Copying Copyright’s Willful Infringement Standard:
A Comparison of Enhanced Damages in Patent Law
and Copyright Law

“The term willful is not unique to patent law, and it has a well-established
meaning in the civil context. For instance, our sister circuits have employed a
recklessness standard for enhancing statutory damages for copyright
infringement. Under the Copyright Act, a copyright owner can elect to receive
statutory damages, and trial courts have discretion to enhance the damages, up
to a statutory maximum, for willful infringement. 17 U.S.C. § 504(c). Although
the statute does not define willful, it has consistently been defined as including
reckless behavior.”

I. INTRODUCTION

Federal law entitles patent holders (patentees) to compensation for losses
resulting from patent infringement. Courts measure a patentee’s loss as lost
profits attributable to the infringement or as a reasonable royalty during the
infringement period. Although Congress has statutorily provided for
discretionary enhanced damages, a judicially created threshold requires courts
to find willful infringement before awarding enhanced damages. This
requirement makes enhanced damages exclusively punitive and not

1. In re Seagate Tech., L.L.C., 497 F.3d 1360, 1370 (Fed. Cir. 2007) (en banc) (justifying heightened
court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a
reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed
by the court.” Id.
3. See id. (setting damages as adequate compensation with minimum as reasonable royalty); see also
Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1545 (Fed. Cir. 1995) (defining adequate compensation as “the
sales and profits lost . . . because of the infringement”).
4. See 35 U.S.C. § 284 (codifying court’s discretion to award treble damages). If a court finds patent
infringement, the court “may increase the damages up to three times the amount found or assessed.” Id.; see also
(declaring enhanced damages awarded under Section 284 as penalty for “infringer’s increased culpability”).
An infringer’s culpability increases when the court finds that the infringer acted willfully or in “bad faith.”
Beatrice Foods, 923 F.2d at 1579. But see Seagate, 497 F.3d at 1380 (Gajarsa, J., concurring) (challenging
willfulness requirement for enhanced damages as against Supreme Court’s statutory interpretation). The
United States Supreme Court suggested that the omission of explicit limiting language in Section 284 imparts
Court denied a petition for certiorari proposing that willfulness should not be read into Section 284 as a
threshold to obtaining enhanced damages. See Convolve Inc. v. Seagate Tech. L.L.C., 128 S. Ct. 1445 (2008);
see also Petition for Writ of Certiorari at *5-*7, Seagate, 128 S. Ct. 1445 (No. 07-656), 2007 WL 4132978.
compensatory.\textsuperscript{5}

Since 1983, courts have interpreted willful patent infringement as the breach of a “duty of care” that the infringer owes to the patentee, thus equating willfulness with negligence.\textsuperscript{6} In its August 2007 Seagate\textsuperscript{7} decision, the Court of Appeals for the Federal Circuit raised the standard for willful patent infringement from negligence to “objective recklessness.”\textsuperscript{8} The new standard makes it harder to obtain enhanced damages from a patent infringer.\textsuperscript{9} The Seagate court justified the “objective recklessness” standard, in part, as harmonizing with the accepted meaning of willfulness in the copyright infringement context.\textsuperscript{10}

Although United States patent law and copyright law share an origin in the United States Constitution, these bodies of law are considerably different.\textsuperscript{11} In

\textsuperscript{5} See Beatrice Foods, 923 F.3d at 1579 (explaining courts cannot use enhanced damages to “rectify . . . an inadequacy in the actual damages”). But see SRI Int’l, Inc. v. Advanced Tech. Labs., Inc., 127 F.3d 1462, 1468 (Fed. Cir. 1997) (observing opportunity to balance equities as secondary benefit to enhanced damages’ punitive effect); Fromson v. W. Litho Plate & Supply Co., 853 F.2d 1568, 1576 (Fed. Cir. 1988) (noting courts may prevent undercompensation with increased damages). The Seagate concurrence lists numerous precedential cases including King Instruments Corp., Rite-Hite Corp., and Stickle, in which enhanced damages served a remedial rather than punitive purpose. See Seagate, 497 F.3d at 1378-79 (Gajarsa, J., concurring); King Instruments Corp. v. Perego, 65 F.3d 941, 951 n.6 (Fed. Cir. 1995) (advocating use of enhanced damages to make up for inadequacies in reasonable royalty awards); Rite-Hite Corp. v. Kelley Co., 819 F.2d 1120, 1126 (Fed. Cir. 1987) (commenting court can use willfulness finding to compensate patentee); Stickle v. Heublein, Inc., 716 F.2d 1550, 1563 (Fed. Cir. 1983) (allowing discretionary enhancement of reasonable royalty to achieve adequate compensation).


\textsuperscript{7} 497 F.3d 1360 (Fed. Cir. 2007) (en banc), cert. denied, 128 S. Ct. 1445 (2008).

\textsuperscript{8} Id. at 1371 (holding patentees must demonstrate defendant acted with “objective recklessness” overturning duty of care standard).


\textsuperscript{10} Seagate, 497 F.3d at 1370-71 (recognizing decision as adoption of copyright willfulness standard).

particular, patent law and copyright law differ in infringement standards and, at least historically speaking, in damage award considerations. This Note explores these differences to determine if, as the Seagate court suggests, patent law and copyright law should nonetheless share a willfulness standard with regard to enhanced damage awards.

This Note begins by explaining the origins and objectives of patent law and copyright law. It then presents the substantive requirements of patent infringement, willful patent infringement, and the structure of patent-infringement damages. In parallel, this Note presents the substantive requirements of copyright infringement, willful copyright infringement, and the structure of copyright-infringement damages. It then analyzes the relevant differences between the two bodies of law and considers whether these differences should affect the meaning assigned to “willfulness,” and thus the availability of enhanced damages to prevailing plaintiffs. The analysis focuses on whether an “objective recklessness” standard for willfulness in patent law allows for an adequate remedy that preserves the incentive to patent inventions and effectively deters patent infringement. Finally, this Note concludes that in deciding to import a standard from copyright law into patent law, courts should consider the contrasting policies and statutory structures underlying patent and copyright protection. Copyright law’s objective recklessness standard may not be appropriate in patent law because it can preclude patentees from recovering full compensation for infringement and it

(asserting patents and copyrights deserve parallel treatment because they share Constitutional origin). Even the United States Supreme Court has imported standards from copyright law into patent law. See eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 392 (2006) (advocating same standard when granting injunctive relief in patent cases and copyright cases). But see infra text accompanying note 12 (pointing out difference between copyright law and patent law).

12. See infra Part II (obviating differences in objectives, infringement analysis, and damage award structures of patent and copyright law).

13. See infra Part III (analyzing differences between copyright law and patent law in view of their respective damages standards). Although injunctive relief is available to both patentees and copyright holders, the scope of this Note is limited to monetary damages. 35 U.S.C. § 283 (2000) (providing injunctive remedies for patent infringement); 17 U.S.C. § 502 (2000) (providing injunctive remedies for copyright infringement). This Note addresses only utility patents, excluding plant and design patents from the scope of the analysis. Additionally, this Note excludes criminal copyright infringement from its scope, addressing only civil copyright infringement.

14. See infra Part II.A (discussing history and fundamentals of patent law and copyright law).

15. See infra Part II.B (discussing patent infringement, willful patent infringement, and damages available for patent infringement).

16. See infra Part II.C (discussing copyright infringement, willful copyright infringement, and damages available for copyright infringement).

17. See infra Part III (analyzing differences between copyright law and patent law as those differences relate to damage awards).

18. See infra Part III (analyzing effect of damage-award structure on incentive and deterrence).

19. See infra Part IV (obviating differences in patent law and copyright law relevant to their damage-award structures).
contributes to the underdeterrence of patent infringement.  

II. BACKGROUND


Congress derives its power to enact patent and copyright laws from the Constitution, which provides authorization “[t]o promote the [p]rogress of [s]cience and useful [a]rts, by securing for limited [t]imes to [a]uthors and [t]raders the exclusive [r]ight to their respective [w]ritings and [d]iscoveries.” 21 Although these limited, private monopolies benefit individuals, their primary goal is to benefit the public. 22 Patent Law has developed under the belief that the net effect of a carefully balanced patent system enables competition, fuels investment, and furthers technological development. 23 Similarly, copyright law carefully balances restraints on free speech with the underlying incentive to increase the variety of creative works. 24

1. Fundamentals of Patent Law

Patent-eligible subject matter is limited to that which is useful, novel, nonobvious, and which fits into at least one of the statutory categories of a

20. See infra Part IV (concluding raising willfulness standard results in fewer patentees receiving enhanced damages awards).

21. U.S. CONST. art. I, § 8, cl. 8 (granting limited power to Congress); see also Graham v. John Deere Co., 383 U.S. 1, 5-6 (1966) (explaining clause limits Congress to “the stated constitutional purpose” of promotion of advances in useful arts). The Constitution distinguishes patents and copyrights from one another. See 1 DONALD S. CHISUM, CHISUM ON PATENTS § 1.01 (2004). Copyrights secure “protection for ‘authors’ over their ‘writings’ with the purpose of promoting ‘science,’” while patents provide “protection for ‘inventors’ over their ‘discoveries’ with the purpose of promoting the ‘useful arts.’” Id. at n.14.


24. See 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 19E.02[A][1] (2006) [hereinafter NIMMER ON COPYRIGHT] (acknowledging explicit and implicit influence of free speech on United States copyright-law development); Peter K. Yu, The Copyright Divide, 25 CARDozo L. REV. 331, 336-53 (2003) (tracing history of United States copyright laws protecting authors from piracy); see also 17 U.S.C. § 107 (2000) (codifying “fair use” defense for certain activities). Though fair use promotes some free-speech activities, the “Fair Use” and “First Amendment” defenses are separate and distinct, such that even a “fair use” could violate free speech and be deemed improper. See NIMMER ON COPYRIGHT, supra, § 19E.02 (explaining relationship of fair use and First Amendment defenses to copyright infringement).
process, machine, article of manufacture, or composition of matter. A patent is a publication that includes a complete disclosure from the inventor specifying how to practice his invention. In exchange for the full disclosure, patent holders enjoy the right to exclude others from making, using, selling, and importing their inventions for twenty years. Thus, the exclusivity granted to the patentee gives inventors an incentive to fully disclose the details of their inventions. Using the disclosure as a starting point, others can improve on patented inventions and develop alternative technologies, thereby increasing the public value of the initial invention. After the patent expires, the public is free to make, use, and sell the previously patent-protected invention.

Alternatively, inventors can keep their inventions secret and invoke trade secret law to maintain exclusivity. Trade secret status secures potentially unlimited monopolies, but deprives the public of its benefit from the full disclosure of an invention. Because trade secrets are difficult to maintain and misappropriation may be difficult to prove, the increased level of protection that patent law provides encourages inventors to patent their inventions.

25. See 35 U.S.C. § 101 (2000) (codifying categories for subject matter eligible for patent grant); see also id. § 102 (listing disclosures and events defeating novelty and thereby patentability); id. § 103 (codifying non-obviousness standard for patentability).

26. See id. § 112 (delineating disclosure requirements for patent grant). Section 112 requires a patent applicant to provide “a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same . . . .” Id.

27. See id. § 154 (providing list of rights conferred with patent grant and setting patent term to twenty years from filing date); id. § 271(a) (defining infringing activities during patent term). A patent confers only the right to exclude others from infringing activity, and is not an affirmative grant of rights to “make, use or sell.” See 5 DONALD S. CHISUM, CHISUM ON PATENTS § 16.02[1] (2007) (differentiating between right to exclude and affirmative right to “make, use, or sell”).

28. See RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 38 (6th ed. 2003) (describing how patents provide inventors with incentive). Judge Posner hypothesizes that inventors would not invest if they did not benefit financially. Id. Without a patent’s incentive, invention would be limited that which can be kept secret and that which carries minimal invention costs. Id.

29. See State Indus., Inc. v. A.O. Smith Corp., 751 F.2d 1226, 1235-36 (Fed. Cir. 1985) (identifying patents’ public benefit as ability to “design around” and improve invention); see also JAY DRATLER, JR. & STEPHEN M. MCJOHN, 4 INTELLECTUAL PROPERTY LAW: COMMERCIAL, CREATIVE AND INDUSTRIAL PROPERTY § 12.05 (2008) (acknowledging patent system’s “negative incentive” to “design around” brings “steady flow of innovations” to market).


31. See POSNER, supra note 28, at 39 (referring to trade secrecy as alternative to patent protection).

32. See id. (explaining use of trade secrecy as alternative to patents). If an invention can be kept secret longer than the patent term, an inventor may decide on trade-secret law for protection. See id. A trade secret remains protected for as long as it stays out of public knowledge. See Donald M. Zupanec, Annotation, Disclosure of Trade Secret as Abandonment of Secrecy, 92 A.L.R. 3d 138, § 3[a] (1979) (explaining public disclosure destroys trade-secret status).

33. See POSNER, supra note 28, at 39 (explaining limitations of trade-secret protection). Competitors may legally discover trade secrets through reverse engineering, independent discovery, or by taking advantage of a trade-secret holder’s inadvertent disclosure. See id.
Obtaining a patent can be a complex, expensive, and lengthy process. \(^{34}\) An inventor must first submit to the United States Patent and Trademark Office (USPTO) an application that fully describes and defines what the inventor considers to be his invention. \(^{35}\) USPTO examiners search “prior art” to evaluate the novelty and nonobviousness of an applicant’s claims, and they assess the sufficiency of the applicant’s disclosure. \(^{36}\) Typically, examiners engage in a written dialogue with the applicant, often through an attorney or agent, and the applicant refines the claims to comport with statutory requirements. \(^{37}\) This process can cost as much as $30,000, but the cost varies widely depending on attorney’s fees and the subject matter’s complexity. \(^{38}\) Not only can the process be costly, but the time between filing a patent application and issuance of a patent can stretch to over forty-three months. \(^{39}\) Once the USPTO issues the patent, courts presume its validity in view of the USPTO’s examination.

2. Fundamentals of Copyright Law

Although both patents and copyrights can protect some inventions, copyrights generally protect a different category of subject matter than patents. \(^{41}\) Copyrights do not protect processes, machines, or articles of

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34. See infra text accompanying notes 35–40 (demonstrating difficulty of obtaining patent protection for inventions).

35. See 35 U.S.C. § 111 (2000) (setting forth requirements for patent application); id. § 112 (requiring specification to include “one or more claims” indicating scope of invention).


37. See Evans, supra note 36, § 19 (explaining process of patent prosecution with USPTO).

38. See LAW PRACTICE MGMT. COMM., AM. INTELLECTUAL PROP. LAW ASS’N, REPORT OF THE ECONOMIC SURVEY 2007 23 (2007) [hereinafter AIPLA 2007 REPORT] (reporting typical charges and costs for United States utility patents broken down by subject matter). The third quartile of the reported cost for preparation and filing of a biotech or chemical patent is approximately $15,000, with the amendments and arguments costing approximately $4,500, and issue/post-allowance activity and maintenance fees totaling $1,500, resulting in a total cost of about $21,000 to obtain such a patent. Id.


40. See 35 U.S.C. § 282 (stating presumption of patent validity on claim-by-claim basis); see also MOY, supra note 36, § 3.17 (characterizing USPTO patent grant as merely “initial determination” of patentability). The USPTO is subservient to the judiciary in determining patentability because a court may later hold a patent invalid. Id. The examination process is not “truly adversarial” and resources spent on factual discovery in a judicial proceeding are far higher. Id. A court may invalidate a patent even in view of the same evidence that the USPTO considered. Id. The defendant bears the burden of demonstrating invalidity by clear and convincing evidence. See 24 Techs., Inc. v. Microsoft Corp., 507 F.3d 1340, 1352 (Fed. Cir. 2007) (recognizing defendant’s burden to overcome presumption of validity with “clear and convincing evidence”).

41. See KATHERYN A. ANDRESEN, 1 LAW AND BUSINESS OF COMPUTER SOFTWARE § 2:1 (2d ed. 2007) (explaining congressional intent and courts’ inclination to protect software with copyright); see also id. § 3:4
manufacture, which are the subject matters eligible for patent protection.\(^{42}\)

Instead, copyrights protect literary, musical, and artistic works from being copied in substantial part.\(^{43}\) Copyright law aims to increase the variety of creative works available to the public.\(^{44}\) This increased variety, in turn, increases the public’s education and enjoyment.\(^{45}\)

A copyright owner has the exclusive right to reproduction and distribution, to public visual or audio performance, and to public display of the copyrighted work, as well as to creation of derivative works based on the copyrighted work.\(^{46}\) Congress grants this “bundle of rights” to the author, or his assigns, for the duration of the author’s life plus seventy years.\(^{47}\) At the end of the copyright term, the public may freely engage in all of the activities previously reserved for the copyright owner.\(^{48}\) Through its grant of exclusive rights, copyright law enables artists and authors to derive revenue for creative works, which the public would otherwise easily reproduce royalty free.\(^{49}\)

For a copyright to be valid, the work must be the original work of the author.\(^{50}\) Originality, in the copyright context, has two prongs: the work must be an independent creation of the author, and the work must possess a de minimis amount of creativity.\(^{51}\) The work must also be fixed in a tangible


\(^{42}\) See 17 U.S.C. § 102(b) (excluding any “[i]dea, procedure, method, system, process, . . . [and] discovery” from copyright protection).

\(^{43}\) See id. § 102(a) (listing eight categories of copyrightable works); infra text accompanying notes 97-99 (explaining copyright infringement comprises copying original elements of copyrighted work). The Copyright Act lists eight categories of copyrightable work including literary works, musical works, dramatic works, pantomimes and choreographic works, sound recordings, and architectural works. 17 U.S.C. 102(a); see also 1 PAUL GOLDSTEIN, COPYRIGHT § 2.0 (2d ed. Supp. 2002) (noting congressional intent for expansive and flexible interpretation of copyrightable subject matter).

\(^{44}\) See GOLDSTEIN, supra note 43, § 1.0 (describing utilitarian principles of copyright law).

\(^{45}\) See id. (explaining public benefit of copyright law).

\(^{46}\) See 17 U.S.C. § 106 (listing copyright owner’s six fundamental exclusive rights).


\(^{48}\) See Sony Corp. of Am. v. Univ. City Studios, Inc., 464 U.S. 417, 429 (highlighting public benefit through allowing public access after expiration of patent or copyright).

\(^{49}\) See Eldred v. Ashcroft, 537 U.S. 186, 212 n.18 (2003) (explaining complementary relationship between private copyright reward and public ends); Koenigsberg, supra note 47 (explaining copyright historically enabled creators to earn livings from creative works).

\(^{50}\) See 17 U.S.C. § 102(a) (stating originality requirement for copyrighted work); Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 345 (1991) (defining sine qua non of copyright as “originality”).

\(^{51}\) See Feist, 499 U.S. at 345, 363 (explaining two requirements for originality and distinguishing “originality” from “novelty”). The Feist court explains that if two authors independently create identical poems, the poems, while not novel, are copyrightable as original to each poet. Id. at 346.
medium. 52

A copyright is valid without registration with the United States Copyright Office, but the author must register the copyright before commencing an infringement action in the courts. 53 Unlike the USPTO, the Copyright Office does not perform a substantive examination to determine a copyright’s validity. 54 Copyright registration is simple and quick, requiring only that the author deposits the work with the Copyright Office along with a small fee. 55 In a copyright-infringement action, the simple registration establishes prima facie evidence of originality, but registering beyond five years from the first publication will destroy the presumption of originality. 56

B. Patent Infringement

When faced with an infringement suit, defendants often attempt to demonstrate first that the patent-in-suit is invalid, and then, if it is valid, that they did not infringe. 57 A substantial number of patents are held invalid by courts despite the USPTO’s pre-issuance examination. 58

To determine whether patent infringement has occurred, a court performs a two-step analysis. 59 First, the court construes the patent claims, which set the boundary of the patentee’s rights. 60 Second, the court compares the allegedly infringing product to the patentee’s construed claims. 61 Often a claim’s meaning is not straightforward, and it can be difficult for a competitor to

52. See 17 U.S.C. § 102(a) (stating tangibility requirement for copyrighted work).
53. See id. 17 U.S.C. § 408(a) (2000) (stating “registration is not a condition of copyright protection”); id. § 411(a) (codifying necessity of preregistration to commence infringement action).
55. See 17 U.S.C. § 408(a) (requiring deposit of copyrighted work, application, and fee for registration); id. § 408 (specifying copyright application requirements). The application requirements include such things as the applicant’s name and the year in which the work was completed. Id. Effective as of July 1, 2007, the fee for basic Copyright registration is forty-five dollars for paper submission or thirty-five dollars for online submission. U.S. Copyright Office, Copyright Office Fees (Circular 4), available at http://www.copyright.gov/circs/circ04.html [hereinafter Copyright Office Fees].
56. See 17 U.S.C. § 410(c) (giving court discretion in assigning evidentiary weight to registrations made after five years from publication).
58. See supra notes 36-37 and accompanying text (discussing USPTO’s substantive examination before granting patent); see also Blair & Cotter, supra note 57, at 11 n.11 (giving statistics showing as high as 46 percent of litigated patents judicially invalidated).
60. See Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (explaining scope of patentee’s rights defined only by claims). Construing or interpreting claims is called “claim construction” and can occur at any stage of the case. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 981 (Fed. Cir. 1995) (en banc) (expressing acceptance for claim construction announced when framing charge to jury).
61. See Golden Blount, 365 F.3d at 1059 (articulating analysis for determining patent infringement).
differentiate between what is patented and what is left to the public domain.62

Additionally, courts may find either literal infringement or infringement under the doctrine of equivalents, which further complicates the infringement analysis.63 For literal infringement, an accused device must contain every claim element and limitation as construed.64 If the differences between the accused device and the patent claims are “insubstantial,” the court may find infringement under the doctrine of equivalents.65

Patent infringement is generally considered a strict-liability offense because the defendant’s state of mind is irrelevant to the analysis, which involves only comparing the claims and the accused product.66 The court considers an infringer’s state of mind only after finding infringement, when determining the remedies.67 Independent invention is not a defense to patent infringement, and likewise, not knowing of the existence of the infringed patent does not exonerate a defendant.68

Notwithstanding the strict-liability framework, a patentee still must notify the accused of the infringement to collect damages.69 The patentee can only collect damages that accrue after notice of infringement.70 Notice can be constructive if the patented product contains indicia of its patented status.71

62. See Edward Manzo, Claim Construction in the Federal Circuit § 1:1 (2007) (recognizing claim construction not always exact science and observing even simple claim language often disputed); see also Stephen M. McJohn, A New Tool for Analyzing Intellectual Property, 5 NW. J. TECH. & INTELL. PROP. 105, 113 (2006) (citing claim interpretation as contributor to “great uncertainty” of patents); see also Dratler & McJohn, supra note 29, § 12.05[1](a) (noting “considerable . . . expertise” and “exhaustive review” required to determine validity and infringement).

63. See Deering Precision Instruments, L.L.C. v. Vector Distrib. Sys., 347 F.3d 1314, 1324 (Fed. Cir. 2003) (stating patentee must prove infringement literally or under doctrine of equivalents for each claim limitation); Dratler & McJohn, supra note 29, § 1205[1](a) (highlighting particular difficulty in determining validity and infringement in view of doctrine of equivalents).

64. See Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed. Cir. 1995) (explaining all limitations must appear “exactly” in the accused device for literal infringement).


67. See Jurgens, 80 F.3d at 1570 n.2 (explaining intent irrelevant when determining whether patent infringement occurred).

68. See 5 Donald S. Chisum, Chisum on Patents § 16.02[2] (2007) (explaining “elementary” principle that patent infringement can occur inadvertently, unintentionally, or without knowledge).

69. See 35 U.S.C. § 287(a) (setting forth notice requirement for recovering damages from infringers).

70. See id. (limiting damages to those accruing after notice of suit unless notice achieved with marking).

71. Id. (explaining marking requirement). If the patent is a process, the patentee must mark the product
Actual notice, such as filing an infringement suit, also satisfies the notice requirement. 72

1. Damages for Patent Infringement

A prevailing patentee may recover damages “adequate to compensate” the patentee for the infringement, or minimally, a “reasonable royalty.” 73 In addition, a patentee can recover interest and costs. 74 Courts calculate the damages “adequate to compensate” as the lost profits that the patentee can prove resulted from the infringement. 75 Because this calculation can be difficult, and in some circumstances impossible, a patentee may not recover full compensation. 76 The alternative minimum, a reasonable royalty, can also be difficult to calculate because it involves speculating what the parties would have agreed to in an arms-length negotiation. 77

Although a reasonable royalty or the patentee’s lost profits may amount to less than the infringer earned from his infringement, a patentee cannot disgorge the infringer of his or her profits. 78 Instead, the Patent Act and courts limit the

made by the process to satisfy the statutory requirement. See id.


73. See id. § 284 (setting damages at amount “adequate to compensate” for infringement but not less than “reasonable royalty”); see also Brunswick Corp. v. United States, 36 Fed. Cl. 204, 211 (Fed. Cl. 1996) (summarizing factors courts consider to determine reasonable royalty in patent cases).

74. See id. § 284 (allowing for award of interest and costs).

75. See Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1545 (Fed. Cir. 1995) (explaining compensation amounts to lost profits due to infringement); see also Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1156 (6th Cir. 1978) (stating four factors for establishing lost profits due to infringement). The Panduit factors to establish lost profits are “(1) demand for the patented product, (2) absence of acceptable noninfringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made.” Panduit Corp., 575 F.2d at 1156. But cf. Rite-Hite Corp., 56 F.3d at 1545 (qualifying Panduit factors “accepted as a useful, but non-exclusive” test).

76. See supra note 75 and accompanying text (detailing calculations for determining lost profits due to patent infringement); see also Mark A. Lemley & Ragesh K. Tangri, Ending Patent Law’s Willfulness Game, 18 BERKELEY TECH. L.J. 1085, 1110 (2003) (acknowledging difficulty of proving lost profits and noting nonmanufacturing patentees precluded from lost profits award). Lost profits may become even more difficult to prove should Congress pass pending legislation that limits recoverable profits to those attributable to the incremental improvement over the prior art. See Seidenberg, supra note 23, at 62 (highlighting commonality in proposed House and Senate bills limiting damages); see also OFFICE OF MGMT. & BUDGET, EXECUTIVE OFFICE OF THE PRESIDENT, STATEMENT OF ADMINISTRATION POLICY, H.R. 1908 – PATENT REFORM ACT OF 2007 1 (2007) (advising against rigid application of rules for assessing damages in patent cases).

77. See King Instruments Corp. v. Perego, 65 F.3d 941, 951 (Fed. Cir. 1995) (recognizing “[w]illing negotiators, . . . act[ing] in their own best interests, would not agree to any royalty”); Fromson v. W. Litho Plate & Supply Co., 853 F.2d 1568, 1575 (Fed. Cir. 1988) (recognizing difficulty in calculating what parties would have reasonably agreed to). The court noted that calculating the reasonable royalty “involve[s] more the talents of a conjurer than those of a judge.” Fromson, 853 F.2d at 1574.

punitive remedy to enhanced damages upon finding willful infringement or to an award of attorney’s fees in exceptional cases.\textsuperscript{79} Exceptional cases include not only cases where a court finds willful infringement, but also cases where a court finds bad-faith litigation or inequitable conduct during patent prosecution.\textsuperscript{80} The award of attorney’s fees is especially important in patent litigation, where litigating costs an average of $4 million and as much as $7 million.\textsuperscript{81}

2. Willful Patent Infringement

Although the Patent Act allows for discretionary increases of damage awards, in the 1991 case \textit{Beatrice Foods Co. v. New England Printing and Lithographing Co.},\textsuperscript{82} the Federal Circuit explained that courts should increase damage awards only for willful patent infringement.\textsuperscript{83} Although in a few cases the court awarded enhanced damages for compensatory purposes, finding willfulness has become the widely accepted prerequisite for enhancing damages in patent-infringement awards.\textsuperscript{84}

To avoid a finding of willfulness prior to \textit{Seagate}, defendants needed to 

\textsuperscript{79} See 35 U.S.C. § 285 (allowing for award of attorney’s fees in exceptional cases); \textit{In re Seagate Tech., L.L.C.}, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc) (recognizing punitive purpose of enhanced damages for willful infringement), \textit{cert. denied}, 128 S. Ct. 1445 (2008); \textit{Perricone v. Medicis Pharm. Corp.}, 432 F.3d 1368, 1380-81 (Fed. Cir. 2005) (recognizing punitive purpose of attorney fee award); Beckman Instr., Inc. v. LKB Produkter AB, 892 F.2d 1547, 1551 (Fed. Cir. 1989) (listing situations where attorney’s fees awarded in patent cases). Attorney’s fees are not awarded in ordinary patent suits, but only in exceptional cases to prevent gross injustice. See \textit{Beckman Instr.}, 892 F.2d at 1552.

\textsuperscript{80} See \textit{Yamanouchi Pharm. Co. v. Danbury Pharmacal, Inc.}, 231 F.3d 1339, 1346-47 (Fed. Cir. 2000) (noting types of misconduct rendering cases exceptional for attorney’s-fee award).

\textsuperscript{81} See Kelly C. Hunsaker, \textit{Taking Care of Business: Patent Reform Should Promote Innovation, Not Imitation}, SAN FRANCISCO CHRON., Aug. 30, 2005, at B7 (noting $4 million average cost of patent litigation); see also \textit{AIPLA 2007 REPORT, supra note 38}, at 25 (reporting patent litigation median cost up to $5 million with highest of $7 million).

\textsuperscript{82} See 923 F.2d 1576 (Fed. Cir. 1991).

\textsuperscript{83} See id. at 1579 (declaring enhanced damages awarded under Section 284 as penalty for “infringer’s increased culpability”); see also \textit{Jurgens v. CBK, Ltd.}, 80 F.3d 1566, 1570 (1996) (characterizing increased damage award as punitive and therefore requiring “some degree of culpability”). The enhanced damages statute does not require “willfulness.” See 35 U.S.C § 284 (making no mention of culpability level required for enhanced damages); see also \textit{In re Seagate Tech.}, L.L.C., 497 F.3d 1360, 1368 (Fed. Cir. 2007) (en banc) (noting absence of statutory guidance for increasing damages), \textit{cert. denied}, 128 S. Ct. 1445 (2008); Matthew D. Powers & Steven C. Carlson, \textit{The Evolution and Impact of the Doctrine of Willful Patent Infringement, 51 SYRACUSE L. REV. 53, 67 (2001) (concluding no U.S. patent statute has ever articulated criteria for enhanced damages). Pending legislation in Congress, however, aims to codify the willfulness requirement. Patent Reform Act of 2007, H.R. 1908, 110th Cong. § 5(c) (as passed by House of Representatives Sept. 7, 2007) (proposing codification of willfulness requirement for enhanced damages); Patent Reform Act of 2007, S. 1145, 110th Cong. § 5(b) (as reported by Senate Committee on the Judiciary, July 20, 2007) (proposing codification of willfulness for enhanced damages).

\textsuperscript{84} See \textit{Seagate}, 497 F.3d at 1378-79 (Gajarsa, J., concurring) (noting prevailing “willfulness” requirement, but listing cases acknowledging remedial aspect of enhanced damages); see also supra note 5 (listing cases in which enhanced damages served compensatory purpose).
prove that they had satisfied a “duty of care” owed to the patentee. To fulfill this duty, potential infringers usually sought an opinion of counsel to determine that they were not infringing or that the patent was invalid. This pre-Seagate “negligence” standard caused problems for defendants who would have to produce the opinion at trial and thereby waive attorney-client privilege to related correspondence or otherwise risk an adverse inference that they did not fulfill their “duty of care” or that they had obtained an unfavorable opinion. Attempting to alleviate the defendants’ dilemma and the burdens on the attorney-client relationship, the Federal Circuit subsequently abolished the fact-finder’s ability to make an “adverse inference”. Despite these efforts, problems persisted, and with its Seagate decision, the Federal Circuit retracted the “duty of care” standard and redefined willfulness as “objective recklessness.”

The Seagate court announced a two-part analysis for determining the new standard of “objective recklessness.” First, a plaintiff “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.” In this first part of the analysis, the court explained, “The state of mind of the accused infringer is not relevant . . . .” Next, the plaintiff must show that the “objectively-defined risk . . . was either known or so obvious that it should have been known to the accused infringer.”

After announcing this new standard, the Seagate court left it to future litigation to elucidate what actions and evidence will satisfy the two-part test. Factors such as a defendant’s behavior, sophistication, resources, diligence, and the industry are relevant to determine whether infringement was willful.

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86. See Seagate, 497 F.3d at 1369 (explaining how potential infringers fulfilled their duty to patentees).
87. See L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1126 (Fed. Cir. 1993) (allowing adverse inference when no opinion was produced by defendant); see also Pall, supra note 6, at 672 (describing “considerable litigation problems” resulting from “affirmative duty” standard).
89. See In re Seagate Tech., L.L.C., 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc) (overruling Underwater Devices and setting “objective recklessness” as minimum standard for willful patent infringement).
90. See id. (explaining two-part test for establishing willful infringement).
91. See id. (explicating first prong of two-part analysis for willful infringement).
92. See id. (qualifying relevance of defendant’s state of mind in willfulness determination).
93. See Seagate, 497 F.3d at 1371 (explicating second prong of two-part analysis for willful infringement).
94. See id. (stating “we leave it to future cases to further develop the application of this standard”). The Seagate court did give some guidance with respect to demonstrating an “objectively high likelihood,” noting that this determination would be based on the record at trial. Id.
Post-Seagate, in close cases where defendants have strong, but not winning, arguments on invalidity or noninfringement, plaintiffs now find it especially difficult to prove infringers’ willfulness.\(^{96}\)

### C. Copyright Infringement

In a copyright-infringement action, a plaintiff must prove ownership of a valid copyright and that the defendant copied the original elements of the copyrighted work.\(^{97}\) For the copying to be actionable, the defendant’s work must be substantially similar to the copyrighted material.\(^{98}\) Generally, a plaintiff proves copying through circumstantial evidence, showing that the defendant had access to the copyrighted work, and that there is a substantial similarity between the accused and copyrighted works.\(^{99}\)

Despite the fact that proving copyright infringement requires a showing of “copying,” which suggests that courts consider some state of mind, many commentators say that copyright infringement, like patent infringement, is a “strict liability” offense.\(^{100}\) A court will not absolve a defendant for “innocent [copyright] infringement”—copying a copyrighted work unconsciously or truly believing the conduct was noninfringing.\(^{101}\) On the other hand, unlike in patent law, if a defendant independently creates the substantially similar work, he is not liable to the copyright holder.\(^{102}\)

To recover damages, the Copyright Act does not mandate that owners mark their work as “copyrighted.”\(^{103}\) Notice in the form of a marking, however, negates a defendant’s ability to claim “innocent infringement” and to thereby mitigate statutory damages.\(^{104}\)

\(^{96}\) See Informatica Corp. v. Bus. Objects Data Integration, Inc., 527 F. Supp. 2d 1076, 1083 (N.D. Cal. 2007) (declining award of enhanced damages based on case closeness in view of Seagate); TGIP, Inc. v. AT&T Corp., 527 F. Supp. 2d 561, 579 (E.D. Tex. 2007) (overturning jury’s willfulness verdict under Seagate standard where case close on validity).


\(^{98}\) See \textit{Nimmer on Copyright}, supra note 24, § 13.01 (explaining how liability attaches to copying).

\(^{99}\) See id. § 13.01[B] (highlighting difficulties in proving copying through direct evidence). Evidence of similarity alone could suffice to show “copying” in some circumstances because strong similarity indicates the work was not independently created. \textit{Id}.

\(^{100}\) See \textit{supra} notes 66–68 and accompanying text (discussing strict liability for patent infringement); see also \textit{Nimmer on Copyright}, supra note 24, § 13.08 (explaining innocent intent does not negate liability); infra note 118 and accompanying text (explaining reduction of statutory damages possible for innocent copyright infringement).

\(^{101}\) See \textit{Nimmer on Copyright}, supra note 24, § 13.08 (listing three types of “innocent intent” where court still may find liability).

\(^{102}\) See \textit{id.} § 13.01 (noting court must deny liability for infringement if defendant independently created work at issue).

\(^{103}\) See 17 U.S.C. § 401 (2000) (outlining permissible, but not required, forms of notice of copyright); \textit{id.} § 401(d) (explaining effect of notice as negating innocent infringement claim).

\(^{104}\) See \textit{id.} § 401(d) (stating no weight given to innocent infringement defense when notice provided).
1. Damages for Copyright Infringement

Having proven infringement, a copyright holder may recover either actual damages, which may be supplemented with the infringer’s profits, or statutory damages.105 The copyright holder must elect one of these options before final judgment, but statutory damages are only available if the copyright holder registered the work prior to infringement or within three months of the first publication.106 Courts measure actual damages as the “lost market value” at the time of the infringement.107 In electing statutory damages, the copyright holder avoids proving losses, and courts have the discretion to award $750 to $30,000 for each infringed work.108 Although statutory damages may seem nominal, they can be substantial when there are many defendants or many works infringed.109

Statutory damages for copyright infringement have a dual purpose: allowing copyright owners to enforce their rights when damages are difficult to calculate or prove and deterring infringers.110 The Copyright Act only allows courts to enhance statutory damages, and thus, some argue that punitive-damage awards are not available when a copyright holder elects to recover “actual damages.”111 The Copyright Act, however, allows the copyright holder to disgorge the infringer of profits made from the infringement, presumably as a punitive measure.112

A court may also award attorney’s fees to the prevailing party in a copyright-infringement action.113 With the cost of litigating a copyright-infringement suit averaging between $290,000 and $1 million, the award of attorney’s fees encourages copyright holders to bring infringement claims despite a potential lack of economic incentive to challenge the infringement.114

105. See id. § 504(a) (providing actual or alternative statutory damages to copyright holders). The Copyright Act allows for the actual damages to include the infringer’s profits from the infringement. Id. § 504(b).

106. See id. § 504(b) (requiring election of statutory damages “before final judgment”); id. § 412 (limiting when statutory damages available to copyright holders).


108. See 17 U.S.C. § 504(c)(1) (allowing court to award between $750 and $30,000 as they consider just).


113. See id. § 505 (allowing recovery of costs by prevailing party).

114. See Assessment Tech. of WI, L.L.C. v. Wiredata, Inc., 361 F.3d 434, 437 (7th Cir. 2004) (acknowledging importance of attorney’s-fees award when monetary damages are small); AIPLA 2007...
Courts have discretion to award attorney’s fees in copyright cases to assist in both compensation and deterrence and they award them routinely.\textsuperscript{115}

2. Willful Copyright Infringement

The Copyright Act provides for modifications to damage awards based on the infringer’s culpability.\textsuperscript{116} For example, a court may enhance statutory damages for “willful” infringement.\textsuperscript{117} Conversely, a court may also reduce the statutory damage award when the “infringer was not aware and had no reason to believe that his or her acts constituted infringement of copyright.”\textsuperscript{118}

Although the Copyright Act explicitly names willfulness as a prerequisite for increased damages, it does not define willfulness.\textsuperscript{119} While some circuits define willfulness as the intentional disregard of a known legal duty, most circuits define it as acting with knowledge or with reckless disregard.\textsuperscript{120}

III. ANALYSIS

Neither the Copyright Act nor the Patent Act defines the degree of culpability constituting “willfulness,” and it has historically been interpreted differently in each.\textsuperscript{121} On the Model Penal Code’s scale, which is useful for
comparing levels of culpability based on a defendant’s state of mind, copyright law’s objective recklessness definition of willfulness falls between knowledge and recklessness.\textsuperscript{122} In contrast, patent law’s historically lower standard, involving the fulfillment of a duty of care owed to the patentee, fell between “recklessness” and “negligence” until the \textit{Seagate} decision brought the patent law standard in line with copyright law’s “objective recklessness” standard.\textsuperscript{123}

To determine whether copyright law’s “objective recklessness” is appropriate in patent law, this analysis assumes that the compensatory scheme in the Copyright Act adequately compensates copyright holders and adequately provides incentives to obtain and enforce copyrights.\textsuperscript{124} Further, this analysis assumes that when courts apply an objective recklessness standard when determining willful copyright infringement, they properly punish and deter copyright infringers.\textsuperscript{125} With these assumptions in mind, the following analysis compares the adequacy of damage awards in patent and copyright law, and explores whether an objective recklessness standard results in effective punishment and deterrence of patent infringement and in adequate incentive for inventors to utilize the patent system.\textsuperscript{126}

\textbf{A. Adequate Compensation in Patent and Copyright Law}

Damage awards serve primarily to compensate for a wronged party’s losses.\textsuperscript{127} Both patent law and copyright law provide a minimum-damage

\textsuperscript{122} See \textit{Dratler & McJohn}, supra note 29, § 12.05 (utilizing Model Penal Code’s classification of culpability when analyzing patent and copyright infringement). In the Model Penal Code, the levels of culpability are, from highest to lowest: purposefulness, knowledge, recklessness, and negligence. \textit{Model Penal Code} § 2.02(2) (1962).

\textsuperscript{123} See supra note 89 and accompanying text (explaining \textit{Seagate}’s raising of willful-patent-infringement standard from negligence to copyright law’s objective recklessness); see also \textit{Dratler & McJohn}, supra note 29, § 12.05 (classifying willful patent infringement as between reckless and negligent).

\textsuperscript{124} See \textit{Dratler & McJohn}, supra note 29 (explaining exclusive nature of statutorily provided copyright and patent remedies). \textit{But see Hyde}, supra note 120, at 378 (criticizing copyright law’s prevailing willfulness definition as inappropriate); \textit{Thomas}, supra note 110, at 915 (positing copyright law should adopt patent law’s negligence standard). A higher standard than recklessness would be especially egregious in patent law, which seeks to foster technological innovation through the study of competitor’s patents. \textit{See supra} note 29 and accompanying text (outlining public benefits of patents). If willfulness were akin to “knowingly” or “purposefully,” potential infringers would purposefully avoid looking at competitor’s patents so that they could not “know” their conduct was wrongful. \textit{See} Jon E. Wright, \textit{Willful Patent Infringement and Enhanced Damages—Evolution and Analysis}, 10 Geo. Mason L. Rev. 97, 122 (explaining “ostrich” approach to avoiding liability).

\textsuperscript{125} See supra note 110 and accompanying text (highlighting purpose of copyright law’s statutory-damage awards).

\textsuperscript{126} See \textit{Blair & Cotter}, supra note 57, at 233, 263 (stating damages should preserve incentive embodied in Patent Act); see also \textit{Terence P. Ross, Intellectual Property Law: Damages and Remedies} § 2.01 (2006) (noting remedies serve to sustain balance struck by Copyright Act).

\textsuperscript{127} See Filardi, supra note 78, at Part II (explaining patent damages designed as compensatory in accord
award that serves as compensation when lost profits are difficult to prove.\textsuperscript{128} The statutory damages available in copyright law, however, may exceed the copyright holder’s losses, whereas the reasonable royalty available in patent law is likely to be lower than the patentee’s losses.\textsuperscript{129} Courts usually equate the reasonable royalty with the hypothetical license fee that the infringer would have paid to the patentee had they negotiated.\textsuperscript{130} Theoretically, a patentee would have licensed his invention for the amount of the reasonable royalty if it was economically beneficial.\textsuperscript{131} Where the patentee did not choose to license, it follows that the expected profit from exclusivity was higher than the potential royalty.\textsuperscript{132}

If damages do fall short of a copyright holder’s losses, courts can increase a damage award without finding willful infringement, by disgorging the copyright infringer’s profits.\textsuperscript{133} Disgorgement of the infringer’s profits, however, is unavailable in patent law.\textsuperscript{134} Furthermore, although courts can use attorney’s fees as an additional compensatory remedy in copyright cases, courts award attorney’s fees in patent cases only when the case is “exceptional.”\textsuperscript{135} In analyzing whether a patent-infringement case is exceptional, a court does not consider whether the actual damage award fully compensates the patentee.\textsuperscript{136}

A finding of willfulness suffices to show that a case is “exceptional.”\textsuperscript{137} Because attorney’s fees may be predicated on finding willfulness, which is more difficult post-\textit{Seagate}, fewer plaintiffs will recover attorney’s fees in patent-infringement cases. Accordingly, patentees may be less likely to enforce

\begin{footnotes}
\item[128] See supra note 73 and accompanying text (describing minimum award for patent infringement); supra note 110 and accompanying text (highlighting availability of statutory damages for copyright infringement when losses difficult to prove).
\item[129] See infra text accompanying notes 131-132 (demonstrating why reasonable royalty likely less than patentee’s lost profits); see also Fromson v. Western Litho Plate & Supply Co., 853 F.2d 1568, 1574-76 (Fed. Cir. 1998) (acknowledging inadequate compensation resulting from reasonable royalty award); Christopher Pooser, \textit{Statutory Damages Under the Copyright Act}, \textsc{Advoc.}, Aug./Sept. 2007, at 23 (noting possibility of statutory damages exceeding copyright holder’s injury).
\item[130] See supra note 77 and accompanying text (describing reasonable royalty as what parties would agree to in arms-length negotiation).
\item[131] See King Instruments Corp. v. Perego, 65 F.3d 941, 951 (Fed. Cir. 1995) (reasoning patentees consider licensing and excluding and choose more rewarding option).
\item[132] See id. (noting exclusion of competitors may be more profitable than licensing).
\item[133] See supra note 105 and accompanying text (explaining copyright infringer’s profits can supplement actual damages).
\item[134] See supra notes 78-79 and accompanying text (explaining limited punitive remedy in patent law does not include disgorgement of infringer’s profits).
\item[135] See supra notes 79-80 and accompanying text (explaining purely punitive nature of attorney’s-fee award in patent cases); supra notes 113-115 and accompanying text (explaining availability of attorney’s fees as additional compensatory measure in copyright cases).
\item[136] See supra note 80 and accompanying text (highlighting factors courts consider in determining whether to award attorney’s fees in patent cases).
\item[137] See supra text accompanying note 80 (explaining role of willfulness in determinations of exceptionality for attorney’s fees award).
\end{footnotes}
their rights if they do not believe that they can recoup the high litigation costs, which are often an order of magnitude higher than copyright litigation costs.138

B. Adequate Preservation of Incentive to Obtain Patents and Copyrights

Patent law and copyright law provide incentives to publicize one’s work so that the public can benefit.139 Without an adequate remedy for infringement to balance the quid pro quo for patent or copyright protection, incentives diminish.140 A patentee must make a large investment of both time and money to obtain and enforce his or her patent, whereas copyright protection requires trivial upfront costs.141 Furthermore, there is no obvious alternative to copyright protection for a literary or musical work, while at least some patentees can rely on trade-secret protection rather than on patent protection.142

An inventor must fully disclose his or her invention to the public in exchange for patent protection, but risks that the USPTO may not grant the patent despite the publication of secrets.143 Even if granted, a court may invalidate a patent despite the USPTO’s pre-grant examination.144 With these risks and expenses in mind, would-be patentees have much to consider in contemplating reliance on patent protection.145 In light of the large investment, the high risk associated with patenting an invention, and the availability of alternative methods of protection, it is arguably even more important to prevent patent damage awards from falling short than to prevent copyright damage awards

138. See supra note 81 and accompanying text (exposing cost of patent lawsuits up to $7 million).
139. See supra text accompanying notes 22-23 (describing public benefit of patent law as enabling competition and fueling investment and technological furtherance); supra text accompanying notes 22 and 24 (describing public benefit of copyright law as increasing variety of creative works).
141. Compare supra text accompanying notes 34-39 (detailing complex process and high costs of obtaining patent protection), with supra notes 53-55 and accompanying text (detailing simple process and low cost of obtaining copyright protection). An artist, who has no choice but to publicize his or her work to receive any benefit, risks only forty-five dollars should he or she be unable to enforce the copyright. Copyright Office Fees, supra note 55 (showing cost of copyright as forty-five dollars).
142. See Posner, supra note 28, at 39 (describing trade secrecy as alternative protection to patenting).
144. See Blair & COTTER, supra note 57, at 11 n.11 (identifying risk where litigation resulted in invalidation of up to 46 percent of USPTO-granted patents).
145. See supra text accompanying notes 141-144 (explaining risks associated with patenting inventions); see also Posner, supra note 28, at 39 (explaining inventor may utilize trade-secret law as alternative to patenting invention).
C. Adequate Determent of Patent and Copyright Infringement

Punitive-damage awards serve primarily to deter wrongful behavior. Presumably, the punitive damage award for willful infringement seeks to discourage behavior that is more egregious than behavior that constitutes ordinary infringement. Ordinary infringement in copyright law and patent law, however, is fundamentally different.

In copyright law, the infringer’s state of mind ranges from innocent to willful, with ordinary infringement falling between the two. Ordinary copyright infringement involves “copying,” which can be proven by showing that the infringer had access to the copyrighted work and that a substantial similarity exists between the copyrighted work and the accused work. This implies that ordinary copyright infringement requires some awareness of the copyrighted work. When the accused has had no access to the copyrighted work or independently creates the same work, he or she is not liable to the copyright holder. Courts may also relax statutory damage awards for innocent copyright infringement. Therefore, ordinary copyright infringement must amount to more than mere “innocent” infringement and therefore requires a level of culpability higher than simple awareness of the copyrighted work.

Because the “objective recklessness” standard developed in copyright law with its culpability spectrum in mind, supplanting that standard into patent law

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146. See text accompanying notes 141 and 145 (pointing out risks of patenting and alternative to patenting).
148. See Hyde, supra note 120, at 378 (differentiating between ordinary copyright infringement and willful copyright infringement deterred with enhanced damages); see also Thomas, supra note 110, at 912 (commenting on Congress’s creation of three categories of copyright infringers: “ordinary, innocent, and willful”).
149. See infra text accompanying notes 150-157 (contrasting culpability associated with ordinary copyright infringement with culpability associated with ordinary patent infringement.)
150. See infra text accompanying notes 151-155 (explaining spectrum of liability for copyright infringement).
151. See supra text accompanying notes 97-99 (exposing requirements for establishing copyright infringement).
152. See supra text accompanying note 100 (questioning application of “strict liability” label to copyright infringement).
153. See supra text accompanying note 99 (detailing significance of access to copyrighted work when proving copyright infringement); see also Nimmer on Copyright, supra note 24, § 13.01[B] (explaining independent creations non-infringing in copyright law).
154. See supra text accompanying note 101 (explaining situations when damages relaxed in copyright law).
155. See Hyde, supra note 120, at 378 (referring to ordinary copyright infringer as “neither innocent nor willful”).
is not necessarily sensible.\textsuperscript{156} In patent law, even independent inventors who lack knowledge of the infringed patent are liable for ordinary infringement.\textsuperscript{157} Furthermore, the Patent Act, unlike the Copyright Act, does not provide for reduced damages for “innocent” patent infringement.\textsuperscript{158} Thus, ordinary patent infringement is more akin to “strict liability,” as it requires no culpability unlike ordinary copyright infringement.\textsuperscript{159} Because ordinary patent infringement lacks a culpability element whereas ordinary copyright infringement requires culpability, perhaps the level of culpability required for establishing willful patent infringement should be lower than that required for establishing willful copyright infringement.\textsuperscript{160} If the same differential between ordinary infringement and willful infringement in copyright law was intended to be applied to patent law, then because ordinary infringement in patent law can require little or no culpability, perhaps the more egregious willful patent infringement should be lower than copyright law’s “objective recklessness.”\textsuperscript{161} In addition to enhanced damages for willful conduct as a deterrent to infringement, the potential for disgorgement of profits also deters copyright infringement.\textsuperscript{162} Courts, however, cannot disgorge a patent infringer’s profits.\textsuperscript{163} Because a patent infringer’s profits are untouchable, patent infringers could potentially pay less in damages than what they made in profits and ultimately benefit from their infringement.\textsuperscript{164} Because more infringers would be subject to enhanced damages with a lower standard, a lower standard for willful infringement in patent law would strengthen the deterrent forces,

\textsuperscript{156} See infra text accompanying notes 157-164 (obviating relevant differences between copyright law and patent law).
\textsuperscript{157} See supra text accompanying notes 66-68 (explaining strict-liability nature of patent infringement).
\textsuperscript{158} Compare supra Part II.B.1 (detailing damages available for patent infringement under Patent Act), with supra note 118 and accompanying text (showing reduction of statutory damages available under Copyright Act).
\textsuperscript{159} See supra text accompanying notes 157-158 (noting difference between patent law and copyright law).
\textsuperscript{160} See supra text accompanying note 159 (pointing out requisite culpability required for ordinary patent and copyright infringement).
\textsuperscript{161} See supra text accompanying note 157 (explaining differential in culpability required for ordinary patent and willful copyright infringement).
\textsuperscript{162} See supra text accompanying note 112 (presuming disgorgement of profits has deterrent purpose).
\textsuperscript{163} See supra note 78 and accompanying text (noting disgorgement of profits unavailable remedy under Patent Act).
\textsuperscript{164} See Blair & Cotter, supra note 57, at 231 (criticizing reasonable royalty award as under-deterring where defendant “no worse off for having infringed”); Filardi, supra note 78, at Part III.B (advocating Section 284 revisions because infringers face only compulsory license at reasonable royalty). Blair and Cotter combat this criticism, citing permanent injunctions and defendant’s litigation costs as deterrents. See Blair & Cotter, supra note 57, at 231. Injunctions, however, are no longer granted as a matter of right to prevailing patentees. See eBay Inc. v. MercExchange L.L.C., 547 U.S. 388, 393-94 (2006) (holding permanent injunction not matter of right for prevailing patentees); see also Yixin H. Tang, The Future of Patent Enforcement After eBay v. MercExchange, 20 H ARV. J.L. & TECH. 235, 250 (2006) (positing large corporations can afford willful infringement if treble damages and permanent injunctions rarely granted).
which lack in comparison to copyright law.\textsuperscript{165}

In defense of a higher standard for enhanced damages in patent law, overdeterrence of patent infringement runs contrary to a primary goal of the Patent Act: to enable competitors to use patent disclosures as the foundation for development of new designs.\textsuperscript{166} Copyright law, however, does not share this primary goal.\textsuperscript{167} Additionally, one might defend a higher standard for enhanced damages because legitimate use of the patent publication while avoiding infringement is comparatively difficult.\textsuperscript{168}

Although it may be difficult to tell whether a work is “substantially similar” to a copyrighted work, it is arguably more difficult to know whether one is infringing a patent.\textsuperscript{169} A comparison between the alleged patent infringer’s product and the patent claims is not a question of “similarity.”\textsuperscript{170} The alleged patent infringer must contemplate how a court might construe the patent claims.\textsuperscript{171} The alleged patent infringer must also understand the application of the doctrine of equivalents.\textsuperscript{172} Because there is no mechanism to reduce patent infringement damages as there is in the Copyright Act, a higher standard for enhancing patent-infringement damages may be sensible so that competitors do not reduce their discovery and design-around efforts fearing high damage awards.\textsuperscript{173}

These arguments for a higher standard for enhanced damages in patent law, however, do not necessarily require the adoption of “objective recklessness” as a standard for willful infringement.\textsuperscript{174} Instead, they suggest that patent law should adopt an “innocent infringement” standard to allow for reduction in damages similar to the reduction allowed in copyright law.\textsuperscript{175}

\textsuperscript{165} See supra text accompanying note 9 (suggesting difficulty after Seagate in obtaining enhanced damages); see also supra text accompanying notes 162-164 (demonstrating lack of deterrent forces in patent law compared with copyright law).

\textsuperscript{166} See supra note 23 and accompanying text (explaining goals of patent law includes technological advancement).

\textsuperscript{167} See Hyde, supra note 120, at 393 n.113 (noting patents classified and searchable for ease in discovery while copyrights not easily searched); see also 17 U.S.C. § 504(c)(2) (2000) (reducing statutory damages for innocent infringers).

\textsuperscript{168} See infra text accompanying notes 169-172.

\textsuperscript{169} See infra text accompanying notes 170-172 (explaining difficulties in infringer’s ability to recognize patent infringement). But see Hyde, supra note 120, at 393 n.113 (noting patent claims delineate patentee’s rights whereas no comparable demarcation exists for copyrights).

\textsuperscript{170} See text accompanying notes 59-65 (explaining analysis and adjudication of direct patent infringement).

\textsuperscript{171} See text accompanying notes 60-62 (explaining two-part patent-infringement analysis involves claim construction and comparison to construed claims).

\textsuperscript{172} See text accompanying notes 63-65 (explaining doctrine of equivalents analysis).

\textsuperscript{173} See Lemley & Tangri, supra note 76, at 1100 (cautioning lowered willfulness standard may result in over-deterrence).

\textsuperscript{174} See infra text accompanying note 175 (suggesting alternative to adopting higher standard for willful infringement in patent law).

\textsuperscript{175} See supra Part II.B.1 (detailing damages available for patent infringement under Patent Act). There is no reduction of damages for “innocent” infringement provided for amongst the remedies in the Patent Act. See
IV. CONCLUSION

Courts have fewer tools to make up for inadequacy in compensatory awards for patentees than they have for copyright holders. Without the ability to disgorge the infringer of profits and to award attorney’s fees freely, adopting copyright law’s higher threshold for obtaining enhanced damages further forecloses adequate compensation of patentees.

A lower standard for enhancement of damages is appropriate in patent law where lost profits or a reasonable royalty can undercompensate and underdeter patent infringement. With a lower standard, courts could sufficiently deter infringers and ensure that patentees recover their losses. Thus, the lower standard would effectively incentivize patenting of inventions so that the public realizes the patent system’s benefits. Although a lowered standard could compromise a primary goal of patent law, namely the enablement of technological advancement through the study and noninfringing use of competitors’ patent disclosures, adoption of a reduction in damages for inadvertent patent infringement could solve this dilemma. Regardless of whether an “objective recklessness” standard for willful infringement is sound in patent law, justifying its adoption as harmonizing with copyright law is unpersuasive absent a deeper analysis given the inherent differences between patent law and copyright law.

Rachel L. Emsley

supra note 101 and accompanying text.