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## WILLFUL PATENT INFRINGEMENT AFTER *IN RE SEAGATE*: JUST WHAT IS “OBJECTIVELY RECKLESS” INFRINGEMENT?

RANDY R. MICHELETTI\*

### INTRODUCTION

Patent infringement lawsuits place over \$15 billion in corporate assets at risk each year.<sup>1</sup> Compensatory damages for infringement—often exceeding \$10 million per suit—may be enhanced when the patentee proves, by clear and convincing evidence, that the defendant willfully infringed the patent.<sup>2</sup> Willful infringement has traditionally been a subjective inquiry, but the Federal Circuit recently adopted an objective standard in *In re Seagate Technology*.<sup>3</sup> The court delegated responsibility for development of the new standard to future cases.<sup>4</sup> Because the financial stakes are high and willfulness is alleged in nearly all patent infringement suits, uniform application of the new standard is highly desirable for district courts and its litigants.

Anyone who invents a “new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” is entitled to a patent in the United States.<sup>5</sup> Subject to some limits,<sup>6</sup> patents are granted for a wide variety of inventions including machines, methods of manufacture, chemicals and pharmaceuticals, isolated genes,

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1. Based on empirical survey data collected by the American Intellectual Property Law Association. See AM. INTELL. PROP. L. ASS’N, AIPLA REPORT OF THE ECONOMIC SURVEY 2007 25, I-90, I-91 (2007).

2. See 35 U.S.C. § 284 (2006); *Union Carbide Corp. v. Graver Tank & Mfg. Co.*, 282 F.2d 653, 675 (7th Cir. 1960).

3. See *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007), cert. denied sub nom. *Convolv. Inc. v. Seagate Tech.*, 128 S. Ct. 1445 (Feb. 25, 2008).

4. See *id.*

5. 35 U.S.C. § 101.

6. For example, patentable inventions must also be useful (35 U.S.C. § 101), novel (35 U.S.C. § 102), nonobvious (35 U.S.C. § 103), and be sufficiently described in the patent application such that another person skilled in the same art can make or use the patented invention without undue experimentation (35 U.S.C. § 112).

computer software, and even methods of conducting business.<sup>7</sup> As the United States Supreme Court famously recognized, Congress intended patent protection be available for “anything under the sun that is made by man.”<sup>8</sup>

The U.S. patent system reflects a careful balance of interests between society and inventors.<sup>9</sup> In exchange for a time-limited exclusive right to control the use of the patented invention,<sup>10</sup> an inventor must fully disclose details of the invention so that another person with ordinary technical skills in that field can recreate the patented invention without undue experimentation.<sup>11</sup> Thus both the inventor and the public benefit from a granted patent: The inventor reaps an immediate reward for her efforts in the form of an exclusive right to control the use of the patented technology.<sup>12</sup> The public receives both the immediate benefit of the patented technology itself, as well as sufficient information to freely recreate the invention once the patent expires.<sup>13</sup>

Infringement occurs when anyone, “without authority [from the patent owner,] makes, uses, offers to sell, or sells [the] patented invention, within the United States . . . during the term of the patent.”<sup>14</sup> Two important features of patent infringement law are apparent from the statutory text. First, infringement is a strict liability tort—the statute makes no mention of the

7. See, e.g., Method System and Computer Program for Shading, U.S. Patent No. 5,880,736 (filed Jun. 20, 1997); Glycopeptide Antibiotic Derivatives, U.S. Patent No. 5,840,684 (filed Mar. 24, 1995); Mutant Dwarfism Gene of Petunia, U.S. Patent No. 5,523,520 (filed Jun. 24, 1994); Packaging Machine, U.S. Patent No. 5,488,812 (filed Feb. 2, 1994); Computerized Case History Business Method, U.S. Patent No. 5,001,630 (filed Dec. 20, 1988); Process for Making Pigmented Ink Jet Inks, U.S. Patent No. 5,026,427 (filed Oct. 12, 1988).

8. *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) (quoting Congressional Committee Reports that accompanied the 1952 revisions to the Patent Act, S. REP. NO. 1979, at 5 (1952), and H.R. REP. NO. 1923, at 6 (1952), as reprinted in 1952 U.S.C.C.A.N. 2394, 2399).

9. See Timothy R. Holbrook, *Possession in Patent Law*, 59 SMU L. REV. 123, 125–27, 131–32 (2006).

10. See 35 U.S.C. § 154(a)(2) (setting forth the statutory grant of rights as beginning on the day the patent issues and terminating 20 years from the date the application for patent was filed).

11. See 35 U.S.C. § 112, ¶ 1 (requirement that patent applications contain a fully enabling disclosure); see also *Brown v. Barbacid*, 276 F.3d 1327, 1336 (Fed. Cir. 2002) (describing conception of an invention as occurring “only when the idea is so clearly defined in the inventor’s mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.”).

12. See Holbrook, *supra* note 9, at 131–32.

13. This policy of benefit to the public—generally referred to as the “quid pro quo” of the patent system—has helped contour the practice of U.S. patent law in a number of ways, including determinations of exactly when an invention is “born,” see *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004); whether an inventor has delayed too long to qualify for a patent, see *Pennock v. Dialogue*, 27 U.S. 1 (1829); whether a patent owner should be granted an injunction as a form of equitable remedy for infringement, see *eBay Inc. v. MercExchange, L.L.C.*, 544 U.S. 388, 392 (2006).

14. 35 U.S.C. § 271(a).

infringer's state of mind or motivation.<sup>15</sup> Second, the list of prohibited conduct is very broad; the scope of protection granted to patentees is wide and far-reaching.<sup>16</sup> Although a patentee's term of rights is limited to only a short time, the power conferred on the patentee for that exclusive period is near-absolute.<sup>17</sup>

Collectively, patentees file thousands of infringement suits each year.<sup>18</sup> Billions of dollars in alleged damages are litigated annually in patent infringement proceedings.<sup>19</sup> Sometimes infringement suits carry additional non-monetary consequences.<sup>20</sup> But the doctrine of willful infringement extraordinarily raises the stakes. If the patentee can prove that the defendant's infringement was willful, the district court has discretion to increase total damages up to three times the compensatory award.<sup>21</sup> To add insult to injury, the court may also award attorney fees when the defendant's infringement was willful.<sup>22</sup>

In 2007 the Federal Circuit elevated the standard for proving willfulness from a subjective standard "akin to negligence" to an objective standard.<sup>23</sup> Patentees seeking enhanced damages for willful infringement must now first prove "by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent."<sup>24</sup> If the threshold question is satisfied, the patentee must then prove "that [the] objectively-defined risk (determined by the record developed in the infringement proceeding) was either known to the accused infringer or so obvious that it should have been known to the accused infringer."<sup>25</sup>

15. *See id.*

16. *See id.*

17. Until recently, patentees enjoyed absolute control over decisions to grant licenses to others. The Supreme Court placed a condition on the otherwise absolute control in its landmark *eBay* case. *See eBay*, 544 U.S. at 392.

18. 4,254 patent infringement suits were filed from 1999–2000. Kimberly A. Moore, *Empirical Statistics on Willful Patent Infringement*, 14 FED. CIR. B.J. 227, 230–31 (2004/2005).

19. *See* AM. INTELL. PROP. L. ASS'N, *supra* note 1.

20. When facing a claim of patent infringement, a defendant routinely files a counterclaim that the patent is invalid or unenforceable. Successful defendants can thus turn the tables on a patentee and simultaneously avoid the high cost of infringement damages and strip the patentee of his patent rights altogether. *See generally* JANICE M. MUELLER, AN INTRODUCTION TO PATENT LAW Ch. 10 (2d ed. 2006).

21. *See* 35 U.S.C. § 284.

22. *See* 35 U.S.C. § 285; *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551 (Fed. Cir. 1989) (citing *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 455 (Fed. Cir. 1985)).

23. *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (noting that the willfulness standard up until this case represented "a lower threshold" than the Supreme Court advocated in *Safeco Ins. Co. of Am. v. Burr*, 551 U.S. 47, 127 S. Ct. 2201, 2209, 2215, 2216 n.20 (2007)).

24. *Id.*

25. *Id.*

While the court clearly expressed the two-part test patentees must satisfy, it did not elaborate on what types of evidence will be relevant.<sup>26</sup> District courts have struggled to apply the new standard in subsequent infringement cases, and will certainly benefit from some guidance.<sup>27</sup> Patentees seeking to enforce their patent rights, and those trying to fairly compete with patentees<sup>28</sup> will also benefit from some up-front guidance to more accurately assess any patent-related risks a new business plan may bring.

Part II of this note describes in more detail how the doctrine of willful patent infringement developed over time. Part III introduces the litigation that prompted the Federal Circuit to dramatically change the willfulness standard. Part IV reviews how district courts have struggled to apply the new standard. Part V proposes a set of factors for analyzing each of the two new willfulness prongs. Part VI applies the proposed factors to the facts in *Cohesive Technologies v. Waters*,<sup>29</sup> one of the first district court cases to apply the new *Seagate* standard.

## I. DEVELOPMENT OF THE WILLFUL INFRINGEMENT DOCTRINE

Because patent infringement is a strict liability offense,<sup>30</sup> the infringer's intent is not relevant to determining whether the patent was infringed; a defendant may be liable for patent infringement even absent actual knowledge of the patent itself.<sup>31</sup> The infringer's state of mind is relevant, however, in determining whether the infringement was willful. Under Section 284 of the Patent Act,<sup>32</sup> a court may award enhanced damages to a patentee up to three times the amount of compensatory damages from the infringement.<sup>33</sup> The text of Section 284 has not changed substantially since

26. *See id.*

27. *See infra* Part III.

28. 35 U.S.C. § 112 requires patents to fully disclose the invention and enable a person of ordinary skill in the relevant art to make or use the patented invention. In part, this provision seeks to advance the policy goal of encouraging others to advance the relevant art by using patent disclosures to invent alternative solutions to similar problems. *See Holbrook, supra* note 9, at 131 (citing Federal Circuit case law acknowledging that the U.S. patent system encourages a patentee's competitors to "design around" existing patents).

29. *Cohesive Techs., Inc. v. Waters Corp.*, 526 F. Supp. 2d 84 (D.Mass. 2007).

30. 35 U.S.C. § 271(a) states in relevant part "whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States . . . any patented invention during the term of the patent therefore, infringes the patent." *See also In re Seagate Tech.*, 497 F.3d 1360, 1368 (Fed. Cir. 2007).

31. *See id.*

32. United States Code Title 35 is commonly referred to as the "Patent Act." Consistent with this practice, the term "Patent Act" is synonymous with Title 35.

33. *See* 35 U.S.C. § 284 (Whether damages are assessed by a jury or the court, "the court may increase the damages up to three times the amount found or assessed."). For an excellent summary of the development of enhanced damages provisions in the Patent Act, *See* Matthew D. Powers & Steven

1836<sup>34</sup> and specifies no standard under which enhanced damages are proper.<sup>35</sup> Shortly after Congress first granted courts discretion in levying enhanced damages, the Supreme Court held that the purpose of increased statutory damages was to punish bad faith infringers above and beyond actual damages they caused.<sup>36</sup> By at least 1960, enhanced damages under the Patent Act were judicially limited to cases where the infringement was “conscious and wilful.”<sup>37</sup>

A finding of willfulness is significant beyond even enhanced damages under Section 284. Section 285 permits courts to award reasonable attorney fees to the winning party in “exceptional cases.”<sup>38</sup> When the prevailing party is the patent holder, a finding that the infringement was willful is sufficient to justify an award of attorney fees as well, which can significantly increase the total liability for infringement.<sup>39</sup>

#### A. *Willful Infringement Before Seagate*

Shortly after Congress created the Federal Circuit, in part to bring consistency to the application of patent law in the federal courts,<sup>40</sup> the new appellate court adjusted the standard for willfulness to favor patentees over alleged infringers.<sup>41</sup> In *Underwater Devices v. Morrison-Knudsen*, the court held that when “a potential infringer has actual notice of another’s patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing.”<sup>42</sup> As the court explained in a later case,

C. Carlson, *The Evolution and Impact of the Doctrine of Willful Patent Infringement*, 51 SYRACUSE L. REV. 53 (2001).

34. See Powers & Carlson, *supra* note 33, at 66–68.

35. See *id.*

36. See *Seymour v. McCormick*, 57 U.S. 480, 488–89 (1853) (holding that the Patent Act of 1836 granted courts discretion in imposing enhanced damages to correct the unjust situation where a defendant who infringed in good faith was subject to liability for treble damages just as a “wanton and malicious pirate” were).

37. *Union Carbide Corp. v. Graver Tank & Mfg. Co.*, 282 F.2d 653, 675 (7th Cir. 1960).

38. 35 U.S.C. § 285.

39. See *nCube Corp. v. SeaChange Int’l, Inc.*, 436 F.3d 1317, 1325 (Fed. Cir. 2006) (affirming a district court that awarded over \$2 million in compensatory damages, doubled the compensatory damages because the patent infringement was willful, and further awarded reasonable attorney fees under § 285 because the case was exceptional). While no two infringement cases are alike, a recent report by the American Intellectual Property Law Association found that total median costs for patent litigation in 2007 ranged from \$600,000 (for suits where less than \$1 million was at risk) up to \$5 million (for actions risking more than \$25 million). Since 2001, the total cost of litigation for patent infringement has risen from 20–68%. AM. INTELLECTUAL PROP. L. ASS’N, *supra* note 1, at 25.

40. See *Panduit Corp. v. All States Plastic Manufacturing Co., Inc.*, 744 F.2d 1564, 1573–74 (quoting S.Rep. 97-275, 97th Cong., 1st Sess. 5, reprinted in 1982 U.S.C.C.A.N. 11, 15).

41. See *Underwater Devices, Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389 (Fed. Cir. 1983). See also Lewis R. Clayton, “*Seagate’s*” *Objective Standard*—“*State of Mind*” *Irrelevant*, 238 N.Y. L.J. 3, 6 (2007).

42. *Underwater Devices*, 717 F.2d at 1389.

placing the affirmative duty on the infringer was necessary to correct for “wide-spread disregard of patent rights.”<sup>43</sup>

The patentee bears the burden to show by clear and convincing evidence that infringement was willful.<sup>44</sup> *Underwater Devices* arguably permitted patentees to shift that burden onto the infringer by little more than notice pleading.<sup>45</sup> It is no surprise, therefore, that nearly all patent infringement plaintiffs allege willful infringement.<sup>46</sup> In a recent empirical study of willful infringement,<sup>47</sup> then-Professor and now-Judge Kimberly Moore of the Federal Circuit reasoned that the high rate of willful infringement allegations is probably due to two benefits the patentee gains by alleging willfulness.

First, *Underwater Devices* permitted patentees to gain valuable insight into potential defenses the infringer will rely upon to avoid liability for even “ordinary” infringement.<sup>48</sup> When an infringement defendant elected to assert an advice of counsel defense<sup>49</sup> against an allegation of willfulness, privilege was necessarily waived as to all documents related to that defense—sometimes even as to communications related only to trial strategy

43. See *Knorr-Bremse Systeme Fuer Nutzfahreuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1343 (Fed. Cir. 2004) (en banc) [hereinafter *Knorr-Bremse*].

44. *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1368 (Fed. Cir. 2006) (citing *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1190 (Fed. Cir. 1998)).

45. See *Knorr-Bremse*, 383 F.3d at 1349 (Dyk, J., concurring-in-part and dissenting-in-part). Specifically, the separate opinion stated that

a potential infringer’s mere failure to engage in due care is not itself reprehensible conduct. To hold that it is *effectively shifts the burden of proof on the issue of willfulness from the patentee to the infringer*, which must show that its infringement is not willful by showing that it exercised due care.

*Id.*

46. For an excellent empirical study of willful infringement pleading and a comparison between jury verdicts and bench trials on those claims, see Moore, *supra* note 18 (finding that willful infringement was alleged in over 92% of 1,721 patent infringement cases that were resolved from 1999–2000). Ms. Moore was confirmed as Circuit Judge for the Federal Circuit in September 2006, but took no part in the court’s *In re Seagate Tech.*, 297 F.3d 1360, 1365 (Fed. Cir. 2007) (unnumbered footnote).

47. Moore, *supra* note 18.

48. See *id.* at 232–234. To satisfy the “affirmative duty of care” outlined in *Underwater Devices*, a potential infringer routinely obtains an opinion from counsel that analyzes the patents at issue for validity (was the patent properly granted by the United States Patent and Trademark Office?), enforceability (did the applicant obtain the patent through fraudulent or inequitable conduct before the Patent and Trademark Office?), and infringement (will the potential infringer’s proposed conduct actually infringe on the patentee’s rights as granted in the patent document?). At trial, failure to provide the court with this opinion can lead to an inference that the infringer’s conduct was willful. But offering the court (and opposing counsel) the opinion to avoid a negative inference also necessarily broadcasts the infringer’s likely defenses at trial—invalidity, unenforceability, and/or noninfringement—as outlined in the opinion itself.

49. An opinion of counsel is a legal analysis of relevant patents related to the client’s intended course of conduct. A defendant asserts an advice of counsel defense by entering the opinion of counsel into evidence.

on the willfulness issue.<sup>50</sup> Second, because the willfulness allegation is usually found in the patentee's prayer for relief as a request for enhanced damages under Section 284, the potential payoff of treble damages comes at an insignificant cost: the patentee merely has to request enhanced damages in the complaint and cite the statute.<sup>51</sup>

In addition, the affirmative duty doctrine presented an odd paradox out of touch with the policy rationales underlying the patent system. Because actual knowledge of the patent triggered a duty to investigate potential infringement, *Underwater Devices* may have created a powerful disincentive to read patents.<sup>52</sup> In other words, the risk of willful infringement under a subjective standard vanishes if patents aren't read because the infringer had no actual knowledge of the patent in the first place.<sup>53</sup> And yet a primary objective of the patent system is to disseminate enabling knowledge of new inventions to the public.<sup>54</sup>

In *Underwater Devices* the court hoped to reduce widespread apathy to patentees' rights by requiring potential infringers affirmatively seek an opinion of counsel upon notice of a competitor's patent.<sup>55</sup> Should a defendant fail to assert an opinion as a defense to a charge of willfulness, the fact-finder was permitted to infer that advice was either not obtained or that any advice solicited suggested that the defendant's proposed conduct would infringe valid U.S. patents.<sup>56</sup> Either way, a defendant faced a tough choice after *Underwater Devices*: waive attorney-client privilege for all willfulness-related documents or permit the fact-finder to infer that advice was not obtained or was obtained but warned of likely infringement.

In *Knorr-Bremse Systeme fuer Nutzfahreuge v. Dana*<sup>57</sup> ("Knorr-Bremse"), the court removed the negative inference permitted by an infringer's failure to offer opinion of counsel to rebut a willful infringement allegation.<sup>58</sup> The court based this decision not on apathy for patentees' rights, but because the affirmative duty imposed "inappropriate burdens on the attorney-client relationship."<sup>59</sup> Relying on the Supreme Court's charac-

50. See *In re Seagate Tech.*, 497 F.3d at 1372.

51. See Moore, *supra* note 18.

52. See Holbrook, *supra* note 9, at 142-43 (arguing that the risk of willful infringement discourages competitors from reading patents).

53. See *id.*

54. See *id.* at 125. This is the "quid pro quo" rationale for extending time-limited exclusive rights to a patentee.

55. See *Knorr-Bremse*, 383 F.3d 1337, 1343 (Fed. Cir. 2004).

56. See *id.* (citing *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 1580 (Fed. Cir. 1986)).

57. *Id.*

58. See *id.* at 1344.

59. *Id.* at 1343.



terization of the attorney-client privilege as “the oldest of the privileges for confidential communications known to common law”<sup>60</sup> and its critical purpose of fostering “full and frank communications between attorneys and their clients,”<sup>61</sup> the Federal Circuit acknowledged that the risk to defendants created by *Underwater Devices* was unwarranted and would lead to the erosion of the privilege itself.<sup>62</sup> *Knorr-Bremse* ultimately eliminated an infringer’s difficult choice between handing the patentee his trial strategy playbook and risking an adverse inference by refusing to turn over any opinions of counsel.<sup>63</sup>

Two years later, the Federal Circuit took a small step back from *Knorr-Bremse* when it held that an accused infringer waived attorney-client privilege as to *any* communications with *any* counsel on the same subject matter, even if the infringer did not rely on that advice.<sup>64</sup> The court’s holding in *In re Echostar Communications Corp.* (“*Echostar*”)<sup>65</sup> made no distinction between opinion counsel and trial counsel, as long as the attorney actually communicated the opinion to the client.<sup>66</sup> Although the primary issue before the Federal Circuit was the scope of waiver of attorney-client privilege, the court’s holding returned a potent offensive weapon to patentees. After *Echostar*, any accused infringer that relied on an opinion of counsel as a defense to a willful infringement allegation ran the risk that it might also have to turn over its trial strategy regarding the patent’s validity, unenforceability, or non-infringement.<sup>67</sup>

### B. Tests for Willful Infringement Before Seagate

Although the Federal Circuit has repeatedly adjusted the scope of attorney-client privilege, it has been remarkably consistent in its concept of what willful conduct looks like. In *Bott v. Four Star*, the Federal Circuit adopted three factors from the Tenth Circuit to determine whether an infringer’s conduct, under all the circumstances, was willful.<sup>68</sup> The *Bott* Factors consider (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other’s

60. *Id.* at 1344 (quoting *Upjohn Co. v. United States*, 449 U.S. 383, 389 (1981)).

61. *Id.*

62. *Id.*

63. *See id.*

64. *See In re Echostar Commc’ns Corp.*, 448 F.3d 1294, 1304 (Fed. Cir. 2006).

65. *Id.*

66. *Id.* at 1303.

67. *See In re Seagate Tech.*, 497 F.3d 1360, 1372–73 (Fed. Cir. 2007).

68. *See Bott v. Four Star Corp.*, 807 F.2d 1567, 1572 (Fed. Cir. 1986) (citing *Lam, Inc. v. Johns-Manville Corp.*, 668 F.2d 462, 474–75 (10th Cir. 1982), cert. denied, 456 U.S. 1007 (1982)).

patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; and (3) the infringer's behavior as a party to the litigation.<sup>69</sup>

Six years later, the Federal Circuit reaffirmed the three *Bott* Factors and approved six more in *Read v. Portec*.<sup>70</sup> Specifically, the court recognized that the three *Bott* Factors were appropriate, but not necessarily comprehensive enough to satisfy the "totality of the circumstances" standard.<sup>71</sup> *Read* required courts to also consider: (4) the defendant's size and financial condition, (5) the closeness of the case, (6) the duration of the defendant's conduct, (7) any remedial action by the defendant, (8) the defendant's motivation for harm, and (9) whether the defendant attempted to conceal its misconduct.<sup>72</sup>

The *Bott* and *Read* Factors<sup>73</sup> served as the exclusive test for willfulness in patent litigation for over twenty years. The inquiry focused on the infringer's subjective state of mind in an effort to punish bad-faith infringers for disregarding a competitor's patent rights.<sup>74</sup> Courts also used the *Bott* and *Read* Factors to gauge the level of damage enhancement appropriate in a given case once willfulness was found.<sup>75</sup> But litigation that commenced in 2000 over digital storage technology would prove to be the demise of the subjective test.<sup>76</sup>

## II. THE FEDERAL CIRCUIT ADOPTS "OBJECTIVE RECKLESSNESS" WILLFULNESS STANDARD IN *SEAGATE*

Originally a discovery dispute, *Convolve v. Compaq Computer*<sup>77</sup> resulted in one of the most significant—and unexpected—changes to patent law in 2007.<sup>78</sup> While the initial conflict focused exclusively on the extent

69. *Id.*

70. *See Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992).

71. *Id.*

72. *See id.* (internal citations omitted).

73. The *Bott* and *Read* Factors are often collectively referred to as the "*Read* Factors." For the analytical purposes of this article, however, they will be referred to separately as the "*Bott* Factors" or the "*Read* Factors."

74. *See Read*, 970 F.2d at 826 ("The paramount determination in deciding to grant enhancement and the amount thereof is the *egregiousness of the defendant's conduct* based on all the facts and circumstances.") (emphasis added).

75. *See id.*

76. *Convolve, Inc., and the Massachusetts Institute of Technology* filed suit against *Compaq Computer and Seagate Technology* on July 13, 2000. *Convolve, Inc. v. Compaq Computer Corp.*, 224 F.R.D. 98, 99 (S.D.N.Y. 2004).

77. *See id.*

78. Other significant changes to patent law in 2007 included a dramatic shift in obviousness jurisprudence (*KSR v. Teleflex*, 550 U.S. 398, 127 S. Ct. 1727 (2007)), clarification from the Supreme Court on licensee standing for Declaratory Judgment actions (*MedImmune v. Genentech*, 127 S. Ct.

of the scope of the defendant's waiver of privilege, the Federal Circuit capitalized on the opportunity to bring patent law principles more in line with other civil tort regimes.<sup>79</sup>

### A. *Procedural Posture of In re Seagate*

In 2000—six years before the Federal Circuit's *Echostar* decision—Convolve, Inc. ("Convolve"), and the Massachusetts Institute of Technology (MIT) filed suit against Compaq Computer Corp. ("Compaq") and Seagate Technology, Inc. ("Seagate") alleging patent infringement.<sup>80</sup> Convolve and MIT owned patents covering "Input Shaping" technology<sup>81</sup> for computer disk drives.<sup>82</sup> In its amended complaint, Convolve and MIT alleged that Compaq and Seagate willfully infringed the Input Shaping patents.<sup>83</sup>

After receiving notice that Convolve was suing for patent infringement, Seagate retained patent attorney Gerald Sekimura to analyze the Convolve and MIT patents and Seagate's products.<sup>84</sup> Sekimura generated two opinions that concluded that the two Input Shaping patents were both invalid, that one was possibly unenforceable because Convolve had not disclosed relevant prior art to the patent examiner,<sup>85</sup> and that Convolve had failed to show that any of Seagate's existing products infringed the issued patents.<sup>86</sup>

By early 2002, Convolve was granted a patent on its "Quick and Quiet" technology,<sup>87</sup> and amended its complaint with an additional infringement claim and a request for enhanced damages based on Compaq and Seagate's alleged willful infringement.<sup>88</sup> Sekimura again provided Seagate with an opinion concluding that many of the claims in the newly

764 (2007)), and proposed changes to the rules for securing patent protection in the PTO (preliminarily enjoined by *Tafas v. Dudas*, 511 F.Supp.2d 652 (E.D. Va. 2007)) and the Patent Act (see H.R. 1908, 110th Cong. (2007)).

79. See *In re Seagate Tech.*, 497 F.3d 1360, 1370–71 (Fed. Cir. 2007).

80. See *Convolve, Inc.*, 224 F.R.D. at 99.

81. See U.S. Patent No. 4,916,635 (filed Sept. 12, 1988); U.S. Patent No. 5,638,267 (filed June 15, 1994).

82. *Convolve, Inc.*, 224 F.R.D. at 99.

83. *Id.*

84. *Id.* at 99–100. Apparently Compaq retained a different patent attorney about a year after Seagate did, but terminated that relationship when it learned that Sekimura was already well into his analysis on Seagate's behalf. *Id.*

85. In general, a claim in a patent is unenforceable when the applicant fails to disclose relevant prior art to the Patent and Trademark Office while the application is pending. See *Union Pacific Resources Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 693 (Fed. Cir. 2001).

86. *Convolve, Inc.*, 224 F.R.D. at 100.

87. See U.S. Patent No. 6,314,473 (filed Mar. 4, 1999).

88. *Convolve, Inc.*, 224 F.R.D. at 99.

issued patent were invalid and that Seagate was not infringing the patent even the claims were valid.<sup>89</sup>

Seagate at all times retained separate trial counsel who were completely independent from Sekimura.<sup>90</sup> To defend against Convolve's claim of willful infringement, Seagate notified the court that it intended to rely on Sekimura's three opinions.<sup>91</sup> But based on *Echostar*,<sup>92</sup> the district court granted Convolve's motion to compel Seagate to produce *all* communications with counsel—including trial counsel—on the three topics discussed in Sekimura's opinions: infringement, invalidity, and enforceability.<sup>93</sup>

### B. *Seagate's Writ of Mandamus*

When the district court denied its motion for a stay and certification of interlocutory appeal, Seagate petitioned the Federal Circuit for a writ of mandamus.<sup>94</sup> The Federal Circuit agreed that Seagate had "no other means of attaining the relief desired"<sup>95</sup> and granted the petition to prevent wrongful exposure of privileged communications.<sup>96</sup> The court stayed the district court's discovery orders pending the results of the appellate review.<sup>97</sup>

Seagate's petition raised two issues concerning the extent of attorney-client privilege and are beyond the scope of this note.<sup>98</sup> Although not part of Seagate's mandamus petition, the Federal Circuit certified a third question *sua sponte*:

Given the impact of the statutory duty of care standard announced in *Underwater Devices* . . . on the issue of waiver of attorney-client privilege, should this court reconsider the decision in *Underwater Devices* and the duty of care standard itself?<sup>99</sup>

89. *Id.* at 100.

90. *In re Seagate Tech.*, 497 F.3d 1360, 1366 (Fed. Cir. 2007).

91. *Id.*

92. *See In re Echostar Commc'ns Corp.*, 448 F.3d 448 F.3d 1294, 1304 (Fed. Cir. 2006).

93. *Id.*

94. *In re Seagate Tech., LLC*, 214 F. App'x 997 (Fed. Cir. 2007) (per curiam).

95. *In re Seagate Tech.*, 497 F.3d at 1367 (citing *Mallard v. U.S. Dist. Ct. for the S. Dist. of Iowa*, 490 U.S. 296, 309 (1989)).

96. *Id.* (quoting *In re Regents of the Univ. of Cal.*, 101 F.3d 1386, 1387 (Fed. Cir. 1996)).

97. *In re Seagate Tech.*, 214 F. App'x at 997.

98. The Federal Circuit's first two certified questions were "(1) Should a party's assertion of the advice of counsel defense to willful infringement extend waiver of the attorney-client privilege to communications with that party's trial counsel?" and "(2) What is the effect of any such waiver on work-product immunity?" The court held that, as a general rule, reliance on opinion of invalidity, unenforceability, or non-infringement does not automatically waive the attorney-client privilege as to trial counsel, and similarly, as a general rule, reliance on opinion counsel's work product does not waive work product immunity as to trial counsel. *In re Seagate Tech.*, 497 F.3d at 1367, 1374, 1376.

99. *Id.* at 1367.

The court noted that the development of willfulness doctrine has led to “practical dilemmas . . . in the areas of attorney-client privilege and work product protection” and therefore *en banc* reexamination of the willfulness standard was warranted.<sup>100</sup>

C. *Seagate’s Holding: “Willfulness” Now Requires a Showing of “Objective Recklessness”*

The Federal Circuit appeared as concerned that willfulness in the patent infringement context was out of line with other areas of tort law than its interplay with the attorney-client relationships.<sup>101</sup> In particular, the court noted that the current standard for showing willful patent infringement resembled something close to negligence, while other areas of civil liability link willfulness with conduct at least reckless in nature.<sup>102</sup>

The Supreme Court’s decision reviewing enhanced damages under the Fair Credit Reporting Act (FCRA) in *Safeco Insurance Company of America v. Burr*<sup>103</sup> less than three months before *Seagate* further validated the Federal Circuit’s decision to review its willfulness standard in patent infringement suits.<sup>104</sup> The FCRA permits courts to award punitive damages to plaintiffs that can prove the defendant “willfully fail[ed] to comply with [the FCRA].”<sup>105</sup> Like the Patent Act, the FCRA does not define willfulness, but the Supreme Court held in *Safeco* that “standard civil usage thus counsels reading § 1681n(a)’s phrase ‘willfully fails to comply’ as reaching reckless FCRA violations.”<sup>106</sup>

The Supreme Court’s objective interpretation of civil “willfulness” conflicted with the Federal Circuit’s subjective, pseudo-negligence stan-

100. *Id.* Convolv and MIT argued in their reply brief that addressing *Underwater Devices* would amount to an advisory opinion. Oppositions of Respondents at 48–59, *In re Seagate Tech.*, 497 F.3d 1360 (Fed. Cir. 2007) (Misc. No. 830), available at 2007 WL 1685896 (Fed. Cir. 2007). The Federal Circuit responded to this assertion (echoed by the Houston Intellectual Property Law Association in its amicus brief (Amicus Curiae Brief on Behalf of the Houston Intellectual Property Law Association at 2–5, *In re Seagate Tech.*, 497 F.3d 1360 (Fed. Cir. 2007) (Misc. No. 830), available at 2007 WL 1032694) by noting that “it is indisputable that the proper legal standard for willful infringement informs the relevance of evidence relating to that issue and, more importantly here, the proper scope of discovery.” *In re Seagate Tech.*, 497 F.3d at 1371–72 (citing *U.S. Nat’l Bank of Or. v. Indep. Ins. Agents of Am., Inc.*, 508 U.S. 439, 447 (1993)).

101. The Federal Circuit pointed out, for example, that willful copyright infringement requires at least a showing that the defendant “recklessly disregarded the possibility that its conduct represented infringement.” *In re Seagate Tech.*, 497 F.3d at 1370 (quoting *Yurman Design, Inc. v. PAJ, Inc.*, 262 F.3d 101, 112 (2d Cir. 2001) (internal quotation marks omitted)).

102. *See id.*

103. 127 S. Ct. 2201 (2007).

104. *See In re Seagate Tech.*, 497 F.3d at 1370–71.

105. 15 U.S.C. § 1681n(a).

106. *Safeco*, 127 S. Ct. at 2209.

dard under *Bott, Read, and Underwater Devices*.<sup>107</sup> In *Seagate*, the Federal Circuit rejected that subjective standard in favor of a new willfulness standard for patent infringement suits: Patentees must now show the infringer acted with at least “objective recklessness” to justify enhanced damages under Section 284.<sup>108</sup>

More specifically, a patentee must now satisfy a two-part test to meet *Seagate*'s willfulness standard.<sup>109</sup> First, it must show “by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent.”<sup>110</sup> Then, the patentee must also show “that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known to the accused infringer or so obvious that it should have been known to the accused infringer.”<sup>111</sup>

The Federal Circuit left the question of what types of evidence are relevant to the new two-part test largely unanswered.<sup>112</sup> But the court was not completely silent on what factors may be considered under the new objective standard. First, Circuit Judge Haldane Mayer noted in the majority opinion that prelitigation conduct is likely to be much more probative of the threshold question than post-filing conduct.<sup>113</sup> Similarly, the court opined that a genuine issue of the patent's validity or the defendant's infringement “is likely sufficient” to nullify a claim of willfulness based on post-filing infringing conduct.<sup>114</sup>

The only other clue given by the court was a cryptic one: concurring Circuit Judge Pauline Newman suggested that “the standards of fair commerce, including the reasonableness of the actions taken in the particular circumstances,” should inform the willfulness inquiry.<sup>115</sup> The majority opinion acknowledged such standards “would be among the factors a court might consider.”<sup>116</sup> Judge Newman only slightly elaborated that the “stan-

107. See *In re Seagate Tech.*, 497 F.3d at 1371 (noting the tension between the willfulness standard in patent infringement suits with willfulness standards in other civil contexts); *Safeco*, 126 S. Ct. at 2209.

108. *In re Seagate Tech.*, 497 F.3d at 1371.

109. See *id.*

110. *Id.* (citing *Safeco*, 127 S. Ct. at 2215).

111. *Id.* at 1371.

112. See *id.* (“We leave it to future cases to further develop the application of this standard.”) (footnote omitted).

113. See *id.* at 1374 (noting that, while patent infringement is an ongoing offense, a patentee must have a “good faith basis for alleging willfulness” in the complaint). Judge Mayer further noted that a patentee's failure to secure injunctive relief is a strong indicator that the infringer's conduct was not reckless. See *id.*

114. *Id.*

115. *Id.* at 1385 (Newman, J., concurring opinion).

116. See *id.* at 1371 n.5.

dards of fair commerce” may include the “reasonableness of the [possible infringer’s] actions taken in the particular circumstances.”<sup>117</sup> Yet she, too, seemed satisfied to allow evolution of the new standard by relying on “judicial wisdom . . . to show the way, in the common-law tradition.”<sup>118</sup>

Beyond these few suggestions, *Seagate* provides little concrete guidance for development of the objective recklessness standard. Competitors have little idea what conduct is appropriate after *Seagate*. Arguably, *Seagate*’s attempt to raise the standard of willfulness from something “akin to negligence”<sup>119</sup> to objective recklessness will not put good faith competitors at any more risk than under the old subjective standard.<sup>120</sup> But without a clear understanding of the new objective recklessness standard for willfulness, the court’s unspecific holding may undermine the patent system’s fair competition policy basis.

And because most patent infringement cases will very likely involve allegations of willful infringement, district courts also face a considerable challenge: Just what is “objective recklessness” with respect to patent infringement? The statute provides no test or factors relevant to an inquiry into willfulness.<sup>121</sup> The few clues given by the Federal Circuit merely provide a general direction for district courts.<sup>122</sup> Based on the largely inconsistent application of *Seagate*, however, it is clear that the “common-law tradition” has led to significant confusion and disagreement among the district courts.

### III. INITIAL JUDICIAL APPLICATION OF *SEAGATE*’S OBJECTIVE RECKLESSNESS STANDARD: DISTRICT COURTS ARE CONFUSED

With the number of patent infringement suits filed annually, it is no surprise that district courts had immediate opportunities to apply the *Seagate* standard. Initial application of the new standard has primarily focused on the threshold question: whether the defendant “acted despite an objectively high likelihood that its actions constituted infringement of a valid patent.”<sup>123</sup> A handful of courts have also addressed the secondary question:

117. *Id.* at 1385 (Newman, J., concurring opinion).

118. *Id.*

119. *Id.* at 1371.

120. *See id.* (suggesting that the Supreme Court’s understanding of willfulness requires at least a showing of recklessness, whereas willful patent infringement allows punitive damages for something “akin to negligence”).

121. *See* 35 U.S.C. § 284.

122. *See In re Seagate Tech.*, 497 F.3d at 1371 (“We leave it to future cases to further develop the application of this standard.”).

123. *Id.*

whether the objective risk of infringement was known or so obvious that it should have been known to the accused infringer.<sup>124</sup> District courts applying *Seagate* appear to be confused on a number of fronts, however.

A. *District Courts are Struggling to Apply Seagate's New Willfulness Standard.*

Because the Federal Circuit provided only vague suggestions on how to assess willfulness post-*Seagate*, district courts generally have struggled. First, courts often conflate the two stepwise *Seagate* questions into a holistic “objective recklessness” inquiry. For example, the Northern District of California correctly recited the new willfulness inquiry as a two-step analysis beginning with assessment of the defendant’s actions as creating an objectively high likelihood of infringement.<sup>125</sup> The court then rationalized its denial of the patentee’s motion for summary judgment solely based on the lack of an objectively high likelihood of infringement of a valid patent, but included facts clearly showing the defendant knew or should have known about the plaintiff’s patent.<sup>126</sup>

Courts also are unsure of the continued relevance of the *Bott* and *Read* Factors in the *Seagate* analysis.<sup>127</sup> On the one hand, those Factors were developed under the former subjective standard for willfulness. But on the other hand, they not only address *whether* the defendant infringed willfully, but also *how much* the court should enhance damages.<sup>128</sup> Perhaps simply from a lack of guidance on application of the new standard, courts appear to be gravitating towards the practical utility found in the *Bott* and *Read* Factors as a starting point.<sup>129</sup>

124. *See id.*

125. *See Depomed, Inc. v. Ivax Corp.*, 532 F. Supp. 2d 1170, 1177 (N.D. Cal. 2007).

126. *See id.* at 1186. The court stated that:

Third, there is evidence that the ‘475 patent and an agreement to license the patent to a third party were well publicized . . . . In sum, there is ample evidence upon which a reasonable juror could base the conclusion that [the defendant acted] *despite an objectively high likelihood that its actions constituted infringement of a valid patent.* (emphasis added).

*Id.*

127. *See, e.g., Informatica Corp. v. Bus. Objects Data Integration, Inc.*, 527 F. Supp. 2d 1076, 1083 (N.D. Cal. 2007) (citing the closeness of the infringement issue as the primary reason that the defendant could not have infringed willfully); *Depomed, Inc.*, 532 F. Supp. 2d at 1177 (“It is unsettled whether the . . . factors identified in *Read* . . . remain relevant to the willfulness inquiry.”).

128. *See Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826–28 (Fed. Cir. 1992).

129. *See, e.g., Funai Elec. Co., Ltd. v. Daewoo Elecs. Corp.*, 593 F. Supp. 2d 1088, 1112–17 (N.D. Cal. 2009); *Finjan Software, Ltd. v. Secure Computing Corp.*, No. 06-369, 2009 U.S. Dist. LEXIS 72825 at \*46–52 (D. Del. 2009).



One assertive district court announced a six-factor test for willfulness under the new *Seagate* standard.<sup>130</sup> To decide the issue of willfulness under *Seagate*, the district court stated that important factors to consider include:

(1) whether there was a bona fide disagreement regarding patent invalidity or infringement, (2) whether the infringer solicited or followed the advice of counsel, (3) whether there was continued infringement after notice of probable infringement was received, (4) whether there was a degree of similarity between the patented and accused devices, (5) whether the infringer took efforts to avoid infringement, and (6) whether the infringer was indemnified against infringement costs.<sup>131</sup>

Interestingly, the district court cited no authority for these six factors, nor did it explain how these factors were derived or even why they inform the inquiry.

More troublesome, however, is that the asserted six-factor test completely conflates *Seagate*'s threshold question with the secondary question. Factor 3, for example, considers whether the infringer knew or should have known of the risk of infringement. Surrounding that factor are Factors 1, 2, and 4, all of which help define the threshold question: whether there was an objectively high risk of infringement in the first place. Factor 6 (and perhaps Factor 3) appear to guide the court in determining the extent of damage enhancement, but the district court did not rationalize, discuss or even apply Factor 6 to the facts before it.<sup>132</sup>

In contrast, the district court in *Church & Dwight v. Abbott Laboratories* carefully analyzed the evidence presented under *Seagate*'s two-part test.<sup>133</sup> In that case, the patentee sued Abbott over three patents covering various aspects of home pregnancy test kits.<sup>134</sup> A jury found that Abbott infringed the patents and that the claims at issue were not invalid.<sup>135</sup> Furthermore, the jury concluded that Abbott's infringement was willful.<sup>136</sup> After trial, Abbott moved, *inter alia*, for judgment as a matter of law that its infringement was not willful.

As to *Seagate*'s threshold question, the court concluded that there was sufficient evidence to support a finding of an objectively high likelihood of infringement of a valid patent. Specifically, the court noted that

130. See *Cohesive Techs., Inc. v. Waters Corp.*, 526 F. Supp. 2d 84, 103–04 (D. Mass. 2007).

131. *Id.*

132. See *id.* at 105–06.

133. *Church & Dwight Co., Inc. v. Abbott Labs.*, No. 05-2142, 2008 WL 2565349 at \*10–11 (D. N.J. Jun. 24, 2008).

134. *Id.* at \*1.

135. *Id.*

136. *Id.*

the jury was shown evidence that: (1) the . . . patents, because they were issued, were presumptively valid; (2) Abbott's invalidity defenses were not very strong and were previously rejected by the USPTO; (3) that Abbott did not contest infringement of [one of the patents] at trial; and (4) its infringement arguments as to the other patents were not convincing.<sup>137</sup>

Thereafter, the court concluded that the patentee met its burden to demonstrate that the objectively high risk was known to Abbott, or was so obvious that Abbott should have known of it, reasoning that

the jury was shown evidence that: (1) [the patentee] put Abbott on notice of its infringement of the . . . Patents; (2) [the patentee's] predecessor notified Abbott that "it was very difficult to sell visually readable lateral flow test strips without infringing" on the . . . Patents; (3) Abbott knew that its infringement was an issue; (4) Abbott was "not going to change" until it could "investigate and do otherwise;" (5) Abbott sought to "insure" itself against liability exposure via indemnifications; and (6) Abbott sold its Diagnostics unit in part to avoid current and potential intellectual property issues.<sup>138</sup>

As a result, the court denied Abbott's motion for judgment as a matter of law.<sup>139</sup>

#### 1. Judicial Interpretation of *Seagate's* Threshold Question: Evidence Considered in Assessing the Objective Likelihood of Infringing a Valid Patent

Despite some confusion among the district courts in the proper method to apply *Seagate*, some trends have already emerged. First, every district court applying *Seagate* has concluded that a defendant's effort to design around the patent at issue signals an objectively low likelihood that its conduct constituted infringement of a valid patent.<sup>140</sup> Second, district courts continue to view competent opinions of counsel as highly relevant. Rather than a complete defense to a claim of willful infringement, however, most courts recognize that such opinions now merely help define the objec-

137. *Id.* at \*10.

138. *Id.*

139. *Id.* at \*11.

140. *See, e.g.*, Fisher Price, Inc. v. Safety 1st, Inc., No. 01-051, 2008 WL 1976624 at \*6 (D. Del. May 5, 2008) (although the jury found that Safety 1st willfully infringed Fisher-Price's patent under the pre-*Seagate* willfulness standard, the court refused to award enhanced damages post-*Seagate* in part because "Safety 1st engaged in efforts to redesign [the infringing] product after the first infringement verdict."); Eastman Kodak Co. v. Agfa-Gevaert N.V., 560 F. Supp. 2d 227, 303-05 (W.D.N.Y. 2008); Cohesive Techs., Inc. v. Waters Corp., 526 F. Supp. 2d 84, 105 (D. Mass. 2007); Rhino Assoc., L.P. v. Berg Mfg. & Sales Corp., 531 F. Supp. 2d 652, 658-59 (M.D. Pa. 2007); *In re Muth Mirror Sys.*, L.L.C., 379 B.R. 805, 827 (Bankr. E.D. Wis. 2007).

tive likelihood of infringement under *Seagate*.<sup>141</sup> As before, an opinion must be objectively competent before a court will consider its contents as signaling a low objective likelihood of infringement.<sup>142</sup>

A few district courts have linked invalidity arguments raised at trial to *Seagate's* threshold question.<sup>143</sup> Courts generally understand *Seagate* to imply that credible invalidity arguments indicate an objectively low likelihood of infringement.<sup>144</sup> Similarly, courts have held that weak or frivolous invalidity arguments presented at trial, or invalidity arguments already rejected by the USPTO, all infer an objectively high risk of infringement.<sup>145</sup> Indeed, the Federal Circuit endorsed the relationship between invalidity arguments raised at trial and *Seagate's* threshold question in *Black & Decker v. Robert Bosch Tool*.<sup>146</sup> In this non-precedential opinion, the court similarly concluded that credible invalidity arguments raised during infringement proceedings indicate that the likelihood that the defendant's conduct constituted infringement was objectively low.<sup>147</sup> Some courts have rejected invalidity arguments raised at trial as probative of

141. See *Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc.*, 553 F. Supp. 2d 939, 956 (N.D. Ill. 2008) (letters from counsel stating that there can be no infringement without a court determination of infringement were ineffective to shield infringer from willful infringement determination); *Kellogg v. Nike, Inc.*, No. 8:07CV70, 2008 WL 3875299 at \*2 (D. Neb. Aug. 14, 2008) (defendant's motion for summary judgment of no willful infringement was denied because patentee presented evidence showing genuine issues of material fact as to whether the accused infringer obtained or followed the advice of counsel); *VNUS Medical Techs., Inc. v. Diomed Holdings, Inc.*, 527 F. Supp. 2d 1072, 1075-76 (N.D. Cal. 2007); *Cohesive Techs.*, 526 F. Supp. 2d at 104-05; *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 578-79 (E.D. Tex. 2007).

142. See *VNUS Medical Techs.*, 527 F. Supp. 2d at 1076; *Ball Aerosol & Specialty Container*, 553 F. Supp. 2d at 956.

143. See *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assoc., Inc.*, No. 03-0597-PHX-MHM, 2008 WL 2958968 at \*2 (D. Ariz. Jul. 29, 2008) (defendant's invalidity argument based on three prior art references was directly contradicted by the USPTO prosecution history of the patent-in-suit); *Church & Dwight Co., Inc. v. Abbott Labs.*, No. 05-2142, 2008 WL 2565349 at \*10 (D. N.J. Jun. 24, 2008) (defendant's motion for JMOL of no willful infringement was denied in part because its "invalidity defenses were not very strong and were previously rejected by the USPTO"); *Kleen-Tex Indus., Inc. v. Mountville Mills, Inc.*, No. 3:03-CV-093-JTC, 2008 WL 2486363 at \*8 (N.D. Ga. Mar. 3, 2008) (citing *Black & Decker*, 260 F. App'x at 291 ("a 'credible invalidity argument' is sufficient . . . to avoid a finding of willful infringement.)); *Pivonka v. Central Garden & Pet Co.*, No. 02-cv-02394-RPM, 2008 WL 486049 at \*2 (D. Colo. Feb. 19, 2008) (granting defendant's motion for summary judgment of no willful infringement in part because, while the infringement suit was still pending, the PTO Board of Patent Appeals and Interferences issued a non-final order and memorandum rejecting all of the patent's claims as unpatentable); *Informatica Corp. v. Bus. Objects Data Integration, Inc.*, 527 F. Supp. 2d 1076, 1083 (N.D. Cal. 2007).

144. See *Informatica*, 527 F. Supp. 2d at 1083; *Kleen-Tex Indus.*, 2008 WL 2486363 at \*8.

145. See *Depomed*, 532 F. Supp. 2d at 1185; *Church & Dwight Co.*, 2008 WL 2565349 at \*10; *Bard Peripheral Vascular, Inc.*, 2008 WL 2958968 at \*2.

146. *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, 260 F. App'x 284 (Fed.Cir. 2008).

147. See *id.* at 291.

willfulness, however.<sup>148</sup> The link between invalidity arguments raised at trial and *Seagate's* threshold question is considered more fully in Part V.B.4, *infra*.

Likewise, district courts tend to view credible non-infringement arguments indicate an objectively low likelihood of infringement.<sup>149</sup> At least one court has found an objectively high likelihood of infringement based in part on non-infringement arguments that “were not convincing.”<sup>150</sup>

The district court in *Trading Technologies International v. eSpeed* concluded that knowledge of the plaintiff’s pending patent application was irrelevant in assessing the likelihood of infringement of a valid patent.<sup>151</sup> The court rationalized that “[f]iling an application is no guarantee any patent will issue and a very substantial percentage of applications never result in patents.”<sup>152</sup> In contrast, *Seagate's* threshold question limits the objective inquiry to “a valid patent.”<sup>153</sup>

Finally, one court has held that an earlier Federal Circuit opinion questioning the validity of certain claims in the plaintiff’s patent meant that the defendant, who was manufacturing and selling a drug covered by one of the questioned claims, acted with an objectively low likelihood that it was infringing the patent.<sup>154</sup> Although the earlier appellate case did not involve the defendant in the instant case, the district court reasoned that if the Federal Circuit, with exclusive jurisdiction over patent-related appeals, had serious doubts as to the validity of a specific patent claim, then offering goods covered by that claim must represent an objectively low likelihood of infringement of a *valid* patent.<sup>155</sup>

148. See, e.g., *i4i Ltd. P’ship v. Microsoft Corp.*, No 07-CV-113, 2009 U.S. Dist. LEXIS 70104 at \*28–35 (E.D. Texas Aug. 11, 2009), *aff’d* 2010 U.S. App. LEXIS 5010 at \*62–67 (Fed. Cir. Mar. 10, 2010).

149. See *Northbrook Digital Corp. v. Browster, Inc.*, No. 06-4206, 2008 WL 4104695 at \*\*6–7 (D. Minn. Aug. 26, 2008) (defendant’s motion for summary judgment of no willful infringement was granted in part because of legitimate non-infringement defenses); *ResQnet.com, Inc. v. Lansa, Inc.*, 533 F. Supp. 2d 397, 420 (S.D.N.Y. 2008) (finding no objectively reckless conduct when the accused infringer advanced invalidity and non-infringement “arguments [that] were substantial, reasonable, and far from the sort of easily-dismissed claims that an objectively reckless infringer would be forced to rely upon”); *Franklin Elec. Co., Inc. v. Dover Corp.*, No. 05-C-598-S, 2008 WL 5067678 at \*8 (W.D. Wis. Nov. 15, 2007) (defendant’s motion for summary judgment of no willful infringement was granted in part because defendant’s non-infringement arguments were “significant[ly] support[ed] by the language of the patent, the specification and prosecution history”).

150. *Church & Dwight Co.*, 2008 WL 2565349 at \*10.

151. *Trading Techs. Int’l, Inc. v. eSpeed, Inc.*, 2008 WL 63233 at \*1 (N.D. Ill. 2008).

152. *Id.* (quoting *State Indus., Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1236 (Fed. Cir. 1985)).

153. *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (emphasis added).

154. See *Abbott Labs. v. Sandoz, Inc.*, 532 F. Supp. 2d 996, 997 (N.D. Ill. 2007).

155. See *id.* at 999.

## 2. Judicial Interpretation of *Seagate*'s Secondary Question: Evidence Considered in Assessing Whether the Defendant Knew or Should Have Known of the Objectively High Likelihood that its Conduct Constituted Infringement

The Federal Circuit has recently stated that evidence of copying and receipt of marked product sales kits are relevant to the secondary question under *Seagate*.<sup>156</sup> Only a few district courts have considered *Seagate*'s secondary question because most of the patentees facing the new standard have failed to prove that the defendant acted despite an objectively high risk that its actions constituted infringement of a valid patent. Thus patterns of judicial treatment of the secondary question are preliminary at best. Nonetheless, district courts that have applied the secondary question have taken a broad view of what evidence shows that "the objectively-defined risk . . . was either known or so obvious that it should have been known to the accused infringer."<sup>157</sup>

A few courts have recognized that cease and desist letters sent to the accused infringer may satisfy *Seagate*'s secondary question.<sup>158</sup> For example, the district court in *Ball Aerosol & Specialty Container v. Limited Brands* found that the patentee met its burden to prove that the infringer knew of the objectively high likelihood of infringement in part because it sent a cease and desist letter to the accused infringer.<sup>159</sup> Similarly, the court in *Church & Dwight* denied the infringer's motion for judgment as a matter of law on the willfulness issue because the patentee introduced evidence that it sent a cease and desist letter that included a detailed narrative describing how no plausible non-infringing alternatives could be produced.<sup>160</sup>

On the other hand, the district court in *TGIP v. AT&T* found that two letters accusing the defendant of infringement were insufficient to justify the jury's conclusion of willful infringement when the defendant had obtained competent opinion of counsel concluding that the patents were

156. See *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1336 (Fed. Cir. 2009) ("evidence of copying in a case of direct infringement is relevant only to *Seagate*'s second prong, as it may show what the accused infringer knew or should have known about the likelihood of its infringement"); *i4i Ltd. P'ship v. Microsoft Corp.*, 2010 U.S. App. LEXIS 5010 at \*62–66 (Fed. Cir. Mar. 10, 2010) (jury determination of willfulness was supported by evidence that defendant had attended product trainings and received product sales kits marked "patented" with a reference to the patent-in-suit).

157. *In re Seagate Tech.*, 497 F.3d at 1371.

158. See *Church & Dwight Co., Inc. v. Abbott Labs.*, No. 05-2142, 2008 WL 2565349 at \*10 (D. N.J. Jun. 24, 2008); *Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc.*, 553 F. Supp. 2d 939, 954–56 (N.D. Ill. 2008); *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 579 (E.D. Tex. 2007).

159. *Ball Aerosol & Specialty Container*, 553 F. Supp. 2d at 954–55.

160. *Church & Dwight Co.*, 2008 WL 2565349 at \*10.

invalid or not infringed.<sup>161</sup> In yet another variation, the District Court of Minnesota in *Northbrook Digital v. Browster* viewed the lack of notice before filing the infringement complaint as an indicator that the infringement was not willful.<sup>162</sup>

District courts have not limited analysis of *Seagate*'s secondary question to formal notice of the patent in suit, however. For example, one court found infringement willful based in part on knowledge the defendant gained during licensing negotiations with the patentee.<sup>163</sup> Although the negotiations eventually broke down, the accused infringer used technical drawings and pricing information shared during the negotiations to design its own competing product.<sup>164</sup>

The court in *Church & Dwight* reasoned that the accused infringer knew of the objectively defined risk of infringement based in part on evidence that it tried to secure indemnifications to limit its infringement liability exposure and sold off the relevant business unit to avoid infringement issues.<sup>165</sup>

Widespread media publicity of the patent-in-suit and a third party licensing agreement were sufficient to satisfy the *Seagate* standard in *Depomed v. Ivax Corporation*.<sup>166</sup> While the court clearly rationalized such evidence as indicating "that a reasonable party in [the defendant's] position would have or should have known of the existence of the [patent at issue]," the court incorrectly analyzed the two *Seagate* inquiries simultaneously.<sup>167</sup> But the court incorrectly found these facts dispositive—the *Seagate* standard asks whether the infringer knew or should have known of the objectively-defined risk of infringement, and not simply of the plaintiff's valid patent.<sup>168</sup> The appropriate weight to afford evidence of this kind is considered in Part V.C.5, *infra*.

Similarly, the Special Master in *Veritas Operating v. Microsoft* skipped over *Seagate*'s threshold question and simply stated:

the . . . evidence falls well short of raising a genuine issue of material fact that Microsoft was objectively reckless in making, using, offering to sell and selling the accused products, or in its communications with its customers regarding the accused products. [T]here is no dispute that no

161. See *TGIP*, 527 F. Supp. 2d at 579.

162. See *Northbrook Digital Corp. v. Browster, Inc.*, No. 06-4206, 2008 WL 4104695 at \*6-7 (D. Minn. Aug. 26, 2008).

163. See *Ball Aerosol & Specialty Container*, 553 F. Supp. 2d at 954-55.

164. *Id.*

165. See *Church & Dwight Co.*, 2008 WL 255349 at \*10.

166. See *Depomed, Inc. v. Ivax Corp.*, 532 F. Supp. 2d 1170, 1186 (N.D. Cal. 2007).

167. See *id.*

168. See *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007).

one at Microsoft actually knew of the [patent-in-suit], much less considered that patent in connection with any commercial activities involving the accused products.<sup>169</sup>

The *Depomed* court also gave strong weight to the amount of time that had elapsed between issuance of the plaintiff's patent and the infringing conduct.<sup>170</sup> But because the court conflated the two separate *Seagate* inquiries, it is unclear whether this evidence was applied to the threshold question, the secondary question, or both.<sup>171</sup> Nonetheless, the court stated that two years was "ample time [for a reasonable party] to investigate and discover the relevant patent."<sup>172</sup> Again, this analysis missed the mark *Seagate* announced—the inquiry focuses on whether the risk of infringement was known or so obvious that it should have been known to the defendant. In contrast, the *Depomed* court essentially equated the patent itself with the objective risk of infringement despite the Federal Circuit's palpable efforts to point out the difference.<sup>173</sup>

Knowledge of a pending patent *application* was relevant—but not dispositive—in determining whether the defendant in *Trading Technologies* knew or should have known of the risk of infringement.<sup>174</sup> Citing to pre-*Seagate* case law, the court admitted that "pre-patent conduct is relevant to a determination of willfulness,"<sup>175</sup> but that mere knowledge of a patent application, without more, is insufficient to satisfy *Seagate's* secondary question.<sup>176</sup>

With a few exceptions, then, district courts are confused on how to apply *Seagate*. They have generally applied arbitrary methodologies inconsistent with each other and inconsistent with *Seagate's* two-part standard. In addition, courts are unsure what facts are relevant to each prong of the new willfulness standard. To facilitate the courts' adoption of a willfulness

169. See *Veritas Operating Corp. v. Microsoft Corp.*, 562 F. Supp. 2d 1141, 1286 (W.D. Wash. 2008).

170. *Depomed*, 532 F. Supp. 2d at 1185.

171. The relevant paragraph of the court's opinion begins "[t]here is substantial evidence that would support the conclusion that Ivax sold Metformin ER despite an objectively high likelihood that its actions constituted infringement of Depomed's valid patents." But after discussing the evidence, the same paragraph concludes "[t]his evidence weighs in favor of Depomed's argument that a reasonable party in Ivax's position would have or should have known of the existence of the '475 patent." *Id.* at 1185–86.

172. *Id.* at 1186.

173. See *In re Seagate Tech.*, 497 F.3d at 1371 ("the patentee must also demonstrate that *this objectively-defined risk (determined by the record developed in the infringement proceeding)* was either known or so obvious that it should have been known to the accused infringer") (emphasis added).

174. See *Trading Techs. Int'l, Inc. v. eSpeed, Inc.*, 2008 WL 63233 at \*1 (N.D. Ill. 2008).

175. *Id.* at \*2 (citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1581 (Fed. Cir. 1992)).

176. *Id.* at \*2.

test consistent both with the letter and the spirit of *Seagate*, this note now considers what evidence may be relevant to each prong of the new standard.

#### IV. DISCUSSION: WHAT FACTORS SHOULD A DISTRICT COURT CONSIDER WHEN FACED WITH A WILLFUL INFRINGEMENT CLAIM AFTER *SEAGATE*?

Enhanced damages for willful patent infringement are punitive in nature.<sup>177</sup> Punitive damages are assessed in civil cases based on the actor's culpability.<sup>178</sup> The Supreme Court stated in *State Farm Mutual Insurance v. Campbell* that "punitive damages should only be awarded if the defendant's culpability, after having paid compensatory damages, is so reprehensible as to warrant the imposition of further sanctions to achieve punishment or deterrence."<sup>179</sup>

The Supreme Court's punitive damage framework applies to all substantive divisions of civil law.<sup>180</sup> Dozens of federal courts have relied on *State Farm* to analyze a wide array of civil punitive damage awards.<sup>181</sup> In his concurrence-in-part in *Knorr-Bremse*, Judge Timothy Dyk cited *State Farm* as a guideline for determining whether the Federal Circuit's affirmative duty of care requirement comported with general principles of punitive damages.<sup>182</sup> Punitive damages for willful patent infringement, therefore, share a common general purpose and framework with punitive damage jurisprudence in other areas of civil law.

177. See, e.g., *Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 (Fed. Cir. 1996); *Underwater Devices, Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389 (Fed. Cir. 1983) (enhanced damages are punitive when assessed for willful infringement); *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (noting that the *Underwater Devices* standard "allows for punitive damages in a manner inconsistent with Supreme Court precedent").

178. See *State Farm Mut. Auto Ins. Co. v. Campbell*, 538 U.S. 408, 419 (2003) (citing *BMW of N. Am. v. Gore*, 517 U.S. 559, 575 (1996)).

179. *Id.*

180. See AM. BAR ASS'N, PUNITIVE DAMAGES AND BUSINESS TORTS 2 (Thomas J. Collin, ed. 1998) ("As a general proposition, punitive damages are damages awarded to punish a person for extreme or outrageous acts").

181. See, e.g., *Chicago Title Ins. Corp. v. Morgan*, 487 F.3d 985 (6th Cir. 2007) (breach of non-compete agreement and tortious interference with contract); *Bach v. First Union Nat'l Bank*, 486 F.3d 150 (6th Cir. 2007) (violation of Fair Credit Reporting Act); *Action Marine, Inc. v. Continental Carbon, Inc.*, 481 F.3d 1302 (11th Cir. 2007) (common law nuisance and trespass from noxious carbon black emissions); *Romanski v. Detroit Entm't, L.L.C.*, 428 F.3d 629 (6th Cir. 2005) (civil rights violation under § 1983); *White v. Burlington N. & Santa Fe Ry. Co.*, 364 F.3d 789 (6th Cir. 2004) (Title VII action); *Motorola Credit Corp. v. Uzan*, 388 F.3d 39 (2d Cir. 2004) (federal RICO violations in fraudulent loan applications); *Stogsdill v. Healthmark Partners, L.L.C.*, 377 F.3d 827 (8th Cir. 2004) (medical malpractice).

182. See *Knorr-Bremse*, 383 F.3d 1337, 1348 (Dyk, J., concurring-in-part and dissenting-in-part).



In *Seagate*, the Federal Circuit expressly sought to realign willfulness in patent infringement with willfulness in other areas of civil liability.<sup>183</sup> Because punitive damages serve to punish and deter culpable conduct, factors relevant for proving objective recklessness in other areas of non-criminal law are instructive in building a concrete test for the new standard after *Seagate*. Considering the policy goals driving patent law, comparable areas of civil liability, and preliminary judicial interpretations of the new standard, a set of factors for analyzing an infringer's conduct emerges.

A. *Are the Bott and Read Factors Still Relevant?*

The *Bott* and *Read* Factors were developed under a subjective willfulness standard.<sup>184</sup> Their continued validity as a comprehensive test for willfulness after *Seagate* is therefore suspect, and some district courts have already questioned their relevancy.<sup>185</sup> The *Seagate* opinion itself strongly suggests that the Federal Circuit no longer considers them determinative.<sup>186</sup> While the court did not expressly abrogate the existing Factors, it invited future courts to "further develop the application of this standard," implying that the willfulness analysis should not include the *Bott* and *Read* Factors.<sup>187</sup> In addition, court-led development would be logically unnecessary if the *Bott* and *Read* Factors were still adequate to assess a defendant's conduct under the new objective recklessness standard.

Specifically, two of the three *Bott* Factors expressly consider the infringer's subjective state of mind. But the Federal Circuit clearly stated in *Seagate* that "[t]he state of mind of the accused infringer is not relevant to this objective inquiry."<sup>188</sup> The third *Bott* Factor considers the infringer's conduct during litigation, and is therefore irrelevant in assessing the *prospective* risk that its planned conduct may infringe a valid patent.

One of the *Read* Factors considers whether the defendant had a "motivation for harm"—a subjective inquiry into the accused infringer's state of mind.<sup>189</sup> The remainder of the *Read* Factors primarily guide the district courts in deciding how much to enhance damages—not whether enhance-

183. See *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (noting that willfulness in patent infringement "fails to comport with the general understanding of willfulness in the civil context") (citing *McLaughlin v. Richland Shoe Co.*, 486 U.S. 128, 133 (1988)).

184. See *supra* Part I.B.

185. See *Depomed, Inc. v. Ivax Corp.*, 532 F. Supp. 2d 1170, 1177 (N.D. Cal. 2007); *Informatica Corp. v. Bus. Objects Data Integration, Inc.*, 527 F. Supp. 2d 1076, 1082–83 (N.D. Cal. 2007).

186. See *In re Seagate Tech.*, 497 F.3d at 1370–71.

187. *Id.* at 1371.

188. *Id.*

189. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992) (citing *Am. Safety Table Co. v. Schreiber*, 415 F.2d 373, 379 (2d Cir. 1979)).

ment is authorized.<sup>190</sup> But under *Seagate* such an inquiry is not necessary until the patentee proves the infringer acted willfully. Thus while the *Bott* and *Read* Factors are no longer appropriate in assessing the objective recklessness of the infringer's conduct, district courts may still find them useful in gauging the extent of damage enhancement once willfulness under *Seagate* has been determined.<sup>191</sup>

Traditionally, an assessment of an infringer's allegedly willful conduct has been based on the "totality of the circumstances" standard.<sup>192</sup> There is no indication in *Seagate*'s majority opinion that would suggest that the Federal Circuit altered the scope of that inquiry. Indeed, Judge Newman's concurring opinion implies that the scope of the willfulness inquiry should still consider all available circumstances.<sup>193</sup> Accordingly, any set of discrete factors for gauging an infringer's willful conduct will necessarily fall short of "exhaustive." Thus, in addition to the Proposed Factors presented below, courts should consider any additional evidence relevant to the two-part willfulness test.<sup>194</sup>

*B. Assessing the Threshold Question: What Factors Show an "Objectively High Likelihood" that the Defendant's Conduct Would Infringe Another's Valid Patent?*

The threshold question asks whether the defendant "acted despite an objectively high likelihood that its actions constituted infringement of a valid patent."<sup>195</sup> In other words, a patentee must show by clear and convincing evidence that its valid patent claimed an invention so close to the defendant's conduct that the probability that such conduct infringed the

190. *Id.* (noting that the factors are useful "particularly in deciding on the extent of [damage] enhancement").

191. At least one district court has considered the *Read* Factors in determining the extent of damage enhancement under *Seagate*. See *Informatica Corp. v. Bus. Objects Data Integration, Inc.*, 527 F. Supp. 2d 1076, 1082–83 (N.D. Cal. 2007).

192. See *Powers & Carlson*, *supra* note 33, at 82.

193. See *In re Seagate Tech.*, 497 F.3d 1360, 1385 (Fed. Cir. 2007) (Newman, J., concurring opinion) (The standards of behavior by which a possible infringer evaluates adverse patents should . . . include [the] reasonableness of the actions taken *in the particular circumstances.*) (emphasis added). *But see* *Depomed, Inc. v. Ivax Corp.*, 532 F. Supp. 2d 1170, 1177 (N.D. Cal. 2007) ("It is unsettled whether the Federal Circuit's prior 'totality of the circumstances' test is now abrogated . . .").

194. For example, one of the four factors courts in the Fourth Circuit consider when presented with a claim for willful copyright infringement is "any other relevant factor presented." *Rosciszewski v. Arete Assoc., Inc.*, 1 F.3d 225, 234 (4th Cir. 1993) (citing *Lieb v. Topstone Indus.*, 788 F.2d 151, 155–56 (3d Cir. 1986)).

195. *In re Seagate Tech.*, 497 F.3d at 1371 (noting that, in general, "the civil law generally calls a person reckless who acts . . . in the face of an unjustifiably high risk of harm that is either known or so obvious that it should be known.") (quoting *Farmer v. Brennan*, 511 U.S. 825, 836 (1994), which in turn cites *Prosser & Keaton* § 34, pp. 213–14; *Restatement (Second) of Torts* § 500 (1965) (emphasis added)).

patent was objectively high.<sup>196</sup> Evidence as to the nature of the defendant's conduct before and while engaging in the allegedly infringing activities are thus relevant.<sup>197</sup> The objective recklessness standard was adopted to bring patent jurisprudence in line with other areas of tort law.<sup>198</sup> Factors relevant to the threshold question, therefore, can be compiled by analogizing to other areas of tort law similarly concerned with an actor's objectively reckless conduct.

Proposed Threshold Factor 1. Similarity of the patented invention to the defendant's infringing conduct.

The risk that conduct will infringe a patent is highest when the activity precisely matches the claimed invention.<sup>199</sup> Conversely, the risk is lowest when the conduct and the patented invention bear no relation at all. Thus, the most important factor in assessing the risk of infringement is to determine how similar the defendant's conduct is to the patented invention.

The majority opinion in *Seagate* indirectly supports this principle: The court noted that patentees can guard against post-filing willful infringement by moving for a preliminary injunction.<sup>200</sup> If the district court denies the motion for preliminary injunction, it is unlikely that the post-filing infringing conduct was willful.<sup>201</sup> In other words, "[a] substantial question about . . . infringement is likely sufficient not only to avoid a preliminary injunction, but also a charge of willfulness based on post-litigation conduct."<sup>202</sup>

As for pre-litigation conduct, evidence that the defendant attempted to secure rights in the technology or design around the patent at issue is probative because it suggests that the patented technology and the defendant's intended conduct were substantially similar. First, evidence that the defendant filed a patent application on the technology suggests that it considered its innovation to be distinct from the patentee's rights.<sup>203</sup> Under the Patent Act, an inventor can only be awarded a patent if his invention is,

196. See *In re Seagate Tech.*, 497 F.3d at 1371.

197. See *id.* at 1374 ("in ordinary circumstances, willfulness will depend on an infringer's prelitigation conduct").

198. *In re Seagate Tech.*, 497 F.3d at 1371.

199. See generally William W. Cochran II, *Review of Selected Cases from the CAFC Relating to Infringement Under the Doctrine of Equivalents and Literal Infringement Under Paragraph 6, 35 USC 112*, 29 IDEA 253 (1989).

200. *In re Seagate Tech.*, 497 F.3d at 1374.

201. See *id.*

202. *Id.*

203. This assumes, of course, that the defendant filed its application in compliance with the PTO's guideline that applicants provide copies of all relevant prior art to the examiner for consideration.

*inter alia*, novel.<sup>204</sup> If the defendant's application was rejected for lack of novelty, the objective risk that future activity utilizing that technology will infringe another's patent rights is extremely high because another inventor already secured rights in that same technology through a U.S. patent.<sup>205</sup> Similarly, evidence that the patentee's invention was involved in an interference proceeding<sup>206</sup> with the defendant's patent application strongly suggests that the defendant's conduct was very similar to the patented invention.

Second, evidence that the defendant tried in vain to license rights from the patentee strongly suggests that subsequent conduct in the same field would be highly likely to infringe.<sup>207</sup> If the defendant failed to secure rights in the patent at issue, but then proceeded to use the unlicensed technology anyway, courts may justifiably conclude that the objective risk of infringement was high.

Evidence of the defendant's efforts to design around the claims of a patent presents a challenging situation in light of the new objective standard. The U.S. patent system seeks in part to encourage inventors to design multiple solutions to a given problem.<sup>208</sup> The public receives the benefit of choice in available goods and services, competitors are not completely boxed out of a market niche by losing the race to invent "the" solution to a given problem, and competition within that market niche is thus fostered.<sup>209</sup>

204. See 35 U.S.C. § 102 (2006). Novelty is a term of art that limits patent awards to inventors in several ways. The limitations most relevant to an inquiry into the objective risk that a defendant's conduct may infringe a valid patent are found in §§ 102(a) and (g). The Patent Office will reject an application for patent when the invention has already been patented by someone else in the United States. And under § 102(g), an applicant may be denied a patent in favor of another applicant who actually invented the technology first.

205. A rejection for lack of novelty may also be strong evidence that the defendant knew or should have known of the objectively high risk that his conduct would infringe another's patent rights, a topic discussed further in Part IV.B., *infra*.

206. Interference proceedings are conducted by the United States Patent and Trademark Office when two patent applications, or one application and one issued, unexpired patent, both claim the same invention. The interference proceeding determines which applicant invented the technology first and will therefore receive the patent. See 35 U.S.C. § 135. See also ROGER SCHECHTER & JOHN THOMAS, PRINCIPLES OF PATENT LAW 118 (2d ed. 2004).

207. See *Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc.*, 553 F. Supp. 2d 939, 954 (N.D. Ill. 2008). Cf. *King Inst. Corp. v. Otari Corp.*, 767 F.2d 853, 867 (Fed. Cir. 1985).

208. See *State Indus., Inc. v. A.O. Smith Corp.*, 751 F.2d 1226 (Fed. Cir. 1985). The court stated: One of the benefits of a patent system is its so called 'negative incentive' to 'design around' a competitor's products, even when they are patented, thus bringing a steady flow of innovations to the marketplace. It should not be discouraged by punitive damage awards except in cases where conduct is so obnoxious as clearly to call for them.

*Id.* at 1236.

209. See *Holbrook*, *supra* note 9, at 131 (citing Federal Circuit case law acknowledging that the U.S. patent system encourages a patentee's competitors to "design around" existing patents).

But a purely objective inquiry—one that ignores relevant policy goals of the patent system—may well view design-around activity as a clear indicator that the defendant’s conduct was close enough to the patented invention that the risk of infringement was objectively high. If the patent’s claim scope and the defendant’s conduct were dissimilar, after all, design-around efforts would be unnecessary. Considering that willfulness is only a relevant inquiry once actual infringement is proven, however, evidence of design-around activity merely indicates a subjective intent to try to avoid infringement liability. While *Seagate* clearly dismissed subjective intent as a relevant factor, it is also clear that the Federal Circuit did not endeavor to undermine the patent system’s policy rationales.

Indeed the Federal Circuit has previously favored the policy goal of encouraging design-around efforts over punitive damage interests.<sup>210</sup> Applying the pre-*Seagate* subjective willfulness standard in *Westvaco v. International Paper*, the court reversed a district court finding that Westvaco willfully infringed International Paper’s patents, stating that design-around efforts “should not be discouraged by punitive damage awards except in cases where conduct is so obnoxious as clearly to call for them.”<sup>211</sup>

A bright line rule exempting all infringers from enhanced damage awards upon a showing of design-around activities is therefore inappropriate. One recent Federal Circuit decision supports the view that evidence demonstrating the defendant’s efforts to avoid infringement by designing around a patented product is relevant to the threshold question.<sup>212</sup> Evidence of the specific design-around steps is therefore relevant to determine whether, for example, the accused infringer “made specific structural changes to its product . . . to avoid infringement.”<sup>213</sup>

Proposed Threshold Factor 2. Opinion of counsel obtained by the defendant before engaging in the conduct at issue.

Despite the Federal Circuit’s rejection in *Knorr-Bremse* of the adverse inference drawn from failure to obtain an opinion of counsel, corporate actors still find such opinions useful in assessing the risk a proposed course of action may bring on the company.<sup>214</sup> Generally, opinions of counsel

210. See *Westvaco Corp. v. Int’l Paper Co.*, 991 F.2d 735, 745 (Fed. Cir. 1993).

211. *Id.* (quoting *State Indus.*, 751 F.2d at 1235–36).

212. See *i4i Ltd. P’ship v. Microsoft Corp.*, No. 2009-1504, 2010 U.S. App. LEXIS 5010 (Fed. Cir. Mar. 10, 2010).

213. *Id.*

214. See Alejandro Menchaca, Shareholder, McAndrews Held & Malloy, Ltd., Presentation at the 52d Annual Intellectual Property Law Conference: Recent Developments in Patent, Trademark, Copyright & Trade Secret Law (Feb. 29, 2008) (on file with author).

analyze the client's proposed conduct in light of issued patents covering similar technologies or processes. The opinion typically considers three independent questions: (1) whether the existing patent is valid, (2) whether the existing patent is enforceable, and (3) whether the proposed conduct is so similar to the rights secured by the patent to be considered infringement. The conclusions are relevant in determining the objective level of risk that the proposed conduct would infringe another's patent because they represent the unbiased assessments of a patent professional.

For example, an opinion concluding that the patent at issue was valid, enforceable, and the defendant's proposed conduct would likely infringe the scope of the patent's claims clearly establishes an objectively high likelihood that the proposed conduct would infringe. Of course, a defendant is not likely to rely on such an opinion to defend against a claim of willful infringement, and under *Knorr-Bremse*, a fact finder may no longer draw an adverse inference from a defendant's choice not to rely on an opinion. But should an opinion like this find its way into evidence, a court should conclude the objective risk of infringement was high.

More likely is the case where the defendant relies on an opinion concluding that the plaintiff's patent is invalid, unenforceable, and that the defendant's proposed conduct is not likely to infringe a valid and enforceable patent. Presuming such an opinion is an objective assessment of the scope of the patent and the defendant's proposed course of action,<sup>215</sup> evidence of this nature strongly suggests that the risk that the defendant's conduct may infringe the patent was objectively low.

Courts are also likely to encounter opinions of counsel that raise serious questions as to the patent's validity. Such evidence indicates an objectively low likelihood of infringement after *Seagate* because the standard considers the level of risk of infringing "a valid patent."<sup>216</sup> When the conduct encroaches on the claims of an invalid patent, therefore, the risk must be low because patent law provides no protection for inventions in the public domain.<sup>217</sup>

215. See, e.g., *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1580 (Fed. Cir. 1992); *Underwater Devices, Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1390 (Fed. Cir. 1983).

216. *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007).

217. See, e.g., *Egbert v. Lippmann*, 104 U.S. 333 (1881); *Moleculon Res. Corp. v. CBS, Inc.*, 793 F.2d 1261 (Fed. Cir. 1986); *Safoco, Inc. v. Cameron Int'l Corp.*, No. H-05-0739, 2009 U.S. Dist. LEXIS at \*63-77 (S.D. Tex. July 31, 2009) (reexamination of patent-in-suit suggests the lack of an objectively high risk of infringement, but is not dispositive); *St. Clair Intell. Prop. Consultants, Inc. v. Matsushita Elec. Tndus. Co., Ltd.*, No. 04-1436, 2009 U.S. Dist. LEXIS 66359 at \*7-9 (D. Del. July 28, 2009).

The Federal Circuit recently endorsed a similar view in *Black & Decker*, one of the first cases involving willfulness to reach the appellate court after *Seagate*.<sup>218</sup> Although the willfulness issue was moot after the court reversed the district court's claim construction, the circuit noted that "credible invalidity arguments demonstrate the lack of an objectively high likelihood that a party took actions constituting infringement of a valid patent."<sup>219</sup> Should credible invalidity arguments appear in an opinion of counsel, therefore, the risk of infringement is objective low.

For similar reasons, an opinion of counsel concluding that the patent at issue is unenforceable also indicates an objectively low risk of infringement. Again, the *Seagate* standard only considers the risk of infringement of "a valid patent."<sup>220</sup> While judicial findings of unenforceability are relatively rare,<sup>221</sup> an infringer's reliance on a competent opinion of counsel clearly proffering persuasive evidence of unenforceability should not be considered per se unreasonable.<sup>222</sup>

In sum, a competent pre-litigation opinion that concludes that the risk of infringement is low, raises credible invalidity arguments, or lays out strong evidence of unenforceability strongly suggests that the objective likelihood of infringement is low. On the other hand, an opinion that concludes that the risk of infringement is high, raises weak or strained invalidity arguments, or uncovers no evidence of unenforceability strongly suggests that the objective likelihood of infringement is high.

### Proposed Threshold Factor 3. Characteristics of the defendant's commercial market including patent saturation and the pace of innovation.

Because *Seagate* prescribes an objective standard, the inquiry must consider the reasonableness of the infringer's conduct compared to similarly situated actors. Reasonable conduct in one industry may not be the same as reasonable conduct in another industry.<sup>223</sup> Judge Newman suggested that

218. *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, 260 F. App'x 284, 291 (Fed. Cir. 2008).

219. *Id.*

220. *In re Seagate Tech.*, 497 F.3d at 1371.

221. *See Burlington Indus., Inc. v. Dayco Corp.*, 849 F.2d 1418, 1422 (Fed. Cir. 1988) (describing the assertion of the unenforceability by inequitable conduct defense in patent infringement litigation as "an absolute plague" and noting that the defense is meritless except for "a small percentage of the cases").

222. *But see* John F. Lynch, *An Argument for Eliminating the Defense of Patent Unenforceability Based on Inequitable Conduct*, 16 AIPLA Q.J. 7, 8 (1988).

223. *See* RESTATEMENT (THIRD) OF TORTS § 13(a) (Proposed Final Draft No. 1 2005) ("An actor's compliance with the custom of the community, or of others in like circumstances, is evidence that the actor's conduct is not negligent but does not preclude a finding of negligence."); RESTATEMENT (THIRD) OF TORTS § 13(b) (Proposed Final Draft No. 1 2005) ("An actor's departure from the custom of

the “standards of fair commerce, including [the] reasonableness of the actions taken in the particular circumstances” are relevant to the new objective willfulness inquiry.<sup>224</sup> Taking cue from her concurring opinion,<sup>225</sup> two sub-factors examining the specific field of technology at issue in the litigation fine-tune this inquiry.

One objective measure of the risk that activity may infringe is the level of patent saturation in the relevant field. When patenting innovation is commonplace in the relevant market, then the risk of infringing another’s patent in that market is objectively higher than for a distinct market where patents are rarely obtained. Additionally, a large number of patents on components used in the relevant market may suggest that infringement in that field is almost per se likely. Marketable devices unique to that field that necessarily require use of those patented components increases the risk of infringement for any actor in that field.

A second objective gauge of the risk of infringement is the pace of innovation in that field. For example, a defendant active in a market with a high rate of innovation is more likely to engage in infringing conduct because the number of patents issued in that field increases rapidly. While rapid innovation also indicates that patentable inventions are easier to develop than in a slow-innovating field, a defendant actively involved in a rapidly advancing industry is simply competing with a larger number of inventors for a limited number of possible innovations. The objective risk of overlapping conduct in a fast-growing industry is therefore higher than in a slow-developing market.

Patent saturation and innovation pace are essentially qualitative in nature. But basic statistical data may be available from publicly available market sales and marketing reports, industry trade publications, popular media, or even the United States Patent Office web site.

#### Proposed Threshold Factor 4. Legitimate defenses to infringement raised at trial.

The Federal Circuit remanded the *Black & Decker* infringement verdict against Bosch on claim construction grounds.<sup>226</sup> But because the district court would also have to rehear the infringement and willful infringement issues based on the modified claim construction, the Federal

the community, or of others in like circumstances, in a way that increases risk is evidence of the actor’s negligence but does not require a finding of negligence”).

224. *In re Seagate Tech.*, 497 F.3d at 1385 (Newman, J., concurring).

225. *See id.* at 1384–85.

226. *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, 260 F. App’x 284, 290 (Fed. Cir. 2008).



Circuit noted in dicta that “legitimate defenses to infringement claims . . . demonstrate the lack of an objectively high likelihood that a party took actions constituting infringement of a valid patent.”<sup>227</sup>

This statement presents an interesting chronological conundrum. On the one hand, legitimate infringement defenses are only raised at trial when the party’s conduct is in question by the patentee. But the willfulness standard set forth in *Seagate* considers the objective risk of infringement when the defendant began its infringing conduct—long before any threats of litigation by the parties. Did the Federal Circuit intend to incorporate *litigation conduct* into the willful infringement inquiry?

A better explanation is that the court was addressing two separate issues simultaneously. *Black & Decker*, the prevailing patentee at the district court, was awarded damage enhancement based on the jury’s finding of willful infringement on Bosch’s part, and also moved for attorneys’ fees under Section 285.<sup>228</sup> Reasonable attorneys’ fees can be awarded to a prevailing patentee when the case is “exceptional.”<sup>229</sup> Courts have long held that a finding of willful infringement is sufficient for determining that a case is “exceptional.”<sup>230</sup> The district court explicitly discussed willfulness as sufficient to awarding attorneys’ fees, and went so far as to consider Bosch’s litigation conduct under the *Bott* and *Read* Factor analysis for willfulness. The district court in *Black & Decker* ultimately concluded that Bosch’s litigation conduct was not sufficiently in bad faith to award attorneys’ fees, but that it, in combination with the other factors, justified enhancement of the damages.<sup>231</sup> Thus it is possible that the Federal Circuit was simultaneously responding to the relevancy of litigation conduct in both the willfulness and fee-shifting provisions of the Patent Act.

District Courts have split on the relevance of invalidity and noninfringement arguments raised solely at trial. Some find the evidence relevant to the threshold question.<sup>232</sup> Others reject this approach because the rele-

227. *Id.* at 291.

228. See 35 U.S.C. § 285 (2006) (“The court in exceptional cases may award reasonable attorney fees to the prevailing party”).

229. *Id.*

230. See *Group One, Ltd. v. Hallmark Cards, Inc.*, 407 F.3d 1297, 1308 (Fed. Cir. 2005) (“[a]n express finding of willful infringement is a sufficient basis for classifying a case as ‘exceptional’”) (quoting *Modine Mfg. Co. v. Allen Group, Inc.*, 917 F.2d 538, 543 (Fed.Cir.1990)).

231. *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 3359349 at \*5, 10 (N.D. Ill. 2006).

232. See, e.g., *ResQNet.com, Inc. v. Lansa, Inc.*, 533 F. Supp. 2d 397, 420 (S.D.N.Y. 2008); *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1337 (Fed. Cir. 2009).

vant time period is not during trial, but during the allegedly infringing conduct.<sup>233</sup>

Because of the difficulties in chronology, however, the better position is that legitimate defenses raised at trial are irrelevant to an objective willfulness inquiry under the *Seagate* standard. Of course, legitimate defenses raised at trial may still be relevant to the willfulness inquiry, especially when the defendant engaged in its allegedly infringing behavior with such a defense already in hand.<sup>234</sup> Nonetheless, until the Federal Circuit clarifies its position on their proper role, defenses raised at trial against infringement seem to be relevant to the threshold question.<sup>235</sup>

*C. Assessing Seagate's Secondary Question: What Factors Show that the Risk of Infringement was Either Known or So Obvious that it Should Have Been Known?*

Once a patentee has proven by clear and convincing evidence that the risk of infringement was objectively high, he must also prove “that this objectively-defined risk . . . was either known or so obvious that it should have been known to the accused infringer.”<sup>236</sup> Mere awareness of the patent at issue is not sufficient to satisfy this second prong because the standard refers to the objectively high risk of infringement, not the risk that a valid patent exists.<sup>237</sup> The *Seagate* court relied on Prosser and Keeton's classic torts treatise and the Second Restatement of Torts when crafting this second prong.<sup>238</sup> Accordingly, establishing appropriate factors for assessing whether the infringer knew or should have known of the risk his conduct may infringe may be derived from comparable areas of tort law.

233. See *i4i Ltd. P'ship v. Microsoft Corp.*, No. 2009-1504, 2010 U.S. App. LEXIS 5010 at \*66-67 (Fed. Cir. 2010).

234. See *supra* Part IV.B.2.

235. See *Black & Decker*, 260 F. App'x at 291. Although *Black & Decker* is a non-precedential opinion, several district courts have relied on it when applying *Seagate*. See, e.g., *Kleen-Tex Indus., Inc. v. Mountville Mills, Inc.*, No. 3:03-CV-093-JTC, 2008 WL 2486363 at \*8 (N.D. Ga. Mar. 3, 2008); *Kellogg v. Nike, Inc.*, No. 8:07CV70, 2008 WL 3875299 at \*1 (D. Neb. Aug. 14, 2008).

236. *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007).

237. See *id.*

238. See *id.* (quoting *Farmer v. Brennan*, 511 U.S. 825, 836 (1994)). In *Farmer*, the Supreme Court noted the difference between civil and criminal recklessness in deciding whether a transsexual inmate's Eighth Amendment right against cruel and unusual punishment was violated by prison officials that failed to protect him from harm at the hands of other inmates. In distinguishing civil and criminal recklessness, the Court cited Prosser and Keeton and the Second Restatement of Torts for the proposition that civil recklessness does not require actual knowledge by a tortfeasor, but that the unjustifiably high risk of harm must either be “known or [is] so obvious that it should be known.” *Id.* at 836. Ultimately, the Court held that *Farmer's* Eighth Amendment claim was governed by the subjective criminal recklessness standard. *Id.* at 837.

Proposed Secondary Factor 1. Evidence that the patentee provided clear notice that the defendant's specific conduct will infringe his issued patent.

Before *Seagate*, actual knowledge of the patent was generally dispositive of the willfulness issue because knowledge triggered the affirmative duty to exercise due care to avoid infringement.<sup>239</sup> Although the affirmative duty to exercise due care was abrogated, *Seagate* somewhat restored the importance of actual knowledge in the new standard. But the court was careful to point out that actual knowledge of the *patent* is not dispositive in the post-*Seagate* world. Instead, willfulness is shown only when "the patentee demonstrate[s] that [the] *objectively-defined risk (determined by the record developed in the infringement proceeding)* was . . . known."<sup>240</sup>

Knowledge of the patent at issue should remain a critically important factor in the *Seagate* analysis, however, because such knowledge may create an inference that the defendant knew or should have known of the risk of infringement. Conversely, proving an infringer should have known of the risk that he would infringe the patent at issue becomes very difficult—if not impossible—if the defendant had no knowledge of the patent at all.

An understanding of the importance of actual knowledge of the patent at issue may be informed by looking to an analogous situation governed by federal copyright law. The constitution's Intellectual Property Clause granted Congress the authority to regulate both patent and copyright policy.<sup>241</sup> While substantive provisions differ between the two areas, the policies underlying each have similar overtones because of their common

239. In *Imonex Services v. W.H. Munzprufer Dietmar Trenner*, the Federal Circuit summarized the pre-*Seagate* willfulness standard:

Actual notice of another's patent rights triggers an affirmative duty of due care. Constructive notice, as by marking a product with a patent number, is insufficient to trigger this duty. This court has identified several criteria for assessing damages, including, inter alia, whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed, and the duration of defendant's misconduct.

408 F.3d 1374, 1377 (Fed. Cir. 2005) (internal citations omitted). The court concluded that willfulness in the *Imonex* case turned on whether the defendants had actual knowledge of the plaintiff's patent because none of the defendants had obtained an opinion of counsel until after the infringement suit was filed. *Id.* at 1377–78. Evidence that the patentee marked its products, passed out marketing material that pointed out the products' patent protection, and even communicated with the defendants about unauthorized use of the patented products before filing suit. *Id.* at 1378. The court concluded that the defendants indeed had actual knowledge of the patents and affirmed the district court's denial of the defendants' motion for JMOL on the willfulness issue. *Id.*

240. In *re Seagate Tech.*, 497 F.3d at 1371 (emphasis added).

241. U.S. CONST. art. I, § 8, cl. 8 ("The Congress shall have Power . . . [t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries").

constitutional roots.<sup>242</sup> As is the case for patent law, enhanced damages in copyright infringement cases are available when the defendant willfully infringes the copyrighted material.<sup>243</sup> Unlike patent law, however, copyright infringement requires the plaintiff to prove either direct copying or access to the copyrighted material plus a substantial similarity between the copyrighted and infringing material.<sup>244</sup> But like the new objective recklessness standard announced in *Seagate*, willful copyright infringement can be shown “where the defendant knows that its conduct is an infringement *or is reckless in not knowing that fact.*”<sup>245</sup> Courts have held that “evidence of notice . . . before the specific acts found to have constituted copyright infringement occurred is perhaps the most persuasive evidence of willfulness.”<sup>246</sup>

In the copyright context, a non-specific cease and desist letter is generally insufficient notice to support a willfulness finding.<sup>247</sup> Similarly, a mere showing that the patentee sent the defendant a vague cease and desist letter should be insufficient by itself to satisfy the second *Seagate* prong. Rather, a cease and desist letter should at least include identification of the patent at issue and a detailed description of the allegedly infringing conduct.

The Federal Circuit noted in *Seagate* that post-filing conduct is generally less probative than pre-litigation conduct.<sup>248</sup> Accordingly, filing suit against the defendant alleging infringement should not be dispositive of *Seagate*'s second prong, especially as to the defendant's pre-litigation conduct. Likewise, simple notice pleading of willfulness in the complaint

242. See, e.g., *Eldred v. Ashcroft*, 537 U.S. 186, 201–04 (2003) (analogizing an issue of copyright term extension legislation to similar regulation in patent law); see also *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 525 n.12 (1994) (interpreting the fee-shifting provision in the Copyright Act in light of the fee-shifting provision in the Patent Act and the Lanham Act because copyright, trademark, and patent law are “related”).

243. 17 U.S.C. § 504(c)(2) (2006). See also, e.g., *Superior Form Builders, Inc. v. Dan Chase Taxidermy Supply Co., Inc.*, 74 F.3d 488, 496 (4th Cir. 1996); *Video Views, Inc. v. Sudio 21, Ltd.*, 925 F.2d 1010, 1020 (7th Cir. 1991), *cert. denied*, 502 U.S. 861 (1991).

244. See generally 18 AM. JUR. 2d *Copyright and Literary Property* § 225 (2004).

245. *Video Views*, 925 F.2d at 1020 (emphasis added). In *Video Views*, the Seventh Circuit affirmed the district court's ruling that the defendant infringed Video Views' copyrights for adult films, and also affirmed the court's finding that the plaintiff's claim for willful infringement was unsupported by the evidence. Video Views premised its claim for willful copyright infringement exclusively on evidence that it notified the accused infringer of its copyrights in films produced by a list of twelve companies. The two films shown to the public by the defendant were not produced by any of the companies listed in Video Views' notice letter.

246. *Id.* at 1021.

247. See *id.*

248. *In re Seagate Tech.*, 497 F.3d 1360, 1374 (Fed. Cir. 2007). An obvious exception to this general rule is when the defendant continues to infringe the plaintiff's patent after the complaint is filed. See *id.*

should not support a willfulness allegation as to the defendant's post-complaint conduct. Cease and desist letters should set forth more than a de minimis statement that the recipient may be infringing one or more issued patents for this first Proposed Secondary Factor to favor the patentee.

Proposed Secondary Factor 2. Opinion of counsel obtained by the defendant before engaging in the conduct at issue.

Evidence that the defendant knew or should have known of the objectively high risk that its conduct would infringe the patent at issue may also come from an opinion of counsel. Opinions of counsel generally include thorough assessments of the likelihood that the client's proposed conduct will infringe an issued patent.<sup>249</sup> After *Knorr-Bremse* and *Seagate*, however, defendants are not required to obtain such an opinion nor will the court draw a negative inference from the defendant's choice not to rely on such an opinion.<sup>250</sup> But if such evidence is offered to defend against infringement, it is also useful to determine whether the defendant knew or should have known that its conduct was likely to infringe.

First, an opinion of counsel can only show that the defendant knew or should have known of the risk if it is effectively communicated to the defendant.<sup>251</sup> Effective communication of an opinion to the client is critical because the enhanced damages provision seeks to punish culpable conduct.<sup>252</sup> This purpose is not advanced if culpability is based on the contents of an opinion of counsel that is not effectively communicated to the defendant. In *Minnesota Mining & Manufacturing v. Johnson & Johnson Orthopaedics*,<sup>253</sup> the Federal Circuit affirmed a district court finding of willfulness in part because the opinion of invalidity was rendered to the defendant orally, rather than in writing.<sup>254</sup> An oral opinion poses evidentiary problems for subsequent litigation, which typically does not occur for years after the opinion is rendered; these problems are of course solved by a written opinion.<sup>255</sup> But *Minnesota Mining* is clear that orally rendered opinions are not per se unreliable. Thus, if an opinion of counsel represents the sole basis for finding an objectively high risk of infringement in a par-

249. Questions typically addressed in opinions of counsel are discussed in Part IV.B.2., *supra*.

250. *See supra* Part I.A.

251. *See* *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1580-81 (Fed. Cir. 1992) (questioning the value of an opinion of invalidity because it was communicated orally to the client).

252. *See* RESTATEMENT (SECOND) OF TORTS § 500 (1965).

253. *Minn. Mining & Mfg. Co.*, 976 F.2d at 1580.

254. *Id.* (noting that "oral opinions are not favored" and therefore "carry less weight").

255. *Id.*

ticular case, then the infringer could only have known of that high risk if the opinion is effectively communicated, preferably in writing.

The question of whether an infringer's failure to obtain an opinion of counsel before engaging in conduct satisfies *Seagate's* alternative "should have known" option presents a bigger challenge. While a court is no longer permitted to determine willfulness exclusively based on a defendant's failure to seek legal advice,<sup>256</sup> a comprehensive analysis of the totality of the circumstances should not wholly ignore such evidence.<sup>257</sup>

Again considering an analogous situation in the copyright context guides analysis of this Factor. Like in the patent context, accused copyright infringers are not duty-bound to seek advice of counsel upon receiving notice of possible infringement. But two federal appellate courts have cited a defendant's failure to obtain legal advice as a significant indication that the copyright infringement was willful.<sup>258</sup>

Therefore, while evidence that the infringer obtained an opinion of counsel suggests he actually knew of the objective risk of infringement, evidence that the infringer failed to obtain an opinion of counsel may still indicate that he should have known of the objectively high risk. Because the conclusions in any opinion define the risk of infringement under the first prong, this Factor ultimately hinges on the nature of those conclusions.

### Proposed Secondary Factor 3. Special relationship between the patentee and the defendant.

Evidence that the infringer was in a contractual relationship with the patentee, was an independent contractor of the patentee, or was a former employer of the patentee may indicate that he knew or should have known about the patent at issue—and perhaps of the objectively high risk of infringement, too. In *i4i Limited Partnership v. Microsoft*, for example, Microsoft's infringement was found to be willful based in part on evidence that the patentee demonstrated the patented software, provided sales kits marked with the patent number, and sent marketing emails to Microsoft employees before Microsoft began developing its competing software product.<sup>259</sup>

256. See *Knorr-Bremse*, 383 F.3d at 1344; *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007).

257. I am especially grateful to Alejandro Menchaca for helpful discussions on this topic. See also Menchaca, *supra* note 214.

258. See, e.g., *Yurman Design, Inc. v. PAJ, Inc.*, 262 F.3d 101, 113 (2d Cir. 2001); *Wildlife Express Corp. v. Carol Wright Sales, Inc.*, 18 F.3d 502, 512 (7th Cir. 1994).

259. *i4i Ltd. P'ship v. Microsoft Corp.*, No. 2009-1504, 2010 U.S. App. LEXIS at \*64–65 (Fed. Cir. 2010).

Additional support for this Factor is found in trade secrets law.<sup>260</sup> Specifically, the doctrine of inevitable disclosure permits a plaintiff to enjoin a defendant that has entered into a relationship whereby disclosure of the plaintiff's trade secret is practically unavoidable, regardless of the defendant's intent.<sup>261</sup> The doctrine recognizes that an individual formerly in a special relationship with the trade secret owner—typically an ex-employee and his former employer—knew of the trade secrets, or at the very least should have known of the trade secrets because of his former role.<sup>262</sup>

Likewise, general principles of agency law prohibit agents from using the principal's confidential information for the agent's own gain.<sup>263</sup> In *Western Medical Consultants v. Johnson*,<sup>264</sup> the Ninth Circuit held that a former employee did not breach her non-compete agreement because she had no reason to know that her former employer had plans to open a competing office before she opened shop in Alaska.<sup>265</sup>

Inherent in the court's reasoning, however, is the notion that Johnson would have been in breach of the agreement even if she merely "should have known" about her former employer's plans to open an Alaskan office.<sup>266</sup> By analogy, then, evidence of a special relationship between the patentee and the defendant, including employment, contractual, fiduciary, or even familial relationships, may be relevant in determining whether the defendant knew or should have known about the patent at issue.

This Factor requires a court to additionally consider the specific scope of the infringer's relationship with the patentee because the infringer may have had limited or no access to information concerning the patent at issue. For example, evidence that the defendant licensed the patent at issue from the plaintiff is evidence that the defendant actually knew of the patent, or at the very least should have known that its own conduct similar to that

260. Trade secrets law lies at the crossroads of various legal regimes including contract law, torts, criminal law, unfair competition, agency law, and more. Most states have enacted some version of the Uniform Trade Secrets Act, a model code that defines a trade secret

as information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

UNIF. TRADE SECRETS ACT § 1 (1985).

261. See *Pepsico, Inc. v. Redmond*, 54 F.3d 1262, 1268 (7th Cir. 1995). See generally JAMES POOLEY, TRADE SECRETS § 7.02[2][b][ii] (updated 2008).

262. See *Pepsico*, 54 F.3d at 1268.

263. See RESTATEMENT (THIRD) OF AGENCY § 8.05 (2006).

264. *Western Med. Consultants, Inc. v. Johnson*, 80 F.3d 1331 (9th Cir. 1996).

265. See *id.* at 1336.

266. See *id.* at 1335.

claimed in the patent may infringe.<sup>267</sup> But evidence that the patentee hired the defendant as an independent contractor for a short-term project wholly unrelated to the patents is significantly less persuasive.

More difficult is the situation where the defendant has licensed rights from the plaintiff that are dissimilar from the infringed patent. The defendant should have known of the risk of infringement when the licensed patent is very similar to the infringed patent—for example when both patents cover similar technologies. But evidence that the licensed patent covers technology dissimilar to the infringed patent may suggest that the defendant had no reasonable basis for knowing its conduct would infringe the dissimilar patent.

Proposed Secondary Factor 4. The defendant's level of skill compared to a person having ordinary skill in the art.

One of the statutory requirements for patentability is that the invention be “non-obvious” to “a person having ordinary skill in the art.”<sup>268</sup> While the ordinary level of skill in the art objectively determines the eligibility of an invention for patent protection under the statute, the same level of ordinary skill is useful in objectively determining the level of sophistication of the accused infringer. The defendant's level of sophistication, in turn, can be useful in determining whether it “should have known” of the risk it may be infringing another's patent.<sup>269</sup>

In seeking to punish culpable behavior in developing innovation, courts should exercise care to avoid over-detering unsophisticated actors lest the fear of treble damages dissuade businesses from engaging in new competitive projects in the first place. The second *Seagate* prong must therefore consider the defendant's level of sophistication to determine what he “should have known” at the time of the allegedly infringing activities.

When the accused infringer possesses much lower skill than a person having ordinary skill in the art (“PHOSITA”), it is less likely that he knew or should have known his conduct was infringing. This is likely true, for example, when the patent at issue is outside the defendant's normal commercial market.<sup>270</sup> If the defendant engaged in conduct within his own

267. Cf. *Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc.*, 553 F. Supp. 2d 939, 954 (N.D. Ill. 2008).

268. 35 U.S.C. § 103(a) (2006).

269. The defendant's level of sophistication is not relevant to whether it infringed the patent because infringement is a strict liability tort. See *supra*, Part I.

270. Judge Newman's concurring opinion in *Seagate* seems to support this assertion: “[T]o the extent that *Underwater Devices* has been applied as a *per se* rule that every possibly related patent must be exhaustively studied by expensive legal talent, lest infringement presumptively incur treble damages,



market that infringes a patent in a different market or technological field, it is unlikely that the defendant had actual knowledge of the patent—or that the risk of infringing that patent was so obvious that he should have known about it. Even if the defendant has a level of skill similar to a PHOSITA in his own field, the level of skill he possesses in the patentee's field may be substantially less. Because willful infringement awards are a form of punitive damages,<sup>271</sup> courts should be reluctant to punish a defendant who infringes a patent outside his normal commercial market without additional evidence that he actually knew of the high risk of infringement.

On the other hand, an accused infringer possessing skill significantly greater than a PHOSITA is more likely to know of the patent. But again, the relevant inquiry is whether the infringer knew or should have known of the risk of infringement—not just of the patent itself.<sup>272</sup> Unless the accused infringer is also sophisticated as to patent law, therefore, a court should be reluctant to view this Proposed Factor as dispositive of *Seagate's* second prong. Nonetheless, a finding that the defendant is significantly more skilled than a PHOSITA in the patentee's field favors the patentee.

Proposed Secondary Factor 5. Contemporary media publicity of the patentee or its patent.

*Seagate* held that willful infringement requires proof that the infringer knew or should have known about the *risk* that his conduct infringes a valid patent. Constructive knowledge of the *patent* is nonetheless an important consideration.

Besides actual notice obtained directly from the patentee,<sup>273</sup> the defendant may learn about the patent at issue through other means, including contemporary media outlets. If coverage of the patent is pervasive enough, a fact-finder may justifiably conclude that the defendant should have known about the patent and therefore the risk that his conduct would infringe the patentee's rights.

Publicity of the patentee or its patent may take many forms. For example, the New York Times published a 1,300-word article on the front page of its Business section discussing the ramifications of a patent

I agree that the standard should be modified." *In re Seagate Tech.*, 497 F.3d 1360, 1385 (Newman, J., concurring).

271. *See, e.g., Seymour v. McCormick*, 57 U.S. 480, 488–89 (1853) (interpreting the 1836 modifications to the Patent Act as distinguishing between actual damages, which are meant to compensate the patentee for losses sustained as a result of the infringement, and discretionary damages, which are meant to punish the "wanton and malicious pirate" for bad faith infringement).

272. *In re Seagate Tech.*, 497 F.3d at 1371.

273. *See supra* Part IV.B.1.

awarded to Priceline.com covering its “buyer-driven commerce” business plan.<sup>274</sup> Such prominent placement and thorough discussion of the patent in a widely circulated periodical would support an overall finding that other online retailers should have known that similar activity would likely infringe Priceline’s patent rights.

Similarly, publication of issued patents in an industry-specific periodical may also support an overall conclusion that the defendant should have known of the risk that its conduct would infringe patented technology. For example, *Organic Process Research and Development* routinely publishes reviews of selected recently-issued patents in technical fields of interest to its readers.<sup>275</sup> Thus, proof that the defendant subscribes to the industry-specific publication where news of the plaintiff’s patent was published strongly suggests that the defendant knew or should have known that commencing activity similar to that described in the periodical would likely infringe the patent.

Lectures and exhibits at major industry trade shows, widespread publication of relevant license agreements to third parties; infringement suits, settlements, and verdicts against others; and assignment of the patent to competitors are also relevant considerations under this Factor. A court should consider how thoroughly the publication is disseminated in the relevant industry and whether an ordinary business or actor in that field subscribes to the periodical, attends the trade show, or otherwise would be exposed to the medium discussing the patentee or its patent.

#### Proposed Secondary Factor 6. Markings on the infringed product.

Infringers are only liable for monetary damages under Section 287(a) when the patented product is marked with “Patent” or “Pat.” followed by the patent number.<sup>276</sup> When marking the product is impractical, the statute permits monetary damages when the product’s label or packaging is properly marked.<sup>277</sup> Marking provides consumers of the good constructive notice of the patent.<sup>278</sup> Absent marking the actual product, damages are only

274. Peter H. Lewis, *Web Concern Gets Patent For Its Model Of Business*, N.Y. TIMES, Aug. 10, 1998, at D1, D5; U.S. Patent No. 5,794,207 (filed Sept. 4, 1996) (issued Aug. 11, 1998).

275. See, e.g., Keith Turner, *Highlights from the Patents: A Review of U.S. Patents in the Field of Organic Process Development Published during January and February 2006*, 10 ORGANIC PROCESS RES. & DEV. 381–90 (2006); Keith Turner, *Highlights from the Patents: A Review of U.S. Patents in the Field of Organic Process Development Published during November and December 2005*, 10 ORGANIC PROCESS RES. & DEV. 184–93 (2006).

276. See 35 U.S.C. § 287(a) (2006).

277. See *id.*

278. See, e.g., *Syngenta Seeds, Inc. v. Delta Cotton Coop. Inc.*, 457 F.3d 1269, 1276 (Fed. Cir. 2006); *Sentry Protection Prods., Inc. v. Eagle Mfg. Co.*, 400 F.3d 910, 918 (Fed. Cir. 2005).

allowed when the patentee proves she notified the accused infringer, but damages are then limited to conduct occurring after notice is provided.<sup>279</sup> Marking the product covered by the patent therefore serves as “notice to the public” of the patent.<sup>280</sup> In determining whether the defendant knew or should have known of the high risk of infringement, then, evidence of the notice marked on the infringed product is important.<sup>281</sup>

But simply marking the patented article should not be dispositive for several reasons. First, as a matter of statutory construction, Congress could not have meant that enhanced damages under Section 284 turns on whether the article is marked. There is no statutory language that links the enhanced damages provision to Section 287(a). Of course, enhancement of damages presumes that the patentee first proved actual damages, so as a practical matter, enhanced damages for willfulness are in fact limited to marked articles. But if Congress intended to allow enhanced damage awards simply based on marking of the articles, Sections 284 and 287(a) would more clearly reflect such a policy choice.

Second, as already discussed, marking the patented article is not always practical. This is especially true when the patented article is not tangible, for example when the patent covers a process or business method. For tangible goods that are too small or irregularly shaped, marking on the packaging may not suffice either because the accused infringer may have obtained the patented article only after the packaging (and the notice of the patent) have been discarded. Third, the accused infringer may be located in a remote geography where the patented article is not available. Even though the article may be clearly marked, the marking does not serve as adequate notice to a defendant that has never seen a sample. The infringing conduct may still be willful, though, because the defendant may very well have copied the patented article from a drawing or photograph that did not include the notice marks.

279. *See id.*

280. 35 U.S.C. § 287(a) states in part “Patentees . . . may give notice to the public that [the patented article] is patented” by marking the article as described.

281. *See* *i4i Ltd. P’ship v. Microsoft Corp.*, No. 2009-1504, 2010 U.S. App. LEXIS 5010 at \*64–65 (Fed. Cir. 2010) (infringement found to be willful based in part on evidence that defendant had received patented product sales kits that were marked “patented” and referenced the patent-in-suit).

Proposed Secondary Factor 7. Length of time between patent issuance and commencement of the allegedly infringing activity.

Timing of clearance searches are relevant considerations in trademark infringement suits.<sup>282</sup> Allegations of willful trademark infringement can be effectively rebutted by showing that a full trademark search was conducted before the defendant began using the mark in question.<sup>283</sup> The Lanham Act expressly defines damage enhancement as compensatory and not punitive in nature,<sup>284</sup> but instead permits awards of the defendant's profits when infringement was willful.<sup>285</sup> In trademark practice, then, awarding defendant's profits stands in the place of treble damages in patent law—both provisions deter the ignorance of another's valid rights, albeit by different means.

In *Sands, Taylor & Wood v. Quaker Oats*, the mark owner sued Quaker over its use of "Thirst Aid" in its advertisements for Gatorade.<sup>286</sup> The district court awarded profits to the mark owner because Quaker did not conduct a basic trademark search until just days before the advertisements aired, continued to broadcast the ads even after learning of the mark's prior registration, and did not obtain a pre-conduct opinion of potential trademark issues or otherwise take "reasonable precautions" to avoid trademark infringement.<sup>287</sup> But the Seventh Circuit overturned the award of profits, interpreting Quaker's conduct as something less than bad faith.<sup>288</sup>

At least one district court has already awarded enhanced damages under the *Seagate* standard based in part on the time that had elapsed between the issuance of the patent and the commencement of the infringing conduct.<sup>289</sup> In that case, the patentee owned a patent on an extended release drug formulation. Almost two years after the patent issued, a rival pharmaceutical company began selling a generic version of the patented drug. The district court found the competitor liable for willful infringement because

282. See MASS. CONTINUING LEGAL EDUC., INC., OBTAINING USING AND PROTECTING TRADEMARKS Part 3 § 13 (2006).

283. See *id.*

284. See 15 U.S.C. § 1117(a) (2006).

285. See *id.* Circuits are split over whether a willfulness finding is necessary to award profits. Compare, e.g., *Adray v. Adray-Mart, Inc.*, 76 F.3d 984, 988 (9th Cir. 1996) (a finding of willful infringement is a requirement before profits can be awarded) with *Banjo Buddies, Inc. v. Renosky*, 399 F.3d 168, 173–76 (3rd Cir. 2005) (willfulness is a factor to consider but is not a requirement for an award of profits).

286. See *Sands, Taylor & Wood Co. v. Quaker Oats Co.*, 978 F.2d 947, 951 (7th Cir. 1992).

287. *Id.* at 961–62.

288. See *id.* at 962.

289. See *Depomed, Inc. v. Ivax Corp.*, 532 F. Supp. 2d 1170, 1185–86 (N.D. Cal. 2007).

“[a] reasonable party would . . . have had ample time to investigate and discover the relevant patent.”<sup>290</sup>

No court has extended this logic to declare that the mere passing of time between patent issuance and infringing conduct mandates a finding of willfulness. But courts may be tempted to heavily weigh the timing in their analyses. Like in the trademark context, anyone can search valid and expired U.S. patents on the Patent Office web site from anywhere in the world as soon as they issue.<sup>291</sup> No special expertise is required, and results include scanned images of the full patent documents.<sup>292</sup> In addition, calculation of the time between issuance of the patent and the start of the defendant’s infringing conduct is objective and straight-forward.

But given the Federal Circuit’s statement of the new standard and the historical consideration of the “totality of the circumstances” surrounding allegedly infringing conduct, courts should be weary of such a bright line rule. Especially in light of Judge Newman’s concurrence, evidence of the time lapse between the grant of the patent and the infringing conduct should be viewed in the context of the general practices, including typical product development and launch timelines for the industry involved.<sup>293</sup> In a fast-developing industry, such as computer hardware, two years may represent several generations of technology, and may reasonably be considered “ample time to investigate and discover the relevant patent.”<sup>294</sup> But in a slower-developing industry, where new product launches require years of post-development effort, two years may not be “ample time.”

As in the trademark arena, timing may be an important consideration in assessing whether an accused infringer knew or should have known of the objectively high risk of infringement. But unless and until the Federal Circuit (or U.S. Supreme Court) announces an affirmative duty to conduct a thorough patent search just before launching a new product or service, courts should refrain from considering the timing of patent issuance and infringing conduct as dispositive.

290. *Id.* at 1186.

291. See U.S. Patent Full-Text Database Boolean Search, <http://patft.uspto.gov/netahtml/PTO/search-bool.html> (last visited Nov. 17, 2009). Patent applications that have not yet matured into issued patents are also available from the Patent Office web site free of charge. See USPTO Full-Page Image Database (AIW) Direct Image Viewing, <http://patft.uspto.gov/netahtml/PTO/appimg.htm> (last visited Nov. 12, 2009).

292. For example, searching for “6314473” on the U.S. Patent Full-Text Database Boolean Search web page (see *supra*, note 291) displays a scanned image of the first page of U.S. Patent No. 6,314,473.

293. See *In re Seagate Tech.*, 497 F.3d 1360, 1385 (Newman, J., concurring) (“standards of fair commerce, including [the] reasonableness of the actions taken in the particular circumstances” should inform the willfulness inquiry).

294. *Depomed*, 532 F. Supp. 2d at 1186.

V. APPLICATION OF THE PROPOSED FACTORS TO  
*COHESIVE TECHNOLOGIES V. WATERS CORPORATION*<sup>295</sup>

Among the early cases applying *Seagate* to a willful infringement claim, *Cohesive* stands out for two reasons. First, the district court boldly asserted a six-factor test *ipse dixit*, but then applied only a few of those factors to the case at bar.<sup>296</sup> Second, the court conflated the two-step *Seagate* framework and analyzed all of its proposed factors simultaneously.<sup>297</sup> But the opinion contains a very detailed discussion of the facts introduced into evidence, and therefore represents an excellent test case for the Proposed Factors discussed in Part IV, *supra*. Despite the formalistic and functionalistic flaws in the court's reasoning, application of this note's Proposed Factors to the facts of the case clearly indicate that the result was correct: patentee Cohesive Technologies did not carry its burden to show by clear and convincing evidence that defendant Waters Corporation acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. But had Cohesive met its burden on the threshold question, the facts of the case indicate that Waters knew of the risk or should have known because the risk was obvious.

A. *The Facts in Cohesive Technologies v. Waters*

Cohesive Technologies manufactures and sells equipment for high performance liquid chromatography (HPLC), a critical technique used to separate chemically similar compounds from each other. The technique uses high pressured liquids to force a small amount of the chemical mixture through a tube filled with an insoluble solid ("column"). The interaction between the chemical mixture and the solid in the column separates the mixture into its components. Cohesive sued Waters Corporation for infringing two of its patents covering improvements in the composition of the insoluble solid material inside the columns.<sup>298</sup>

Pursuant to Section 122(b) of the Patent Act, Cohesive's first patent application was published in May 1997.<sup>299</sup> Within a week, scientists at Waters had obtained a copy of the published application.<sup>300</sup> Soon thereaf-

295. *Cohesive Techs., Inc. v. Waters Corp.*, 526 F. Supp. 2d 84 (D. Mass. 2007).

296. *See id.* at 103–07.

297. *See id.* at 103–04.

298. *See id.* at 88.

299. *Id.* at 104. *See also* 35 U.S.C. § 122(b)(1) (2006) ("each application for a patent shall be published . . . promptly after the expiration of a period of 18 months from the earliest filing date for which a benefit is sought under this title").

300. *Cohesive Techs.*, 526 F. Supp. 2d at 104.

ter, Waters began comparing a prototype of the Cohesive column to a Waters column already in development.<sup>301</sup> Waters' tests revealed several differences in the solid particles inside the two columns. First, Cohesive's insoluble solid particles were on average 67% larger than Waters' insoluble solid particles.<sup>302</sup> Second, Waters' solid particles "collapsed" at liquid pressures exceeding 5,000 psi while Cohesive's solid particles were "rigid" and did not collapse even at liquid pressures up to 10,000 psi.<sup>303</sup>

Waters began producing its columns in February 1998 while testing of the Cohesive column was still in progress.<sup>304</sup> Cohesive's patent issued on June 30, 1998.<sup>305</sup> In August the Waters scientists presented their findings to its in-house attorney, who drafted an opinion of non-infringement in September 1998.<sup>306</sup> After Cohesive filed suit, Waters retained outside counsel, who rendered an opinion that Waters' column did not literally infringe the Cohesive patent, nor did it infringe Cohesive's patent under the doctrine of equivalents.<sup>307</sup>

*B. The Likelihood that Waters Would Infringe Cohesive's Patent was Not Objectively High*

After *Seagate*, a patentee seeking enhanced damages under Section 284 must now initially prove, "by clear and convincing evidence, that the defendant acted despite an objectively high likelihood that its actions constituted infringement of a valid patent."<sup>308</sup> Applying the Proposed Threshold Factors described in Part IV.B., *supra*, to the evidence in the record reveals that Cohesive did not meet its burden.

Under Proposed Threshold Factor 1, evidence that the defendant attempted to design around the patented technology strongly suggests that the risk that it would infringe the patent was objectively low. Upon learning about Cohesive's patent application, Waters immediately began investigating the Cohesive column to determine whether the new columns it was

301. *Id.*

302. *Id.*

303. *Id.*

304. *Id.*

305. See U.S. Patent No. 5,772,874 (filed Jun. 11, 1996).

306. See *Cohesive Techs.*, 526 F. Supp. 2d at 104-05.

307. See *id.* at 104 n.4. Infringement of a patent under the doctrine of equivalents accounts for the limits of language in accurately and completely describing an invention. See Cochran, *supra* note 199, at 253-54, 274. In the classic test for equivalence, infringement under the doctrine of equivalents occurs when the accused product or process "if it performs substantially the same function in substantially the same way to obtain the same result." *Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30, 42 (1929) (internal citation omitted).

308. *In re Seagate Tech.*, 497 F.3d 1360, 1371 (Fed. Cir. 2007).

developing were covered by Cohesive's draft claims.<sup>309</sup> Extensive testing of the two columns revealed that the solid particles performed very differently at extreme pressures and that the solid particles were significantly different in size.<sup>310</sup> While Waters had already designed its column, the evidence at least generates a strong inference that Waters was willing to modify its column technology if testing revealed that its solid particles were substantially similar to the solid particles claimed in the Cohesive application. Proposed Threshold Factor 1 favors Waters.

Proposed Threshold Factor 2 suggests, *inter alia*, that evidence that the defendant obtained a thorough opinion of counsel concluding its proposed conduct would not infringe may still suggest an objectively high likelihood of infringement.<sup>311</sup> The opinion's conclusions as to the validity and enforceability of the patent are important even when the opinion also concludes that the likelihood of infringement is low.<sup>312</sup> Waters relied on an opinion by its in-house counsel that the Waters column would not infringe Cohesive's claims as they appeared in the published application.<sup>313</sup> Because the application had not matured into a patent at the time Waters launched its product, the in-house opinion could not consider whether Cohesive's patent was valid or enforceable.<sup>314</sup> Proposed Threshold Factor 2 favors Waters.

Proposed Threshold Factor 3 suggests an objectively high likelihood of infringing a valid patent when the patentee's market is saturated with patents or features a fast pace of innovation. Unfortunately, evidence of the HPLC market characteristics is not in the trial record.<sup>315</sup> But some information is readily available from the patent-in-suit and Patent Office web site. Cohesive's patent is listed in Class 210 ("Liquid Purification or Separation"), Subclass 198.2 ("With Means to Add Treating Material: Chromatography").<sup>316</sup> A search of the Patent Office web site reveals that nearly 2,000 patents have issued in that Class and Subclass since 1976.<sup>317</sup> At a rate exceeding one issued patent per week, the class appears to be both saturated and quickly developing. The data suggest that the risk that anyone

309. See *Cohesive Techs., Inc. v. Waters Corp.*, 526 F. Supp. 2d 84, 104 (D. Mass. 2007).

310. *Id.*

311. See *supra* Part IV.B.2.

312. See *id.*

313. See *Cohesive Techs.*, 526 F. Supp. 2d at 104–05, 106.

314. See *id.*

315. See *id.* at 103–07.

316. U.S. Patent No. 5,772,874 at [52] (filed Jun. 11, 1996).

317. United States Patent and Trademark Office, U.S. Patent Full-Text Database Manual Search, <http://patft.uspto.gov/netahtml/PTO/search-adv.htm> (search performed Oct. 21, 2007; search term: "ccl/210/198.2").



launching new products in the HPLC equipment market is objectively high. Proposed Threshold Factor 3 therefore favors Cohesive.

Under Proposed Threshold Factor 4, credible arguments of invalidity and unenforceability suggest that the likelihood of infringing a *valid* patent is objectively low.<sup>318</sup> The *Cohesive* court ignored the opinion of non-infringement Waters obtained from outside counsel after Cohesive filed suit alleging infringement.<sup>319</sup> But those arguments raised credible challenges to the patent's validity and enforceability to the record.<sup>320</sup> In addition, Waters raised arguments of invalidity and unenforceability that ultimately failed.<sup>321</sup> The unenforceability argument was credible enough that it required eight pages of discussion on Water's motion for judgment as a matter of law.<sup>322</sup> Due to the wealth of credible non-infringement, invalidity and unenforceability arguments, Proposed Threshold Factor 4 favors Waters.

In sum, Waters manufactured and sold HPLC columns verifiably different in composition and performance from that claimed in the Cohesive patent. It reasonably relied on a competent opinion of non-infringement from in-house counsel. Waters raised credible issues of invalidity and unenforceability at trial. The HPLC market is saturated with patents and quickly developing. Waters is favored by weighty evidence strongly suggesting that the likelihood it would infringe was low. Only weak evidence of patent saturation and face pace of innovation favoring Cohesive. The likelihood that Waters' activities would infringe a valid patent was therefore objectively low under the Proposed Threshold Factors.

*C Waters Did Not Know Nor Should Have Known of the Objectively-Defined Risk of Infringing a Valid Patent.*

Even if the court concluded that the facts represented an objectively high risk that Waters' actions constituted infringement of a valid patent, a court applying the Proposed Secondary Factors discussed in Part IV.C, *supra*, would not have concluded that Waters knew or should have known of that risk.

Under Proposed Secondary Factor 1, cease and desist letters that give notice of the conduct that allegedly infringing a patent strongly suggests

318. See *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, 260 F. App'x 284, 291 (Fed. Cir. 2008).

319. See *Cohesive Techs.*, 526 F. Supp. 2d at 104 n.4.

320. See *id.*

321. See *id.* at 94–95 (validity); *id.* at 95–103 (unenforceability).

322. See *id.* at 95–103.

that the defendant knew of the risk that its actions constitute infringement of a valid patent. There is no evidence in the record, however, that Cohesive sent Waters a cease and desist letter or otherwise communicated allegations of infringement before filing suit. Waters clearly knew of the patent application, and very likely knew of Cohesive's issued patent.<sup>323</sup> But here Waters used the published patent application to ensure that its own product would not infringe the claims if they matured into an issued patent.<sup>324</sup> On balance, Proposed Secondary Factor 1 favors Waters.

Proposed Secondary Factor 2 favors the patentee if the accused infringer obtained an opinion that its conduct was likely to infringe a valid patent. Here, however, Waters obtained and reasonably relied on a competent opinion of non-infringement from its in-house counsel.<sup>325</sup> Although Waters obtained additional opinions of invalidity and unenforceability, those opinions were generated after Cohesive filed suit and therefore were not available when Waters was developing its competing HPLC column.<sup>326</sup> But the first opinion of non-infringement by its in-house counsel is enough that Proposed Secondary Factor 2 favors Waters.

Under Proposed Secondary Factor 3, evidence that the patentee and the accused infringer were in a special relationship—for example as licensor-licensee—may infer that the accused infringer should have known of the high risk of infringement. Strictly applying Proposed Factor 3 to the *Cohesive* facts, however, favors Waters. No facts in the court's opinion suggest that any Waters employee was in a special relationship with a Cohesive employee. The companies were not under any kind of contractual partnership, joint venture, or other collaborative effort.

On the other hand, Waters and Cohesive are direct competitors in a niche market. Their corporate headquarters are within ten miles of each other.<sup>327</sup> While these facts were apparently not entered into evidence at trial, they do create an inference that the two companies were well aware of each other before this litigation. At best, however, this information merely creates a presumption of awareness that certainly falls short of *Seagate's*

323. *See id.* at 104–105.

324. *See id.* at 104.

325. *See id.* at 104–06.

326. *See id.* at 104 n.4.

327. Waters Corporation is headquartered in Milford, Massachusetts, while Cohesive Technologies is headquartered in Franklin, Massachusetts, less than ten miles south on I-495. *See* Waters Corporation, [www.waters.com/webassets/other/corp/about/quick.html](http://www.waters.com/webassets/other/corp/about/quick.html) (last visited Nov. 15, 2009); BusinessWeek, Cohesive Technologies, Inc.: Private Company Information, <http://investing.businessweek.com/research/stocks/private/snapshot.asp?privcapId=26668> (last visited Nov. 15, 2009).

heightened willfulness. At most, Proposed Secondary Factor 3 minimally favors Cohesive.

Under Proposed Secondary Factor 4, an actor with a high level of skill compared to a PHOSITA is presumed to have a more thorough knowledge of her field of expertise than an ordinary layperson. The Waters employees involved in developing the HPLC column were highly skilled, well-educated, and were aware of Cohesive's HPLC products and pending patent application.<sup>328</sup> In short, the Waters employees were at least as skilled as a PHOSITA and in the same market as Cohesive. This suggests that Waters should have known of the high likelihood that manufacturing its HPLC column would infringe a valid patent. Proposed Secondary Factor 4 favors Cohesive.

Proposed Secondary Factor 5 favors the patentee when news of the patent is widely published. But there is no evidence in the record that Cohesive's HPLC column technology was publicized in the media or in trade magazines before Waters developed its competing column. Proposed Secondary Factor 5, then, favors Waters.

Under Proposed Secondary Factor 6, markings on the patented article weakly favors a finding that the accused infringer knew or should have known that its activity would likely infringe a valid patent. Here, however, the prototype Cohesive column obtained by Waters was not yet patented.<sup>329</sup> Thus, it was not marked with a patent number under Section 287(a) of the Patent Act. Proposed Secondary Factor 6 favors Waters.

Finally, under Proposed Secondary Factor 7, evidence that the accused infringer began developing its competing product or process long after the relevant patent issued slightly favors a finding that the infringer should have known that it risked infringing a valid patent. In *Cohesive*, however, Waters began developing its own HPLC column before the Cohesive patent issued.<sup>330</sup> Waters' awareness of the published patent application is not relevant to this inquiry because the claims published in the patent application are almost never the same as the claims that issue. Proposed Secondary Factor 7 therefore favors Waters.

The strongest evidence in the Proposed Secondary Factors favors Waters. Waters did not receive a cease and desist letter describing how it may be infringing Cohesive's patent. Nonetheless, Waters obtained and relied on a competent opinion of non-infringement, even though it developed its column before Cohesive's patent issued. There was no evidence that Cohe-

328. See *Cohesive Techs.*, 526 F. Supp. 2d at 104.

329. See *id.* at 105.

330. See *id.*

sive's column was widely publicized or that the prototype Cohesive column used for comparative testing was marked with a patent number. Cohesive is favored only slightly in that the two companies are headquartered within ten miles of each other and Waters' product development team appears to be highly skilled in the art of HPLC column technology. Therefore, even if Cohesive had proved that there was an objectively high likelihood that Waters' HPLC column would infringe its valid patent, Cohesive could not have shown that Waters knew or should have known about that risk of infringement by clear and convincing evidence.

### CONCLUSION

Faced with a new standard for willful patent infringement, district courts are already applying *Seagate* in situations where millions of dollars of compensatory damages are at stake. Early indications strongly suggest that the courts—and their litigants—require more concrete guidance in applying *Seagate*.

Proposed Factors for applying *Seagate* emerge from the American tort law and the policies underlying the U.S. patent system. Of these factors, four Proposed Threshold Factors guide courts in assessing whether the accused infringer acted despite an objectively high likelihood that its conduct would infringe a valid patent. Seven Proposed Secondary Factors assist courts in determining whether the objectively high risk (as defined through the Proposed Threshold Factors) was known to the accused infringer, or was so obvious that the infringer should have known of the risk.

These Proposed Factors provide district courts with structure for evaluating the probative value of evidence brought by litigants, while minimizing inflexibility in their application. And because the totality of the circumstances standard seems to have survived *Seagate*, courts should still consider relevant evidence outside these factors.

