### COURT DECISIONS AND RECENT LEGISLATION ARE CREATING A "PERFECT STORM" INCENTIVE FOR INVENTORS TO RELY ON TRADE SECRETS, NOT PATENTS

#### Edmund J. Sease\*

#### **ABSTRACT**

A series of seemingly unrelated events beginning in 1985 with the abolishment of the presumption of validity in reexam and ending with the 2011 adoption of the America Invents Act (AIA), followed so closely by enhanced federal trade secret protection in the Defend Trade Secret Act of 2016 (DTSA), have created a "perfect storm" resulting in diminished strength of the U.S. patent right and perhaps influencing innovators to rely more on trade secrets than patents.

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#### I. INTRODUCTION

In 1997, Sebastian Junger's book *The Perfect Storm* was published.<sup>1</sup> It proved to be a highly popular shipwreck adventure story explaining how a series of seemingly unrelated weather events created the 1991 violent storm that sunk the *Andrea Gail*.<sup>2</sup> The ship and its crew were never found.<sup>3</sup> Since then, "perfect storm" has become a commonly term used to describe events far beyond weather.<sup>4</sup>

Similarly, a series of seemingly unrelated legal events beginning as early as 1985 have cascaded down upon us to create a perfect storm in patent law. We are in an era of "kill the trolls" enthusiasm for dilution of patent rights through legislation and decisions that have resulted in a continuing diminishment of the value of the patent right. Among the examples are: postpatent issuance examination remedies of the 2011 America Invents Act (AIA) without any legal presumption of patent validity; relaxed standards for summary judgment in federal court; Federal Circuit and Supreme Court decisions limiting the patent subject matter eligibility; limiting injunctive relief; limiting the role of juries; and finally, an ever-increasing popularity

- 1. Sebastian Junger, The Perfect Storm (1997).
- 2. See generally id.
- 3. See generally id.
- 4. "A perfect storm is an event in which a rare combination of circumstances drastically aggravates the event. The term is used by analogy to an unusually severe storm that results from a rare combination of meteorological phenomena." *Perfect Storm*, WIKIPEDIA, http://en.wikipedia.org/wiki/perfect\_storm [https://perma.cc/NH5UTRWR].
- 5. "A patent troll is an entity or individual that asserts a patent aggressively against a company or entity that produces a product or service. The patent troll simply owns the patent . . . and does not produce the product or offer the service embodied in the patent." Patent Troll, SMITH & HOPEN, https://smithhopen.com/glossary/patent-troll [https://perma.cc/78VS-LB6N]. The phrase is usually used as a derogatory term implying harm to the patent system. *Id*.
  - 6. 35 U.S.C. § 282(a) (2018).
  - 7. Id. § 101.
  - 8. Id. § 283.
- 9. See Philippe Signore, On the Role of Juries in Patent Litigation, 83 J. PAT. & TRADEMARK OFF. SOC'Y 791, 814 (Nov. 2001).

<sup>\*</sup> Member of Iowa, Ohio, and Patent bars; Adjunct Professor of Patent Law, Drake University; former Partner and now Of-Counsel to McKee, Voorhees & Sease, Des Moines, Iowa.

of less expensive intellectual property protections, e.g. trade secrets and contracts.<sup>10</sup>

There is at least a significant sentiment among patent practitioners that all of the patent dilution efforts are driving U.S. innovators to an increased use of trade secrecy, and correspondingly, a decreased use of the patent system, especially by smaller business entities, universities, and individuals. It has come upon us slowly, like shoreline erosion. But come it has over the last 36 years!

The long-term consequences of this are not easily predicted, but I argue they have certainly lessened the incentive of many to use our U.S. patent system.<sup>11</sup>

As Winston Churchill said, "The farther back you look, the farther forward you can see." Let us go back 35 years and see how we got into this perfect storm.

### II. THE FIRST STEP: REJECTION OF THE PRESUMPTION OF VALIDITY FOR AN ISSUED PATENT IN AN EX PARTE PATENT REEXAMINATION (1985)

In 1977, Bud Etter invented a new electric meter reading system that operated on the spot using a portable computer.<sup>13</sup> He patented it on January 2, 1979, U.S. Patent 4,133,034.<sup>14</sup> Eventually he was forced into an ex parte patent reexamination.<sup>15</sup> His lawyers (my firm) relied upon the presumption of patent validity, asserting the examiner had the burden to prove invalidity

<sup>10.</sup> Not all the diminishment tools are discussed here, as many are beyond the scope of this Article—for example, state laws, limiting cease and desist letters and defining their content, *see*, *e.g.*, MINN. STAT. § 325D.72 (2016), and the current chaos of 35 U.S.C. § 101 (2018) (*see* Alice Corp. v. CLS Bank Int'l, 573 U.S. 208 (2014)).

<sup>11.</sup> See U.S. CONST. art. I, § 8, cl. 8. The patent system is supposed to be an incentive to disclose knowledge (science) and Article I, § 8, cl. 8 provides: "[The Congress shall have power] to promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

<sup>12.</sup> Winston Churchill Quotes, BRAINYQUOTE, https://www.brainyquote.com/quotes/winston\_churchill\_136790 [https://perma.cc/TU62-ZPBY].

<sup>13.</sup> Method & Means of Assimilating Util. Meter Data, U.S. Patent No. 4133034 (filed July 27, 1977).

<sup>14.</sup> *Id*.

<sup>15.</sup> In re Etter, 756 F.2d 852, 854 (Fed. Cir. 1985); see also 35 U.S.C. §§ 302-07 (2018).

by clear and convincing evidence—the standard applied to defendants in patent litigation.<sup>16</sup>

Amazingly, the examiner agreed the higher standard of proof applied but found the presumption overcome.<sup>17</sup> The Board<sup>18</sup> did *not* agree with the examiner's use of the higher standard, saying the burden on the examiner was the same as in any initial examination.<sup>19</sup> Etter lost and appealed to the Federal Circuit, which took the case en banc, even though the solicitor showed a willingness to accept applicability of the presumption of validity (i.e., the higher standard) in reexamination.<sup>20</sup>

The Federal Circuit decided, what is now accepted law, the presumption of patent validity does *not* apply in ex parte reexamination.<sup>21</sup> The reasoning was at best "iffy," accepting a few general statements in the legislative history to support the view.<sup>22</sup>

Judges Helen Nies, Edward Smith, and Jean Bissel concurred in result, but disagreed with the holding that, in reexamination, a patent is never accorded the presumption of validity.<sup>23</sup> They noted the presumption dovetails neatly with reexamination, and in any event, the U.S. Patent and Trademark Office (PTO) here acknowledged the presumption *did* apply.<sup>24</sup>

Simply put, if the presumption of validity applied, the courts and the PTO would be applying the same standard to issued patents.<sup>25</sup> What could possibly be less complicated and more fair? But it was not to be.

<sup>16. 35</sup> U.S.C. § 282(a) (2018); *In re* Etter, 756 F.2d at 856; *see also* Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 91 (2011); Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1534 (Fed. Cir. 1983).

<sup>17.</sup> In re Etter, 756 F.2d at 855.

<sup>18.</sup> Patent Office Board of Appeals and Interferences, the predecessor to today's Patent Trial and Appeal Board (PTAB).

<sup>19.</sup> *In re* Etter, 756 F.2d at 855. The initial burden is to create a prima facie case of unpatentability. *See* USPTO, MANUAL OF PATENT EXAMINING PROCEDURE § 2103 *Patent Examination Process*, https://www.uspto.gov/web/offices/pac/mpep/s2103.html [https://perma.cc/YHK5-HY32].

<sup>20.</sup> In re Etter, 756 F.2d at 855.

<sup>21.</sup> *Id.* at 856. It has since been extended to *inter partes* review by statute. *See* 35 U.S.C. § 316(e) (2018).

<sup>22.</sup> *In re* Etter, 756 F.2d at 857.

<sup>23.</sup> Id. at 860.

<sup>24.</sup> *Id.* at 861.

<sup>25.</sup> See id.

The different burden of proof for post-patent issuance reexamination has created much mischief.<sup>26</sup> Now, the Federal Circuit has even acknowledged on the same prior art record, in a reexamination and litigation, both the reexamination holding of unpatentable and a court holding of not invalid can be technically correct because of the different standards.<sup>27</sup> A seemingly absurd result only making sense to lawyers and judges but certainly not to inventors and businesses owning patents!<sup>28</sup> *In re Etter* and its progeny is an ominous 1985 cloud on the horizon and a first step toward our perfect storm.

### III. THE SECOND STEP: THE SUPREME COURT'S SUMMARY JUDGMENT TRILOGY IN 1986

Three cases, decided in 1986, none of them patent cases, collectively are the second step.<sup>29</sup> Together, they set a new standard for summary judgment in federal court cases.<sup>30</sup> Those cases are *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242 (1986); *Celotex Corp. v. Catrett*, 477 U.S. 317 (1986); and *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986). While it is not the purpose of this Article to discuss at length standards of summary judgment, the message from these cases was clear: summary judgment is a useful tool for federal docket control and can properly be applied more often than it previously had been.<sup>31</sup>

While at least one commentator has said the trilogy is much ado about nothing,<sup>32</sup> my experience, and I submit that of most experienced trial lawyers, is the opposite. Anyone who regularly tries cases in both federal and state courts will attest to the fact that summary judgment is usually much more difficult to attain in state court, where all doubt is usually resolved in

<sup>26.</sup> See Ethicon, Inc. v. Quigg, 849 F.2d 1422, 1428 (Fed. Cir. 1988).

<sup>27.</sup> *Id*.

<sup>28.</sup> See id.

<sup>29.</sup> Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250 (1986); Celotex Corp. v. Catrett, 477 U.S. 317, 323–24 (1986); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986).

<sup>30.</sup> Anderson, 477 U.S. at 250; Catrett, 477 U.S. at 323–24; Matsushita Elec. Indus. Co., 475 U.S. at 587.

<sup>31.</sup> Anderson, 477 U.S. at 250; Catrett, 477 U.S. at 323–24; Matsushita Elec. Indus. Co., 475 U.S. at 587.

<sup>32.</sup> Linda S. Mullenix, *The 25th Anniversary of the Summary Judgment Trilogy: Much Ado About Very Little*, 43 Loy. U. Chi. L. J. 561, 561–62 (2012).

favor of trial for the plaintiff.<sup>33</sup> In contrast, federal judges are not at all shy about citing the trilogy and granting summary judgment—doing so frequently in patent cases and specifically in those that raise issues of subject matter eligibility<sup>34</sup> and patent claim interpretation.<sup>35</sup>

## IV. THE THIRD STEP: DIMINISHING THE JURY'S ROLE IN PATENT LITIGATION (1996)

Markman v. Westview Instruments, Inc. is a watershed patent case holding that interpretation of patent claims is a matter of law reserved entirely for the court.<sup>36</sup> It has altered the way patent cases have been tried ever since.<sup>37</sup>

Patent claims are single sentence descriptions of an invention, which, according to 35 U.S.C. § 112(b), are to "particularly point[] out and distinctly claim[] the subject matter which the inventor . . . regards as the invention." The problem is that words are inherently imprecise and often have no real meaning apart from their context of use.

"In effect, *Markman* has encouraged defendants to rewrite patent claims[, frequently] to the point where the construed claim hardly resembles the claim allowed by the [PTO]."<sup>39</sup>

"Most important, yet often forgotten, are the individual rights of inventors. The Constitution specifically protects those rights, 40 and remains silent on patent claims. Inventors do not invent patent claims; instead, they invent tangible things—machines, processes, plants, etc.—created to better the useful arts. Claims are but symbols that represent those inventions. To

<sup>33.</sup> For example, the Iowa Supreme Court says the court must indulge "on behalf of the nonmoving party every legitimate inference reasonably deduced from the record." Bagelmann v. First Nat'l Bank, 823 N.W.2d 18, 20 (Iowa 2012); *see also* Hedlund v. State, 930 N.W.2d 707, 735 (Iowa 2019).

<sup>34. 35</sup> U.S.C. § 101 (2018).

<sup>35.</sup> Markman v. Westview Instruments, Inc., 517 U.S. 370, 370 (1996). The claim is the portion of a patent that defines the scope of a patentee's rights. *Id.*; 35 U.S.C. § 112(b) (2018).

<sup>36.</sup> *Markman*, 517 U.S. at 390.

<sup>37.</sup> *See id.* 

<sup>38. 35</sup> U.S.C. § 112(b) (2018).

<sup>39.</sup> Edmund J. Sease, Essay, Markman *Misses the Mark, Miserably*, 2004 U. ILL. J.L. TECH. & POL'Y 99, 101 (2004).

<sup>40.</sup> U.S. CONST. art. I, § 8, cl. 8.

the extent courts focus on the symbols, rather than on the merits of the invention, they frustrate the constitutional purpose of patents."<sup>41</sup>

I have gone on record after *Markman*, arguing its real effect is to diminish the role of juries in patent cases, and in fact it has judges deciding what are in reality often factual matters which should be reserved for juries.<sup>42</sup>

Here, I will not rehash those arguments already made. But suffice it to say, *Markman*, coupled with the trilogy of summary judgment cases, is a powerful tool in the hands of defense counsel, which frequently results in judgments in favor of defendants/accused infringers.<sup>43</sup>

# V. FOURTH STEP: *EBAY*, A PARADIGM SHIFT UNDERMINING THE NATURE OF THE PATENT RIGHT (2006)

#### A. The Nature of the Patent Right

To fully appreciate the sea of change that was about to occur, one needs to understand the patent right. As every patent attorney knows, a patent is not a grant of a right to make anything.<sup>44</sup> By express statutory statement, the patent right is a right to exclude others from making, using, or offering to sell a thing or process.<sup>45</sup> In other words, it is a negative right, and negative rights can only be enforced by injunctions.<sup>46</sup> In *Smith International, Inc. v. Hughes Tool Co.*, the Federal Circuit expressed it well:

Without this injunctive power of the courts, the right to exclude granted by the patent [(35 U.S.C. § 154)] would be diminished, and the express purpose of the Constitution and Congress, to promote the progress of the useful arts would be seriously undermined. The patent owner would lack much of the "leverage," afforded by the right to exclude, to enjoy the full value of his invention in the market place.<sup>47</sup>

In line with this statement, the courts long followed a general rule that once a patent was found to be infringed, and not invalid, in accord

<sup>41.</sup> See Sease, supra note 39, at 102.

<sup>42.</sup> See id. at 99.

<sup>43.</sup> *See id.* at 99–100.

<sup>44.</sup> See 35 U.S.C. § 154 (2018).

<sup>45.</sup> *Id*.

<sup>46.</sup> See id.

<sup>47.</sup> Smith Int'l, Inc. v. Hughes Tool Co., 718 F.2d 1573, 1577–78 (Fed. Cir. 1983), *abrogated by* Robert Bosch LLC v. Pylon Mfg. Corp., 659 F.3d 1142 (Fed. Cir. 2011).

with 35 U.S.C. § 154, the trial court would issue an injunction in accord with 35 U.S.C. § 283 to stop the infringing acts.<sup>48</sup> Frequently, the injunction would be entered the day the trial ended, or at least in the next day or two. Nearly the only exception to this was where public health and safety dictated otherwise. The classic case being where an injunction to prevent Milwaukee from infringing a sewage disposal patent would have required dumping raw sewage in Lake Michigan.<sup>49</sup>

#### 1. eBay, 2006

MercExchange, L.L.C. v. eBay, Inc. initially seemed unremarkable in terms of its application of injunction law.<sup>50</sup> eBay had been found to be a willful infringer.<sup>51</sup> However, the trial court denied a permanent injunction.<sup>52</sup> Devoting only two pages to this issue, a panel of the Federal Circuit held the trial court did not provide any persuasive evidence to not follow the general rule that a permanent injunction will issue once infringement and validity have been adjudged.<sup>53</sup> In this regard, the trial court's only reasons to deny injunctive relief had been the patents were business-method patents, the litigation was contentious, and MercExchange had previously expressed a willingness to license.<sup>54</sup> The Federal Circuit rejected all of these reasons saying:

The statutory right to exclude is equally available to both groups, [those willing to license and those not] and the right to an adequate remedy to enforce that right should be equally available to both as well. *If the injunction gives the patentee additional leverage in licensing, that is a natural consequence of the right to exclude and not an inappropriate reward to a party that does not intend to compete in the marketplace with potential infringers.* <sup>55</sup>

<sup>48.</sup> Id. at 1577.

<sup>49.</sup> City of Milwaukee v. Activated Sludge, Inc., 69 F.2d 577, 593 (7th Cir. 1934).

<sup>50.</sup> See generally MercExchange, LLC v. eBay, Inc., 401 F.3d 1323 (Fed. Cir. 2005).

<sup>51.</sup> Id. at 1326.

<sup>52.</sup> *Id*.

<sup>53.</sup> Id. at 1339 (Michel, C.J. & Clevenger & Bryson, J.J.).

<sup>54.</sup> *Id*.

<sup>55.</sup> Id. (emphasis added).

The court concluded with the comforting statement that they "s[aw] no reason to depart from the general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances." 56

Justice Clarence Thomas wrote for a Supreme Court majority—stunning the patent world with a paradigm shift—that the "general rule" that courts will issue permanent injunctions against patent infringement absent exceptional circumstances was wrong, and instead *all* permanent patent injunctions must satisfy the traditional four-factor test for issuance of an injunction.<sup>57</sup>

The Court's reasoning was scant at best—nothing in 35 U.S.C. § 283 justified a departure from the four-factor test's previous use, and the statute itself was permissive, i.e., "may" issue injunctions.<sup>58</sup>

Ignored was a rational analysis of the nature of a patent grant<sup>59</sup> and that the inventor had made a bargain to disclose his technology in return for the right to exclude.<sup>60</sup> A bargain the inventor cannot back out of once made.

Chief Justice John Roberts touched on these points in his concurring opinion.<sup>61</sup> While Justice Anthony Kennedy, in another concurring opinion, pointed to the leverage issue addressed by the Federal Circuit and pointed to the four-factor test as allowing a different calculus to reach a fairer result.<sup>62</sup>

#### 2. The Consequences of eBay

Much has been written about eBay—but like it or not, it remains the law now 13 years later.<sup>63</sup> It too has changed the nature of patent litigation.

<sup>56.</sup> Id.

<sup>57.</sup> eBay, Inc. v. MercExchange, LLC, 547 U.S. 388, 391 (2006) (listing the four factors as: "(1) that it has suffered 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 disserved by a permanent injunction").

<sup>58. 35</sup> U.S.C. § 283 (2018); *eBay*, 547 U.S. at 391.

<sup>59. 35</sup> U.S.C. § 154(a)(1) (2018).

<sup>60.</sup> U.S. CONST. art. I, § 8, cl. 8.

<sup>61.</sup> *eBay*, 547 U.S. at 394–95 (Roberts, C.J., concurring).

<sup>62.</sup> Id. at 396–97 (Kennedy, J., concurring).

<sup>63.</sup> In the Author's opinion, two of the best articles are: Shyamkrishna Balganesh, *Demystifying the Right to Exclude: Of Property, Inviolability and Automatic Injunction*, 31 HARV. J. L. & PUB. POL'Y 593 (2008); Christopher B. Seaman, *Permanent Injunctions in Patent Litigation After* eBay: *An Empirical Study*, 101 IOWA L. REV. 1949 (2016).

Gone are the days of nearly instantaneous injunctions for winning patentees.<sup>64</sup> Instead—more briefing, more hearings, more cost, and more uncertainty.<sup>65</sup>

The factors now important to whether injunctive relief is granted include, among others: whether the parties are competitors, whether the patent owner is a non-practicing entity, whether the patent owner has a history of licensing, whether the patent owner is a PAE (Patent Assertion Entity), whether it is a university research foundation, etc.<sup>66</sup> They are all carefully outlined in an excellent *Iowa Law Review* article.<sup>67</sup>

But clearly, the best chance of injunctive relief is competitor litigation with no history of licensing, which is reported to have a 70–85 percent chance of injunction.<sup>68</sup> PAE's have the lowest chance of injunctive relief at about 16 percent.<sup>69</sup>

#### 3. The Federal Circuit Response

The Federal Circuit has done what it can to salvage the exclusionary nature of the patent property. For example, in *Apple, Inc. v. Samsung Electronics Co.*, the Federal Circuit, carefully employing the four-factor test, concluded because of the statutory right to exclude and the importance of the patent system in encouraging innovation, "public interest nearly always weighs in favor of protecting property rights . . . especially when the patentee practices his inventions."

Decisions like this *Apple, Inc.* case recognize the patentee's bargain and provide incentive for the patent system, i.e., encourage the full technology disclosure in return for the limited exclusionary right.<sup>72</sup> Still, *eBay* has undeniably diminished the value of the patent right.<sup>73</sup>

<sup>64.</sup> See eBay, 547 U.S. at 391.

<sup>65.</sup> See id.

<sup>66.</sup> Seaman, *supra* note 63, at 1987–91.

<sup>67.</sup> Id. at 1949.

<sup>68.</sup> *Id.* at 1990.

<sup>69.</sup> *Id.* at 1988–89.

<sup>70.</sup> See Apple, Inc. v. Samsung Elecs. Co., 809 F.3d 633, 647 (Fed. Cir. 2015).

<sup>71.</sup> *Id*.

<sup>72.</sup> *See id.* 

<sup>73.</sup> See id.

#### VI. FIFTH STEP: AMERICA INVENTS ACT (AIA) (2011)

The AIA is changing patent law in many important ways.<sup>74</sup> It redefined novelty;<sup>75</sup> it has made the United States a first-to-file system,<sup>76</sup> and it dramatically altered post-patent issuance examination remedies.<sup>77</sup>

It is beyond the scope of this Article to deal with the AIA generally. Much of the AIA is deeply discussed in Judge Paul Michel's contribution to this Issue. Rost relevant to this discussion is the dramatically altered postpatent issuance examination remedies and the enhanced role of the Patent Trial and Appeal Board (PTAB).

Before the AIA, post-issuance reexamination was limited to two choices:<sup>80</sup> ex parte reexamination, like the earlier discussed *Etter* patent endured,<sup>81</sup> and *inter partes* reexamination.<sup>82</sup> *Inter partes* reexamination has now been replaced with *inter partes* review (IPR),<sup>83</sup> a quite different procedure.

IPR involves a mix of procedures with adversarial participation, limited discovery, some deposition opportunities, and a PTAB administrative trial of sorts.<sup>84</sup>

<sup>74.</sup> America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011).

<sup>75. 35</sup> U.S.C. § 102 (2018).

<sup>76.</sup> Id. § 102(a).

<sup>77.</sup> Inter partes review (35 U.S.C. §§ 311–319 (2018)) is one of four new proceedings introduced by the AIA to permit the PTO to review, revise, or cancel claims of issued patents. The other three are 35 U.S.C. § 257 (2018) supplemental examination, 35 U.S.C. §§ 321–329 (2018) post grant review, and 35 U.S.C. § 18 (2000) covered business methods. Previously, ex parte reexamination 35 U.S.C. §§ 301–310 and old *inter partes* reexamination, 35 U.S.C. §§ 311–319 were the choices.

<sup>78.</sup> See Paul R. Michel & Matthew J. Dowd, From a Strong Property Right to a Fickle Government Franchise: The Transformation of the U.S. Patent System in 15 Years, 69 DRAKE L. REV. 1 (2021).

<sup>79. 37</sup> C.F.R. §§ 41.1–.208 (2019).

<sup>80. 35</sup> U.S.C. §§ 302–307 (2018).

<sup>81.</sup> See supra note 21 and accompanying text.

<sup>82. 35</sup> U.S.C. §§ 311–319 (2018).

<sup>83.</sup> *Inter partes* review is governed by procedural rules of the PTO, *see* 37 C.F.R. § 41.1–.208 (2019).

<sup>84.</sup> See id.

Early results in IPRs prompted former Chief Judge Randall Rader of the Federal Circuit to say the PTAB ALJs<sup>85</sup> have proven to be patent death squads.<sup>86</sup>

Several constitutional questions have been raised concerning IPRs<sup>87</sup> and the very structure of the PTAB itself.<sup>88</sup> For example, in *Oil States Energy Services v. Greene's Energy Group*, the constitutionality of the PTAB under Article III and the Seventh Amendment right to a jury trial were addressed.<sup>89</sup> The IPR process survived, but the Court cautioned its ruling was narrow.<sup>90</sup>

Justice Neil Gorsuch and Chief Justice Roberts dissented, arguing that in England and here, only courts have jurisdiction to revoke or cancel patents, as once the original examination is complete, it has become the property of the patent owner, and therefore the patent owner is entitled to the same due process protection as other property owners.<sup>91</sup>

Other court challenges are in progress, and the PTAB itself seems to be morphing over time. It had gone from 80 percent holdings of at least partial invalidity early on to more recent numbers closer to 50 percent with, for example, the PTAB institution rate in 2019 being about 62 percent.<sup>92</sup>

<sup>85.</sup> ALJs are administrative law judges, sometimes here referred to as APJs, administrative patent judges.

<sup>86.</sup> Rob Sterne & Gene Quinn, *PTAB Death Squads: Are All Commercially Viable Patents Invalid?*, IP WATCHDOG (Mar. 24, 2014), https://www.ipwatchdog.com/2014/03/24/ptab-death-squads-are-all-commercially-viable-patents-invalid/id=48642/ [https://perma.cc/55XL-729L] (quoting Federal Circuit Chief Judge Rader (retired) at an AIPLA Annual Meeting in October of 2013).

 $<sup>87.\;\;</sup>$  John M. Golden et al., Principles of Patent Law, Cases and Materials 728 n.7 (7th ed. 2018).

<sup>88.</sup> Arthrex, Inc. v. Smith & Nephew, Inc., 941 F.3d 1320 (Fed. Cir. 2019). In October 2019, the Federal Circuit held the appointment of APJs constitutionally defective under the Appointments Clause of the Constitution. *Id.* 

<sup>89</sup> See Oil States Energy Servs. v. Greene's Energy Grp., 138 S. Ct. 1365, 1378 (2018).

<sup>90.</sup> Id. at 1379.

<sup>91.</sup> Id. at 1380.

<sup>92.</sup> Jacqueline Bell, *How Patent Litigation Changed in 2018*, LAW360 (Jan. 31, 2019), https://www.law360.com/articles/1124208/how-patent-litigation-changed-in-2018 (reporting the number of district court patent cases sank in 2018 to numbers not seen since 2011). Statistics are all publicly available through the PTO and are analyzed regularly on certain blogs. *Id.*; USPTO, *USPTO Annual Reports*, https://www.uspto.gov/about-us/performance-and-planning/uspto-annual-reports [https://perma.cc/8UEW-CE7G]. As a specific example 3,657 new patent cases were filed in 2018—a nearly 40 percent drop from the level of cases filed in 2015 (5,831). *Id.* 

Furthermore, it has retreated from the pre-issuance broadest reasonable interpretation (BRI) of claims rule used in application reexamination to the same rule applied in court, i.e., plain ordinary meaning to someone skilled in the art, as the words are used in the context of the patent.<sup>93</sup>

One thing is for sure, PTAB hearings are not close to trials in the traditional sense. There is no right to a jury, there is very limited opportunity to call witnesses, and the time devoted to any one case is nowhere near the cumulative time spent in an Article III federal district court case. Hor is there a real opportunity to teach the decisionmakers the art in question. While the PTAB judges (Administrative Patent Judges (APJs)) may know patent law, they are, in my opinion, far less qualified to judge witness credibility issues, equities, and conflicting expert testimony; and APJs, unlike Article III judges, are not independent but must be guided by the views of their employer, the PTO, with the director delegating his or her authority to the PTAB.

All of this is facing inventors who have voluntarily given up their rights to trade secrets in return for the quid pro quo of a time limited patent exclusionary property right that the PTO can now take back!<sup>97</sup> Clearly the concurring opinions of Justice Gorsuch and Justice Roberts in *Oil States* deserve careful consideration.<sup>98</sup>

VII. SIXTH STEP: ENHANCED TRADE SECRET PROTECTION, DTSA (2016)

#### A. Background Basics

Before there were patents, there were trade secrets. They arise not from any grant by the power of government but because people always have

<sup>93. 2111</sup> Claim Interpretation; Broadest Reasonable Interpretation, USPTO, https://www.uspto.gov/web/offices/pac/mpep/s2111.html [https://perma.cc/NL29-32W Y]. Effective November 13, 2018, the PTO replaced the broadest reasonable interpretation standard with the same one used in *Phillips v. AWH Corp.*. 415 F.3d 1303, 1309 (Fed. Cir. 2005); 37 C.F.R. § 42.200 (2019).

<sup>94.</sup> See generally 37 C.F.R. § 42.1-.412 (2019).

<sup>95.</sup> See generally id.

<sup>96.</sup> See id. § 42.10(c). The Director of the PTO is a political appointee. 35 U.S.C. §§ 3(a)(1), (a)(4) (2018). The director supervises and pays the board members responsible for deciding PTAB cases, 35 U.S.C. §§ 1(a), 3(b)(6), 6(a), and can even select who hears which cases, 35 U.S.C. § 6(c).

<sup>97. 37</sup> C.F.R. § 41.1–.208 (2019).

<sup>98.</sup> Oil States Energy Servs. v. Greene's Energy Grp., 138 S. Ct. 1365, 1380 (2018).

the choice to share their ideas or not. One needs no government grant to keep secret their idea or creation.

The difficulty comes when one wishes to both exploit information for private economic benefit and still keep it secret.<sup>99</sup>

This tension resolved itself in the middle ages with guilds and the master-apprentice relationship. Families told their knowhow secrets only to other trusted family members or apprentice associates. In this way, they could both exploit for their benefit knowhow and keep the bits of knowhow that competitively differentiated themselves. Out of this, trade secret law naturally evolved.

Trade secret law appeals to businesspeople because it is easy.<sup>104</sup> No filings. No grants. No money paid to obtain it.<sup>105</sup> The potential duration is limitless,<sup>106</sup> unlike a patent which has a defined life.<sup>107</sup> A patent is enforceable against anyone who infringes<sup>108</sup> regardless of any intentional wrongdoing, and a trade secret is enforceable only against a wrongdoer, usually a thief or contract breaker, or violator of a confidential relationship.<sup>109</sup> The right disappears when the secrecy disappears.<sup>110</sup> This balancing act makes trade secrets versus patents a never-ending calculus that must be constantly adjusted.

<sup>99.</sup> Catherine L. Fisk, *Working Knowledge: Trade Secrets, Restrictive Covenants in Employment, and the Rise of Corporate Intellectual Property*, *1800–1930*, 52 HASTINGS L.J. 441, 441–43 (2001).

<sup>100.</sup> Id. at 451.

<sup>101.</sup> Id.

<sup>102.</sup> Id.

<sup>103.</sup> See generally id. at 450–52. An excellent general review of the law of trade secrets in Iowa is in Thomas W. Foley, Keeping a Company's Confidences Secret: Trade Secret Enforcement Under Iowa's Uniform Trade Secrets Act, 59 DRAKE L. REV. 1 (2010).

<sup>104.</sup> See Foley, supra note 103, at 6, 21.

<sup>105.</sup> See id.

<sup>106.</sup> See USPTO, Trade Secret Policy, https://www.uspto.gov/ip-policy/trade-secret-policy [https://perma.cc/Z2MK-SRGV]. Patents by constitutional limitations are for "limited times." U.S. CONST. art. I, § 8, cl. 8. There is only the limit of length of secrecy on trade secrets.

<sup>107. 35</sup> U.S.C. § 154(a)(2) (2018).

<sup>108.</sup> *Id.* § 281.

<sup>109.</sup> E.g., Basic Chems., Inc. v. Benson, 251 N.W.2d 220, 229–30 (Iowa 1977).

<sup>110.</sup> *Id.* at 229.

In the early days, trade secret law was common law developed.<sup>111</sup> Influenced by the Restatement of Torts, the American Bar Association, in the 1960s, launched an effort to draft a uniform law to govern trade secrets, now known as the Uniform Trade Secrets Act (UTSA).<sup>112</sup> The UTSA, in one form or another, has been adopted in 48 states, leaving only New York and North Carolina that have not adopted it.<sup>113</sup>

Iowa, my home state, is, I believe, singularly unique. Iowa has both common law trade secrets and a version of the UTSA.<sup>114</sup> They declined to adopt the preemptive section of the UTSA.<sup>115</sup>

The elements of a trade secret case under the UTSA are simple. 116 They require: (1) secrecy; (2) reasonable efforts to keep it secret; (3) independent economic value; and (4) misappropriation. 117 Injunctive relief is available, as are enhanced damages and attorney fees. 118

All sounds pretty good, right? But remember, independent development is a complete defense and destruction of secrecy destroys the right.<sup>119</sup>

Lastly, the information that can be secret knows no bounds, unlike the information that can be patented, which is limited to 35 U.S.C. § 101 patent eligible subject matter. 120

<sup>111.</sup> See Elizabeth A. Rowe & Sharon K. Sandeen, Trade Secret Law 15 (2d ed. 2012).

<sup>112.</sup> See id.

<sup>113.</sup> Id. at 31.

<sup>114.</sup> See 205 Corp. v. Brandow, 517 N.W.2d 548, 550 (Iowa 1994).

<sup>115.</sup> UNIF. TRADE SECRETS ACT § 7 (UNIF. L. COMM'N 1985), relating to preemption, is not a part of the IOWA CODE § 550 (2019).

<sup>116.</sup> Unif. Trade Secrets Act § 1 (Unif. L. Comm'n 1985).

<sup>117.</sup> IOWA CODE §§ 550.1, 550.2 (2019).

<sup>118.</sup> *Id.* §§ 550.3, 550.6.

<sup>119.</sup> See Foley, supra note 103, at 27–28.

<sup>120.</sup> Compare 35 U.S.C. § 101 (2018), with IOWA CODE § 550.1 (2019). 35 U.S.C. § 101 defines the limits of patent eligible subject matter, which has been even further limited by the Supreme Court decision Alice Corp. v. CLS Bank Int'l, 573 U.S. 208 (2014). In contrast, any information that is not generally known that has value and offers an opportunity for competitive advantage can be considered a trade secret. See IOWA CODE § 550.1 (2019).

### B. The Perfect Storm Is Brewing: The New Federal Trade Secret Act (DTSA)

President Barack Obama signed the new Defend Trade Secrets Act of 2016 (DTSA) on May 11, 2016. 121 The law amends the Economic Espionage Act of 1996 to provide a federal civil remedy closely akin to what the UTSA provides in the states. 122 Additionally, seizure remedies are available, 123 with the session law itself in section 5 stating its express purpose to address trade secret theft in the United States and around the world. 124

Allowing U.S. businesses to address foreign theft of trade secrets with nationwide subpoena power and nationwide injunctive relief rather than state-by-state enforcement represents a huge benefit in cost and time savings. Importantly, there is no preemption of state-by-state claims.<sup>125</sup>

There are numerous other new concepts in DTSA,<sup>126</sup> including those relating to whistleblowers,<sup>127</sup> criminal fines, obligation, and duties in employer/employee relationships,<sup>128</sup> etc. These are, however, beyond the topic of this Article.

Lastly, in addition to a specific rejection of preemption, <sup>129</sup> the DTSA has original federal jurisdiction but not exclusive federal jurisdiction. <sup>130</sup> This

<sup>121.</sup> Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376. The DTSA is incorporated into and amends the 1996 Economic Espionage Act. *See id.* 18 U.S.C. § 1831(2018) and 18 U.S.C. § 1832 (2018) provide for criminal fines, 18 U.S.C. § 1839 (2018) provides a general definition of trade secrets modeled after the USTA, and civil actions in general are provided in 18 U.S.C. § 1836 (2018).

<sup>122.</sup> See Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376; UNIF. TRADE SECRETS ACT (UNIF. L. COMM'N 1985).

<sup>123. 18</sup> U.S.C. § 1836(b)(2) (2018).

<sup>124.</sup> See Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376, 383–84.

<sup>125. 18</sup> U.S.C. § 1838 (2018).

<sup>126.</sup> See generally Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376, 383–84.

<sup>127. 18</sup> U.S.C. § 1833(2)(b)(1) (2018).

<sup>128.</sup> *Id.* § 1836(b)(3)(A)(I). The inevitable disclosure rule which in some states is sufficient for injunctive relief preventing employees from taking a new job is often credited with origination in *PepsiCo*, *Inc. v. Redmond*, 54 F.3d 1262 (7th Cir. 1995) is rejected federally.

<sup>129. 18</sup> U.S.C. § 1838 (2018).

<sup>130.</sup> *Id.* § 1832. Federal jurisdiction is based upon the Commerce Clause. *Id.* The jurisdiction is original but not exclusive, similar in that respect to Lanham Act trademark cases, 15 U.S.C. § 1051 (2018).

means, for example, in a state like Iowa, one could plead common law trade secrets, <sup>131</sup> statutory trade secrets under the Iowa version of USTA, <sup>132</sup> and DTSA, all in the same complaint, if desired.

While case law is still just developing, most certainly a huge benefit is access to nationwide subpoena power and nationwide injunctive relief, bringing these attributes to nearly every new trade secret case if DTSA is pled.

#### VIII. DISCUSSION

And now we have the perfect storm:

- 1. In post-issuance examination, the patent holder's patent is no longer presumed to be valid (1985).<sup>133</sup>
- 2. Beginning in 1986, federal courts are much more liberal than state courts in granting summary judgment, making it much harder to get to trial.<sup>134</sup>
- 3. Since *Markman*, the role of the jury has been diminished, as juries no longer interpret patent claims—only judges do—even though factual issues are regularly involved which previously had been the province of the jury to decide (increasing chances of summary judgment) (1996).<sup>135</sup>
- 4. *eBay* has dramatically undercut the nature of the patent right, namely, the right to exclude, by making it demonstrably more difficult for a valid patent owner whose patent has been infringed to obtain injunctive relief (2006).<sup>136</sup>
- 5. The AIA created non-Article III APJs and expanded the PTAB, which now takes a major role in litigation and too frequently rules against the patent holder (2011).<sup>137</sup>

<sup>131.</sup> See 205 Corp. v. Brandow, 517 N.W.2d 548, 550 (Iowa 1994).

<sup>132.</sup> IOWA CODE §§ 550.1–.8 (2019).

<sup>133.</sup> In re Etter, 756 F.2d 852, 856 (Fed. Cir. 1985).

<sup>134.</sup> *See* Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250 (1986); Celotex Corp. v. Catrett, 477 U.S. 317, 323–24 (1986); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986).

<sup>135.</sup> Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996).

<sup>136.</sup> eBay, Inc. v. MercExchange, LLC, 547 U.S. 388, 391 (2006).

<sup>137. 37</sup> C.F.R. §§ 41.1–.208 (2019).

6. The DTSA has federalized trade secret protection while taking none away from state law, creating a federal cause of action with almost irresistible powers and relief available (2016).<sup>138</sup>

All of these converge to undeniably diminish the value and leverage power of patents and further enhance the value and leverage power of trade secrets.

No one of the six events could have been foreseen from the other. Indeed, when viewed separately, many of the events seem unrelated to the other. That is to say, when viewed in a time sequence as here presented, one does not follow logically from the other. But yet, few would deny that from the 1985 removal of the presumption of validity to the 2011 creation of APJs and the PTAB, it has been a cascading slide downhill in diminishment of patent power. And then at the end of the slide, Congress breathes greater life into trade secrets with the first ever opportunity for nationwide subpoena power and injunctive relief. 140

Earlier studies, like the so-called Yale Survey of 1983, reported in 1987, and the National Bureau of Economic Research study of February 2000, both reported that patents are not the key appropriability mechanisms in most industries, rather it is secrecy and lead time. And both of these studies are *before* most of the events here discussed. It takes little imagination to guess what a new study today would reveal.

By breathing new life into trade secrets with national protections, rather than state-by-state rights, Congress has aided and abetted in increasing the incentive to rely upon trade secrets, at the expense of patenting.<sup>143</sup> They have continued the rebalancing of the equations (patents versus trade secrets) in favor of trade secrets, even though their avowed purpose was to provide increased weapons for industrial espionage,

<sup>138.</sup> See Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376; UNIF. TRADE SECRETS ACT (UNIF. L. COMM'N 1985).

<sup>139.</sup> See In re Etter, 756 F.2d 852, 856 (Fed. Cir. 1985); 37 C.F.R. §§ 41.1–.208 (2012).

<sup>140.</sup> See Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376; UNIF. TRADE SECRETS ACT (UNIF. L. COMM'N 1985).

<sup>141.</sup> RICHARD C. LEVIN ET AL., APPROPRIATING THE RETURNS FROM INDUSTRIAL RESEARCH AND DEVELOPMENT 795 (1987); WESLEY M. COHEN ET AL., PROTECTING THEIR INTELLECTUAL ASSETS: APPROPRIABILITY CONDITIONS AND WHY U.S. MANUFACTURING FIRMS PATENT (OR NOT) 1–3 (2000).

<sup>142.</sup> See generally LEVIN ET AL., supra note 141; COHEN ET AL., supra note 141.

<sup>143.</sup> See Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376; UNIF. TRADE SECRETS ACT (UNIF. L. COMM'N 1985).

particularly from foreign operatives.<sup>144</sup> Congress was warned of some of these concerns in a letter from 42 law professors,<sup>145</sup> but to no avail.

But what Congress can do, it has the power to undo. Put another way, Congress created the perfect storm, and it can end it.<sup>146</sup>

#### IX. NEEDED CONGRESSIONAL ACTION

Two simple laws will rebalance the equation in favor of patents, as Article I, section 8, clause 8 intends:

- 1. Legislatively overrule *In re Etter* and restore the presumption of validity in all post patent issuance examination proceedings;<sup>147</sup> and
- 2. Legislatively overrule *eBay*, restoring the general rule for injunctive relief in patent cases when infringement and validity issues are won by the patentee.<sup>148</sup>

Legislatively overruling court decisions is not a new thought and has been done before to cure incorrect thinking in patent cases. For example, in the *Cuno Engineering Corp. v. Automatic Devices Corp.* opinion, written by Justice William Douglas, the Supreme Court imposed a "flash of genius test" for non-obviousness which was at best a catastrophe. <sup>149</sup> The 1952 Patent Act overruled it by saying in 35 U.S.C. § 103, "Patentability shall not be negated by the manner in which the invention was made." <sup>150</sup> In no more words than this, the presumption of validity could be restored by amendment to

<sup>144.</sup> See 18 U.S.C. § 1839(5) (2018); Defend Trade Secrets Act of 2016, Pub. L. No. 114–153, 130 Stat. 376, 384–85.

<sup>145.</sup> See Professors' Letter in Opposition to the "Defend Trade Secrets Act of 2014" (S. 2267) and the "Trade Secrets Protection Act of 2014" (H.R. 5233) 1–2 (Nov. 17, 2015, Aug. 26, 2014).

<sup>146.</sup> In fact, Congress has already ended one effect of *eBay*. On December 27, 2020, in the Trademark Modernization Act (TMA), Congress restored the presumption of irreparable harm for trademark owners against infringers, which the Third, Ninth, and Eleventh Circuits held was taken away by *eBay*. *See* Ferring Pharms., Inc. v. Watson Pharms., Inc., 765 F.3d 205 (3d Cir. 2014); Herb Reed Enters., LLC v. Florida Ent. Mgmt., Inc., 736 F.3d 1239 (9th Cir. 2013); North Am. Med. Corp. v. Axiom Worldwide, Inc., 522 F.3d 1211, 1228 (11th Cir. 2008) (stating "a strong case can be made" *eBay* eliminated the presumption of irreparable harm).

<sup>147.</sup> See In re Etter, 756 F.2d 852, 855 (Fed. Cir. 1985).

<sup>148.</sup> See eBay, Inc. v. MercExchange, LLC, 547 U.S. 388, 396–97 (2006).

<sup>149.</sup> Cuno Eng'g Corp. v. Automatic Devices Corp., 314 U.S. 84, 91 (1941).

<sup>150. 35</sup> U.S.C. § 103 (2018).

35 U.S.C. § 282 for post-issuance examination and the general rule of injunction for 35 U.S.C. § 283:

35 U.S.C. § 282(a): (first sentence amended) (addition underlined)

A patent shall be presumed valid in all post issuance proceedings.

35 U.S.C. § 283: (amended, adding new last sentence) (addition underlined)

The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent . . . as the court deems reasonable. Only in exceptional public interest cases shall an injunction be denied after a holding of infringement and non-invalidity.

These two amendments<sup>151</sup> would mean requestors for reexamination would have to prove their case by clear and convincing evidence—the same standard used in Article III district court cases—and successfully litigated patents could get the injunction they deserve to breathe life into the exclusionary right grant of 35 U.S.C. § 154. In an almost inevitable result, it is likely post-issuance proceedings would plunge in popularity.<sup>152</sup>

#### X. CONCLUSION

Many, if not most, commentators would say the United States has the most valuable patent system in the world. These two simple amendments would end the perfect storm and keep it that way.

<sup>151.</sup> And repealing 35 U.S.C. §§ 316(e) and 326(e) relating to evidentiary standards in IPRs and PGRs.

<sup>152.</sup> Jacqueline Bell, *How Patent Litigation Changed in 2019*, LAW360 (Feb. 26, 2020), https://www.law360.com/articles/1247871/how-patent-litigation-changed-in-2019. The PTAB saw the number of petitions slow in 2019 (1,720 in 2018 and 1,322 in 2019). *Id.* No doubt recent district court cases allowing non-institution decisions as trial court evidence, and broadly applying IPR estoppel, contributed to this drop in filings. *See* Bell, *supra* note 92.