues, or customers).

153. *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1841 (2006) (Roberts, C.J., concurring) (noting the difficulty of protecting a right to *exclude* through monetary remedies).

154. *Id.* (“[This] difficulty . . . often implicates the first two factors [irreparable injury and adequacy of remedy at law] of the traditional four-factor test.”).

155. *Id.* at 1842 (“When it comes to discerning and applying those standards . . . ‘a page of history is worth a volume of logic.’” (quoting *New York Trust Co. v. Eisner*, 256 U.S. 345, 349(1921))).

156. *Barner & Norrod*, *supra* note 15, at 12; *Seidenberg*, *supra* note 2, at 54 (“The concurrence of Chief Justice John G. Roberts Jr. . . . stressed that the new four-part test should produce much the same results as the old Federal Circuit test.”); *Vorder-Bruegge Jr.*, *supra* note 15, at 15 (“Chief Justice Roberts’ concurrence suggests that future application of the new four-part test should still be guided by historical precedent favoring injunctions . . .”).

157. In *3M*, the district court’s analysis of irreparable injury cited precedent that endorsed Chief Justice Roberts’s principle that damages are often inadequate and injury is often irreparable when one’s right to exclude is compromised. *3M Innovative Proprs. Co.*, 2006 WL 2735499, at *1. In *Smith & Nephew*, the court repeated the standard from *Telequip* and added that defendant had “violated Plaintiff’s exclusionary right in a manner that cannot be compensated adequately through

cases granting injunctions. The *Telequip* court relied on precedent that patents derive their value from the right to exclude, and therefore, damages would be inadequate because loss of the right to exclude constituted irreparable injury.¹⁵⁸ The *3M* court likewise highlighted the general inadequacy of providing money damages to address continuing infringement.¹⁵⁹ The *Novozymes* court directly equated irreparable harm with infringement of the right to exclude, and explicitly stated that “*eBay* did not state that loss of the right to exclude could not be irreparable harm.”¹⁶⁰ In *Black & Decker*, the court went even further, holding that loss of right to exclude deserved special consideration when the plaintiff was a market competitor.¹⁶¹

Courts apply a lenient standard when plaintiffs are market competitors and apply a standard that is impossible to meet when plaintiffs are not market competitors, resulting in an essentially per se denial of injunction to them. Compare the reliance on the irreparable consequences of losing one’s right to exclude with the standard applied in cases where plaintiffs were not market competitors and courts denied injunctions. In the latter cases, courts have not adopted the standard from Chief Justice Roberts’s concurrence, or even indirectly intimated that the withholding of the right to exclude causes irreparable harm or could lead to inadequacy of damages. Instead, courts confronted with non-market-competing plaintiffs have utilized language explicitly repudiating the proposition that infringement of the right to exclude constitutes irreparable injury.¹⁶² Both

pecuniary damages.” *Smith & Nephew*, 466 F. Supp. 2d at 984. The *Transocean* court re-emphasized a point found in Chief Justice Roberts’s concurrence that “the right to exclude remains a relevant issue for courts to consider when weighing the equities.” *Transocean*, 2006 WL 3813778, at *3.

158. *Telequip Corp. v. Change Exch.*, No. 5:01-CV-1748, 2006 WL 2385425, at *2 (N.D.N.Y. Aug. 15, 2005) (“[C]ourts have held that monetary damages are not an adequate remedy against future infringement because ‘the principal value of a patent is its statutory right to exclude.’” (quoting *Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp.*, 397 F. Supp. 2d 537, 546 (D. Del. 2005))).

159. *3M Innovative Props. Co.*, 2006 WL 2735499, at *1 (“[W]here the infringing device will continue to infringe and thus damage Plaintiffs in the future, monetary damages are generally considered to be inadequate.” (quoting *Schneider (Europe) AG v. Scimed Life Sys., Inc.*, 852 F. Supp. 813, 861 (D. Minn. 1994))).

160. *Novozymes A/S v. Genencor Int’l, Inc.*, 474 F. Supp. 2d 592, 612 (D. Del. 2007); cf. *800 Adept, Inc. v. Murex Sec., Ltd.*, No. 6:02-cv-1354-Orl-28DAB, 2007 WL 1101238, at *6 (M.D. Fla. Apr. 12, 2007) (“[I]rreparable harm flows from a competitor’s attempts to usurp the pioneering company’s market position and goodwill.”).

161. *Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04—C-7955, 2006 WL 3446144, at *4 (N.D. Ill. Nov. 29, 2006).

162. *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 225 (D. Del. 2007); *Sundance, Inc. v. DeMonte Fabricating Ltd.*, No. 02-73543, 2007 WL 37742, at *2 (E.D. Mich. Jan. 4, 2007) (holding that damages allegedly flowing from loss of the right to exclude “does not establish an inadequate remedy at law”); *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *5 (E.D. Tex. Aug. 16, 2006); *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 441 (E.D. Tex. 2006). The *Finisar* court likewise rebuffed application of Chief Justice Roberts’s touchstone that losing exclusion be an irreparable injury in itself. *Finisar Corp. v. DirecTV Group, Inc.*, No. 1:05-CV-264, U.S. Dist. LEXIS 76380 (E.D. Tex. July 7, 2006). Practitioners, commenting on *Finisar*, noted that the district judge had denied plaintiffs their ability to show irreparable injury and inadequate remedy from losing the exclusivity of their patent. GARREY & JACKSON, *supra* note 21, at 10 (“Judge Clark rejected Finisar’s argument that the right to exclude others from using their

Paice and *z4* drew a line in the sand by holding that deprivation of the right to exclude does not warrant an injunction.¹⁶³

The *IMX* court used particularly strong language to hold that loss of one's right to exclude did not even constitute evidence of irreparable harm.¹⁶⁴ These results demonstrate an impossible standard that non market-competitors face when courts "apply" the four-factor test. Plaintiffs that market their invention receive favored treatment and easy access to the injunctive remedy, and those plaintiffs that do not may find the standard applied to them insurmountable. Such a result—the manifestation of the market competition requirement in action—is a misapplication of the four-part test and undermines the Supreme Court's majority opinion in *eBay* by relying on overly broad classifications.

B. District Courts are "Trolling for Trolls" but Are Ignoring Equitable Considerations

The Supreme Court envisioned the four-factor test to reflect longstanding equitable principles¹⁶⁵ aimed at recalibrating the injunctive remedy in patent law to conform with other areas of the law,¹⁶⁶ but district courts have failed to account for major equitable considerations in their application of the market competition requirement. First, the starting point for equitable administration of justice requires avoiding the use of "broad classifications" that short-circuit evenhanded application of the test. Second, if courts are really to utilize the four-factor test in the service of aligning the injunctive remedy in patent law with other areas of law, then they should not subvert that goal by ignoring equitable willfulness doctrine that has emerged with respect to the injunctive remedy in other areas of the law. The Supreme Court's repudiation of the Federal Circuit's general injunction-granting rule in favor of applying "traditional principles of equity" should have been a sign to district judges that creating *sui generis* requirements in patent law to obtain injunctive relief was off limits. However, this is exactly what district courts have done with the market competition requirement. Ironically, if this trend continues, this recalibration of remedies could end up leaving remedies in patent law seriously misaligned with other areas of the law.

patent 'could be priceless.'" (quoting Transcript of Post Jury Verdict Hearing, *supra* note 90, at 123)).

163. *Paice*, 2006 WL 2385139, at *5 ("Infringing one's right to exclude . . . is insufficient to warrant injunctive relief."); *z4*, 434 F. Supp. 2d at 441 ("[A] violation of the right to exclude does not inevitably lead to the conclusion that a patent holder cannot be adequately compensated by remedies at law such as monetary damages without first applying the principles of equity.").

164. *IMX*, 469 F. Supp. 2d at 225 (finding that plaintiff's contention that it suffered irreparable harm in the form of loss of its exclusive right amounted to "no evidence of irreparable harm").

165. *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1839 (2006) ("According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief.").

166. *Id.* at 1840.

The Supreme Court's holding in *eBay* empowered district courts to issue injunctions according to their equitable discretion.¹⁶⁷ District courts arguably have discretion to find that equity favors denying injunctions to willing licensors who, because they don't practice their invention and make a business out of collecting licensing fees, can be made whole by damages. Justice Kennedy advocated for this expansive view of district court discretion in his concurrence and implored district judges to be wary of plaintiffs asserting patents in order to obtain a license fee yet who were not market competitors.¹⁶⁸ Justice Kennedy noted that in certain circumstances, the public interest favored awarding plaintiffs damages rather than injunctions.¹⁶⁹ When a district court, then, disarms a plaintiff that it views as a nuisance holdup artist by denying an injunction, it is arguably operating within its discretion.

District court discretion, regardless of whether it is exercised to admirable ends, is nonetheless cabined by the Supreme Court's central holding in *eBay* that discretion must be congruent with traditional principles of equity.¹⁷⁰ Two lessons from the opinion provide useful guidance. First, referring to *per se* denials of injunctions to noncommercial willing licensors, the Supreme Court stated that any use of "broad classifications" in the four-factor analysis contravened traditional principles of equity.¹⁷¹ District courts' adoption of a market competition requirement that relies on "broad classifications" of market activity runs afoul of this constraint. Second, the Supreme Court held that traditional principles of equity should apply equally "in patent disputes no less than in other cases governed by such standards."¹⁷² The implication is that traditional principles of equity exist not only in the body of cases discussing the injunctive remedy in patent law, but also in the larger body of cases dealing with the injunctive remedy more generally.

One of the most well-known equitable principles regarding specific remedies¹⁷³ is that when infringement is willful, equity may require that courts ignore the defendant's hardship. One commentator, in suggesting that courts could use willfulness determinations to guide district court discretion post-*eBay*, found it a nearly universal principle of equity that courts do not

167. *Id.* at 1841 ("[T]he decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts . . .").

168. *Id.* at 1842 (Kennedy, J., concurring) ("[F]irms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees.").

169. *Id.* ("When the patented invention is but a small component of the product . . . legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest.").

170. *Id.* at 1841.

171. *Id.* at 1840; *see also supra* Section II.A.

172. *eBay Inc.*, 126 S. Ct. at 1841.

173. As opposed to substitutionary remedies, which seek to compensate the plaintiff or provide the plaintiff with a substitute to redress what she has lost, specific remedies seek to prevent the harm from occurring in the first place or to give back to the plaintiff the specific thing she has lost. Colleen P. Murphy, *Money as a "Specific" Remedy*, 58 ALA. L. REV. 119, 134 (2006).

balance hardships if defendant's conduct was willful.¹⁷⁴ Courts more generally recognize that balancing tests avoid the harsh results of rigid application of the law upon an innocent defendant, but the reason for mitigating harsh results is absent when a defendant's conduct was willful.¹⁷⁵ Courts have also recognized that should they award specific relief, equity requires discounting the defendant's alleged hardship where the defendant's conduct was willful.¹⁷⁶

Though discounting the hardship of a willful wrongdoer is one of the most widely recognized equitable doctrines, district courts denying injunctions post-*eBay* are conspicuously not applying it.¹⁷⁷ While courts have found willful infringement in eleven cases post-*eBay*, this finding has failed to make its way into the four-factor analysis and has failed to shape the hardship considerations in particular.¹⁷⁸ Instead, the market competition requirement has trumped willfulness considerations. Because the market competition requirement does not allow for application of this important equitable doctrine, it violates *eBay*'s command to apply "traditional principles of equity."

C. The Market Competition Requirement as Causation

The market competition requirement, because it precludes equitable considerations such as willfulness and relies on broad classifications, has a real and salient effect on those plaintiffs denied injunctive relief. Were courts to abandon the market competition requirement in favor of evenhanded application of the four-factor test with full force given to willfulness considerations, the likely result is that at least some plaintiffs for whom courts denied injunctions would have been granted injunctions. First, if the rigid market competition requirement were gone, plaintiffs seeking injunctions against willful infringers would be able to eliminate from consideration any hardship that the defendant might claim under an injunction.¹⁷⁹ Second,

174. Stockwell, *supra* note 70, at 751 ("In virtually all areas of law, when considering injunctive relief 'a court need not balance the hardship when a defendant's conduct has been willful.'" (quoting *United States v. Marine Shale Processors*, 81 F.3d 1329, 1358 (5th Cir. 1996))).

175. *See id.* ("'A court balances equities to avoid harsh results that strict application of law could inflict on a blameless party,' but policies that aim to protect innocent defendants and allow them 'to show undue harm from strict legal enforcement are not present' in the case of willful conduct." (quoting *Louis W. Epstein Family P'ship v. KMART Corp.*, 13 F.3d 762, 769-70 (3d Cir. 1994))).

176. *Helene Curtis Indus., Inc. v. Church & Dwight Co.*, 560 F.2d 1325, 1333 (7th Cir. 1977). There is also a body of cases that has held that in land encroachment cases, where the encroachment was willful, hardship to defendant should not be considered even if damage to the plaintiff is slight. *See, e.g., Ariola v. Nigro*, 156 N.E.2d 536, 540 (Ill. 1959) (collecting cases discussing the standard that willful encroachment leads to an injunction, even when the injunction would be costly to defendant and would only benefit plaintiff slightly).

177. *See supra* Table 1.

178. *See id.* Willful infringement was found in four cases where the injunction was denied, but this did not affect the analysis under the four-factor test. *See id.*

179. *See supra* notes 173-176 and accompanying text.

without the market competition requirement, “broad classifications” and impossible standards for irreparable injury and inadequacy of damages analysis, inequitable on their face, would disappear.¹⁸⁰ This would allow non-market-competing plaintiffs to enjoy the same favorable finding as other plaintiffs of irreparable injury from loss of the right to exclude, as described in Chief Justice Roberts’s opinion. This would be especially important for plaintiffs seeking to enjoin willful infringers, as the loss of the right to exclude would carry extra weight to fill the void left by the removal of the hardship factor.

z4 is a good example of a case that may have come out differently in the absence of a market competition requirement. The court relied heavily on the substantial hardship to Microsoft in terms of resources and cost which would befall them if an injunction issued, but did not consider that this hardship was one brought about by Microsoft’s own willful infringement.¹⁸¹ Without the market competition requirement, however, courts would preclude from consideration Microsoft’s hardships under an injunction because of the willful nature of their wrong. *z4*’s hardship, even if only “limited” in the court’s view,¹⁸² would make this factor favor *z4*. The remaining factors left to be considered would be irreparable injury and inadequacy of damages, as the *z4* court assigned little weight to the public interest factor.¹⁸³ Without the market competition requirement, the impossible standard as to irreparable injury and inadequacy of damages would vanish, giving *z4* an opportunity to persuade the court that its inability to exclude Microsoft, a potential licensee, from using its patent without permission was *itself* an irreparable injury not compensable by damages.¹⁸⁴ *z4*, therefore, would have a realistic chance of showing irreparable injury and inadequacy of damages by using the same standard afforded to market-competing plaintiffs for whom courts *do* award injunctions. By showing that the hardship, irreparable injury, and adequacy of damage factors favor them, plaintiffs’ odds of obtaining an injunction would be vastly improved as compared to under the market competition requirement. Courts, therefore, should abandon the market competition requirement in favor of an even-handed application of the four-factor test both because the market competition requirement defies *eBay* and is outcome determinative.

180. See *supra* Section II.A.1.

181. See *z4* Techs., Inc. v. Microsoft Corp., 434 F. Supp. 2d 437, 442–43 (E.D. Tex. 2006) (noting that it was “quite likely” that the “resources, time, and expense required to redesign its Windows and Office software products would create a significant hardship on Microsoft”).

182. *Id.* at 443.

183. See *id.* at 444 (noting that the public interest weighed “only slightly” in favor of plaintiff).

184. The court’s original argument that plaintiff would not be harmed because it wasn’t losing market share and wouldn’t suffer loss of brand name recognition would be unavailing. See *id.* at 440.

III. IS THE MARKET COMPETITION REQUIREMENT DESIRABLE?

Whether or not the market competition requirement comports with the Supreme Court's message in *eBay*, district courts' creation of this standard may be defensible if it leads to desirable results. However, the market competition requirement cannot be justified on policy grounds. Superficially, the market competition requirement appears to lead to good outcomes; courts award injunctions to plaintiffs that are market competitors and are losing market share to firms that have infringed on their invention, while keeping trolls at bay by denying injunctions plaintiffs that attempt to use patents only as part of a profit-making holdup scheme. But even from an ex post perspective, rote application of the market competition requirement may fall short of allocative efficiency. Possible losses due to overinclusiveness caused by classification errors and decreased competition may negatively impact allocative efficiency. More importantly, even if the market competition requirement leads to ex post gains, its application may prevent socially optimal levels of innovation by lowering the expected monetary value associated with patent rights and decreasing patentee leverage, thereby curbing ex ante incentives to innovate. Sections III.A and III.B consider, in turn, the effects that the market competition rule might have on ex post allocative efficiency and on ex ante incentives to innovate.

A. The Market Competition Requirement Reduces the Holdup Problem, but Poses Additional Problems that May Prevent Ex Post Allocative Efficiency

This Section examines how the market competition requirement addresses problems associated with holdup in patent cases, but concludes that questions regarding the market competition requirement's overinclusiveness and its effects on competition may counsel against its continued use. Ex post allocative efficiency is achieved when an allocation of resources "is impossible unambiguously to improve upon."¹⁸⁵ A major part of efficient allocation of resources that arises in the context of patent lawsuits is the need to "minimiz[e] the losses suffered by the litigating parties."¹⁸⁶ When holdup occurs, one party threatens to produce an outcome that would harm the other party in order to gain a bargaining advantage.¹⁸⁷ The classic holdup problem exists when the threat takes the form of one party saying, "I will do something that hurts you more than it helps me unless you pay me not to."¹⁸⁸ The threat of an injunction gives the plaintiff an

185. ALAN V. DEARDORFF, GLOSSARY OF INTERNATIONAL ECONOMICS, <http://www-personal.umich.edu/~alandear/glossary/e.html> (last visited Aug. 25, 2007) (defining "Efficient allocation").

186. Hanoch Dagan, *The Craft of Property*, 91 CAL. L. REV. 1517, 1545 (2003).

187. See *supra* note 1.

188. Ayres & Madison, *supra* note 1, at 46.

enormous amount of bargaining power which, when wielded by the threatening party, exacerbates the holdup problem.¹⁸⁹ Whether the threatening party succeeds in extracting payment or follows through on the inefficient threat, the result is a less than optimal allocation of resources ex post. Section III.A.1 discusses the problem of holdup in patent law. Section III.A.2 reexamines the market competition requirement as an attempt to address the problem of holdup. Section III.A.3 concludes that the market competition requirement may not be well suited to combat the holdup problem because it may transfer wealth from small-scale inventors to established firms and may reduce competition.

1. *The Holdup Problem in Patent Law*

To the extent that holdup in patent law decreases ex post allocative efficiency, solutions targeted at improving allocative efficiency may not yield better results unless they properly identify would-be holdup artists. Commentators have characterized the holdup problem in intellectual property as especially acute because of the emergence of so-called “patent trolls” that utilize the threat of injunction in hopes of obtaining lucrative settlements.¹⁹⁰ Of specific concern to some commentators is when “patent trolls game the system in an effort to capture not only the value of their inventions, but the value of complementary assets and irreversible investments.”¹⁹¹ In his concurring opinion, Justice Kennedy cited an FTC report emphasizing that holdup in patent cases was particularly wasteful in terms of social costs because, among other things, (1) the firm practicing the invention will be willing to pay a higher license than they would have been prior to sinking costs into the invention; (2) if the settlement sought amounts to less than the cost of litigation, the practicing entity may be willing to settle even when the patent alleged to have been infringed is likely invalid; and (3) the result of holdup by patent trolls is the transfer of wealth from the practicing entity that is actually engaged in innovation to the troll that receives a windfall out of proportion with the benefit it has provided consumers.¹⁹²

In addition to the problem of coerced settlements and socially wasteful injunctions that harm consumers, there are costs incidental to negotiating a settlement. This cost can be especially burdensome in patent litigation because bilateral monopolies¹⁹³ create a large bargaining range.¹⁹⁴ The wide

189. Thomas P. Lyon & Eric Rasmusen, *Buyer-Option Contracts Restored: Renegotiation, Inefficient Threats, and the Hold-Up Problem*, 20 J.L. ECON. & ORG. 148, 150 (2004).

190. See, e.g., Mark A. Lemley, *Patenting Nanotechnology*, 58 STAN. L. REV. 601, 630 (2005).

191. *Id.*

192. FTC REPORT, *supra* note 3, at ch. 3, 40–41.

193. Bilateral monopoly exists when “two parties can deal only with each other.” *Walgreen Co. v. Sara Creek Prop. Co.*, 966 F.2d 273, 276 (7th Cir. 1992).

194. *Id.*

bargaining range exists because the holdup plaintiff will try to extract the most lucrative settlement value possible, potentially just lower than the expected result of litigation. However, the expected result of litigation can be enormously high if an injunction is the anticipated remedy. In this case, the plaintiff may seek an amount approaching the losses that the defendant could avoid if there were no injunction. The defendant, on the other hand, has an interest in paying as little as possible. If the plaintiff only asserts the patent as a bargaining chip and has not suffered any harm beyond expending the resources to prosecute its claim, the defendant may assume that any settlement that the plaintiff receives above its costs of enforcing the patent right will be appropriate. The settlement range in this instance would be the plaintiff's cost of enforcing the patent as a lower bound and the cost of the harm that would befall the defendant if an injunction issued as an upper bound. This difference could be staggeringly large. As Judge Posner has noted, "the costs of negotiating to a point within that range may be high."¹⁹⁵

However, private negotiations facilitated by injunctions as a means of dealing with the costs of negotiating to a point within a large range are often too quickly dismissed by those advocating for judicial valuation of patent royalties. Commentators argue that whatever the costs imposed by private negotiation of a patent license in the shadow of an injunction, it is not clear that the alternative, judicially determined damages, is any better.¹⁹⁶ Professor Merges argues that even if transaction costs are high, private negotiations in patent cases resulting from injunctions are preferable to awarding damages because valuation of intellectual property can be an intractable problem with which courts are not equipped to deal.¹⁹⁷ If true, holdup and the associated negotiation costs, though otherwise problematic, would be necessary evils required to facilitate private negotiations. Although commentators disagree on when and how frequently private negotiations should be encouraged, in discussing holdup issues they often overlook the benefits of private bargains in valuing intellectual property.

In addition to considerations of negotiating and valuation costs *generally*, in order to achieve *ex post* allocative efficiency, categories of factual circumstances where granting plaintiffs injunctions would lead to socially suboptimal results must be identified and addressed. Though private bargains may or may not be the best available means for parties to *value* a patent *in general*, the real question is whether, as per *specific* plaintiffs, denying the leverage of an injunction in bargaining would prevent the kind

195. *Id.*

196. See Robert P. Merges, Comment, *Of Property Rules, Coase, and Intellectual Property*, 94 COLUM. L. REV. 2655, 2664 (1994) (explaining that injunctions in IP cases are preferable to court ordered damages because of the valuation problems associated with commercially deployed intellectual assets); cf. *Sara Creek Prop. Co.*, 966 F.2d at 276 ("[P]rices and costs are more accurately determined by the market than by government.").

197. Merges, *supra* note 196, at 2664.

of inefficient transfers of wealth and social waste identified in the FTC report.¹⁹⁸ If granting an injunction in *specific* instances would lead to socially inefficient results, then the necessary smaller cost of valuation through judicial damages proceeding *in those instances* may be justifiable to prevent the larger cost associated with inefficient wealth transfer. Justice Kennedy recognized this concern in his concurring opinion and was particularly troubled by “firms [that] use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees.”¹⁹⁹ Justice Kennedy highlighted certain classes of plaintiffs that abused injunctions by employing them “as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.”²⁰⁰ A solution designed to ameliorate these holdup problems raised by Justice Kennedy should, therefore, do so in a way narrowly tailored to affect only holdup artists.

2. *The Market Competition Requirement Addresses the Holdup Problem and Eliminates Some of the Problems Associated with Holdup*

At first pass, the market competition requirement moves individual litigation outcomes closer to ex post efficiency by preventing holdup and its ensuing costly transfers of wealth and negotiation costs, but only insofar as courts have confidence that its application correctly “sorts” plaintiffs. One way to view the market competition requirement is as a heuristic for identifying the class of cases where the risk of socially wasteful holdup might be most pressing. When applied to plaintiffs who have no good-faith intention of practicing their invention and would not benefit from an injunction, it serves the dual function of reducing the holdup problem and protecting consumers from the downstream effects of inefficient transfers of wealth.²⁰¹ For market competitors, on the other hand, courts still issue injunctions, preserving parties’ ability to negotiate to a result in the market. In this way, the market competition requirement can be seen as a gatekeeper that lets through only those plaintiffs who would not engage in socially costly holdup if they were awarded an injunction. Similarly, the market competition requirement’s demarcation of the class of entities that are not market competitors may serve as a rough-and-ready judicial approximation of the patent troll, allowing courts to locate socially costly injunctions before issuance, at low judicial cost.²⁰²

198. See FTC REPORT, *supra* note 3, at 40–41.

199. eBay Inc. v. MercExchange, L.L.C., 126 S. Ct. 1837, 1842 (2006) (Kennedy, J., concurring)

200. *Id.*

201. See *supra* notes 192, 198 and accompanying text.

202. Cf. Grab, *supra* note 2, at 113–14.

3. *Overinclusiveness of the Market Competition Requirement
and Effects on Competition May Offset Some of the
Ex Post Gains Achieved by Reducing
the Holdup Problem*

Though the market competition requirement confers ex post social benefits in the form of reducing some of the problems associated with holdup, its overinclusiveness may mitigate the ex post gains. The market competition requirement is an overinclusive categorization that may result in inefficient transfer of wealth from small-scale inventors to established firms, resulting in decreased competition.²⁰³ The market competition requirement withholds injunctions from plaintiffs that are not presently market competitors without adequately weighing the intent of the plaintiff.²⁰⁴ For those plaintiffs that intend to practice their invention but have not yet marketed it, the ex post justification for denying an injunction is weaker. To account for this, one would have to subtract from the gains achieved ex post the losses incurred through false negatives, which occur when courts deny injunctions to plaintiffs who ultimately would have commercially implemented their invention in a manner beneficial to consumers²⁰⁵ but were unable to do so because they lacked sufficient power to enter the market without the injunction.²⁰⁶

The amount of this loss is entirely dependant on the frequency at which would-be commercial competitors—those persons or entities that have future plans or would otherwise end up competing in the future—are stymied by the non-issuance of an injunction. The business model of patent licensing firms of buying, selling, and litigating patents means that this group may contain few would-be competitors, so the number of false negatives affecting this group is probably low. However, even with respect to licensing firms, for each false negative where a court denies an injunction to a plaintiff that would not in fact have engaged in holdup, potential losses associated with substituting judicial valuation for private negotiation still exist. Individual small-scale inventors, as opposed to patent licensing firms, may, more frequently, fall within the category of would-be competitors. The risk of false negatives to this group, because they may intend to compete in the future yet are likely to be ensnared by the market competition requirement, is more prominent. One specific area of concern, brought to the fore by Justice Thomas, is the need to protect “self-made

203. *See id.*

204. *See* z4 Techs., Inc. v. Microsoft Corp., 434 F. Supp. 2d 437, 444 (E.D. Tex. 2006) (denying an injunction to z4 amid arguments and evidence that z4 had exerted tremendous effort to commercialize its patent, and failed only because of Microsoft’s infringement).

205. For example, the inventions could have benefited consumers by providing competition that reduced prices or by providing superior goods or services.

206. A related, similar loss occurs when a court incorrectly classifies a market-competing plaintiff (or indeed any plaintiff) as a party who would use an injunction as a holdup device and then denies that party an injunction.

inventors” who “prefer to license their patents.”²⁰⁷ Justice Thomas’s warning against a categorical denial of injunctions to “self-made inventors” shows that the market competition requirement can produce casualties if not applied with great care.²⁰⁸ Therefore, any analysis must account for the ex post loss contributed by impeding individual inventors and other would-be competitors.

By impeding would-be market competitors, the market competition requirement increases ex post losses due to monopoly. A would-be competitor could include, for example, a self-made inventor that was on the wrong end of the market competition requirement, or an actual patent troll that, while fitting the description of troll today, would actually have implemented the invention in the future. Would-be competitors cannot obtain an injunction under the market competition requirement because their current conduct does not include market competition.²⁰⁹ When the market competition requirement prevents a would-be competitor from entering the market because of an inability to adequately protect an invention, the result is a ratification of the market status quo. At its worst, the market competition requirement may be an antidote to the holdup problem that is itself a poison because the result is a transfer of wealth from small-scale inventors to established market competitors.²¹⁰ This is the corollary to the holdup problem, where established market competitors transfer wealth to individual inventors and licensing firms. Transfer of wealth from would-be competitors to established corporate entities is problematic because it reduces competition by creating barriers to entry for new competitors.²¹¹ This transfer results in dead weight ex post loss due to monopoly pricing.²¹² Such a result runs contrary to the underlying policy on which antitrust legislation operates, namely that competition is required for the benefit of consumers and business.²¹³ Therefore, this loss is particularly dangerous because it can exacerbate socially inefficient

207. *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1840 (2006).

208. *See id.* For example, cardiologist Jan K. Voda was denied an injunction for his invention of a medical device. *See* Complaint, *supra* note 84.

209. *But cf.* *Commonwealth Scientific & Indus. Research Organisation v. Buffalo Tech. Inc.*, 492 F. Supp. 2d 600, 600–02 (E.D. Tex. 2007) (granting an injunction to an Australian government run research institution that previously had been a market competitor in its inventive area although it was not at the time of the opinion, but it was a competitor in the market of ideas and scientific minds at the time of the opinion).

210. The transfer of wealth entails the established competitor achieving a larger share of the market than otherwise would have been possible if the would-be small scale inventor had successfully been able to penetrate the market and capture some of the share.

211. *See* *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956) (“Monopoly power is the power to control prices or exclude competition.”).

212. Maureen A. O’Rourke, *Shaping Competition on the Internet: Who Owns Product and Pricing Information?*, 53 VAND. L. REV. 1965, 1968 (2000) (arguing that the monopolist may “price above marginal cost, imposing deadweight losses on consumers”).

213. HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION* 174 (2005) (“Antitrust’s purpose is to promote competition, which it does by encouraging competitive market structures and intervening selectively when practices pose a genuine threat to competition.”).

markets devoid of meaningful competition to the detriment of both consumers²¹⁴ and scientific progress.²¹⁵

Given the dynamic nature of ex post costs, an opportunity exists for district courts to exercise their discretion to minimize the negative impact of the market competition requirement. Costs attributed to impeding would-be competitors relative to the state of affairs pre-*eBay* might be justified ex post if, after accounting for these losses, the net result is positive and is the best possible means of addressing the holdup problem.²¹⁶ District courts should apply the market competition requirement with great care to avoid false negatives. Indeed, rather than trolling for trolls based on the single dimension of market competition, it would be more prudent for district courts to expand their factual analysis to watch out for entities who, while having a superficial resemblance to a holdup artist, would not in fact be at high risk of engaging in holdup. Courts could accomplish this, for example, by considering a wider range of factors when conducting irreparable injury and inadequacy of damages analysis such as the plaintiff's prior efforts, ongoing attempts and future plans to market the invention, past licensing practice, and other commercial activity in the same sector but not covering the patent. *Commonwealth Scientific*, though a very unique set of facts, may be a positive development, as the court noted that the plaintiff had engaged in successful commercialization activities in the past before ultimately granting an injunction.²¹⁷ Applied in this way, the market competition requirement may increase ex post allocative efficiency versus pre-*eBay*. If, on the other hand, district courts continue along their current trajectory of rigidly applying the market competition requirement without weighing the consequences, a legitimate risk exists that losses from the market competition requirement will overshadow all the benefits that were to flow from combating patent trolls.

B. *The Market Competition Requirement Endangers Ex Ante Productive Efficiency and Diminishes Incentives to Innovate*

Even if substantial gains ex post exist upon application of the market competition requirement, the reduction in ex ante productive efficiency that is likely to occur as a result of decreased incentives to innovate may

214. PHILLIP AREEDA ET AL., ANTITRUST ANALYSIS 11 (6th ed. 2004); Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs To Achieve Power over Price*, 96 YALE L.J. 209, 279 (1986) ("An increase in price, caused by the exercise of market power, harms consumers . . . [through the] unambiguously harmful 'deadweight' loss of sales occasioned by the shift from the lower, more competitive price.").

215. Christopher R. Leslie, *The Anticompetitive Effects of Unenforced Invalid Patents*, 91 MINN. L. REV. 101, 179 (2006) (discussing how monopolists may exclude competitors by asserting invalid patents, resulting in deadweight loss and reduced innovation).

216. Other solutions to the holdup problem resulting from injunctions have also been offered, including the proposal by Professors Ayres and Madison to award inalienable injunctions that render settlement after injunction impossible. Ayres & Madison, *supra* note 1, at 72–78.

217. See *supra* note 54.

offset these gains to the point that courts should avoid application of the market competition requirement. The market competition requirement's substantive impact is that it changes the distribution of remedies granted to successful plaintiffs. Whereas pre-*eBay*, courts, in essence, granted injunctions to all plaintiffs upon finding infringement of a valid patent,²¹⁸ the market competition requirement confines the availability of the injunctive remedy to market competitors.²¹⁹ Those plaintiffs that do not receive injunctions receive judicially fixed damages. The inability of the class of noncompeting plaintiffs to access injunctive relief, despite having shown infringement of their valid patent, may adversely affect incentives to innovate due to the importance of injunctive relief to patent holders. This Section explores how the market competition requirement may decrease ex ante incentives to innovate, examines the adverse effect the market competition requirement may have on small-scale inventors, and concludes that risks to productive efficiency counsel against the continued use of the market competition requirement.

The Constitution grants Congress 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."²²⁰ This limited power requires maintaining a careful balance between the need to provide adequate incentives for innovation while ensuring that the cost to the public is the minimum necessary to achieve those ends.²²¹ As the Supreme Court has expressed, "Patents are not given as favors . . . , but are meant to encourage invention by rewarding the inventor with the right . . . to exclude others from the use of his invention. . . . But in rewarding useful invention, the 'rights and welfare of the community must be fairly dealt with and effectually guarded.'"²²²

Attempts to improve the ex post results in patent litigation must not occur at the expense of the public, who are the beneficiaries of properly incentivized innovation and scientific progress. Federal courts adjudicating patent disputes have embraced this perspective in holding that achievement of the constitutional purpose of incentivizing innovation for the benefit of the public is not possible without the aid of injunctive relief.²²³ In *Smith International, Inc. v. Hughes Tool Co.*, the Federal Circuit stated that "[w]ithout this injunctive power of the courts, the right to ex-

218. *MercExchange, L.L.C. v. eBay, Inc.*, 401 F.3d 1323, 1338–39 (Fed. Cir. 2005).

219. See *supra* Section I.D and Part II.

220. U.S. CONST. art. I, § 8, cl. 8.

221. See *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 230 (1964) (describing the strict prerequisites to obtaining a patent and the strict enforcement on the limitations on the exercise of a patent after it has been issued).

222. *Id.* (quoting *Kendall v. Winsor*, 62 U.S. (21 How.) 322, 329 (1858)).

223. *Smith Int'l, Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1577–78 (Fed. Cir. 1983), *cert. denied*, 464 U.S. 996 (1983); see also *Applera Corp. v. MJ Research Inc.*, 389 F. Supp. 2d 365, 366–67 (D. Conn. 2005) (citing *Smith Int'l*, 718 F.2d at 1577–78); *A & H Sportswear Co. v. Victoria's Secret Stores, Inc.*, 967 F. Supp. 1457, 1475 (E.D. Pa. 1997) (same).

clude granted by the patent would be diminished, and the express purpose of the Constitution and Congress, to promote the progress of the useful arts, would be seriously undermined.”²²⁴ The market competition requirement may be a reasonable attempt to promote social welfare from an ex post perspective, but to the extent that withholding the injunctive remedy detrimentally affects incentives to develop technologies and the platforms to utilize them, it fails to meet the quid pro quo required by the Constitution.

Commentators have argued that solutions aimed at reducing the problems of holdup ex post are therefore inadequate unless they account for the ex ante effects. Professor Elhauge, commenting on courts’ general and erroneous practice of weighing the costs and benefits of monopolies only ex post, states the problem as follows:

[T]he monopoly loss that results from the exclusion of rivals is an ex post loss that exists only if we compare it to a baseline that assumes the invention was made in the first place. But we get to that baseline only if there are adequate ex ante incentives to innovate²²⁵

“Small” decreases in ex ante incentives to innovate manifest themselves in enormous loss because they result in the non-production of the innovation in question in the first place, completely precluding the possibility of any social gains accruing from this innovation ex post.²²⁶ Similarly, the market competition requirement produces good results only if one adopts the assumption that once innovators take notice of the requirement, they will continue to invent with the same enthusiasm and fervor as they did before the rule existed.²²⁷ This assumption, however, is likely to be false.

The market competition requirement results in far fewer injunctions, which in turn results in lower expected values for patents and diminished incentives to innovate.²²⁸ The Federal Circuit has adopted the position that without the ability to obtain injunctive relief, “the right to exclude granted to the patentee would have only a fraction of the value it was intended to have, and would no longer be as great an incentive to engage in the toils of scientific and technological research.”²²⁹ The principle that patents have reduced value if not enforceable through injunction has been adopted by federal district courts²³⁰ and continues to be viable post-*eBay* as

224. *Smith Int'l*, 718 F.2d at 1577–78.

225. Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253, 301 (2003).

226. *Id.* at 302 (arguing that there would be no ex post allocative efficiency if the diminution in profits deters investment in innovation).

227. *See id.* at 301 (“[O]nce judicial decisions . . . create such a legal risk of compulsory patent licensing, that risk would apply to all future innovations that might get patented by any firm.”).

228. *Merges*, *supra* note 196, at 2667 (quoting *Smith Int'l*, 718 F.2d at 1577).

229. *Smith Int'l*, 718 F.2d at 1578.

230. *E.g.*, *Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp.*, 397 F. Supp. 2d 537, 547 (D. Del. 2005); *Wesley Jessen Corp. v. Bausch & Lomb, Inc.*, 209 F. Supp. 2d 348, 403 n.12 (D. Del.

well.²³¹ With the average value of patents depressed, innovators will not pursue at least some socially useful inventions on the margin.²³² Those entities that recognize themselves as falling squarely within the crosshairs of the losing end of the market competition requirement—i.e., patent licensing firms and “self-made inventors”—will likely place a particularly low value on their patents and will have especially low incentives to innovate. It is virtually certain, therefore, that the market competition requirement will deter at least some socially useful inventions that these groups otherwise would have created. The specific amount of innovation that is deterred is an empirical question that is beyond the scope of this Note. However, it is instructive to note that federal courts and commentators have argued that removal of the injunctive remedy is likely to have substantial effects on innovation.²³³

Post-*eBay* district court cases illustrate how the judicially determined damages remedy may be inadequate to protect innovation incentives as compared to an injunction. When post-*eBay* courts deny injunctions, they allow the defendant’s infringing conduct to continue.²³⁴ Courts determine the damages for the past and future infringement based on a “reasonable royalty” approximating the revenues that plaintiff would have received had the plaintiff and the infringer entered into a license agreement with reasonable terms.²³⁵ Commonly, courts order the infringing defendant to file reports with the court, so they may adjust damages based on reasonable royalty if the level of infringement changes with future conduct.²³⁶

Damages based on reasonable royalty implicate the concern that incentives to innovate will diminish under the market competition requirement because damages may systematically undervalue the reasonable royalty that the plaintiff is entitled to for future infringement.²³⁷ Fact-finders, in setting the royalty rate, have the unenviable task of replicating a value reached in negotiation between plaintiff and defendant, while also valuating abstract technological concepts. Therefore, courts cannot reach a reasonable royalty with scientific precision.²³⁸ While one might think that errors in setting the royalty rate will net out, averaging to a value close to

2002) (citing *Smith Int’l*, 718 F.2d at 1577–78); *Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 106 F. Supp. 2d 696, 703–04 (D.N.J. 2000) (same).

231. *Novartis Corp. v. Teva Pharm. USA, Inc.*, Nos. 04-4473, 06-1130, 2007 WL 1695689, at *31 (D.N.J. June 11, 2007) (citing *Smith Int’l*, 718 F.2d at 1577–78); *Telequip Corp. v. Change Exch.*, No. 5:01-CV-1748, 2006 WL 2385425, at *2 (N.D.N.Y. Aug. 15, 2006) (same).

232. *Merges*, *supra* note 196, at 2667.

233. *See supra* notes 228–230 and accompanying text.

234. *Voda v. Cordis Corp.*, No. CIV-03-1513-L, 2006 WL 2570614, at *6 (W.D. Okla. Sept. 5, 2006); *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 444 (E.D. Tex. 2006) (expressly noting that the court-created damages remedy would need to be crafted to respond to “Microsoft’s continuing post-verdict infringement of z4’s patents”).

235. *Voda*, 2006 WL 2570614, at *1; *z4*, 434 F. Supp. 2d at 441–42, 444.

236. *Voda*, 2006 WL 2570614, at *6; *z4*, 434 F. Supp. 2d at 444.

237. *See supra* note 196 and accompanying text.

238. RICHARD POSNER, *ECONOMIC ANALYSIS OF THE LAW* 68 (2007) (“[O]nly rarely can a court determine the value of competing uses accurately.”).

what the parties would have agreed to in negotiations, commentators have argued that judicially determined damages awarded to enforce property rights tend to be undercompensatory²³⁹ and will not provide the same incentives to innovate ex ante as a patentee's ability to license on their own terms, or not at all.

Plaintiffs, especially small-scale inventors, will not have the leverage to negotiate adequate compensation if judicially determined royalties are, on the average, systematically undercompensatory, absent an injunction. The court, for example, awarded the "reasonable royalty" of 7.5% of the defendant's gross sales of the infringing devices to the plaintiff in *Voda*, a doctor who had patented improvements on a medical catheter.²⁴⁰ This entitled Dr. Voda to a stream of revenue based on the quantity of infringing devices that the defendant sold multiplied by the royalty rate set by the court. What it did *not* entitle Dr. Voda to, though, was the ability to collect more than 7.5% of the revenue, as the royalty rate found by the court would impose a de facto ceiling on a privately negotiated royalty rate that might be reached post-trial. If some percentage *above* 7.5% of the sales by defendant were attributable to Dr. Voda's improvement, Dr. Voda would have been left undercompensated with no recourse. Had the court awarded Dr. Voda an injunction, however, he could have attempted to negotiate a higher royalty as part of a license and simply refused to license the technology if agreement from the defendant was not forthcoming.

To be sure, both winners and losers exist under the market competition requirement, but the incentives of the losers may be particularly sensitive to the market competition requirement. The "losers" are those for whom application of the market competition requirement results in a decrease in ex ante incentives to innovate, namely individual inventors and patent licensing entities. It may be relatively easy for an entity to predict that, as per an inventive area, the court will not perceive them as being a market competitor since district court cases have fleshed out the rule with a fair amount of clarity, meaning that they can predict being a loser under the market competition requirement. An entity that recognizes itself as losing under the market competition requirement, therefore, may be sensitive to its inability to exclude potential competitors. The "winners" are those for whom application of the market competition requirement results in an increase in ex ante incentives to innovate, namely corporations. The winners' ex ante incentives are increased only to the extent that some innovation was previously deterred ex ante by the threat of ex post holdup.²⁴¹

239. See *id.* at 69 (discussing the objection to liability rules that courts are likely to systematically underestimate damages due to the fact that plaintiffs carry the burden of proof for damages issues, and defendants contrary speculative evidence is allowed); *supra* note 196 and accompanying text.

240. *Voda*, 2006 WL 2570614, at *1.

241. See FTC REPORT, *supra* note 3, at ch. 3, 41 ("[I]nnovation may suffer because some companies will 'refrain from introducing certain products for fear of hold-up.'" (quoting Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting*, in *1 INNOVATION POLICY AND THE ECONOMY* 119, 126 (Adam Jaffe et al. eds., 2001))). The increase in

An entity will have greater difficulty, however, predicting *ex ante* that an inventive area in which they are considering investment is likely to harbor future threats of patent holdup, meaning that the winners may not be able to appreciate the potential incentive increase *ex ante*. Therefore, incentives for the losers may be more sensitive to the effects of the market competition requirement than the winners.

Available data bolsters the proposition that, because individuals are responsible for a high degree of patent innovation, it is important that we calibrate incentives to an appropriate level. A study by the National Science Foundation ranked individuals behind only business entities as the largest constituency responsible for innovation through patenting.²⁴² Data reveals that in the United States in 2005, the PTO granted 10,358 patents to individuals, and 65,207 patents to U.S. corporations.²⁴³ Indeed, this may be an optimistic demography of groups potentially affected by the market competition requirement since many patent licensing firms are incorporated. Given the high amount of patent activity taking place in the demographic group most adversely affected by the market competition requirement, it is risky to assume that increased *ex ante* incentives enjoyed by the corporate constituency and gains *ex post* can compensate for *ex ante* losses of productive efficiency, especially given concerns regarding the existence of *ex post* gains.

CONCLUSION

Consistent application in the first twenty-five district court cases post-*eBay* strongly suggests that the market competition requirement is becoming an entrenched doctrine at the district court level. However, the divergent legal standards used by district courts turning on status as a market competitor are in tension with the Supreme Court's unanimous holding that courts should not apply *eBay's* four-factor test in a manner that makes the injunctive remedy unavailable based on broad classifications. Contrary to the Supreme Court's holding, the market competition requirement *does* create a broad class of plaintiffs for whom injunctions are not obtainable. Categorical denial of injunctions to patent-holders that do not market their invention is undesirable not only because it goes against the letter of the *eBay* opinion, but because it is bad policy as well.

ex ante incentives for the group of winners may be small given the fact that corporate entities have access to markets giving them ample commercial incentives to innovate already. Any gain realized by a particular market-competing entity would be further mitigated, if not eliminated, because it too could be denied injunctions under the market competition requirement if not competing in the market in the inventive area covered by the patent in question.

242. NAT'L SCI. BD., NAT'L SCI. FOUND., SCIENCE AND ENGINEERING: INDICATORS 2000, at 7–20 (2000), available at <http://www.nsf.gov/statistics/seind00/pdf/c7/c07.pdf> (noting that individuals own at least twenty percent of all U.S. patents, to say nothing of the number patents that individuals are responsible for filing).

243. PATENT TECH. MONITORING BRANCH, U.S. PAT. & TRADEMARK OFFICE, PATENTING BY ORGANIZATIONS: 2005, at A1-1 (2006), available at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/topo_05.pdf.

The market competition requirement addresses some of the problems resulting from holdup, but the collateral damage is high. The market competition requirement may decrease both competition and incentives to innovate for individual “self-made” inventors, who form a substantial constituency that drives a large segment of patenting activity. The combined effect of the loss in competition when courts deny injunctions to would-be competitors and losses due to decreased incentives to innovate raises serious questions about the wisdom of continued application of the market competition requirement.

