# **Posner's Unlikely Patent Intervention**

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#### INTRODUCTION

At first glance, patent law might seem the least likely place to look for Judge Richard Posner's impact on the law. Judge Posner was appointed to the Seventh Circuit Court of Appeals on October 27, 1981. On October 1, 1982, Congress created the Federal Circuit Court of Appeals and vested it with responsibility for deciding all patent law appeals.<sup>1</sup> Thus, for all but one year of his thirty-five-year career, Judge Posner's court did not decide a single patent case.

Yet as anyone participating in this Symposium knows well, Judge Posner was rarely constrained by the strictures of his own court. Beginning in 2003, Judge Posner took a strong interest in patent law and began sitting by designation on courts that handled patent cases.<sup>2</sup> For the most part, this meant the Northern District of Illinois, located in the same federal building in Chicago as Posner's Seventh Circuit. Many of these cases settled-two of them in my clerkship year (2003–2004) alone. Yet Posner's interest in finding compelling patent cases was such that he would not be deterred. Over the next decade, Posner presided over numerous patent trials and wrote twenty-nine opinions in patent cases, a volume of patent law output just as high as many of the regular members of the Northern District. In addition, Posner sat by designation on the Federal Circuit in 2009. He wrote just a single opinion, Ritchie v Vast Resources, Inc,<sup>3</sup> but that lone opinion has quickly become a staple of patent law casebooks and one of the

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<sup>&</sup>lt;sup>1</sup> Federal Courts Improvement Act of 1982 § 127(a), Pub L No 97-164, 96 Stat 25, 37–38, codified at 28 USC § 1295.

<sup>&</sup>lt;sup>2</sup> The first patent case in which Posner sat by designation was *SmithKline Beecham Corp v Apotex Corp*, 247 F Supp 2d 1011 (ND III 2003).

<sup>&</sup>lt;sup>3</sup> 563 F3d 1334 (Fed Cir 2009).

more memorable patent opinions in existence.<sup>4</sup> All told, Posner has had as much of an impact on patent law as judges who have focused on that field throughout their entire careers. And he has managed to exert this influence despite writing only one patent opinion as an appellate judge, having decided the other cases in his capacity as a district court judge.

Perhaps not surprisingly, Posner's influence on patent law has come through his application (and in some cases nonapplication) of economic principles to the law. Patent law, as made through the courts, has frequently lagged behind other areas of law in its application of economics.<sup>5</sup> Posner's involvement has thus represented an important perturbation from outside of the field.

Judge Posner's methodological influence on patent law is most visible in three cases, covering three distinct areas of law. The first is *Asahi Glass Co v Pentech Pharmaceuticals, Inc*,<sup>6</sup> which concerns the interaction between patent law and antitrust. The second is *Ritchie*, a case on the law of obviousness and Posner's lone Federal Circuit opinion. And the third is *Apple, Inc v Motorola, Inc*,<sup>7</sup> a case about patent damages. The Federal Circuit actually reversed Posner in *Apple v Motorola*,<sup>8</sup> but that has not stopped his opinion from serving as the touchstone of an entire movement in the law of patents.<sup>9</sup> These opinions tell the story of a judicial polymath who descended on a new field (to him), found it wanting, and set about correcting it.

<sup>&</sup>lt;sup>4</sup> See Robert Patrick Merges and John Fitzgerald Duffy, *Patent Law and Policy: Cases and Materials* 681–82 (LexisNexis 6th ed 2013).

<sup>&</sup>lt;sup>5</sup> See Jason B. Portis, *Through the* Alice Corp. *Looking Glass: Using Pragmatic Arguments to Bring Predictability to Patent Law*, 14 Nw J Tech & Intell Prop 237, 253–54 (2016) (arguing that the Federal Circuit has been too formalistic about patent law and that pragmatic considerations, like economics, will lead to more precise results); Peter Lee, *Patent Law and the Two Cultures*, 120 Yale L J 2, 27 (2010) (criticizing the Federal Circuit for rarely citing economic scholarship, unlike the approaches of several other appellate courts).

<sup>&</sup>lt;sup>6</sup> 289 F Supp 2d 986 (ND Ill 2003).

<sup>7 869</sup> F Supp 2d 901 (ND Ill 2012).

<sup>&</sup>lt;sup>8</sup> 757 F3d 1286 (Fed Cir 2014).

<sup>&</sup>lt;sup>9</sup> See Part III; Patrick Doll and L. Joseph Denbina, Daubert for "Dummkopfs"— Judge Posner Hypothetically Disparages Patent Damages Experts in Apple and Brandeis, 21 Tex Intell Prop L J 301, 336–42 (2013) (prophesizing the effect of Posner's decision on patent law).

#### I. ASAHI GLASS V PENTECH PHARMACEUTICALS

Judge Posner's most significant contribution to patent law arose from what appeared to be a run-of-the-mill dispute between brand-name and generic pharmaceutical manufacturers. In 2000, SmithKline Beecham Corp sued Pentech, a generic pharmaceutical firm, claiming that Pentech had infringed SmithKline's drug patent. The two parties settled out of court, pursuant to what might have struck a casual observer as a peculiar arrangement: Pentech would be permitted to sell its generic version of SmithKline's drug only in Puerto Rico.<sup>10</sup> It could not enter the remaining US market unless SmithKline's patent was invalidated or held not to be infringed in separate litigation against another pharmaceutical manufacturer. SmithKline also agreed to provide Pentech with an unlimited supply of the drug free of charge, though Pentech was required to pay SmithKline a "hefty royalty on Pentech's sales of the drug."<sup>11</sup>

Asahi had been a supplier of raw materials to Pentech in its manufacture of the drug involved in the lawsuit.<sup>12</sup> After the SmithKline-Pentech settlement, Pentech no longer had any reason to purchase anything from Asahi because it was receiving the drug for free from SmithKline. In response, Asahi brought suit against both Pentech and GlaxoSmithKline,13 accusing them of having colluded (via the settlement) to divide the market for the drug in violation of the antitrust laws.<sup>14</sup> It is perhaps unsurprising that this case, which represents Posner's most significant contribution to patent law, concerns the interaction between that body of law and a doctrinal area at the core of Posner's expertise: antitrust. The intersection of patent and antitrust is a particularly difficult and complex subject because of the competing purposes of those bodies of law. Antitrust law exists to eliminate restraints on trade (including monopolies) in order to encourage competition; patent law explicitly authorizes firms to establish

<sup>&</sup>lt;sup>10</sup> See SmithKline Beecham Corp v Pentech Pharmaceuticals, Inc, 261 F Supp 2d 1002, 1004 (ND III 2003).

<sup>&</sup>lt;sup>11</sup> Asahi, 289 F Supp 2d at 989.

<sup>&</sup>lt;sup>12</sup> See SmithKline Beecham, 261 F Supp 2d at 1004.

<sup>&</sup>lt;sup>13</sup> When *Pentech* and *SmithKline Beecham Corp v Apotex Corp*, 247 F Supp 2d 1011 (ND Ill 2003) (*Apotex*), were filed, SmithKline Beecham Corp had not yet merged with Glaxo Wellcome. However, after those two filings, and before *Asahi* was filed, Glaxo Wellcome and SmithKline Beecham Corp merged to become GlaxoSmithKline PLC. Thus, when referring to the entity in the *Pentech* and *Apotex* cases, this piece uses "SmithKline." However, when referring to the entity in *Asahi*, this piece uses "GlaxoSmithKline."

<sup>&</sup>lt;sup>14</sup> Asahi, 289 F Supp 2d at 990.

state-sponsored monopolies (and thus suppress competition) for the purpose of encouraging innovation. A panoply of actions that firms take pursuant to patent rights are anticompetitive, by design. When a firm alleges that a patent holder has used a patent in violation of the antitrust laws, a court must determine whether the patent holder's actions, even if anticompetitive, fall outside of the ambit of what patent law allows.

Asahi's suit against Pentech and GlaxoSmithKline for dividing the market arrived in front of Posner at a moment when neither judges nor scholars had given much thought to how courts should treat settlements of this type under the patent and antitrust laws. The case was decided in 2003, near the inception of Posner's interest in patent law, and before settlements of this type had received sustained antitrust scrutiny. The issue was thus ripe for Posnerian intervention.

Posner began with first principles. He reasoned that if a patent settlement were being used as "a device for circumventing antitrust law[s]"-for instance, if a settlement were used to fix prices for a patented good—it would violate antitrust law.<sup>15</sup> Notably, this appeared to be an issue of first impression in the courts. Indeed, the closest case on point—a 1926 Supreme Court case pointed in the opposite direction.<sup>16</sup> (True to form, Posner declared that the Supreme Court's 1926 decision was wrong and proceeded as if it imposed no impediment to his own decision-making.) Critically, Posner also observed that the legal analysis depended on the substantive merits of the patent lawsuit itself. If the patent had been valid and infringed, settling a lawsuit through an agreement to set prices at monopoly levels would have given the patent owner no more or less than it was otherwise entitled to. However, if the patent was invalid (or not infringed), and the patent owner knew it was invalid, the settlement was a sham and a mere pretext for violating antitrust law.<sup>17</sup>

In his focus on the strength of the patent, Posner anticipated the next decade of jurisprudence on antitrust and patent settlements. As scholars and courts realized over the next several years, the question of patent strength was central to the antitrust

<sup>&</sup>lt;sup>15</sup> Id at 991.

<sup>&</sup>lt;sup>16</sup> See id at 992, citing United States v General Electric Co, 272 US 476 (1926).

<sup>&</sup>lt;sup>17</sup> Asahi, 289 F Supp 2d at 991-92.

inquiry.<sup>18</sup> A settlement that might be appropriate if the patent were strong would be transformed into an antitrust violation if the patent were weak. Indeed, much of the debate over antitrust law and patent settlements over the ensuing decade centered around the issue of patent strength. In particular, courts and scholars worried that deciding the antitrust issue would require holding a type of shadow trial to evaluate the strength of the underlying patent.<sup>19</sup> This could be cumbersome and time-consuming, to the point at which the entire doctrine might become unworkable. In Asahi, however, this problem did not loom large. Posner had already adjudicated the GlaxoSmithKline patent in the course of a prior litigation between SmithKline and Apotex, another generic drug manufacturer. There, Posner had found the patent valid but not infringed.<sup>20</sup> Moreover, as Posner explained, "Although I did rule that Apotex had not infringed [the patent], I made clear that the issue was a close one. The case is now on appeal to the Federal Circuit, which for all that anyone can know may reverse."<sup>21</sup> Even as early as 2003, Posner understood the uncertainty underlying patent law and the vicissitudes of the Federal Circuit.

Yet Posner's analysis did not stop there. He also explained that in some cases the structure of the settlement itself can demonstrate that it constitutes a restraint on trade, even without reference to the strength of the patent. For instance, he explained, settlements "in which the patentee explicitly pays the alleged infringer to stay out of the market, are criticized and sometimes invalidated on the theory that they prevent competition."<sup>22</sup> These types of agreements are called "reverse payment" settlements because the plaintiff pays the defendant to settle the case, rather than the reverse. The idea that reverse payments should be considered illegal had only begun to percolate in the academic literature over the previous year,<sup>23</sup> and Posner's opinion in *Asahi* was

<sup>&</sup>lt;sup>18</sup> See, for example, Richard MacMillan Jr, Mary Bram, and M. Brinkley Tappan, Solving the Procedural Quagmire for Testing Reverse Payment Settlements, 11 Minn J L Sci & Tech 801, 813–14 (2010).

<sup>&</sup>lt;sup>19</sup> See, for example, *In re Ciprofloxacin Hydrochloride Antitrust Litigation*, 544 F3d 1323, 1336–37 (Fed Cir 2008); MacMillan, Bram, and Tappan, 11 Minn J L Sci & Tech at 811–12 (cited in note 18).

 $<sup>^{20}</sup>$   $\,$  Apotex, 247 F Supp 2d at 1052.

 $<sup>^{21}</sup>$   $Asahi,\,289$  F Supp 2d at 993.

<sup>&</sup>lt;sup>22</sup> Id at 994.

<sup>&</sup>lt;sup>23</sup> See Carl Shapiro, Antitrust Limits to Patent Settlements, 34 RAND J Econ 391, 394 (2003); Herbert Hovenkamp, Mark Janis, and Mark A. Lemley, Anticompetitive Settlement of Intellectual Property Disputes, 87 Minn L Rev 1719, 1749–50, 1757–59

only the third time the phrase "reverse payment" had made its way into a judicial opinion.<sup>24</sup> In Posner's view, the SmithKline-Pentech settlement did not constitute a reverse payment. SmithKline had not paid Pentech any money to settle the case, and SmithKline had allowed Pentech to enter the Puerto Rico market, thereby increasing competition.<sup>25</sup> Posner upheld the SmithKline-Pentech settlement as lawful and granted judgment against Asahi.<sup>26</sup>

Judge Posner's opinion in *Asahi* is a shining example of the many virtues that made him such an influential judge. He was among the first judges in America to recognize and understand a complex economic issue that had critical relevance to law. Rather than worrying about sticking strictly to the facts of his own case, he laid out a comprehensive economic theory of the circumstances under which a patent holder's actions will or will not constitute violations of antitrust law. In so doing, he prefigured one of the most important issues to arise in patent law in decades.<sup>27</sup> This line of doctrine culminated in the Supreme Court's decision in *Federal Trade Commission v Actavis, Inc*,<sup>28</sup> in which the Court, following Posner, held that "unexplained large reverse payment[s]" could be unlawful under the antitrust laws.<sup>29</sup> In *Actavis*,

<sup>27</sup> See C. Scott Hemphill, An Aggregate Approach to Antitrust: Using New Data and Rulemaking to Preserve Drug Competition, 109 Colum L Rev 629, 639 n 40 (2009); C. Scott Hemphill, Paying for Delay: Pharmaceutical Patent Settlement as a Regulatory Design Problem, 81 NYU L Rev 1553, 1558–59 & n 15, 1575 (2006).

<sup>(2003);</sup> Herbert Hovenkamp, et al, *IP and Antitrust: An Analysis of Antitrust Principles Applied to Intellectual Property Law* § 31.1c at 31-8 to -9 (2002).

<sup>&</sup>lt;sup>24</sup> Judge Posner was preceded by five months by Judge David G. Trager of the Eastern District of New York and by a month and a half by Judge R. Lanier Anderson of the Eleventh Circuit. *In re Ciprofloxacin Hydrochloride Antitrust Litigation*, 261 F Supp 2d 188, 250, 252 (EDNY 2003); *Valley Drug Co v Geneva Pharmaceuticals, Inc*, 344 F3d 1294, 1309 (11th Cir 2003).

<sup>&</sup>lt;sup>25</sup> See *Asahi*, 289 F Supp 2d at 994–95.

<sup>&</sup>lt;sup>26</sup> Id at 996. Judge Posner's opinion in *Asahi* generated immediate attention, both positive and negative. See Jeffrey I. Shinder and Matthew L. Cantor, *Rigging the System?: Permitting Anticompetitive Settlements*, 16 Health Lawyer 31, 32 (June 2004) (criticizing Posner's opinion for immunizing a "blatantly anticompetitive" agreement); Kevin D. McDonald, *Coals to Newcastle: In Defense of Judge Posner*, 16 Health Lawyer 33, 33–35 (June 2004) (defending Posner's opinion as being rooted in antitrust and patent law); Robert A. Milne and Michael J. Gallagher, *Recent Activity on the Brand-Generic Drug Patent Settlement Front*, 18 Antitrust 83, 85–86 (Spring 2004) (explaining Posner's defense of reverse payments as incentives to challenge patents).

<sup>&</sup>lt;sup>28</sup> 570 US 136 (2013).

<sup>&</sup>lt;sup>29</sup> Id at 157. One aspect of Judge Posner's decision that did not age quite as well was his conclusion that the SmithKline-Pentech arrangement could not be fairly described as a reverse payment. *Asahi*, 289 F Supp 2d at 994. In the wake of *Actavis*, courts have concluded that unlawful reverse payments can assume forms other than cash transfers. For

the Court followed Posner's lead in relying primarily on the structure of the settlement, rather than delving into the underlying merits of the patent lawsuit.<sup>30</sup> The Court recognized that holding a shadow patent trial in order to adjudicate the merits of the antitrust suit would be difficult and cumbersome, and few judges would be as well situated as Posner in already having adjudicated patent validity and infringement. Indeed, the Court said little in *Actavis* that Posner had not explained a decade earlier in *Asahi*.

In the intervening decade, Posner's decision in *Asahi* exerted an outsized influence on the courts and the law. His opinion has been cited more than a thousand times, including in more than one hundred district court opinions, ten circuit opinions, and once by the Supreme Court. It is not surprising that Posner made such an important contribution to antitrust law—his influence on that field is well appreciated.<sup>31</sup> What is more surprising is that the reach of his decision extended to patent law, and that it came in the context of a district court case in which he was sitting by designation. It took the Supreme Court and the Federal Circuit a decade to catch up with Richard Posner, district judge, but by the standards of those two courts, that was reasonably quick.

instance, allowing a generic competitor to enter one small segment of the market, while reserving the remainder of the market for the patent owner, can also constitute an unlawful reverse payment. See *In re Lipitor Antitrust Litigation*, 868 F3d 231, 253 (3d Cir 2017); *King Drug Co of Florence v SmithKline Beecham Corp*, 791 F3d 388, 409 (3d Cir 2015) (finding that a "no-[authorized generic] agreement" in effect constituted a reverse payment). The plaintiff's permission to sell in that limited market segment constitutes a form of payment. And the increase in competition is sufficiently minor that it does not insulate the overall agreement from scrutiny as a potential restraint of trade.

<sup>&</sup>lt;sup>30</sup> See Actavis, 570 US at 147–48.

<sup>&</sup>lt;sup>31</sup> See, for example, Steven C. Salop, Understanding Richard Posner on Exclusionary Conduct (Antitrust Source, Oct 2018), archived at http://perma.cc/TBS2-USXG. Posner's influence at the intersection of patent law and antitrust was not limited to Asahi alone. His opinion in USM Corp v SPS Technologies, Inc, 694 F2d 505 (7th Cir 1982), is widely credited as having broken significant new ground in the law of antitrust and patent misuse. See, for example, Daryl Lim, Patent Misuse and Antitrust: Rebirth or False Dawn?, 20 Mich Telecom & Tech L Rev 299, 330–33 (2014); Richard Calkins, Patent Law: The Impact of the 1988 Patent Misuse Reform Act and Noerr-Pennington Doctrine on Misuse Defenses and Antitrust Counterclaims, 38 Drake L Rev 175, 188–89 (1989). His opinion in Brunswick Corp v Riegel Textile Corp, 752 F2d 261 (7th Cir 1984), is similarly viewed as having strongly influenced the Walker Process doctrine, though it is not without critics. See generally Christopher R. Leslie, Monopolization through Patent Theft, 103 Georgetown L J 47 (2014) (criticizing Posner for creating a new legal rule that effectively immunized patent theft from antitrust liability).

## II. RITCHIE V VAST RESOURCES

Justice Antonin Scalia once remarked that he wrote his opinions for casebooks, in the hope that they might be used to educate future generations of law students.<sup>32</sup> Justice Scalia meant that he worked to make his opinions particularly clear but also acerbic and, when possible, funny, in the hope that casebook editors would select them for publication. Posner is no stranger to opinions that have been republished in casebooks, in large part because his writing was also characterized by superb clarity and concision. But occasionally an opinion lands in a casebook for reasons that have little to do with how it was crafted. For instance, a judge might find himself adjudicating the patentability of a sex toy.

As any patent law student of the last decade could tell you, that was the subject matter of *Ritchie*. The patent at issue in *Ritchie* involved the use of borosilicate glass (commonly known as Pyrex glass) in the manufacture of sex toys.<sup>33</sup> It turns out that the properties of borosilicate glass make it particularly conducive to use in sex toys. In particular, it can withstand heating and other types of rough treatment without shattering. Indeed, the inventor's borosilicate sex toys were an immediate commercial success.

For the patent holder, the problem was that the invention did not seem particularly technically innovative. Glass sex toys (made from other types of glass) had existed for decades; borosilicate glass had existed for decades. How much ingenuity could have been required to combine them? This question implicates the law of patent obviousness. Just because an invention is "new," in the sense that it has never before existed, does not mean that it is patentable. The invention must also be nonobvious, in the sense that a person of "ordinary skill in the art"<sup>34</sup> would not have known how to create it, given the state of technology in the field.<sup>35</sup> The law of nonobviousness is particularly salient when an invention is (merely) the combination of two or more previously existing inventions. The question then is whether a person of ordinary skill in the art would have known to combine those existing inventions into the new technology. If so, the new invention is obvious and thus unpatentable.

<sup>&</sup>lt;sup>32</sup> Ralph A. Rossum, *Antonin Scalia's Jurisprudence: Text and Tradition* 205 (Kansas 2006) ("He has confessed that he writes with the verve and panache he does in part to ensure that his opinions are included in constitutional law casebooks.").

<sup>&</sup>lt;sup>33</sup> *Ritchie*, 563 F3d at 1336.

<sup>&</sup>lt;sup>34</sup> 35 USC § 103.

<sup>&</sup>lt;sup>35</sup> *Ritchie*, 563 F3d at 1337.

At the same time, courts are also required to look to what are referred to as the "secondary considerations" of nonobviousness a set of economic proxies meant to provide objective indications as to whether the invention was patentable.<sup>36</sup> In particular, courts must assess whether the invention was commercially successful, particularly if it addressed a long-existing consumer need. If consumer demand for this type of product had existed for a long time, no product had appeared, and then finally the patentee had produced the invention in question to substantial commercial success, that indicates that the invention was most likely not obvious to produce and should be patentable.

These two types of considerations-technical and economicare both crucial to the inquiry into whether an invention is nonobvious and thus patentable. The problem for Posner in Ritchie was that they pointed in opposite directions. On the one hand, both glass sex toys and borosilicate glass were decades old; how hard could it have been to invent the idea of combining them? On the other hand, if this invention were so obvious, and if the product were so successful, why hadn't someone else invented this sex toy in the intervening decades? Why had it taken so long? Worse still, there was no doctrine describing how to weigh technical and economic considerations against one another when they yield opposite results. Economic considerations are officially denoted as "secondary," but that had not stopped some courts from privileging them, while others had relied more heavily on the technical considerations.<sup>37</sup> Ritchie threw the lack of guidance on what would seem like a critical issue into stark relief.

To the surprise of many observers, Posner sided with the technical considerations and held the invention unpatentable. First, he noted astutely that economic indicators can sometimes be an unreliable guide to patentability: "The commercial success of a product can have many causes unrelated to patentable inventiveness; for example, the commercial success of an 'invention' might be due not to the invention itself but to skillful marketing of the product embodying the invention."<sup>38</sup> Instead, Posner ex-

<sup>&</sup>lt;sup>36</sup> See Ritchie, 563 at 1336; Graham v John Deere Co, 383 US 1, 17–18 (1966); Manual of Patent Examining Procedure § 2141.II (US Patent and Trademark Office 9th ed 2014).

<sup>&</sup>lt;sup>37</sup> See, for example, *UCB*, *Inc v Accord Healthcare*, *Inc*, 201 F Supp 3d 491, 527, 540 (D Del 2016) ("[S]econdary considerations may often be the most probative and cogent evidence in the record relating to obviousness.") (quotation marks and citation omitted).

<sup>&</sup>lt;sup>38</sup> *Ritchie*, 563 F3d at 1336.

plained, judges should rely more heavily on the technical approach to obviousness, particularly in cases such as this one in which the invention is a combination of preexisting elements. There could be other explanations for why this invention was not produced in the intervening decades and nonetheless became commercially successful, but the technological point could not be denied. It is appropriate, concluded Posner, that economic considerations be treated as "secondary," with the technical analysis as the primary focus.<sup>39</sup>

For a judge so steeped in economic thinking to reject an economic approach to the law of obviousness was a shock to the patent world, and one that has had lasting reverberations. Since Posner's decision in *Ritchie*, courts have moved further away from using economics to adjudicate obviousness and toward the technical approach as the dominant methodology.<sup>40</sup> That the law would take this turn was by no means a certainty. For instance, the leading patent law casebook notes that objective economic considerations of obviousness initially took on a greater role in patent law in the wake of a 2007 Supreme Court decision making it easier to declare an invention obvious.<sup>41</sup> That trend did not continue after *Ritchie*, however. Courts have returned the economic considerations to secondary standing, and it is now much more common to find cases in which the court's technical analysis overwhelms any separate economic argument.<sup>42</sup> It is remarkable that when Posner promotes the role of economics in law, other courts listen. And it is equally remarkable that when Posner diminishes the role of economics in law, other courts listen just as closely.

<sup>&</sup>lt;sup>39</sup> Id at 1336.

<sup>&</sup>lt;sup>40</sup> See, for example, Geo M. Martin Co v Alliance Machine Systems International LLC, 618 F3d 1294, 1304–06 (Fed Cir 2010).

<sup>&</sup>lt;sup>41</sup> See Merges and Duffy, *Patent Law and Policy* at 684 (cited in note 4), citing *KSR International Co v Teleflex Inc*, 550 US 398 (2007).

<sup>&</sup>lt;sup>42</sup> See ZUP, LLC v Nash Manufacturing, Inc, 896 F3d 1365, 1372–75 (Fed Cir 2018); Intercontinental Great Brands LLC v Kellogg North America Co, 869 F3d 1336, 1345–47 (Fed Cir 2017); Merck Sharp & Dohme Corp v Hospira, Inc, 874 F3d 724, 730–31 (Fed Cir 2017); In re Depomed, Inc, 680 Fed Appx 947, 951–52 (Fed Cir 2017); American Innotek, Inc v United States, 128 Fed Cl 135, 163–67 (2016); Bristol-Myers Squibb Co v Teva Pharmaceuticals USA, Inc, 752 F3d 967, 978–79 (Fed Cir 2014); Galderma Laboratories, LP v Tolmar, Inc, 737 F3d 731, 740–41 (Fed Cir 2013); Wm. Wrigley Jr Co v Cadbury Adams USA LLC, 683 F3d 1356, 1363–65 (Fed Cir 2012); In re Huai-Hung Kao, 639 F3d 1057, 1073–74 (Fed Cir 2011).

## III. APPLE V MOTOROLA

Finally, Posner's impact on patent law is visible even in the most unlikely of places: a case in which he was eventually overturned by the court of appeals. The case is Apple v Motorola, which Posner decided over the course of a series of opinions in 2012.43 That case stemmed from a series of suits and countersuits brought by Apple and Motorola Mobility against one another as part of a long-running battle-also including Samsung and Google, which had purchased Motorola-that became known as the "smartphone wars."44 At issue were a variety of software and hardware patents that cover what now seem like basic features of smartphones and tablets. This included software design features such as the toolbar on iPhones, software protocols for streaming audio and video smoothly and without glitches, and technology that allowed cell phones to communicate with cellular base stations.<sup>45</sup> Apple and Motorola (really, Google) were suing and countersuing one another for hundreds of millions of dollars.

In a series of opinions that made national headlines, Posner barred the testimony of both sides' damages experts, holding that their methods for estimating patent damages were unscientific and unsound.<sup>46</sup> He then threw out the case because neither party could prove damages, and thus neither party had any grounds for obtaining relief.<sup>47</sup> The case garnered immediate national attention, with some commentators praising Posner for calling attention to the flaws in patent damages calculations<sup>48</sup> and others vilifying him for contravening what had seemed like settled circuit

<sup>&</sup>lt;sup>43</sup> Apple Inc v Motorola, Inc, 2012 WL 12065655 (ND III) (granting Apple's motion for summary judgment of noninfringement); Apple Inc v Motorola, Inc, 2012 WL 12014907 (ND III) (issuing order regarding expert testimony); Apple Inc v Motorola, Inc, 2012 WL 12537293 (ND III) (adopting claims constructions); 2012 WL 1959560 (ND III) (rejecting all damages testimony); Apple, 869 F Supp 2d 901 (ND III 2012) (dismissing the case).

<sup>&</sup>lt;sup>44</sup> See Fred Vogelstein, *Apple vs Google: Did Apple Learn Anything from Its War with Microsoft?* (Wired, Nov 1, 2013), archived at http://perma.cc/HRV4-4VGR.

<sup>&</sup>lt;sup>45</sup> See *Apple*, 2012 WL 1959560 at \*2–11.

 $<sup>^{46}</sup>$  See id at \*4–12.

<sup>&</sup>lt;sup>47</sup> Apple, 869 F Supp 2d at 923–24.

<sup>&</sup>lt;sup>48</sup> See, for example, Cheryl Milone, *Apple v. Motorola: Analyzing Judge Posner's Decision* (IP Watch Dog, Aug 12, 2012), archived at http://perma.cc/VU3N-L8YL (explaining Posner's economic philosophy as it relates to patents and analyzing the importance of objective damages evidence); Tim Worstall, *Judge Posner Dismisses with Prejudice the Apple Motorola Patents Case* (Forbes, June 24, 2012), archived at http://perma.cc/V5DA-3QAX (praising the opinion as a sign that the "patent system will not be used to smother innovation any more"); Philip Elmer-Dewitt, *Why Judge Posner Pulled the Plug on* Apple v. Motorola (Fortune, June 23, 2012), archived at http://perma.cc/KEU6-PGKM (summarizing Judge Posner's findings in the case and praising their clarity).

precedent.<sup>49</sup> Indeed, the Federal Circuit unceremoniously reversed Posner's decision just a few months later.<sup>50</sup> The appellate judge learned that sitting by designation on a district court has its downsides. Because Posner's opinion did not last, *Apple v Motorola* might seem like an odd candidate in which to look for Judge Posner's influence on the law.

And yet his *Apple v Motorola* opinion, and the general attitude toward patent cases that it signaled, has turned out to be just as significant in death as it was in life. For years, scholars and commentators had been arguing that patents had become too economically powerful and that patent owners were using lawsuits to impede genuine innovation in a manner that harmed consumers.<sup>51</sup> The Supreme Court had offered occasional indications that it understood the problem and, in a series of decisions, had taken modest steps to curb the number and strength of patents.<sup>52</sup> But the Federal Circuit had continued to resist this trend and even went so far as to push back against the Supreme Court's decision.<sup>53</sup> When Posner decided *Apple v Motorola*, patents remained nearly as powerful and plentiful as they had ever been. Public and elite judicial opinion remained largely split regarding whether the patent system needed correction.

Posner's opinion in *Apple v Motorola* represented an inflection point in this debate. Not for legal reasons; as I noted, the case was overturned by the Federal Circuit. Many observers, even generally sympathetic ones, were largely unpersuaded by Posner's

<sup>&</sup>lt;sup>49</sup> Doll and Denbina, 21 Tex Intell Prop L J at 320–31 (cited in note 9) (explaining that Posner went against established precedent and created a regime that was too harsh and not economically efficient); Richard A. Epstein, *Richard Posner Gets It Wrong* (Hoover Institution, July 31, 2012), archived at http://perma.cc/GN6Y-WEJU (arguing that Posner's opinion was "extraordinary," would jeopardize any software patent dispute, and was based on a misguided view that patent proliferation is a problem that needs remedying).

<sup>&</sup>lt;sup>50</sup> Apple v Motorola, 757 F3d at 1330.

<sup>&</sup>lt;sup>51</sup> See, for example, Jonathan Masur, *Patent Inflation*, 121 Yale L J 470, 477–82 (2011); Dan L. Burk and Mark A. Lemley, *Policy Levers in Patent Law*, 89 Va L Rev 1575, 1629–30 (2003).

 $<sup>^{52}</sup>$  See, for example, *eBay Inc v MercExchange, LLC*, 547 US 388, 392–94 (2006) (recognizing a stricter test for issuing permanent injunctions against patent infringement); *KSR International Co v Teleflex Inc*, 550 US 398, 419–22 (2007) (establishing that obviousness can be shown in more ways than just the teaching, suggestion, or motivation (TSM) test).

<sup>&</sup>lt;sup>53</sup> See, for example, Ortho-McNeil Pharmaceutical, Inc v Mylan Laboratories, Inc, 520 F3d 1358, 1364 (Fed Cir 2008) (reading the Supreme Court's rejection of the TSM test in KSR very narrowly); Black & Decker, Inc v Robert Bosch Tool Corp, 260 Fed Appx 284, 290 (Fed Cir 2008) (same); Takeda Chemical Industries, Ltd v Alphapharm Pty, Ltd, 492 F3d 1350, 1356–57 (Fed Cir 2007) (same).

analysis of the damages issue. Rather, the opinion was remarkable and significant for the statement it made about the state of patent law. Posner argued, more explicitly than any other federal judge ever had, that the courts had gone too far in expanding the powers of patent owners. Posner's focus in his opinions was the law of damages and the manner in which he believed patent owners had been allowed to collect damages on the basis of speculation and guesswork. But this issue stood in for a broader array of patent law criticisms. His opinion was understood as a more general strike against what Posner perceived to be a patent system run amok and in need of reining in. To be sure, lawyers and academics had been making similar arguments for years. But those types of voices are sometimes easy to ignore, particularly for the federal judiciary.

Posner's opinion was very different. For a sitting judge to levy such a direct assault on the patent system, and for the attack to come from a judge with such impeccable economic credentials as Posner, was a development that could not be ignored.<sup>54</sup> Posner's voice not only amplified the growing scholarly consensus that patents had become too powerful, it helped that scholarly consensus traverse the vast expanse between scholarly opinion and judicial opinion. It is always difficult to ascribe causation within an intellectual movement. Posner's opinion was not widely cited, in part because it was soon reversed. Nonetheless, his opinion in *Apple v Motorola* marked the moment at which the tide appeared to turn against patent holders on a number of different fronts.

First, and most directly, the Federal Circuit began issuing a series of decisions that raised the hurdles to patent holders seeking damages. The Federal Circuit limited the circumstances under which victorious patent plaintiffs could obtain damages based on the "entire market value" of the product being sold by the defendant, which was often a route to large damages awards.<sup>55</sup> That court also began issuing decisions in which it blocked plaintiffs

 $<sup>^{54}</sup>$  The timing was also auspicious. Posner's decision in *Apple v Motorola* came just three months after the Supreme Court's decision in *Mayo Collaborative Services v Prometheus Laboratories, Inc*, 566 US 66 (2012), a case on patentable subject matter (which actually received substantially less attention than Posner's opinion).

<sup>&</sup>lt;sup>55</sup> See, for example, *VirnetX, Inc v Cisco Systems, Inc,* 767 F3d 1308, 1326 (Fed Cir 2014) (finding that a patentee cannot assess damages based on the entire market value of an accused product if the patented feature did not create the basis for consumer demand); *LaserDynamics, Inc v Quanta Computer, Inc,* 694 F3d 51, 67 (2012) (explaining that "the entire market value rule acts as a check" to ensure that damages are reasonable and based on sound economic and factual hypotheses).

from relying on what appeared to be abnormally large licensing fees as a guide to damages.<sup>56</sup> And perhaps most notably, the Federal Circuit also began to issue a growing number of decisions in which it rejected a patentee's theory of damages as "speculative" or unproven, precisely the grounds on which Posner had rejected Apple and Motorola's cases.<sup>57</sup> Even the Supreme Court got into the act on the question of damages-in its case, damages for design patents. At the time of Posner's decision, existing law provided that a design patent holder could obtain damages based on the entire value of the product that incorporated the patented design, even if much of the product had nothing to do with that design. In Samsung Electronics Co v Apple Inc,<sup>58</sup> a case that, like Posner's Apple v Motorola, was part of the greater smartphone wars, the Supreme Court eliminated this practice. The Court held that damages for design patents for multicomponent products should generally be apportioned—that is, patentees were permitted to obtain damages only for the portion of the product that was actually covered by the patented design.<sup>59</sup> This represented a major step backward for design patent plaintiffs seeking outsized awards.

Indeed, Posner's decision marked a turning point for the Supreme Court's treatment of patents more generally. Over the next several years, the Court issued a series of 9–0 decisions that cut back on the power and scope of patents more decisively than any case in decades (if not longer). In particular, it dramatically narrowed the circumstances under which inventors could obtain patents on software and business methods, as well as naturally occurring substances such as human DNA.<sup>60</sup> These decisions had the effect of invalidating tens or hundreds of thousands of existing patents. Some of these patents overlapped with the technologies at suit in *Apple v Motorola*, patents whose economic worth Judge

 $<sup>^{56}</sup>$  See Finjan, Inc v Blue Coat Systems, Inc, 879 F3d 1299, 1312 (Fed Cir 2018); LaserDynamics, 694 F3d at 81.

<sup>&</sup>lt;sup>57</sup> See, for example, Exmark Manufacturing Co v Briggs & Stratton Power Products Group, LLC, 879 F3d 1332, 1352 (Fed Cir 2018); VirnetX, 767 F3d at 1331–34; Power Integrations, Inc v Fairchild Semiconductor International, Inc, 711 F3d 1348, 1372–74 (Fed Cir 2013); Whitserve, LLC v Computer Packages, Inc, 694 F3d 10, 29–30 (Fed Cir 2012); LaserDynamics, 694 F3d at 81.

<sup>&</sup>lt;sup>58</sup> 137 S Ct 429 (2016).

<sup>&</sup>lt;sup>59</sup> Id at 435–36.

<sup>&</sup>lt;sup>60</sup> See Alice Corp v CLS Bank International, 573 US 208, 226–27 (2014); Association for Molecular Pathology v Myriad Genetics, Inc, 569 US 576, 596 (2013).

Posner had called into question. When the dust from these decisions cleared, the world of patents looked much more like Judge Posner might have envisioned it: patents on software and related technologies, which many people believed were not increasing innovation, had been wiped from the board.

It is difficult to determine causality in legal change under even the best of circumstances. Whatever judges might say in their opinions, one can never be sure what is driving either their reasoning or the outcome. Here, of course, the causal connection is even more remote, particularly as it concerns the Supreme Court's decisions in the cases on patentability. It is impossible to know for certain whether the Supreme Court justices were even aware of Posner's opinions in Apple v Motorola, much less influenced by them. Nevertheless, the timing is unmistakable. June 2012 is when criticism of the patent system writ large migrated from the academy to the judiciary—when it crossed the law's version of the blood-brain barrier. Once Judge Posner began to describe the ills of the patent system, the tide seemed to turn decisively against the advocates of ever-stronger patents. The result was a series of decisions that struck back against the least economically justified types of patent rights. At minimum, the outcome is what Posner would have called for. But more than that, if one looks hard, his intellectual fingerprints are visible all over it.

#### CONCLUSION

For most circuit judges, influence is based on the fact that a court of appeals is, for the most part, a court of last resort. The Supreme Court grants certiorari very rarely, and thus the word of even a typical court of appeals judge is often the last. For Posner, influence extended well beyond this brute institutional fact. In many areas of law discussed in this Symposium, his opinions as appellate judge succeeded in convincing the judges of other circuits, and in some cases the Supreme Court as well, and became the law of the land through sheer persuasiveness. In other cases, the Seventh Circuit had diversity jurisdiction over cases arising out of Illinois, Indiana, or Wisconsin state law. Posner's judgments were, as a formal matter, subordinate to the judgments of the state supreme courts. Yet as this Symposium describes, there are many areas of state law as well in which Judge Posner has been tremendously influential, simply as a matter of the persuasive power of his opinions.

In patent law, the deck was stacked against Judge Posner even more firmly. When he heard patent cases (other than *Ritchie*), he was acting as a district court judge. Above him sat a court of appeals, the Federal Circuit, that had been designed to be expert in patent law and is not shy about asserting its appellate prerogative. And, of course, above the Federal Circuit sits the Supreme Court. The odds of a district court judge having any significant influence on patent law are very, very slim.

And yet Posner's influence has been profound. Indeed, he has had a greater influence on patent law than any district judge since Learned Hand, a century earlier.<sup>61</sup> That influence was exerted through typically Posnerian channels. Finding patent law largely bereft of sound economic analysis, Posner set about elucidating how patent law ought to function from a law-andeconomics perspective and pointing out the areas in which it had clearly gone awry. In some cases, patent law was insufficiently attentive to relevant economic considerations; in at least one other (*Ritchie*), patent law was perhaps *too* in thrall to economics. In each instance, Judge Posner brought to the field a clarity of thought and a sharpness of analysis that had previously been lacking.

Judge Richard Posner became involved in patent law only because he wanted to be—because he found the subject interesting enough to begin taking patent cases while sitting by designation. In contrast to his influence on other fields, there was nothing inevitable or even probable about his contributions to this area of law. Judge Posner on patent law is thus a happy accident of history, one from which the lawyers who practice patent law, the judges who hear patent cases, the scholars who write about the field, and the public at large—not to mention the law itself—will continue to benefit for years to come.

<sup>&</sup>lt;sup>61</sup> See Parke-Davis & Co v H.K. Mulford & Co, 189 F 95, 114–15 (SDNY 1911) (holding that purified natural products were patentable). Judge Hand's opinion in Parke-Davis operated as governing law for one hundred years until it was implicitly overruled by the Supreme Court in Myriad. On the basis of Parke-Davis, applicants were granted patents on a wide variety of biotechnical innovations, up to and including patents on human genes. Judge Hand also exerted significant influence as a Second Circuit judge, before the creation of the Federal Circuit, when the regional circuits heard patent cases. See, for example, Metallizing Engineering Co v Kenyon Bearing & Auto Parts Co, 153 F2d 516, 520 (2d Cir 1946); Gillman v Stern, 114 F2d 28, 31 (2d Cir 1940) (finding that a "puffing machine" could not serve as prior art against a patent application if it was kept completely secret).