

# ***Halo v. Pulse*: A New Chapter for Willfulness and Enhanced Patent Damages**

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The Supreme Court's *Halo v. Pulse*<sup>1</sup> decision in June 2016 striking down the Federal Circuit's two-prong, objective/subjective test in *In re Seagate*<sup>2</sup> for awarding enhanced patent damages under 35 U.S.C. § 284 raises new and important questions about district court discretion, egregious misconduct (such as by an intentionally infringing "pirate"), appellate review, and burden of proof. To explore these questions and offer practice tips in the process, this article traces the history of willfulness and enhanced damages and describes the current regime established by *Halo*, which eliminated the loophole of an after-the-fact, litigation-inspired defense to willfulness, lowered the burden of proof for enhanced damages, and simplified appellate review of enhanced damages.

## **Introduction to Enhanced Damages**

Section 284, which covers patent damages, includes an enhanced damages provision providing that "the court may increase the damages up to three times the amount found or assessed."<sup>3</sup> As a punitive sanction, this provision allows for enhanced damages potentially trebling the compensatory damages awarded to compensate a patentee for infringement. At times, however, the Supreme Court has suggested enhanced damages can instead serve to compensate patentees for "expense," "trouble," and "special inconvenience" suffered as a result of infringement.<sup>4</sup> In light of the statutory silence on the grounds for enhancing damages, the Supreme Court has described enhanced damages as available in the case of "willful or bad-faith infringement."<sup>5</sup> Similarly, both the Supreme Court and the Federal Circuit have referred to enhanced damages as a remedy for "willful infringement"—a "wanton disregard" of a patentee's patent rights<sup>6</sup>—though without any mention of "bad-faith infringement."<sup>7</sup>

## ***Seagate* Eliminates Focus on Infringer's State of Mind**

Prior to *Seagate*, willfulness was based on the "totality of the circumstances" of the infringing conduct and focused on the infringer's state of mind by asking whether the infringer lacked a reasonable good faith belief it was not infringing at the time infringement began.<sup>8</sup> The objective element of willfulness was reasonableness; the subjective element of willfulness was the lack of a good faith belief; and the two elements worked hand in hand in determining willfulness.<sup>9</sup> Ushering in a new era, *Seagate* reshaped willfulness by elevating the objective element of willfulness over its subjective element. The new test for willfulness under *Seagate* consisted of a threshold objective prong followed by a subjective prong. Under the objective prong of the *Seagate* test, the patentee had to demonstrate that the infringer "acted

despite an objectively high likelihood that its actions constituted infringement of a valid patent.”<sup>10</sup> Under the subjective prong, the patentee had to establish that the objectively defined risk was either known or so obvious that it should have been known to the infringer.<sup>11</sup> Not only did this two-prong test based on recklessness replace the negligence standard resulting from the affirmative duty of care introduced by *Underwater Devices*,<sup>12</sup> but it also in effect eliminated a focus on the infringer’s subjective state of mind. For example, because copying was deemed relevant only to *Seagate*’s subjective prong,<sup>13</sup> a court’s objective prong analysis ignored copying altogether. Even though willfulness was objective and subjective in theory, *Seagate*’s threshold objective prong restricted the ability of district courts to consider copying and other evidence of the infringer’s state of mind, often making willfulness purely objective in practice.

Under the *Seagate* line of cases, the willfulness inquiry further strayed from determining what the infringer’s state of mind was at the time infringement began. In practice, the question often became whether the after-the-fact, litigation-inspired defense of the infringer was objectively reasonable.<sup>14</sup> If the infringer’s litigation position was “susceptible to a reasonable conclusion of no infringement,” the objective prong of the *Seagate* test was not met.<sup>15</sup> It did not matter whether the infringer was aware of the reasonable defense when the infringement began.<sup>16</sup> By focusing on the infringer’s after-the-fact, litigation-inspired defense, the Federal Circuit’s “totality of the record evidence”<sup>17</sup> approach based on the trial record eclipsed the prior approach of considering the “totality of the circumstances” of the infringing conduct.

In 2012—the fifth year of the *Seagate* era—*Seagate*’s objective prong grew in importance when the Federal Circuit held that the threshold objective prong is a question of law subject to de novo review and thus an issue for the court, not the jury.<sup>18</sup> *Seagate*’s subjective prong was submitted to a jury only if the objective prong was met.<sup>19</sup> As a result, the existence of a reasonable after-the-fact, litigation-inspired defense became dispositive.<sup>20</sup>

### ***Seagate* Test Bars Halo and Stryker Willfulness Claims at the Federal Circuit**

It took *Halo*<sup>21</sup> and *Stryker*<sup>22</sup>—two cases including willfulness claims against a competitor—to expose the drawbacks of the *Seagate* test. In *Halo*, competitors Halo and Pulse both supplied surface mount electronic package products.<sup>23</sup> Halo sent Pulse two letters offering to license Halo’s patents, but Pulse continued to sell the allegedly infringing products after one of its engineers concluded the Halo patents were invalid.<sup>24</sup> The Pulse engineer testified to spending about two hours reviewing the patents before reaching a conclusion that the Halo patents were invalid based on prior Pulse products.<sup>25</sup> Another Pulse witness testified to not being aware that anyone in the company made a “conscious decision” to continue selling the allegedly infringing products.<sup>26</sup> Halo argued on appeal that Pulse copied the Halo patents.<sup>27</sup>

In the companion case, *Stryker v. Zimmer*,<sup>28</sup> Stryker and Zimmer competed in the market for orthopedic pulsed lavage devices,<sup>29</sup> namely, devices for delivering pressurized irrigation for cleaning tissue during surgery. The court noted that Zimmer gave an independent contractor with no experience in pulsed lavage devices a copy of Stryker’s product and said, “Make one for us.”<sup>30</sup> In the court’s words, “Zimmer chose a high-risk/high-reward strategy of competing immediately and aggressively in the pulsed lavage market and opted to worry about the potential legal consequences later.”<sup>31</sup>

In similar ways, the willfulness claims of Halo and Stryker fell victim to *Seagate's* threshold objective prong. Halo won a jury verdict of willful infringement against Pulse, but then the district court declined to award enhanced damages, ruling Pulse's infringement was not willful because Pulse reasonably relied on its invalidity defense at trial.<sup>32</sup> The Federal Circuit affirmed, agreeing Pulse's invalidity defense was "not objectively unreasonable."<sup>33</sup> Stryker won a jury verdict of willful infringement against Zimmer, and the district court trebled compensatory damages and denied Zimmer's post-trial motion on nonwillfulness.<sup>34</sup> Notably, the district court commented that the jury heard testimony that Zimmer "all but instructed its design team to copy Stryker's products."<sup>35</sup> The Federal Circuit reversed the district court's judgment that infringement was willful and vacated the award of treble damages, holding based on a de novo determination that Zimmer was not reckless because its trial defenses were "not objectively unreasonable."<sup>36</sup> *Seagate's* threshold objective prong thus prevented Halo and Stryker from being awarded enhanced damages. The Supreme Court granted certiorari in both cases to address whether the *Seagate* test was inconsistent with § 284.<sup>37</sup>

### ***Halo*: A New Chapter**

In a unanimous (8–0) decision authored by Chief Justice Roberts, the Supreme Court in *Halo* held that the *Seagate* test is inconsistent with § 284,<sup>38</sup> thereby freeing district courts to exercise discretion unencumbered by *Seagate* in deciding enhanced damages. The Court also rejected *Seagate's* clear and convincing standard of proof and trifurcated appellate review of enhanced damages.<sup>39</sup>

### **District Court Discretion Free of *Seagate***

The Supreme Court in *Halo* declared that the *Seagate* test impermissibly restricted the discretion statutorily granted to district courts, thus "insulating some of the worst patent infringers" from punishment.<sup>40</sup> Preemptively addressing any potential concern about this newly freed discretion of district courts and the lack of a "precise rule or formula"<sup>41</sup> for awarding enhanced damages, the Supreme Court stressed that discretion has limits, stating that "[d]iscretion is not whim"<sup>42</sup> and should be exercised in light of the considerations underlying this statutory grant and sound principles that limit the award of enhanced damages to "egregious cases of misconduct beyond typical infringement."<sup>43</sup>

Tracing the evolution of enhanced patent damages, the Supreme Court explained that the Patent Act of 1836 made enhanced damages discretionary "according to the circumstances of the case."<sup>44</sup> Finding that district court discretion was preserved by the Patent Act of 1870 and the 1952 codification, which was merely a clarifying "reorganization in language," the Supreme Court pronounced that this same discretion applies to § 284.<sup>45</sup> Accordingly, the Court emphasized that § 284 contains no "explicit limit or condition" on awarding enhanced damages, and vacated and remanded both cases for proceedings consistent with its opinion.<sup>46</sup>

Notably, Judge Gajarsa's concurrence in the Federal Circuit's *Seagate* decision had reached a similar conclusion that § 284 means what it says. Judge Gajarsa wrote that the Patent Act of 1836 confirmed that district courts were granted discretion because the phrase "according to the circumstances of the case" is not contingent upon a willfulness finding.<sup>47</sup> Likewise, because the language of § 284 lacked a

willfulness requirement, Judge Gajarsa criticized the “grafting” of a willfulness requirement onto the statutory language.<sup>48</sup> Therefore, based on the plain meaning of the statute, Judge Gajarsa saw § 284 as leaving discretion in the “capable hands” of district courts.<sup>49</sup>

Finding that the § 284 language unambiguously confirmed the discretion of the district courts, the Supreme Court in *Halo* rejected the argument by respondents Pulse and Zimmer that Congress ratified the *Seagate* test when it passed the America Invents Act of 2011 (AIA), reenacting § 284.<sup>50</sup> The “isolated snippets” of legislative history referring to *Seagate* were seen by the Supreme Court as offset by Congress’s failure to adopt a “proposed codification similar to *Seagate*.”<sup>51</sup> Although six members of Congress filed an amicus brief advocating that Congress was aware of the *Seagate* test and intended to leave *Seagate* in place in passing the AIA,<sup>52</sup> it was the unambiguous nature of the reenacted statutory language<sup>53</sup>—not Congress’s ambiguous intent with regard to § 284—that resonated with the Supreme Court.

The Supreme Court also rejected the argument of respondents Pulse and Zimmer that Congress endorsed *Seagate*’s willfulness test in adopting 35 U.S.C. § 298, providing that “[t]he failure of an infringer to obtain the advice of counsel with respect to any allegedly infringed patent, or the failure of the infringer to present such advice to the court or jury, may not be used to prove that the accused infringer willfully infringed.”<sup>54</sup> Because willfulness law predated *Seagate*, the Supreme Court concluded that § 298 does not show that Congress ratified the *Seagate* test.<sup>55</sup> Instead, the Supreme Court correctly attributed the § 298 language as a response to the Federal Circuit’s *Underwater Devices* opinion that imposed an affirmative duty of care on potential infringers.<sup>56</sup>

### **Egregious Misconduct Becomes the New Touchstone**

Due to *Halo*, willfulness is no longer the touchstone for enhanced damages. The new touchstone is “egregious misconduct,” which, as noted by the Supreme Court, has historically been termed “willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant,” or “characteristic of a pirate.”<sup>57</sup> Because egregious misconduct may be “typified by willful misconduct,”<sup>58</sup> willfulness remains relevant to enhanced damages. Willfulness though has changed in two respects. Unlike willfulness under the *Seagate* framework, willfulness post-*Halo* may be purely subjective.<sup>59</sup> Second, unlike the after-the-fact, litigation-inspired defense exploited under the *Seagate* regime to shield infringing conduct, willfulness post-*Halo* is measured as of the time of the challenged conduct.<sup>60</sup>

*Halo* offers two examples suggesting what constitutes egregious misconduct: (1) “intentionally” infringing with “no doubts” about patent validity or “any notion of a defense” in order to “steal the patentee’s business,” and (2) “plunder[ing]” a patent, i.e., infringing without any reason to believe the conduct is “arguably defensible.”<sup>61</sup> In effect, the Supreme Court has transported us back to an era when “wanton and malicious pirate[s]”<sup>62</sup> were the targets of enhanced damages. As an example of circumstances warranting enhanced damages, the Supreme Court described its *Topliff v. Topliff*<sup>63</sup> decision in 1892 as involving an infringer who “knowingly sold copied technology of his former employer.”<sup>64</sup>

*Halo*'s touchstone of egregious misconduct raises many questions. For example, does egregious misconduct resemble intentional conduct by a person who lacks a good faith belief that the patent is not infringed, as argued by the United States Department of Justice in *Halo*?<sup>65</sup> Where is the line between "ignorance"<sup>66</sup> and egregious misconduct? How will district courts consistently identify "egregious cases of culpable behavior" based on "nearly two centuries of enhanced damages" as instructed by the Supreme Court?<sup>67</sup> Is the antithesis of the "wanton and malicious pirate" one who investigates and develops an "honest doubt"<sup>68</sup> about the scope or validity of a patent?

### **Appellate Review Free of *Seagate***

Similar to its rejection in *Highmark v. Allcare Health* of the multipart standard of appellate review for attorneys' fees,<sup>69</sup> the Supreme Court rejected the Federal Circuit's trifurcated appellate review of enhanced damages under *Seagate*, namely, objective recklessness reviewed de novo; subjective knowledge reviewed for substantial evidence; and the ultimate decision whether to enhance damages reviewed for an abuse of discretion.<sup>70</sup> In light of its avoidance in *Halo* of a rigid formula for awarding enhanced damages, the Supreme Court reduced appellate review of enhanced damages to simply an abuse of discretion standard.<sup>71</sup> In other words, because § 284 gives a district court discretion in deciding enhanced damages, the proper inquiry involves determining if the district court's ultimate decision on whether to enhance damages was an abuse of discretion. Thus, there is no longer any separate review of objective recklessness and subjective knowledge. In the Federal Circuit *Halo* case, an abuse of discretion standard for enhanced damages had only been suggested by Judges O'Malley and Hughes in their concurrence.<sup>72</sup>

The Supreme Court's *Halo* decision offers little guidance as to how the Federal Circuit should apply an abuse of discretion standard free of *Seagate* jurisprudence. Describing the appellate review it had in mind, the Supreme Court advised the Federal Circuit to review exercises of discretion in light of the "longstanding considerations" the Supreme Court has identified as having "guided both Congress and the courts."<sup>73</sup> Offering their own guidance on what the Federal Circuit might treat as an abuse of discretion, the concurring Supreme Court justices in *Halo* pointed to a district court's error in assessing the reasonableness of a defense as one example.<sup>74</sup> Not only does this guidance suggest that the Federal Circuit should leverage its patent expertise to spot any district court ruling on enhanced damages that is based on an erroneous view of patent law, but it also suggests that the objective reasonableness of a defense might still deserve a role in deciding enhanced damages.

### **Lowered Burden of Proof**

Prior to *Halo*, the Federal Circuit employed a clear and convincing evidence standard for enhanced damages.<sup>75</sup> The Federal Circuit's view was that a heightened standard of proof was justified by the punitive nature of willfulness as well as the difficult task of distinguishing culpable acts from unintentional ones. Despite the Supreme Court's explanation in *Octane Fitness v. ICON Health & Fitness* that "patent-infringement litigation has always been governed by a preponderance of the evidence standard"<sup>76</sup> and Judge O'Malley's concurrence in the Federal Circuit's *Halo* decision urging the court to reevaluate its standard of proof in light of *Octane Fitness*,<sup>77</sup> the Federal Circuit had maintained a clear and convincing evidence standard. Like its rejection in *Octane Fitness* of the clear and convincing evidence standard for attorneys' fees under 35 U.S.C. § 285, the Supreme Court in *Halo* rejected that stan-

dard of proof for enhanced damages and endorsed a preponderance of the evidence standard.<sup>78</sup> Beyond reiterating its *Octane Fitness* explanation supporting a preponderance of the evidence standard, the Supreme Court added that § 284 does not impose an evidentiary burden, that Congress expressly provided a heightened standard (clear and convincing evidence) elsewhere in the Patent Act, namely, 35 U.S.C. § 273(b), and that historical practice does not support a heightened standard.<sup>79</sup>

Should we be concerned that this lower standard of proof might open the floodgates to enhanced patent damages? Probably not, given the use of the preponderance of the evidence standard in trademark and copyright cases (as noted in Judge O'Malley's *Halo* concurrence<sup>80</sup>), the district court's discretion to deny enhanced damages even if there is a finding of egregious misconduct, and the Supreme Court's admonishment that enhanced damages should not be awarded for "garden-variety" cases or to punish "typical infringement."<sup>81</sup>

### **Role of Jury Post-*Halo***

Post-*Halo*, the role of the jury in deciding enhanced damages is an open issue. Because § 284 identifies the court as the one to decide enhanced damages, Judge O'Malley's concurrence in the Federal Circuit's *Halo* decision suggested that the Federal Circuit should reevaluate its treatment of willfulness as a question of fact for the jury to decide.<sup>82</sup> The concern is that a jury is in effect deciding enhanced damages by deciding willfulness. Similarly, there were amicus briefs filed in *Halo* inviting the Supreme Court to address the role of the jury in deciding enhanced damages.<sup>83</sup> For example, one brief compared willfulness to claim construction, arguing that a patentee lacks a Seventh Amendment right to a jury on willfulness,<sup>84</sup> and another brief relied on § 284 and Federal Rule of Civil Procedure 52 to argue that factual questions underlying an enhanced damages determination must be decided by a court, not a jury.<sup>85</sup>

Because the Supreme Court in *Halo* did not address the jury's role in deciding enhanced damages, district courts and the Federal Circuit are already grappling with this issue. At least two district courts post-*Halo* concluded that willfulness is a factual inquiry reserved for the jury,<sup>86</sup> and one district court ruled that a jury verdict alone is enough for willfulness post-*Halo*.<sup>87</sup> Addressing the jury role issue post-*Halo*, in *WBIP v. Kohler* a panel of the Federal Circuit applied its 1989 precedent in *Richardson v. Suzuki Motor*,<sup>88</sup> concluding that there is a right to a jury trial on willfulness because willfulness is a "classical jury question of intent."<sup>89</sup> *Richardson*, though, offers no further justification for this conclusion, and the Federal Circuit's *Shiley v. Bentley Labs* decision cited in *Richardson* fares no better, criticizing a district court for labeling a jury finding of willful infringement as advisory, while acknowledging that § 284 allocated the role of deciding enhanced damages to the court.<sup>90</sup> Thus, it remains to be seen whether juries will continue to decide willfulness.

### **Homage to *Seagate***

In light of *Halo*, we have wished *Seagate* goodbye, but because of what it achieved for nearly a decade, *Seagate* deserves homage as well. Eliminating the affirmative duty of care created by *Underwater Devices* and raising the bar on proving willfulness, *Seagate* made it tougher to bring successful willfulness claims at a time when willfulness was the rule, not the exception. Prior to *Seagate*, willfulness claims were plaguing patent law.<sup>91</sup> The situation was such that the Federal Trade Commission even recommended limiting willfulness to deliberate copying of a patentee's invention or receipt of a written notice of infringement from the patentee.<sup>92</sup> By insulating accused infringers from routine willfulness

allegations, the *Seagate* test made a significant impact on willfulness law, as echoed by the amicus briefs in *Halo* that sought to preserve the test.<sup>93</sup> Overruling two decades of its own precedent to temper willfulness law, the Federal Circuit made a bold move in *Seagate* that paid off. Despite its “inelastic constraints,” the *Seagate* test, as acknowledged by the Supreme Court, reflected a “sound recognition” that enhanced damages are appropriate only in egregious cases of infringement.<sup>94</sup>

### **A New Chapter Begins**

As *Halo* now reveals, the cost of *Seagate* was letting intentional infringers off the hook whenever they presented an after-the-fact, litigation-inspired defense creating a reasonable cloud of doubt hanging over the patent. The *Seagate* test resulted in an unfortunate incentive to deliberately infringe a patent and then escape willfulness by hatching an objectively reasonable (though unsuccessful) litigation defense. Indeed, as the United States Department of Justice argued in *Halo*, an objectively reasonable defense created an “arbitrary loophole that allow[ed] some of the most egregious infringers to escape enhanced damages.”<sup>95</sup> When that cost eventually became too much to bear, the Supreme Court reminded us how enhanced patent damages evolved in the first place. Following *Halo*, the Federal Circuit has now acknowledged that “an objectively reasonable litigation-inspired defense to infringement” is no longer a defense.<sup>96</sup>

*Halo* ushered in a new chapter for willfulness and enhanced patent damages by returning willfulness to its original target—offenders such as the “wanton and malicious pirate” who intentionally infringes—and its original focus on an infringer’s state of mind at the time of the challenged conduct. If *Seagate* weakened patents by wrongly treating § 284 as intended to punish only objectively unreasonable cases of infringement, then *Halo* strengthens patents by correctly treating § 284 as intended to punish egregious cases of infringement. *Halo* is not a simple return to the pre-*Seagate* jurisprudence when willfulness centered around the lack of a reasonable good faith belief of noninfringement or invalidity. Under *Halo*, willfulness is focused on the egregiousness of the infringement. Although *Halo* may be tough medicine to swallow, the patent system is likely better off when enhanced damages are aligned with their original target and focus. Accordingly, congressional efforts to undo *Halo* seem counter-productive.<sup>97</sup>

Although *Halo* suggests cautious optimism about the future of enhanced damages, we must still await guidance on avoiding egregious misconduct in the context of patent clearance studies, written opinions of counsel, patent demand letters, licensing negotiations, former patent licensees, and institutions of post-grant validity challenges before the U.S. Patent and Trademark Office’s Patent Trial and Appeal Board (PTAB). It will be up to the capable hands of the Federal Circuit and district courts to write that new page. Meanwhile, in light of *Halo*, the following practice tips may be useful to patentees and potential infringers.

### **Tips to Obtain Enhanced Damages**

1. Focus on what the accused infringer did upon learning about the patent and an allegation of infringement.
2. Consider pursuing willfulness allegations if the accused infringer is a competitor who copied your patented products.
3. Consider marking your patented products to help show competitors had knowledge of your patents.

4. If the accused infringer introduces a new product version, consider what the accused infringer did beforehand. Treat willfulness as a continuum of conduct.
5. As part of settlement discussions, consider presuming that willfulness allegations will survive the summary judgment stage.
6. Consider arguing that infringement by a previously licensed entity (e.g., one who became unlicensed by failing to renew) suggests the infringement is egregious.

### Tips to Avoid Enhanced Damages

1. To help establish that you acted in good faith, consider obtaining written opinions of counsel especially if a solid defense is not readily apparent or if a design around is contemplated.
2. To help demonstrate that you acted early on in good faith, consider conducting patent clearance studies before introducing key products.
3. To help show that you acted in good faith in responding to demand letters from patentees, consider asking patentees for more detail and memorializing your noninfringement and invalidity bases, whether internally or in reply letters.
4. When infringement risks grow serious, consider turning to outside counsel for written opinions of counsel to bolster your internal analysis.
5. Before engaging in licensing negotiations, consider obtaining a written agreement with the patentee that licensing discussions cannot be considered as notice of infringement or evidence of egregious misconduct.
6. If interested in entering into a license with the patentee, consider including a provision that avoids the risk of enhanced damages in the event that you are sued on the licensed patent after the term of the agreement.
7. Consider arguing that an institution of your post-grant validity challenge before the PTAB based on an invalidity defense shows the reasonableness of the defense.
8. Consider presenting and preserving the argument that the patentee lacks a right to a jury trial on willfulness.

### Endnotes

1. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016).
2. *In re Seagate Tech., LLC*, 497 F.3d 1360 (Fed. Cir. 2007) (en banc) (applying *Safeco Ins. Co. of Am. v. Burr*, 551 U.S. 47 (2007)).
3. 35 U.S.C. § 284; *Halo*, 136 S. Ct. at 1928.
4. *Clark v. Wooster*, 119 U.S. 322, 326 (1886).
5. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 508 (1964).
6. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992).
7. *Dowling v. United States*, 473 U.S. 207, 227 n.19 (1985); *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 866–67 (Fed. Cir. 1985).
8. *Hoechst Celanese Corp. v. BP Chems., Ltd.*, 78 F.3d 1575, 1583 (Fed. Cir. 1996); *Am. Med. Sys., Inc. v. Med. Eng'g Corp.*, 6 F.3d 1523, 1530 (Fed. Cir. 1993).
9. *Hoechst Celanese*, 78 F.3d at 1583; *Nat'l Presto Indus. v. W. Bend Co.*, 76 F.3d 1185, 1193 (Fed. Cir. 1996); *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1221 (Fed. Cir. 1995); *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1581 (Fed. Cir. 1989).
10. *Seagate*, 497 F.3d at 1371.
11. *Id.*



12. *Underwater Devices Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389 (Fed. Cir. 1983), *overruled by Seagate*, 497 F.3d 1360.
13. *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1336 (Fed. Cir. 2009).
14. *Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319–20 (Fed. Cir. 2010).
15. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1310 (Fed. Cir. 2011); *see also Powell v. Home Depot USA, Inc.*, 663 F.3d 1221, 1237 n.1 (Fed. Cir. 2012).
16. *Spine Solutions*, 620 F.3d at 1319; *Seagate*, 497 F.3d at 1371.
17. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 769 F.3d 1371, 1382 (Fed. Cir. 2014).
18. *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 682 F.3d 1003, 1005 (Fed. Cir. 2012).
19. *Id.* at 1008.
20. *Uniloc*, 632 F.3d at 1311; *Spine Solutions*, 620 F.3d at 1319; *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1335–37 (Fed. Cir. 2009).
21. *Halo*, 769 F.3d 1371.
22. *Stryker Corp. v. Zimmer, Inc.*, 782 F.3d 649 (Fed. Cir. 2015).
23. *Halo*, 769 F.3d at 1374–75.
24. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1931 (2016).
25. *Halo*, 769 F.3d at 1376.
26. *Id.*
27. *See, e.g.*, Petitioner’s Opening Brief, *Halo*, 136 S. Ct. 1923 (No. 14-1513), *available at* <http://www.scotusblog.com/wp-content/uploads/2015/12/Halo-opening-merits-brief-second-corrected-14-1513.pdf>.
28. *Stryker Corp. v. Zimmer, Inc.*, 782 F.3d 649 (Fed. Cir. 2015).
29. *Halo*, 136 S. Ct at 1931.
30. *Stryker Corp. v. Zimmer, Inc.*, No. 1:10-cv-1223, 2013 U.S. Dist. LEXIS 171817, at \*4 (W.D. Mich. Aug. 7, 2013).
31. *Id.* at \*5–6; *see also Halo*, 136 S. Ct. at 1931.
32. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 769 F.3d 1371, 1376 (Fed. Cir. 2014).
33. *Id.* at 1383.
34. *Stryker Corp. v. Zimmer, Inc.*, 782 F.3d 649, 653–54 (Fed. Cir. 2015).
35. *Id.* at 661; *see also Halo*, 136 S. Ct. at 1931.
36. *Stryker*, 782 F.3d at 662.
37. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 356 (2015).
38. *Halo*, 136 S. Ct. at 1932.
39. *Id.* at 1934.
40. *Id.* at 1931–32.
41. *Id.* at 1932.
42. *Id.* at 1931 (alteration in original) (quoting *Martin v. Franklin Capital Corp.*, 546 U.S. 132, 139 (2005)).
43. *Id.* at 1935.
44. *Id.* at 1928.
45. *Id.* at 1930 (quoting *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 376 U.S. 476, 505 n.20 (1964)).
46. *Id.* at 1931.

47. *In re Seagate Tech., LLC*, 497 F.3d 1360, 1377 (Fed. Cir. 2007) (Gajarsa, J., concurring, joined by Newman, J.).
48. *Id.* at 1376–77.
49. *Id.* at 1377.
50. *Halo*, 136 S. Ct. at 1934–35.
51. *Id.* at 1935.
52. Brief of Certain Members of Congress as Amici Curiae in Support of Respondents, *Halo*, 136 S. Ct. 1923 (No. 14-1513), available at <http://www.scotusblog.com/wp-content/uploads/2016/01/14-1513-1520-bsac-Certain-Members-of-Congress.pdf>.
53. See *supra* text accompanying note 3.
54. See *Halo*, 136 S. Ct. at 1935.
55. *Id.*
56. *Id.*
57. *Id.* at 1932.
58. *Id.* at 1934.
59. *Id.* at 1932–33.
60. *Id.*
61. *Id.*
62. *Id.* at 1928 (quoting *Seymour v. McCormick*, 57 U.S. (16 How.) 480, 488 (1854)).
63. 145 U.S. 156, 174 (1892).
64. *Halo*, 136 S. Ct. at 1929.
65. Transcript of Oral Argument at 24:19–25:18, *Halo*, 136 S. Ct. 1923 (No. 14-1513), available at [http://www.supremecourt.gov/oral\\_arguments/argument\\_transcripts/14-1513\\_4e46.pdf](http://www.supremecourt.gov/oral_arguments/argument_transcripts/14-1513_4e46.pdf).
66. *Halo*, 136 S. Ct. at 1928.
67. *Id.* at 1932–34.
68. *Wilden Pump & Eng'g Co. v. Pressed & Welded Prods. Co.*, 655 F.2d 984, 989 (9th Cir. 1981) (quoting *Int'l Mfg. Co. v. Landon, Inc.*, 336 F.3d 723, 728 (9th Cir. 1964)).
69. *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744 (2014).
70. *Halo*, 136 S. Ct. at 1930, 1934.
71. *Id.* at 1934.
72. *Halo Elecs., Inc. v. Pulse Elecs. Inc.*, 769 F.3d 1371, 1385–86 (Fed. Cir. 2014) (O'Malley, J., concurring, joined by Hughes, J.).
73. *Halo*, 136 S. Ct. at 1934.
74. *Id.* at 1938 (Breyer, J., concurring, joined by Kennedy & Alito, JJ.).
75. *SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1465 (Fed. Cir. 1997); *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1221 (Fed. Cir. 1995).
76. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1758 (2014).
77. *Halo*, 769 F.3d at 1385 (O'Malley, J., concurring).
78. *Halo*, 136 S. Ct. at 1934.
79. *Id.*
80. *Halo*, 769 F.3d at 1385 (O'Malley, J., concurring).
81. *Halo*, 136 S. Ct. at 1935.
82. *Halo*, 769 F.3d at 1386 (O'Malley, J., concurring).

83. Brief of Amicus Curiae Askeladden LLC in Support of Neither Party at 31 n.8, *Halo*, 136 S. Ct. 1923 (No. 14-1513), available at <http://www.scotusblog.com/wp-content/uploads/2015/12/Amicus.Askeladden.pdf>; Brief of EMC Corp. as Amicus Curiae in Support of Respondents at 28–30, *Halo*, 136 S. Ct. 1923 (No. 14-1513), available at [http://www.scotusblog.com/wp-content/uploads/2016/02/14-1513\\_amicus\\_resp\\_EMCCorporation.authcheckdam.pdf](http://www.scotusblog.com/wp-content/uploads/2016/02/14-1513_amicus_resp_EMCCorporation.authcheckdam.pdf); Brief of Mentor Graphics Corp. et al. as Amici Curiae in Support of Neither Party at 20–27, *Halo*, 136 S. Ct. 1923 (No. 14-1513), available at [http://www.scotusblog.com/wp-content/uploads/2015/12/14-1513\\_amicus\\_np\\_MENTORGRAPHICS.authcheckdam.pdf](http://www.scotusblog.com/wp-content/uploads/2015/12/14-1513_amicus_np_MENTORGRAPHICS.authcheckdam.pdf).
84. Brief of Mentor Graphics Corp. et al. as Amici Curiae, *supra* note 83, at 20–27.
85. Brief of EMC Corp. as Amicus Curiae, *supra* note 83, at 28–30.
86. *Presidio Components, Inc. v. Am. Technical Ceramics Corp.*, No. 3:14-cv-02061, slip op. at 27 (S.D. Cal. June 17, 2016), ECF No. 368; *Transdata, Inc. v. Denton Mun. Elec.*, No. 6:10-cv-00557, slip op. at 2–4 (E.D. Tex. June 29, 2016), ECF No. 259.
87. *Sociedad Espanola de Electromedicina y Calidad, S.A. v. Blue Ridge X-Ray Co.*, No. 1:10-cv-00159, slip op. at 6–7 (W.D.N.C. July 8, 2016), ECF No. 232.
88. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1250 (Fed. Cir. 1989).
89. *WBIP, LLC v. Kohler Co.*, No. 2015-1038, slip op. at 36–37 (Fed. Cir. July 19, 2016), available at <http://www.cafc.uscourts.gov/sites/default/files/opinions-orders/15-1038.Opinion.7-15-2016.1.PDF>.
90. *Shiley, Inc. v. Bentley Labs., Inc.*, 794 F.2d 1561, 1568 (Fed. Cir. 1986).
91. Kimberly A. Moore, *Empirical Statistics on Willful Patent Infringement*, 14 FED. CIR. B.J. 227, 232 (2004).
92. FED. TRADE COMM’N, *TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY* (2003), <https://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf>.
93. *See, e.g.*, Brief for Intel et al. as Amici Curiae Supporting Respondents, *Halo*, 136 S. Ct. 1923 (2016) (No. 14-1513), available at <http://www.scotusblog.com/wp-content/uploads/2016/01/14-151314-1520sacIntelCorp.pdf>; Brief for Intellectual Property Owners Ass’n as Amicus Curiae in Support of Neither Party, *Halo*, 136 S. Ct. 1923 (2016) (No. 14-1513), available at [http://www.scotusblog.com/wp-content/uploads/2015/12/Amicus.IPO\\_.pdf](http://www.scotusblog.com/wp-content/uploads/2015/12/Amicus.IPO_.pdf); Brief of Amicus Curiae Licensing Executives Society (U.S.A. and Canada), Inc. in Support of No Party, *Halo*, 136 S. Ct. 1923 (No. 15-1513) (citing Christopher B. Seaman, *Willful Patent Infringement and Enhanced Damages after In re Seagate: An Empirical Study*, 97 IOWA L. REV. 417 (2012)), available at <http://www.scotusblog.com/wp-content/uploads/2015/12/14-1513-14-1520-ac-LES.pdf>.
94. *Halo*, 136 S. Ct. at 1932–34.
95. Transcript of Oral Argument, *supra* note 65, at 19:22–20:6.
96. *WBIP, LLC v. Kohler Co.*, No. 2015-1038, slip op. at 35 (Fed. Cir. July 19, 2016).
97. *See, e.g.*, H.R. 2578, Amendment No. 4748, 114th Cong. (2016) (Sen. Orrin Hatch), available at [http://www.hatch.senate.gov/public/\\_cache/files/8e828767-4319-475d-8f5a-8cf2b78bf516/Hatch%204748.pdf](http://www.hatch.senate.gov/public/_cache/files/8e828767-4319-475d-8f5a-8cf2b78bf516/Hatch%204748.pdf).