

Willful Patent Infringement – Impact on Practice After the *Halo* Decision

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I. INTRODUCTION

Employee J of your company attended a trade show and was interested by a particular technology produced by Company X. At the trade show, the inventor of Company X's product explained the ideas embodied in the technology to Employee J. A few months after the conference, during an internal meeting, Employee J inadvertently brought up the ideas he learned from Company X at the trade show. Another employee at your company, Employee K, thought they were good ideas and implemented them into your company's products. About a year later, your company launched a new product which incorporated the ideas learned from Company X. Subsequently, Company X learned of your new products and sent a letter offering an opportunity to license their patents related to the technology implemented in your products. Because both Employees J and K had left your company after your company's product release, your company chose not to respond to Company X's license offer. After a few subsequent offers to license in the ensuing years, Company X sent a final infringement notice with claim charts demanding an immediate response. An employee tells your company they believe Company X's asserted patent should be invalid because your company has existed in the market of the potentially infringing product longer than Company X. That employee also suggests that your company does not need to pay a licensing fee to Company X to continue using the technology in dispute. Your company responds to Company X's final infringement notice by expressing that you will not be paying a licensing fee for their invalid patent. Subsequently, Company X files a lawsuit against your company claiming willful patent infringement.

The above fact pattern illustrates a common behavior amongst market participants who are audacious with patent infringement law. While this type of conduct may have survived the previous objective recklessness standard for willful infringement under *Seagate*,¹ the current subjective willfulness standard under *Halo*² is more stringent. District courts are now more likely to enhance and treble the damages in such a case. According to a

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

2. *Halo Elec., Inc. v. Pulse Elec., Inc., et al.*, 136 S. Ct. 1923 (2016).

Westlaw case report,³ the highest patent infringement damages were awarded in district courts after the *Halo* decision (between 2016 and 2017), ranging from tens of millions to \$2.5 billion⁴ and the damages awarded by juries in high litigation districts were generally larger after the *Halo* decision as well.

This paper first examines the legal theory of willful patent infringement and secondarily examines discernible trends in finding willful infringement and enhanced damages to highlight how the *Halo* decision impacts the U.S. patent system and implications it has for day-to-day patent practice.

II. LEGAL THEORY OF WILLFUL PATENT INFRINGEMENT

The statutory basis and legal theory of willful patent infringement, as well as its related doctrines (including enhanced damages and attorney fees), are the subject of three major cases: *Underwater Devices*, *Seagate*, and *Halo*, discussed in chronological order below.

A. STATUTORY BASIS AND DEVELOPMENT OF LAW

1. Patent Rights

The U.S. Constitution's Patent and Copyright Clause, embodied in Article I, Section 8, Clause 8, states 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."⁵ Congress has amended the patent statute numerous times since its enactment in 1790. The latest major amendment, the America Invents Act of 2011, enacted a transition in the patent system from a first-to-invent to a first-to-file priority system.

The federal statute codifies the patent right by stating "[e]very patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States"⁶

2. Patent Infringement

Patent infringement is a strict liability tort.⁷ Liability for infringement attaches regardless of infringer's knowledge of the patent, intent to infringe, or any state of mind concerning the patent's validity. 35 U.S.C. § 271 states

3. WESTLAW, CASE EVALUATOR REPORT: VERDICT AND SETTLEMENT TRENDS, 2003-2017 (JANUARY 2, 2018).

4. *Idenix Pharm. LLC v. Gilead Sciences Inc.*, No. 1:14CV00846, 2016 WL 8445698 (D. Del., Dev. 15, 2016).

5. U.S. CONST. art I, § 8.

6. 35 U.S.C. § 154(a)(1) (2012).

7. Roger D. Blair & Thomas F. Cotter, *Strict Liability and Its Alternatives in Patent Law*, 17 Berk. Tech. L.J. 800 (2002).

“whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.”⁸ As with civil torts at common law, the tortfeasor’s knowledge and state of mind are considered in determining damages under the Patent Statute.

3. Willful Infringement

Although the Patent Statute does not explicitly define what might constitute willful infringement, 35 U.S.C. § 284 allows courts to increase actual damages up to three times the amount found or assessed if the infringement was committed willfully. Decisional law has guided the analysis of willful patent infringement since the passing of the Patent Act in 1952.⁹

a. Underwater Devices

In *Underwater Devices, Inc. v. Morrison-Knudsen Co.*, the U.S. Court of Appeals for the Federal Circuit (“Federal Circuit”) approached willful patent infringement from the perspective of the tort theory of negligence.¹⁰ According to the Federal Circuit, after receiving actual notice of another’s patent right, the alleged infringer has an affirmative duty to exercise due care by obtaining competent legal advice of counsel before initiating any possible infringing activities.¹¹ To discharge that duty, the competent legal advice of counsel should at least include a patent validity analysis within its four corners, a review of the file history, and an infringement analysis.¹² In other words, the alleged infringer has a crucial time window to fulfill their affirmative duty. The window starts when the alleged infringer learns of the patent in question and must be completed before they continue to engage in any possibly infringing activities. The *Underwater* court also recognized courts must consider the totality of the circumstances surrounding the alleged infringement when determining whether the infringing conduct was willful or not.¹³

b. Seagate

In *Seagate* the Federal Circuit expressly overruled *Underwater Devices* and eliminated the alleged infringer’s affirmative duty in response to complaints that the duty of care established by *Underwater Devices* imposed unreasonable legal costs on the alleged infringer.¹⁴ In its place, the *Seagate* court applied a two-part test which lowered the legal standard of proof for willful infringement. The new test required proof that the accused infringer’s conduct was 1) objectively reckless and 2) subjectively culpable by a heightened standard

8. 35 U.S.C. § 271(a) (2012).

9. 35 U.S.C. § 284 (2012).

10. *Underwater Devices, Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380 (Fed. Cir. 1983).

11. *Id.* at 1389-90.

12. *Id.* at 1390 (although the court only discusses these three methods of discharging the duty this list is not exhaustive).

13. *Id.*

14. *Seagate*, 497 F.3d at 1371.

of clear and convincing evidence.¹⁵ To meet the “objective recklessness” standard, a patentee must show by clear and convincing evidence that the infringer’s actions after learning of the patent were objectively unreasonable.¹⁶ Departing from *Underwater Devices*, the first part of *Seagate*’s test allowed an infringer to establish that their conduct was not objectively reckless by presenting non-frivolous defenses to the patent infringement claim at trial. The infringer’s state of mind (between the time they learned of the patent and up to litigation) had no bearing on this ‘objectively reckless’ prong.

One issue that remained post-*Seagate* was whether the patent holder could argue (by means of a jury instruction) that the absence of a legal opinion supporting an alleged infringer’s “advice of counsel” defense (in response to a claim of willfulness) would give rise to an evidentiary inference—an inference that the infringer never sought such advice, or that the advice of counsel was negative. Congress enacted § 298 in 2011 to remedy this issue.¹⁷ Section 298 states that “the failure of an infringer to obtain the advice of counsel, or the failure of the infringer to present such advice to the court or the jury, may not be used to prove that the accused infringer willfully infringed the patent.”¹⁸ This codification was consistent with *Seagate*’s elimination of an alleged infringer’s affirmative duty of care and their duty to obtain opinions of counsel.

Although this codification precludes the jury in a patent infringement action from drawing an adverse inference against the infringer for failing to come forward with evidence of opinions of counsel, district courts continue to take into account opinions of counsel as a factor in determining willfulness.¹⁹

c. *Halo*

In *Halo*, the U.S. Supreme Court issued a combined decision after consolidating two unrelated cases, *Halo v. Pulse* and *Stryker v. Zimmer*.²⁰ The plaintiffs in both cases prevailed on the issue of willful infringement but failed to meet the *Seagate* test at both the initial trial and on appellate review. The Court rejected the *Seagate* willful infringement and enhanced damages framework because of the decisional law that had evolved under the Copyright Statute and the Patent Statute awarding attorney’s fees to prevailing parties in exceptional cases. The U.S. Supreme Court replaced *Seagate* by reducing the patent owner’s burden of proof from “clear and convincing evidence” to “a preponderance of the evidence.” Furthermore, the Court concluded that *Seagate*’s two-part test was too rigid and incon-

15. *Id.*

16. *Id.*

17. See Sarah Hasford, *America Invents Act Primer* 171-81 (2017); see also *Halo*, 136 S. Ct. at 1937.

18. 35 U.S.C. § 298 (2011).

19. See discussion *infra* Part III(B)(2)(a).

20. *Halo*, 136 S. Ct. at 1933.

sistent with 35 U.S.C. § 284 and essentially excluded district courts from exercising their discretion.²¹

4. Enhanced Damages

a. *Seagate*

Seagate's two-part test established that the evidentiary standard for an award of enhanced damages was clear and convincing evidence that the risk of infringement was either known or so obvious.²² Under *Seagate*, district courts can consider exercising their discretion in awarding enhanced damages to the patent holder only when both parts of the *Seagate* test are satisfied.²³

b. *Halo*

The Supreme Court rejected the *Seagate* test, holding instead that subjective willfulness alone may warrant the award of enhanced damages, without consideration of whether the infringement was objectively reckless.²⁴ The Supreme Court cited to *Octane Fitness* as the relevant standard.²⁵ Referring to the plain language of 35 U.S.C. § 284, the Court noted that the *Seagate* test “impermissibly encumbers the statutory grant of discretion to district courts.”²⁶ Along with the rejection of the *Seagate* test the Court also changed the appellate review standard for willful infringement to “abuse of discretion.”²⁷

5. Attorney Fees

The award of attorney fees to the prevailing patentee is closely related to willful infringement, especially when a court finds egregious behavior from the losing party.²⁸ Significantly, attorney fees have been historically used as an additional punitive tool. Under 35 USC §285, the court, in exceptional cases, may award reasonable attorney fees to the prevailing party.²⁹ In *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, the U.S. Supreme Court addressed the test for awarding attorney fees in exceptional cases by rejecting a rigid two-part test previously adopted by the Federal Circuit requiring the requesting party to prove that the asserted claim is both an objectively baseless defense and subjectively brought in bad faith.³⁰ The Supreme Court held that the determination of whether a case is exceptional is within the district court’s discretion, on a case-by-case basis, taking into account the totality of the circumstances.³¹

21. *Id.* at 1932.

22. *Seagate*, 497 F.3d at 1371.

23. *Id.*

24. *Halo*, 136 S. Ct. at 1933.

25. *Id.* at 1932.

26. *Id.*

27. *Id.* at 1934.

28. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756-57 (2014).

29. 35 U.S.C. § 285 (1952).

30. *Octane Fitness*, 134 S. Ct. at 1749.

31. *Id.* at 1756.

B. HALO'S LEGAL THEORY

1. Willful Infringement

Since the Supreme Court in *Halo* overruled *Seagate's* framework for willful infringement and enhanced damages, a look at how far the pendulum may have swung back to the “willful infringement” framework existing under the *Underwater Devices* case is instructive.

The two major holdings from the *Underwater* case are: 1) the accused infringer's affirmative duty to exercise due care to determine whether infringement exists, specifically by obtaining the competent legal advice of counsel before initiating any possible infringing activity;³² and 2) the determination of willful infringement under the totality of circumstances test,³³ which was further elaborated on by the Federal Circuit in *Rite-Hite Corp. v. Kelley Co. Inc.*³⁴

a. State of Mind

To determine culpability, the duty of care established by *Halo* requires looking into the accused infringer's state of mind at the time the alleged infringement commenced.³⁵ In civil tort cases, including patent infringement, the degree of culpability is based on the actor's state of mind.³⁶ Similarly, “willfulness” of infringement has varying degrees ranging from unknowing (or accidental) to deliberate (or reckless disregard of a patentee's legal rights).³⁷ The *Halo* court indicates that culpability is generally measured against the knowledge of the actor at the time of the challenged conduct,³⁸ citing the Restatement Second of Torts § 8A.³⁹ Therefore, an accused infringer with knowledge that its conduct could substantially result in infringement is likely to meet the requisite state of mind that triggers the culpability. Furthermore, the court discussed recklessness by referring to a case⁴⁰ which relies on Restatement Second of Torts, defining reckless behavior as “acts ‘knowing or having reason to know of facts which would lead a reasonable man to realize’ his actions are unreasonably risky.”⁴¹ This suggests the state of mind standard is “having reason to know,” which is less than actual knowledge, and a reference to “a reasonable man” connotes an objective inquiry.⁴²

32. *Underwater*, 717 F.2d at 1389-90.

33. *Id.* at 1390-91.

34. *Rite-Hite Corp. v. Kelley Co. Inc.*, 819 F.2d 1120, 1125-26 (Fed. Cir. 1987).

35. *Halo*, 136 S. Ct. at 1932-33.

36. *Id.* at 1933.

37. *Rite-Hite*, 819 F.2d at 1125-26.

38. *Halo*, 136 S. Ct. at 1933.

39. *See id.* (discussing the Restatement, Second of Torts § 6A, which states that “intent” denotes state of mind in which “the actor desires to cause consequences of his act” or “believes” them to be “substantially certain to result from it”).

40. *Safeco Inc. Co. of Am. v. Burr*, 551 U.S. 47 (2007).

41. *Halo*, 136 S. Ct. at 1933.

42. Dmitry Karshedt, *Enhancing Patent Damages*, 51 U.C. DAVIS L. REV. 1427, 1465 (2018).

The *Underwater* court specifies that culpability is triggered at the moment the accused infringer is deemed to be “initiating any possible infringing activity.”⁴³ In *Underwater*, the accused infringer received actual notice from patentee by an offer to license the patents; the infringer rejected the offer to license without any further due diligence or infringement analysis.⁴⁴ Such actual notice to the infringer constitutes one triggering point; however, the *Halo* court did not clarify what constitutes the “time of the challenged conduct,” which could commence the moment an accused infringer first learns of the relevant patent(s), or it could commence at the time of the infringing product’s development.⁴⁵ For example, if an infringer has no products, the time of challenged conduct could be as early as when the infringer first found out about the patent, and decided to copy the patented ideas in its products. If an infringer has products, the time of the challenged conduct could be when the infringer found out about the patent and took no remedial measure (such as designing around or ceasing infringing activity, or obtaining a legal opinion). Thus, the infringer’s state of mind at different times, together with its specific circumstances, would all appear to be relevant to the determination of culpability.

The emphasis on “knowledge at the time of the challenged conduct” is a purposeful departure from the *Seagate* decision, which excused willfulness when the accused infringer relied on an objectively reasonable defense to infringement at trial, even when that defense was not previously known to the accused infringer.⁴⁶ Post-*Halo*, district courts define “timing” as the moment the accused products go into production, and “knowledge” as the accused infringer’s opinion of invalidity or non-infringement.⁴⁷ The courts weigh both factors in their determination of culpability.⁴⁸

b. Determining Willfulness

Regarding the degree of culpability that is required to establish willfulness, the *Underwater* court found the defendant willfully infringed the asserted patents, because the defendant did not meet the requisite duty of due care of performing infringement analysis promptly after receiving actual notice of the patent, and continued to engage in the infringing product development.⁴⁹ On the other hand, the *Halo* court rejected the objective recklessness requirement of *Seagate*, noting that *Seagate* effectively excluded district courts from discretionarily punishing many of the most culpable offenders, such as the “wanton and malicious pirate” who intentionally infringed another patent, with no doubts about its validity or any notion of

43. See *Underwater*, 717 F.2d at 1390.

44. See *id.* at 1384-85.

45. See *Halo*, 136 S. Ct. at 1933.

46. *Id.*

47. *Omega Patents, LLC v. CalAmp Corp.*, No. 6:13CV1950Orl40DCI, 2017 U.S. Dist. LEXIS 55846 at *23-24 (M.D. Fla. Apr. 6, 2017).

48. *Id.*

49. *Underwater*, 717 F.2d at 1390.

defense, and whose sole purpose was to steal the patentee's business.⁵⁰ The *Halo* court further noted that "'willfully' is a word of many meanings whose construction is often dependent on the context in which it appears."⁵¹ Therefore, the *Halo* court found that recklessness was too high of a threshold for determining willfulness, especially when it had already established that the infringer's sole purpose was to steal another's business, a punishable conduct.⁵² The *Halo* court held that the willfulness determination still required taking the circumstances of an accused infringer's conduct into account.⁵³ In this regard, the *Halo* court reaffirms the *Underwater* court's approach for determining willfulness in the totality of circumstances.⁵⁴

c. Legal Advice of Counsel

Regarding an accused infringer obtaining advice of counsel on the issues of patent invalidity and non-infringement, the *Underwater* court found that obtaining the competent legal advice of counsel is a proper discharge of the affirmative duty of due care.⁵⁵ In the *Halo* decision, the court stated that willfulness had always been a part of American Patent Law, and that the enactment of §298 did not demonstrate that Congress ratified *Seagate*'s particular conception of, or test for, willfulness.⁵⁶ The concurring justices also observed that Congress's purpose was to leave it "to the potential infringer to decide whether to consult counsel—without the threat of treble damages influencing that decision."⁵⁷ Therefore, post-*Halo*, obtaining competent legal advice of counsel remains an important practice to combat allegations of willfulness.

2. Enhanced Damages

The next question is what degree of willful infringement warrants the statutory remedy of enhanced damages?

First, the *Halo* court held the evidentiary burden for 35 U.S.C. §284 was not *Seagate*'s clear and convincing evidence standard because, "like §285, §284 has no specific evidentiary burden, much less than such a high one."⁵⁸ Further, the *Halo* court held that subjective willfulness and intentional or knowledgeable infringement may warrant enhanced damages.⁵⁹ Therefore, *Halo* establishes that the burden of proving subjective willfulness

50. *Halo*, 136 S. Ct. at 1932.

51. *Halo*, 136 S. Ct. at 1933 n.2; *see also Safeco*, 551 U.S. at 57.

52. *Halo*, 136 S. Ct. 1923.

53. *Id.*

54. *See* JOHN M. SKENYON, CHRISTOPHER MARCHESE & JOHN LAND, PATENT DAMAGES LAW AND PRACTICE § 4:20 (2018-2019 ed. 2019).

55. *Underwater*, 717 F.2d at 1389-90.

56. *Halo*, 136 S. Ct. at 1935 (referring to the court's answer to respondents' arguments to preserve the *Seagate* test, based on 35 U.S.C. §298, which states that an adverse inference cannot be drawn from an accused infringer's failure to obtain the advice of counsel).

57. *Id.* at 1937.

58. *Id.* at 1934.

59. *Id.* at 1933.

is the preponderance of evidence standard, expressly overruling *Seagate's* clear and convincing evidentiary standard.⁶⁰

Secondly, the *Halo* court noted that the statutory intent behind the award of enhanced damages was to punish egregious infringement behavior, which had been described in various cases as “willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or— indeed— characteristic of a pirate.”⁶¹ In other words, the remedy of enhanced damages is a punishment reserved for egregious infringing behavior. Additionally, the *Halo* court’s statement that pirating behavior, coupled with “intentionally infring[ing] another’s patent with no doubts about its *validity* or any *notion of defense*”, strongly suggests that the advice of counsel defense may play a significant role in determining enhanced damages (emphasis added).⁶² The court cautioned awarding enhanced damages in garden-variety cases; for example, “when the evidence shows that the infringer knew about the patent and nothing more,” as stated in Justice Stephen Breyer’s concurring opinion.⁶³

Finally, the *Halo* court held that the district courts should still look at the totality of circumstances when exercising their discretion because “§284 allows courts to punish a full range of culpable behavior” and “courts should continue to take into account the particular circumstances of each case in deciding whether to award damages, and in what amount.”⁶⁴

III. POST-*HALO* FEDERAL DECISIONS

In *Halo*, the court emphasizes that the decision to enhance damage rests within the district court’s discretion.⁶⁵ A determination that the infringement is “willful” is essential to an award of enhanced damages. Therefore, it is essential to identify the rationale behind a district court’s decisions. Below, recent decisions are analyzed to identify post-*Halo* trends and to identify the types of threshold behaviors that sufficiently constitute willful infringement (and therefore result in an award of enhanced damages).

A. POST-*HALO* STATISTICS

The evidentiary standard required to prove willful infringement was curtailed after *Halo*, but how has this change been reflected in actual decisions? Post-*Halo* statistics indicate that the overall rate of juries’ finding willfulness has increased approximately 35% six months after the *Halo* decision

60. *Id.* at 1934.

61. *Id.* at 1932.

62. *Id.*

63. *Id.* at 1936.

64. *Id.* at 1933.

65. *Id.* at 1931-32.

(pre-*Halo*'s 45% versus post-*Halo*'s 80%).⁶⁶ One reason might be that the patent holder can support an allegation of willful infringement with less compelling evidence, and thus the opportunity to find willful infringement is easier than pre-*Halo*. Moreover, because the analysis no longer requires a finding of objective recklessness, the quantum of evidence necessary to support a jury finding of willful infringement finding is lower, making it easier to prove. Another interesting observation post-*Halo* is that pleading willfulness in a case increases the risk of a court determining that infringement occurred, and it leads to a higher risk of a court determining the infringement was willful.⁶⁷ For example, statistics show that when willfulness is tried, infringement is found roughly 85% of the time.⁶⁸ On the other hand, when willfulness is not tried, infringement is found only 60% of the time.⁶⁹ In those cases where juries found infringement, 71% of the accused infringers were also found to have acted willfully.⁷⁰ This trend shows that pleading willful infringement can affect defendants' liability, and plaintiffs may use an assertion of willfulness as leverage for proving liability after *Halo*. Additionally, willfulness becomes harder to overturn due to the more deferential appellate review standard.⁷¹

B. WILLFUL INFRINGEMENT

In patent litigation, the jury is permitted to make a factual finding of willful infringement, but the district court judge retains the discretion to enhance damages based on the jury's finding of willful infringement.⁷² An award of enhanced damages may be affected by several factors. Most importantly, the accused infringer's conduct pre-suit and during the litigation can have a substantial impact on the determination.

1. Willfulness Pleading Standard

After *Halo*, the district courts have exhibited two approaches towards the application of the pleading requirements for willfulness because the *Halo* court did not weigh in on this issue.⁷³ One approach is for the patent holder to plead that the accused infringer had actual knowledge of the asserted patent. This approach is based on the *Halo* court's comments that "the subjective willfulness of a patent infringer, intentional or knowing, may

66. John Johnson et al., *Minimizing Willful Infringement Post-Halo*, FISH & RICHARDSON 45 (Dec. 15, 2016), https://www.fr.com/wp-content/uploads/2016/12/Final_2016-12-15-Halo-Willfulness-Webinar-FINAL.pdf [https://perma.cc/9QRR-D445].

67. Audio recording: *The New Reality of Willful Infringement Post-Halo* (Continuing Legal Education Dec. 15, 2017) (on file with The Bar Association of San Francisco) [hereinafter *BASF-CLE*].

68. *BASF-CLE*, *supra* note 67.

69. *BASF-CLE*, *supra* note 67.

70. *BASF-CLE*, *supra* note 67.

71. *Halo*, 136 S. Ct. at 1934.

72. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1340-41 (Fed. Cir. 2016).

73. See *Pleading Willfulness – One Year Post-Halo*, FISH & RICHARDSON (Jun. 28, 2017), <https://www.fr.com/fish-litigation/pleading-willfulness-one-year-post-halo> [https://perma.cc/F97G-ZJCZ] [hereinafter *Fish IP*].

warrant enhanced damages.”⁷⁴ For example, in *Raytheon Co. v. Cray, Inc.*, the district court concluded that the plaintiff had adequately pleaded willfulness because the plaintiff provided the defendant its patent portfolio and alleged that the defendant had actual knowledge of the patent-in-suit.⁷⁵

The other approach exhibited by the courts requires that the patent holder not only pleads that the accused infringer had knowledge of the patent-in-suit, but also engaged in the egregious conduct. District courts following this approach often cite Justice Stephen Breyer’s concurring opinion in *Halo*, emphasizing that enhanced damages are reserved for “cases of egregious misconduct.”⁷⁶ For example, in *CG Tech. Dev., LLC v. Big Fish Games, Inc.*, the district court dismissed plaintiff’s willfulness claim and held that the complaint contained no facts to suggest that the defendant’s conduct was “egregious” while also holding that the plaintiff’s conclusory allegation about the defendant’s knowledge of the patent and defendant’s continued sale of infringing products was inadequate.⁷⁷

Some district courts distinguish between pre-suit and “post-filing” willfulness.⁷⁸ A pre-suit willful infringement claim may be dismissed if a plaintiff does not meet the pleading requirement, but the district courts may still allow post-filing willfulness to remain if a defendant is accused of having “escalated” infringing behavior after the suit was filed.⁷⁹

2. Accused Infringer’s Knowledge and Behavior

Because the jury’s willful infringement determination directly related to the district court’s enhanced damages analysis, the factors used to assess the egregiousness of willful conduct, referred to as the “*Read* factors,”⁸⁰ shed light on the jury’s determination. Specifically, the factors regarding deliberate copying and good-faith belief of invalidity or non-infringement – shed light on the jury’s determination.⁸¹ Additionally, the jury instruction for willful patent infringement typically equates willfulness with “establishing by a preponderance of the evidence that [a] defendant acted in the manner that was wanton, malicious, in bad-faith, deliberate, consciously wrongfully,

74. *Halo*, 136 S. Ct. at 1932-33.

75. *Raytheon Co. v. Cray, Inc.*, No. 2:16CV00423JRGRSP, 2017 U.S. Dist. LEXIS 56729 at *12-13 (E.D. Tex. Mar. 12, 2017).

76. *Halo*, 136 S. Ct. at 1938.

77. *CG Tech. Dev., LLC v. Big Fish Games, Inc.*, No. 2:16CV00857RCJVCVF, 2016 U.S. Dist. LEXIS 115594 at *44 (D. Nev. Aug. 29, 2016).

78. *Fish IP*, *supra* note 73.

79. *Simplivity Corp. v. Springpath, Inc.*, No. 4:15-13345-TSH, 2016 U.S. Dist. LEXIS 155017 at *60-62 (D. Mass. July 15, 2016).

80. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992) (providing nine factors for enhancement analysis: (1) whether the infringer deliberately copied the ideas of another; (2) whether the infringer investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; (3) the infringer’s behavior as a party to the litigation; (4) the defendant’s size and financial condition; (5) the closeness of the case; (6) the duration of the defendant’s misconduct; (7) remedial action by the defendant; (8) the defendant’s motivation for harm; and (9) whether the defendant attempted to conceal its misconduct).

81. Elizabeth Banzhoff et al., *Determining Willful Infringement When Circumstances Change* LAW360 (Jun. 7, 2017, 2:32 PM), <https://www.law360.com/articles/927122/determining-willful-infringement-when-circumstances-change> [<https://perma.cc/MZ8Z-X78Q>].

flagrant, or characteristic of a pirate,” and thus may influence how the jury perceives willfulness from the evidence.⁸²

a. Legal Opinion

After *Halo*, advice of counsel remains an effective defense to willful infringement assertions. Although 35 U.S.C. §298 prevents drawing negative inferences from the absence of opinions of counsel, district court jury instructions continue to emphasize the importance of opinions of counsel as a factor for consideration.⁸³ In *Loggerhead Tools, LLC v. Sears Holding Corporation*, willful infringement was not found because the facts were “highly probative of good faith.”⁸⁴ Specifically, the court determined the defendant acted in good faith because the defendant consulted with its patent attorney throughout the design process, and because the defendant obtained a non-infringement opinion before the litigation commenced.⁸⁵

However, a legal opinion should be timely, thorough and provided by competent counsel. In *Omega*, the defendant’s opinion letter was prepared three years after the infringement began (after the accused products were already in production) and there was no evidence indicating that the defendant had an invalidity defense at the time the challenged conduct began.⁸⁶ According to *Halo*, culpability is measured against the infringer’s knowledge at the time of the challenged conduct, and an after-the-fact invalidity defense has little merit.⁸⁷ Further in *Dominion Res. Inc. v. Alstom Grid, Inc.*, the jury found the defendant willfully infringed the plaintiff’s patent rights, because the defendant’s belief that no infringement existed was “based entirely on [the] opinion of people without expertise in reading patent claims.”⁸⁸

b. Intent, Knowledge, and Remedial Measure

Knowledge by the alleged willful infringer that the disputed patent exists continues to be a prerequisite to obtain enhanced damages.⁸⁹ The knowledge standard requires that the alleged infringer had “reason to know,” or had “actual knowledge” that the patent existed.⁹⁰ An accused infringer’s conduct is more likely found willful if it obtained knowledge of the infringed patent proactively (or more directly) rather than passively. For example, in *WBIP*, the defendant visited a competitor’s trailer at a trade show, asked how the competitor’s patented technology worked, and later the defendant introduced its own products incorporating the same patented

82. BASF-CLE, *supra* note 67.

83. See BASF-CLE, *supra* note 67.

84. *Loggerhead Tools, LLC v. Sears Holding Corp.*, No. 12CV9033, 2016 U.S. Dist. LEXIS 127627 at *9–10 (N.D. Ill. Sep. 20, 2016).

85. *Id.*

86. *Omega*, 2017 U.S. Dist. LEXIS 55846 at 24.

87. *Halo*, 136 S. Ct. at 1933.

88. *Dominion Res. Inc. v. Alstom Grid, Inc.*, No. 15-224, 2016 U.S. Dist. LEXIS 136728 at *63–64 (E.D. Pa. Oct. 3, 2016).

89. *WBIP*, 829 F.3d at 1341.

90. *Halo*, 136 S. Ct. at 1933.

technology.⁹¹ The jury found the defendant's deliberate copying rose to the standard of willful infringement, and the court awarded plaintiff enhanced damages due to this conduct.⁹²

Sometimes, defendant's knowledge of the existence of a disputed patent can be inferred as early as the time of issuance (rather than when a defendant receives notices or is sued). In *WCM Industries v. IPS Corp.*, the defendant argued that it lacked knowledge of the disputed patent and that they did not find out about the disputed patent until it was sued for infringement.⁹³ The appellate court rejected the defendant's argument because the defendant's employee monitored the plaintiff's products for decades and possessed literature indicating the products were marked with "patent pending."⁹⁴ Additionally, the defendant had been aware of an ongoing patent lawsuit between the company the defendant had acquired and the plaintiff (defendant had knowledge at the time of the acquisition).⁹⁵ The court indicated that the defendant might have known what was coming given that the patent applications are no longer secret.⁹⁶

However, in *Atmos Nation, LLC v. Bnb Enter., LLC*, the plaintiff did not establish the knowledge requirement, because the plaintiff was successful and well-known in the industry, and the defendant simply resold the plaintiff's products.⁹⁷ Further, in *Radware, Ltd. v. F5 Networks, Inc.*, the district court rejected the jury's willful infringement finding because the defendant's allegedly infringing product was on the market long before the lawsuit, and the defendant never received infringement notice.⁹⁸ The district court did not find sufficient evidence to establish that defendant's in-house counsel was aware of the asserted patent because the patent was buried in a list of over a dozen cited references, spanning over 100 pages, that accompanied the Notice of Allowance of the defendant's patent.⁹⁹

Additionally, the remedial measures taken by a defendant after learning of the accused patent can be a factor weighing against willful infringement. For example, in *Greatbatch Ltd. v. AVX Corp.*, the defendant obtained counsel's opinion before the litigation commenced and made a good-faith effort to design around the asserted patent to avoid infringement.¹⁰⁰ The

91. *WBIP*, 829 F.3d at 1341.

92. *Id.*

93. *WCM Indus. v. IPS Corp.*, 721 F. App'x 959, 970–71 (Fed. Cir. 2018).

94. *Id.*

95. *Id.* at 971.

96. *Id.*

97. *Atmos Nation, LLC v. Bnb Enter., LLC*, No. 16-62083 Civ. slip op. at *6 (S.D. Fla. Aug. 21, 2017).

98. *Radware Ltd. v. F5 Networks, Inc.*, No. 5:13CV02024RMW, 2016 U.S. Dist. LEXIS 112504 at *10-11 (N.D. Cal. Aug. 22, 2016).

99. *Id.*

100. *Greatbatch Ltd. v. AVX Corp.*, No. 13-723-LPS, 2016 U.S. Dist. LEXIS 171939 at *5–6 (D. Del. Dec. 13, 2016).

district court found this remedial measure was a reasonable defense to an assertion of willful infringement.¹⁰¹

3. Other relevant factors and strategies

Other strategies may help reduce the risk of an adverse verdict of willful infringement. Accused infringers may rely upon 35 U.S.C. §298, which provides that the accused infringer's failure to rely on the advice of counsel may not be used to draw a negative inference supporting a finding of willful infringement.¹⁰² In that instance, an accused infringer who does not have opinions of counsel regarding an alleged patent may consider filing a motion in limine to prevent a plaintiff offering such evidence at trial.¹⁰³

Another strategy concerns the language and wording of jury instructions. Since a jury resolves the willfulness issue, the jury instruction language may significantly impact how the jury perceives willfulness when reviewing the evidence.¹⁰⁴ Interestingly, one case, decided shortly after the *Halo* decision, involved a jury that did not find willful infringement.¹⁰⁵ The jury instructions contained relatively strong willfulness language that closely followed language contained in the *Halo* decision, which differed from other cases where the jury instructions used at trial contained less stringent, boilerplate language that ultimately resulted in a finding of willfulness by the jury.¹⁰⁶

Finally, a jury verdict form plays an important role as well. A binary choice of "willful" or "non-willful" may not capture a defendant's state of mind for all points in time. The *Halo* Court was not explicitly clear about whether "at the time of the challenged conduct" is a specific date or time period. The jury raised this question during a trial at one point.¹⁰⁷ There was a possibility that defendant's state of mind evolved over time based on changing circumstances.¹⁰⁸ To better assist the jury, and to help district courts exercise discretion for enhancing damages, a more nuanced jury verdict form may help.¹⁰⁹ For example, a verdict form could contain multiple questions addressed to specific factual issues about defendant's conduct in response to changing circumstances.¹¹⁰ It remains to be seen whether post-*Halo* courts will adopt such an approach on jury verdict forms.

101. *Id.*

102. 35 U.S.C. § 289 (2012).

103. Kenneth Jeng et al., *Litigating Willful Patent Infringement in a Post-Halo World*, IPWATCHDOG (Dec. 8, 2016), <http://www.ipwatchdog.com/2016/12/08/litigating-willful-patent-infringement-post-halo/id=75456/> [https://perma.cc/AZ8D-W5YF].

104. Jean Dassie, *Federal Circuit on the role of the judge and jury in finding willful infringement and enhancing damages*, Federal Circuit on Damages and Other Remedies (Apr. 23, 2018), <http://www.fedcircdamages.com/federal-circuit-on-the-role-of-the-judge-and-jury-in-finding-willful-infringement-and-enhancing-damages/> [https://perma.cc/WY98-CNC4].

105. Jeng, *supra* note 103; *Finjan, Inc. v. Sophos, Inc.*, No. 14-cv-01197-WHO, 2016 U.S. Dist. LEXIS 121753 (N.D. Cal. Sep. 8, 2016).

106. Jeng, *supra* note 103.

107. BASF-CLE, *supra* note 67.

108. *See* Banzhoff, *supra* note 81.

109. *See* Banzhoff, *supra* note 81.

110. *See* Banzhoff, *supra* note 81.

C. ENHANCED DAMAGES

Although *Halo* lowered the evidentiary burden of proving willful infringement, an enhanced damages award does not necessarily follow.¹¹¹ Likewise, willfulness is not necessary for enhanced damages.¹¹² *Halo* emphasized that courts should take into account each case's particular circumstances when considering enhanced damages.¹¹³ Since *Halo* merely indicated that district courts are “to be guided by sound legal principles developed over nearly two centuries of application and interpretation of the Patent Act” when applying discretion to award enhanced damages,¹¹⁴ many post-*Halo* courts continue to use the pre-*Halo* factors in *Read Corp. v. Portec, Inc.* for such analysis. Other courts believe that the requisite conduct for awarding enhanced damages post-*Halo* is “egregiousness.”¹¹⁵

In the first six months of post-*Halo* decisions, some *Read* factors seem to carry more weight than others, and therefore deserve more attention and analysis.¹¹⁶ These are: (1) deliberate copying; (2) infringer's analysis of the scope of an infringed patent and its good-faith belief of non-infringement or invalidity; and (3) any evidence of the concealment of the accused infringer's misconduct.¹¹⁷

1. Deliberate Copying

Deliberate copying can be inferred if compelling circumstantial evidence of copying exists and the accused infringer cannot prove independent development. This factor strongly correlates to an enhanced damages award.¹¹⁸ For example, in *Georgetown Rail Equipment Company v. Holland L.P.*, the federal circuit affirmed the district court's application of the *Read* factors, where the plaintiff disclosed its system details to the defendant; the only details not shared were the plaintiff's source codes.¹¹⁹ The jury found the defendant's development partner's source codes contained the claimed algorithm.¹²⁰ Thus, there was strong evidence of copying, which favored enhanced damages.¹²¹ In another case, *Dominion Res. Inc. v. Alstom Grid, Inc.*, deliberate copying was inferred because the defendant claimed that it had conceptualized a claimed functionality five years before the suit.¹²² Howev-

111. *Finjan, Inc. v. Blue Coat Sys.*, No. 13CV03999BLF, 2016 WL 3880774, at *1, *16 (N.D. Cal. Jul 2016).

112. *Id.*

113. *Halo*, 136 S. Ct. at 1933.

114. *Id.* at 1935.

115. *Trs. of Boston Univ. v. Everlight Elecs. Co.*, 212 F. Supp. 3d 254, 257 (D. Mass. 2016).

116. See generally Donald Steinberg et al., *4 Factors Influencing Enhanced Damages After Halo*, LAW 360 (Jan. 17, 2017, 2:12 PM), <https://www.law360.com/articles/876993/4-factors-influencing-enhanced-damages-after-halo> [<https://perma.cc/J44V-4HNC>].

117. *Read Corp.*, 970 F.2d at 827.

118. *Georgetown Rail Equip. Co. v. Holland L.P.*, No. 6:13CV366, 2016 WL 3346084 at *17 (E.D. Tex. June 16, 2016), *aff'd*, 867 F.3d *1229, *1245–46 (Fed. Cir. 2017).

119. *Id.*

120. *Georgetown*, 2016 WL 3346084 at *7.

121. *Id.*

122. *Dominion*, 2016 U.S. Dist. LEXIS 136728 at *61–63.

er, defendant's product did not implement the particular functionality until nine months after attending the trade show where the plaintiff presented products.¹²³

Courts have, however, noted an important distinction between deliberate copying (when an accused infringer receives information directly from the patentee) and normal, lawful business competition (where competitors monitor each other from a distance).¹²⁴ In *Finjan*, where a defendant shifted the focus of its products, and its employees discussed and monitored the plaintiff's product offerings, the district court held that normal business competition was not sufficient to show copying.¹²⁵

2. Good-faith Belief of Non-infringement and/or Invalidity

Jury instructions often include the good-faith belief factor, and thus affect both a jury's determination of willful infringement and a court's exercise of discretion in determining whether to award enhanced damages.¹²⁶ Courts are more likely to award enhanced damages when an infringer is aware of a patent but performs an inadequate analysis or investigation of the scope of their claims to form a reasonable defense,¹²⁷ does not obtain a legal opinion, consults a non-expert and/or non-competent counsel,¹²⁸ or mistakenly investigates wrong products.¹²⁹ The defendant in *Imperium IP Holdings (Cayman), Ltd. v. Samsung Elecs. Co.*, tracked the plaintiff's patent portfolio, failed to analyze the patent claims, could not prove independent development of the technology at issue and instead attempted to buy these patents through a broker without revealing its identity.¹³⁰ Further, in *PPC Broadband, Inc. v. Corning Optical Communs. RF, LLC*, the defendant received legal advice regarding the scope of the patents, but the advice concerned an earlier version of non-infringing products.¹³¹ Finally, in *Georgetown*, the federal circuit affirmed the district court's enhanced damages award because, even though the defendant had obtained the plaintiff's confidential information under non-disclosure agreements, the defendant failed to investigate the scope of the patent holder's patent rights, they did not attempt to design around the patent, and they did not have a plausible good-faith belief of non-infringement.¹³²

123. *Id.*

124. Steinberg, *supra* note 116.

125. *Finjan*, 2016 WL 3880774 at *16; *see also Finjan, Inc. v. Blue Coat Sys.*, 879 F.3d 1299.

126. *See* BASF-CLE, *supra* note 67.

127. *See Imperium IP Holdings (Cayman), Ltd. v. Samsung Elecs. Co.*, 203 F. Supp. 3d 755, 764 (E.D. Tex. 2016); *See also Georgetown*, 867 F.3d at 1245-46.

128. *See Arctic Cat Inc. v. Bombardier Rec. Prods.*, 198 F. Supp. 3d 1343, 1350-51 (S.D. Fla. July 2016) (The defendant consulted a patent agent, who was not permitted to give an opinion on patent infringement or validity).

129. *PPC Broadband, Inc. v. Corning Optical Communs. RF, LLC*, No. 5:11CV761GLSDEP, 2016 U.S. Dist. LEXIS 152450 at *20-21 (N.D.N.Y. Nov. 3, 2016).

130. *Imperium*, 203 F. Supp. 3d at 764.

131. *PPC Broadband*, 2016 U.S. Dist. LEXIS 152450 at *20-21.

132. *Georgetown*, 867 F.3d at 1245-46.

Still, a good-faith belief of non-infringement or invalidity after investigation could be reflected through a successful re-examination or by providing analysis of an infringing product to the patentee for examination. For example, in *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, the federal circuit affirmed the district court's denial of an enhanced damages award, because the alleged infringer filed a re-examination request and successfully caused the patentee to narrow the scope of asserted claims.¹³³ The court found this was not egregious, rather it was a "garden-variety" patent infringement action.¹³⁴ Additionally, in *Trs. of Bos. Univ.*, the defendant hired two firms to provide non-infringement opinions, obtained testing of the accused products from a third party, and then presented this information to the plaintiff.¹³⁵

District courts sometimes find that accused infringers present a reasonable defense and find that, even though the accused infringer did not prevail, the case was too close for the district courts to award enhanced damages.¹³⁶ Such a situation being part of another *Read* factor, "closeness of the case," usually overlaps with the good-faith belief factor. For example, in *Radware*, the district court found that the defendant had a good-faith belief of invalidity even though the USPTO eventually found the asserted patent claim patentable.¹³⁷ The accused infringer's expert testimony supported the view that the prior art was not deficient and did teach the claimed limitations, despite the USPTO's findings to the contrary.¹³⁸ Additionally, in *Enplas Display Device Corp. v. Seoul Semiconductor Co.*, although the jury found willful infringement from the little evidence of good faith prior to litigation, the district court declined to award enhanced damages because the accused infringer sought a declaration of invalidity and non-infringement supported by reasonable theories, and the patent holder dropped a number of claims.¹³⁹

3. Concealment of Misconduct

An important consideration for an enhanced damages award is whether an infringer attempts to conceal misconduct, and such a finding almost invariably leads to an enhanced damages award.¹⁴⁰ The culpable acts of concealment may take place before or after commencement of litigation. For example, in *PPC Broadband*, the district court awarded enhanced damages because, even though the defendant had previously settled an infringement dispute with the plaintiff, the defendant later added an "invisible" infringing feature in its new products while keeping the same series

133. *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1382 (Fed. Cir. 2017).

134. *Id.*

135. *Trs. of Boston Univ.*, 212 F. Supp. 3d at 257.

136. *Radware*, 2016 U.S. Dist. LEXIS 112504 at *23-25.

137. *Id.*

138. *Id.* at 24.

139. *Enplas Display Device Corp. v. Seoul Semiconductor Co.*, No. 13CV05038 NC, 2016 U.S. Dist. LEXIS 105762, at *22-25 (N.D. Cal. Aug. 10, 2016).

140. Steinberg, *supra* note 116.

number, same model number, same catalog, and same marketing material so the plaintiff would not notice.¹⁴¹

On the other hand, evidence of a lack of concealment might reduce the chance of an enhanced damages award,¹⁴² or cause district courts to award less than the maximum statutory amount of treble damages.¹⁴³ For example, in *Trs. of Bos. Univ.*, the district court did not award enhanced damages and noted that providing the patent holder with the means to determine infringement, in the form of product samples, was not indicative of an act of concealment.¹⁴⁴ Further, in *Georgetown*, the federal circuit affirmed the district court's award of limited enhanced damages of only an additional \$1 million as opposed to awarding the maximum treble damages of over \$4.5 million.¹⁴⁵ The defendant's failure to disclose its relationship with its business partner developing the accused infringing product was not an act of concealment, and the defendant publicizing its accused infringing system was inconsistent with concealment.¹⁴⁶

D. SUMMARY

In light of the *Halo* decisions, patent practitioners and the general audience conducting activities related to patents may need to adjust their practice. The alleged infringer's knowledge and intent play a very important role in determining willful infringement by the jury, and the alleged infringer's subsequent behavior also carries weight in a court's enhanced damages determination. They are reflected in whether the accused infringer has a good-faith belief of non-infringement and/or invalidity or whether the accused infringer takes any genuine remedial effort.¹⁴⁷ They are also the best way to stay out of the characterization of "wanton, malicious, in bad-faith, deliberate, consciously wrongfully, flagrant, or characteristic of pirate."¹⁴⁸ In general, knowledge and intent can be categorized into two ways: as a notice or a demand letter from a third-party;¹⁴⁹ or as an infringer's own knowledge of a patent or patented information.¹⁵⁰ The approaches used to minimize the risk in these two after mentioned categories slightly differ.

A notice from a third party can be either a vague letter merely mentioning an opportunity to license a portfolio, or a specific demand letter pointing out patents and accused products. It creates a direct knowledge of

141. *PPC Broadband*, 2016 U.S. Dist. LEXIS 152450, at *4–5, *27.

142. *Trs. of Boston Univ.*, 212 F. Supp. 3d at 257.

143. *Georgetown*, 867 F.3d at 1245–46.

144. *Trs. Of Boston Univ.*, 212 F. Supp. 3d at 257–58.

145. *Georgetown*, 867 F.3d at 1245–46.

146. *Georgetown*, 2016 WL 3346084 at *20; *aff'd* *Georgetown*, 867 F.3d at 1245–46.

147. Steinberg, *supra* note 116; *Read Corp.*, 970 F.2d at 827.

148. *Halo*, 136 S. Ct. at 1932.

149. *Underwater Devices*, 717 F.2d at 1384–85.

150. *Imperium IP Holdings*, 203 F. Supp. 3d at 764; *WBIP*, 829 F.3d at 1325.

patents.¹⁵¹ For a vague letter, the receiving party is better off requesting more information from the sender when the received information is inadequate for the receiving party to form a good-faith belief of non-infringement and/or invalidity. For a specific demand, a deeper level of evaluation of the claims, carried out by legal counsel on the right products, is usually required. An eye toward the jury's perspective may also be helpful by finding a good balance of reviewers, such as appropriate legal counsel and the right level of witnesses, which include a combination of technical experts and decision makers.¹⁵² Again, good-faith belief must show prompt action, competent legal advice from counsel, and analysis of the right products.

Regarding the accused infringer's own knowledge of patents, this category is trickier after the *Halo* decision, because the accused infringer may qualify the knowledge requirement of "having reason to know" well before receiving any notice from the patent holder.¹⁵³ This category can include obtaining patented information through trade shows or business partnerships, curious employee's patent searches, and even exposure to asserted patents through Merger & Acquisition due diligence.¹⁵⁴ The key is to determine whether a party has the reason to know the asserted patent because deliberate copying may be inferred through compelling circumstantial evidence.¹⁵⁵ Once determining the likelihood of meeting the knowledge requirement is high, a party's subsequent actions can either mitigate or increase the chance of finding willfulness and enhanced damages.¹⁵⁶ Accordingly, prudent practice encourages in-house training developed to foster awareness of these issues, establish guidelines, and enact reporting procedures.¹⁵⁷ Product clearance is another good safeguard but may be a little too late in the process.¹⁵⁸ Other useful consideration may also include record retention of independent development evidence such as invention disclosures, product specifications and technical notes and discussions.

In the concurring opinion, the Justices briefly touched upon the cost concern.¹⁵⁹ The cost of obtaining opinions could add up quickly beyond what a small innovative company can afford.¹⁶⁰ A two-phase approach by determining whether a situation warrants opinions of counsel may be worth considering while considering several factors such as the exposure level, the

151. *Underwater Devices*, 717 F.2d at 1389-90.

152. *See* BASF-CLE, *supra* note 67.

153. *Halo*, 136 S. Ct. at 1933.

154. *See* *WBIP*, 829 F.3d at 1325; *see also* *Georgetown*, 867 F.3d at 1245-46; *see also* *WCM*, 721 F. App'x at 971.

155. *See* *Georgetown*, 867 F.3d at 1245-46; *see also* *Dominion*, 2016 U.S. Dist. LEXIS 136728 at *61-63.

156. *See* *Greatbatch*, 2016 U.S. Dist. LEXIS 171939 at *5-6; *see also* *Read Corp.*, 970 F.2d at 827.

157. *See* *Johnson*, *supra* note 66, at 50.

158. *See id.*

159. *Halo*, 136 S. Ct. at 1936-37.

160. *See id.*

matter's complexity and the products' importance.¹⁶¹ An analysis could also be light or in-depth depending on these factors.

IV. CONCLUSION

The *Halo* decision is the third major change in willful patent infringement since the federal circuit developed the willful infringement jurisprudence in 1983. It has been over a year and the new legal standard and application have not completely settled. Although the *Halo* court removes the unduly rigid test in *Seagate* that “can have the effect of insulating some of the worst patent infringer[s] from liability for enhanced damages,”¹⁶² in the short term, we are likely to see possible variabilities in the application of law among jurisdictions and judges, and possibly some forum shopping.

Also, as some scholars have pointed out, the concern of the exposure to punitive damages triggered by reading a patent could interfere with the benefits from the disclosure function of patent law—to promote the progress of science and useful art, and instead encourage wasteful duplication of effort.¹⁶³ This is also reflected in Justice Breyer's concurrence in *Halo* about the cost of opinion of counsel, and the possible discouragement of lawful activities.¹⁶⁴ District courts are likely the ultimate gatekeepers to strike a balance by considering the totality of the circumstances, with their discretion bestowed by the law, to nurture the U.S. patent system.

161. Video recording: Halo and its Aftermath – What's Changed for Willful Infringement and Enhanced Damages (11th Annual Patent Law Institute Apr. 27, 2017) (on file with Practicing Law Institute).

162. *Halo*, 136 S. Ct. at 1932.

163. See Karshedt, *supra* note 42, at 1470; see also Colleen Chien et al., *Non-Compensatory Damages, Attorney Fees, and Interest* (Oct. 16, 2017), https://www-cdn.law.stanford.edu/wp-content/uploads/2017/08/Intl-Enhanced-Damages-and-Attorney-Fees-Chapter-10_16-Draft.pdf [<https://perma.cc/K4ED-5MCK>].

164. *Halo*, 136 S. Ct. at 1936.