

APPENDIX A

NOTE: This disposition is nonprecedential.

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2017-2541

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., STRYKER SALES CORPORATION,

Plaintiffs-Appellees,

v.

ZIMMER, INC., ZIMMER SURGICAL, INC., Defendants-Appellants.

Appeal from the United States District Court for the Western District of Michigan in No. 1:10-cv-01223-RJJ, Judge Robert J. Jonker.

JUDGMENT

* * *

THIS CAUSE having been heard and considered, it is ORDERED and ADJUDGED:

PER CURIAM (PROST, Chief Judge, O'MALLEY and HUGHES, Circuit Judges).

AFFIRMED. See Fed. Cir. R. 36.

ENTERED BY ORDER OF THE COURT

December 10, 2018
Date

/s/ Peter R. Marksteiner Peter R. Marksteiner Clerk of Court

APPENDIX B

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2013-1668

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., STRYKER SALES CORPORATION,

Plaintiffs-Appellees,

v.

 $\begin{array}{c} {\rm ZIMMER, Inc., ZIMMER\ SURGICAL, Inc.,} \\ {\rm \textit{Defendants-Appellants.}} \end{array}$

ZIMMER ORTHOPAEDIC SURGICAL PRODUCTS,

Defendant.

Appeal from the United States District Court for the Western District of Michigan in No. 10-CV-1223, Judge Robert J. Jonker.

Decided: September 12, 2016

* * *

Before PROST, Chief Judge, NEWMAN and HUGHES, Circuit Judges.

PROST, Chief Judge.

This case returns to us on remand from the Supreme Court of the United States. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016). In the original appeal, Zimmer, Inc., Zimmer Surgical, Inc., and Zimmer Orthopaedic Surgical Products (collectively

"Zimmer") appealed from the final judgment of the United States District Court for the Western District of Michigan that U.S. Patent Nos. 6,022,329 ("329 patent"), 6,179,807 ("807 patent"), and 7,144,383 ("383 patent") were valid and willfully infringed.

We affirmed the jury's findings that the patents were valid and infringed, and the jury's award of damages to plaintiff-appellees Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation (collectively "Stryker"). Stryker Corp. v. Zimmer, Inc., 782 F.3d 649, 653 (Fed. Cir. 2014). However, applying the then-controlling test for willful infringement and enhanced damages under In re Seagate Technology, LLC, 497 F.3d 1360 (2007) (en banc), we reversed the jury's willfulness finding and vacated the associated award of treble damages and attorneys' fees. Stryker Corp., 782 F.3d at 660-62.

Stryker petitioned for rehearing en banc, which this court denied. Stryker then filed a petition for a writ of certiorari in the Supreme Court. The Supreme Court granted certiorari to determine whether the Seagate test regarding willfulness and enhanced damages was consistent with the Patent Act. Halo Elecs., Inc., 136 S. Ct. at 1928.

In its decision, the Supreme Court determined that the *Seagate* test "unduly confines the ability of district courts to exercise the discretion conferred on them." *Id.* at 1935. Because we decided the willfulness question under the Seagate framework, the Supreme Court vacated our prior decision and remanded the case for further proceedings. *Id.* at 1935-36.

On remand, we recalled our mandate and reopened the case. Because *Halo* was limited to the questions of willfulness and enhanced damages, it left the judgments on other issues undisturbed. For the reasons stated below, we therefore reaffirm the jury's findings that Stryker's patents were valid and infringed. In light of the new willfulness standard articulated by the Supreme Court, we also affirm the jury's finding of willful infringement. However, we vacate and remand the district court's award of treble damages. Finally, we vacate and remand the district court's finding that this was an exceptional case and its award of attorneys' fees.

I.

The patents at issue concern pulsed lavage devices. Pulsed lavage devices deliver pressurized irrigation for certain medical therapies, including orthopedic procedures and cleaning wounds. The particular devices at issue in this case are portable, battery powered, and handheld. They include both suction and discharge tubes, so they both spray fluid from an external source and also suction off fluid and debris. These devices represent an improvement over older pulsed lavage systems that required a central power source and external mechanical pumps, which meant that they needed to be wheeled around the hospital.

Stryker and Zimmer are the two main competitors in the orthopedic pulsed lavage device market. Stryker began bringing battery-powered, handheld pulsed lavage devices to the marketplace in 1993. That same year, Stryker filed the application which eventually gave rise to the patents at issue. In February 2000, the first of these patents, the '329 patent, issued. Later that year Stryker sued another manufacturer, Davol Inc., for infringement. That suit settled in 2001, and Davol took a license on the '329 patent. The '807 patent subsequently issued in January 2001, and the '383 patent issued in December 2006.

Zimmer introduced its first portable pulsed lavage device, the Var-A-Pulse, in 1996. In 1998, Zimmer began to develop a new design, which came to market soon thereafter as the Pulsavac Plus range of products. Zimmer's Pulsavac Plus products achieved a peak of \$55 million in annual sales in late 2007 before they were withdrawn from the marketplace due to a product recall, after which sales resumed in December 2008.

In 2010, Stryker sued Zimmer, alleging that Zimmer's Pulsavac Plus devices infringed various claims of the '329, '807, and '383 patents. The district court granted partial summary judgment in favor of Stryker, finding infringement of the '807 and '383 patents' asserted claims. The question of whether Zimmer infringed the single asserted claim of the '329 patent, as well as Zimmer's invalidity defenses against all of the asserted claims, went to trial. The jury found that the products infringed claim 2 of the '329 patent and that all of the asserted claims were valid. The jury also awarded \$70 million in lost profits. It further found that Zimmer had willfully infringed all three patents. The jury also found that Stryker had marked substantially all of its products that commercially embodied the patents-in-suit during the period it sought damages, pursuant to 35 U.S.C. § 287(a).

In August 2013, the district court issued an order rejecting Zimmer's motions for judgment as a matter of law ("JMOL") on various issues, affirming the jury's verdict, awarding trebled damages for willful infringement, finding the case exceptional and thus awarding attorneys' fees to Stryker, and imposing a permanent injunction. The district court subsequently entered final judgment pursuant to its order.

Zimmer appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II

We turn first to Zimmer's appeal on the issues of claim construction, infringement, and validity.

Claim construction is an issue of law based on underlying factual considerations. Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 838 (2015). We review the district court's ultimate construction de novo, and any underlying factual determinations for clear error. Id. at 840-41. In construing a claim term, we look at the term's plain and ordinary meaning as understood by a person of ordinary skill in the art. Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). There is an exception to this general rule when a patentee sets out a definition and acts as her own lexicographer. Thorner v. Sony Computer Entm't Am., LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Infringement is a question of fact. Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1309 (Fed. Cir. 2009). Invalidity by reason of anticipation under 35 U.S.C. § 102 is a question of fact. Atlas Powder Co. v. Ireco, Inc., 190 F.3d 1342, 1346 (Fed. Cir. 1999). Invalidity by reason of obviousness under 35 U.S.C. § 103 is a legal conclusion based on underlying facts. Allergan, Inc. v. Sandoz Inc., 726 F.3d 1286, 1290 (Fed. Cir. 2013). Zimmer has the burden to prove invalidity by clear and convincing evidence. Galderma Labs., L.P. v. Tolmar, Inc., 737 F.3d 731, 736 (Fed. Cir. 2013).

On the issues of infringement and validity that the jury decided, Zimmer appeals the district court's denials of its motion for JMOL. Generally, a district court grants JMOL and sets aside the jury's verdict if it "finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue."

Fed. R. Civ. P. 50(a). We apply the law of the regional circuit to our review of the district court's grant or denial of a motion for JMOL. ClearValue, Inc. v. Pearl River Polymers, Inc., 668 F.3d 1340, 1343 (Fed. Cir. 2012). The Sixth Circuit reviews the district court's decision on a motion for JMOL de novo. Barnes v. City of Cincinnati, 401 F.3d 729, 736 (6th Cir. 2005). "Judgment as a matter of law may only be granted if, when viewing the evidence in a light most favorable to the non-moving party, giving that party the benefit of all reasonable inferences, there is no genuine issue of material fact for the jury, and reasonable minds could come to but one conclusion in favor of the moving party." Id.

For the reasons stated below, we affirm the district court's judgment on the various defenses of noninfringement and invalidity that Zimmer raises across the three asserted patents. However, we also find that each of these defenses was not unreasonable.

The '329 Patent

The only asserted claim of the '329 patent, claim 2, describes features of a "pulsed irrigation surgical handpiece." According to this claim, the handpiece comprises a "hollow housing," which includes a "handle," and, in relevant part in this case, "an electric motor spaced between the top and bottom of said handle and located in said handle" adjacent to an irrigation tube within the housing. '329 patent col. 22 ll. 5-7 (emphases added). Zimmer contends that this limitation is critical for the purposes of infringement because, as indicated by the arrows below, the motor in its accused Pulsavac Plus device is not located in the handle—rather, it is located in the "nub" of the handpiece, the protrusion behind the barrel.



Appellees' Br. 11 (red arrows added).

During claim construction, Zimmer took the position that no construction was necessary and that the claim term "handle" could be understood as having its plain and ordinary meaning to a person of ordinary skill in the art. Stryker Corp. v. Zimmer, Inc., No. 10-1223, slip op. at 6 (W.D. Mich. Feb. 1, 2012), ECF No. 106 ("Claim Construction Order"). Stryker proposed to construe the term "handle" as "a portion of a device designed to be held by a hand or hands." Id. The district court adopted Stryker's proposed construction.

Stryker argued that nothing in the patent's specification otherwise limited the meaning of "handle," and that its definition for "handle" was consistent with general dictionaries. Zimmer argued that Stryker's express construction of the term, however, was too broad and read out the specification's consistent distinction between the "handle" and "barrel" portions of the claimed device.

The '329 patent generally describes various embodiments, all of which comprise a "hand-held housing having a handle and a barrel which extends from the upper end of the handle." '329 patent col. 3 ll. 28-31. Zimmer further supported its position with the language of claim 4, which depends on claim 2. Claim 4 separately

describes both a "handle" and a "barrel," which Zimmer argued meant that the patentee maintained the distinction between the two parts of the handpiece.

However, the district court ultimately agreed with the Stryker that a device that met claim 2 did not need to have a discrete barrel joined to the handle, since this claim could cover wand-shaped devices that existed in the prior art in which the entire handpiece functioned like a handle and no separate barrel was joined at an angle. The district court reasoned that since claim 4 is a dependent claim, it could cover the pistol-shaped design described in the specification, while claim 2 would more broadly cover wand-shaped devices as well.

On appeal, Zimmer also raises the prosecution history of U.S. Patent Application No. 08/559,133 ("133 application"), the parent of the application that issued as the '329 patent. During the '133 application's prosecution, Stryker sought to overcome a rejection of claim 39 based on a prior art reference which described a pistol-shaped device with a barrel and a handle. Stryker traversed the rejection by arguing that the motor of the prior art handpiece was "not in the handle or at an angle to the barrel." Zimmer contends that claim 39 included the limitation "locating said motor in said handle," which is the same limitation at issue in the construction of "handle" in claim 2 of the '329 patent. Therefore, Zimmer argues, Stryker's statement disclaimed designs in which the motor is located in the barrel or nub of a pistol-shaped handpiece. See Gemalto S.A. v. HTC Corp., 754 F.3d 1364, 1371 (Fed. Cir. 2014) ("[W]hen multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation."); Microsoft Corp. v.

Multi-Tech Sys., Inc., 357 F.3d 1340, 1349 (Fed. Cir. 2004); Elkay Mfg. Co. v. EBCO Mfg. Co., 192 F.3d 973, 980 (Fed. Cir. 1999).

Zimmer did not raise its prosecution history argument during its claim construction briefing and the *Markman* hearing before the district court. The district court indicated that it would not alter the claim construction but, nevertheless, determined that it would still consider this argument in deciding Zimmer's motion for summary judgment of noninfringement. *Stryker Corp. v. Zimmer, Inc.*, No. 10-1223, slip op. at 3 (W.D. Mich. Nov. 29, 2012), ECF No. 248 ("*Summary Judgment Order I*"). The district court nevertheless denied Zimmer's motion, finding that the prosecution disclaimer was insufficiently "clear and unmistakable" because claim 39 of the '133 application had additional limitations that were absent in claim 2 of the '329 patent. *Id.* at 4-5.

The district court's analysis was flawed, however, because this was not a case in which the "purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications (rather than to the invention itself)." Saunders Grp., Inc. v. Comfortrac, Inc., 492 F.3d 1326, 1333 (Fed. Cir. 2007). There was no difference in the

¹ The limitation at issue in the original claim 39 of the '133 application was, in full: "a handpiece housing containing said pump and shell, said handpiece housing being elongate [sic] and bent and comprising a handle and a barrel, said barrel being open to and extending forward from an intersection with the top of the handle at an angle thereto, said hollow shell extending lengthwise along and within said handle into said angled intersection of said handle and barrel and locating said motor in said handle remote from said angled intersection, said link extending at said angle from said shell and handle forwardly into and along the length direction

language describing the limitations as between the two claims at issue, rather, the limitation of claim 2 was included within claim 39. There is no reason why a disclaimer on a limitation within a narrower claim would not apply to the identical limitation within the broader claim, as the same concerns about the prior art would relate to both. See, e.g., Gemalto, 754 F.3d at 1371 (applying a common disclaimer to both an independent and narrower dependent claim containing the same term).² That said, the district court did not err in rejecting Zimmer's argument as it related to claim construction, while still entertaining it in the context of infringement. See SuperGuide Corp. v. DirecTV Enters., Inc., 358 F.3d 870, 889-90 (Fed. Cir. 2004) (affirming the district court's construction on the grounds that a proffered alternative construction was untimely raised). Therefore, we review Zimmer's argument only as it relates to infringement.

Infringement is a question of fact, and we must give a substantial degree of deference to the jury's verdict. At trial, Stryker presented evidence indicating that a medical professional could hold Zimmer's Pul-

of said barrel, said pump movable member extending along the length direction of said barrel and being reciprocatingly driven by said link in said length direction of said barrel." J.A. 16672 (emphasis added).

² This is unlike the case cited by Stryker and the district court for the contrary proposition, *Middleton*, *Inc. v. Minnesota Mining and Manufacturing*. Co., in which the term at issue, "uniform" in the context of floor coverings, would potentially have a different meaning if it applied to the narrower claim—limited to smooth sporting surfaces—and a subsequent, broader claim that contemplated other kinds of surfaces. 311 F.3d 1384, 1388-89 (Fed. Cir. 2002). Here, a limitation on the location of the motor within the handpiece would mean the same thing in the context of either claim.

savac Plus by the nub behind the barrel, where the motor was located. In addition, Stryker presented evidence that the barrel of the Pulsavac Plus was called a "barrel grip" in an associated patent application, and the barrel included indentations that would allow the device to be used while held by the barrel. Stryker also persuaded the jury that it was reasonable to infer that if the nub behind the barrel was also shaped such that it was at least *capable* of being held, then it would be "a portion of the device designed to be held by hand," in accordance with the district court's construction of "handle" in the claim at issue. In light of the evidence presented at trial as a whole, along with the prosecution history, we do not find that "reasonable minds could come to but one conclusion" that Zimmer did not infringe claim 2 of the '329 patent. Barnes, 401 F.3d at 736. Accordingly, we affirm.

The '807 Patent

Infringement

Zimmer argues that the district court erred in granting summary judgment of infringement of the '807 patent's asserted claims. We review the district court's grant of summary judgment de novo. Dixon v. Univ. of Toledo, 702 F.3d 269, 273 (6th Cir. 2012). "Summary judgment is proper where there exists no issue of material fact and the moving party is entitled to judgment as a matter of law." ETW Corp. v. Jireh Publ'g, Inc., 332 F.3d 915, 920 (6th Cir. 2003) (citing Fed. R. Civ. P. 56(c)). All reasonable factual inferences are drawn in favor of the nonmoving party. Id.

Zimmer's argument on appeal centers on whether its products include, as required for all the asserted claims, "a front end for *receiving* the discharge tube and the suction tube." '807 patent col. 27 ll. 35-37 (em-

phasis added).³ This limitation describes the interface between the nozzles at the front end of the handpiece and the nozzles of a removable tip that includes discharge and suction tubes. Zimmer argues that the claim language requires that there be male openings on the tip that fit into the female nozzles on the handpiece. Therefore, Zimmer contends that the accused devices do not infringe because they are designed with female openings on the tip that fit into tapered male nozzles on the handpiece. To support its position, Zimmer relies on various dictionary definitions of "receive," which it argues all have some variant of the verbs "to contain" or "to hold." See Appellants' Br. 57. Zimmer argues that this meaning is consistent with the specification, which discloses a single embodiment in which the neck of the suction tube "seats in" the drain tube—and, specifically, that this configuration is designed to avoid "leakage of the fluid and material as it flows in the drain tube." '807 patent col. 11 ll. 29-34; see also id. fig.8.

As an initial matter, Stryker's argument that Zimmer waived a narrower construction of the term "receive" is unavailing. The parties and the district court directly addressed this issue during the summary judgment proceedings. Moreover, unlike the dispute concerning the meaning of "handle" in the '329 patent, the district court did not note any waiver and expressly considered the scope of "receive" in evaluating whether Zimmer's design infringed. See Pfizer, Inc. v. Teva Pharm., USA, Inc., 429 F.3d 1364, 1377 (Fed. Cir. 2005) (contemplating "rolling claim construction, in which the

 $^{^3\,\}mathrm{Stryker}$ asserted claim 45 and certain of its dependent claims.

court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves").

Stryker further argues that the specification provides a broader disclosure of "an irrigation handpiece to which complementary tips can be readily *coupled*." '807 patent col. 1 ll. 10-12 (emphasis added); *see also* col. 2 ll. 45-47 (disclosing "a tip assembly [that] readily *seals* to a complementary handpiece") (emphasis added). Stryker also points to Zimmer's own lay witnesses, who admitted that its Pulsavac Plus handpiece "receives" the tips.⁴

The district court noted that, in its view, "Zimmer's reading of 'receive' is artificially narrow." Stryker Corp. v. Zimmer, Inc., No. 10-1223, slip op. at 8 (W.D. Mich. Nov. 29, 2012), ECF No. 247 ("Summary Judgment Order II"). Instead, the district court reasoned that "[t]he word "receives" in this context can only mean that one part of the device connects directly with another part of the device." Id. Thus, the district court found that Zimmer infringed. While it is a close case, we do not find that the district court erred in granting summary judgment of infringement based on the record before it.

Invalidity

Zimmer also appeals the district court's holding that the asserted claims of the '807 patent were antici-

⁴ Stryker also argues that Zimmer's invalidity argument relies on the prior art Var-A-Pulse device including the "receive" limitation—even though it has the same kind of tip assembly as the Pulsavac Plus. We note, however, that nothing precludes Zimmer from arguing for a narrower application of the limitation on the infringement context, while also arguing, in the alternative, that—if the district court were to disagree—the patent claim would be so broad as to be invalid.

pated by its prior art Var-A-Pulse device, the predecessor of the Pulsavac Plus. Stryker argues that the Var-A-Pulse device does not anticipate because it is missing the "lock assembly" limitation of the asserted claims, which require that there be "a lock assembly mounted to the front end of said body for releasably securing the discharge tube and the suction tube to said body." '807 patent col. 27 ll. 35- 37. The district court adopted Stryker's proposed construction of the term "lock assembly" as "components that work together to secure or fasten the tip to the handpiece." Claim Construction Order at 16. In the Var-APulse device, the tip was attached to the handpiece in such a way that the tip nozzles fit into interior housing grooves at the front of the handpiece, which were then held together by friction. Zimmer argues that under the district court's construction, the limitation was present in the prior art because the nozzles were "secured or fastened" when they were fit in the interior housing groove.

At trial, Zimmer presented evidence that included the Var-A-Pulse's technical documentation, which indicated that the tip should be "secured" to the handpiece, as well as testimony from various Stryker witnesses admitting that the tip nozzles were fastened to the handpiece when they were inserted. Stryker argued that, unlike the accused Pulsavac Plus devices, which include a locking ring to secure the tip, there is no separate part or assembly in the Var-A-Pulse. Stryker also contended the prior art device did not include the full claim limitation, which requires that the lock assembly be "mounted" to the front end of handpiece. Stryker argued that because Zimmer identified a "lock assembly" that itself included the housing groove that is part of the front end, Zimmer was essentially arguing

that the lock assembly was mounted to itself, thus nullifying the limitation. Stryker also presented evidence to the jury showing that the Var-APulse tips readily fell off the front end of the handpiece, and that this led the development of the locking ring in the Pulsavac Pulse.

The jury ultimately found that there was no clear and convincing evidence that the Var-A-Pulse device anticipated the '807 patent's asserted claims. In light of the evidence that was presented, we find that a reasonable jury could have reached this verdict. Accordingly, we affirm.

The '383 Patent

At trial, Zimmer argued that the asserted claims of the '383 patent were obvious at the time of the invention in light of U.S. Patent No. 5,046,486 ("Grulke"), U.S. Patent No. 4,817,599 ("Drews II"), and U.S. Patent No. 5,350,356 ("Bales"). Zimmer contends that all of the limitations of the '383 patent's asserted claims were collectively present in the prior art references. Stryker does not directly dispute this point. Instead, it principally argues that because the designs claimed by Grulke and Drews II each exclude certain components described in the claims, one of ordinary skill in the art would not have been motivated to combine these references. In brief, Grulke disclosed a pulsed lavage system that uses a pneumatic, rather than an electric, motor. Drews II disclosed a pulsed irrigation system, powered by an electric motor, that is used as an eye wash.

At trial, Zimmer argued that it would have been obvious to one of ordinary skill to try to replace the pneumatic motor of Grulke with the electric motor in Drews II. Zimmer further argued that any reconfiguration of Grulke to accommodate an electric motor could be done by one of ordinary skill. See In re ICON

Health & Fitness, Inc., 496 F.3d 1374, 1382 (Fed. Cir. 2007) ("[W]e do not ignore the modifications that one skilled in the art would make to a device borrowed from the prior art."). Zimmer also argued that even though the Grulke reference was directed to orthopedic pulsed lavage systems, and the Drews II reference was directed to eyewash systems, they both described pressured water irrigation in hospitals and clinics. Zimmer contended that that a person of ordinary skill in the art of pulsed lavage devices would thus be aware of the art in both fields and would be motivated to combine features from each of them. See KSR Int'l Co. v. Teleflex *Inc.*, 550 U.S. 398, 420 (2007) ("Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.").

Zimmer also presented evidence of the examiner's rejection of certain claims in Stryker's prosecution of U.S. Patent Application No. 11/563,504 ("504 application"), a continuation of the '383 patent, which occurred during the discovery phase of this case. During that patent application's prosecution, the examiner issued a non-final office action, rejecting certain claims of the '504 application as obvious over Grulke "and further in view of Drews II." J.A. 17226. Stryker did not attempt to traverse the rejection and instead ultimately abandoned the application. Stryker principally argued that because the claim at issue in the '504 application included certain different limitations, the examiner's rejection did not have any relevance to the '383 patent's claims. We note, however, that the difference in the detail of the claims is immaterial as to whether it would have been obvious to combine Grulke and Drews II. While persuasive, the examiner's proffered rejection is

not on its own dispositive, in large part because the U.S. Patent and Trademark Office ("PTO") and district courts "take different approaches in determining invalidity and on the same evidence could quite correctly come to different conclusions." *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1428 (Fed. Cir. 1988).

Stryker also argued that the Grulke device differed substantially from the Drews II device. For example, it was designed for surgery rather than eyewashing. Grulke also disclosed a large device that was wheeled into an operating room that had many components that differed from those in the portable device disclosed Drews II. Stryker presented expert testimony rebutting Zimmer's evidence that it would have been obvious to combine these references.

On the basis of the record presented at trial, we agree with the district court that a reasonable jury could conclude that one of ordinary skill in the art would not have been motivated to combine the Grulke and Drews II references, even in light of the examiner's rejection of related claims on the basis of this combination. This is sufficient to affirm the district court's determination that Zimmer did not show, by clear and convincing evidence, that the '383 patent's claims were obvious.

For this reason, we need not reach other issues, including the evidence of secondary considerations of nonobviousness. Therefore, we affirm the district court's determination that the '383 patent's asserted claims were not obvious over the combination of Grulke, Drews II, and Bales.⁵

⁵ Zimmer also appeals the jury's finding that Stryker's products were sufficiently marked by the '383 patent during part of the

III

Enhanced Damages

After taking into consideration the circumstances of a particular case, a court may exercise its discretion and award enhanced damages under 35 U.S.C. § 284. *Halo Elecs.*, *Inc.*, 136 S. Ct. at 1933. "[H]owever, such punishment should generally be reserved for egregious cases typified by willful misconduct." *Id.* at 1934.

In making its willfulness determination, the district court applied the standard we had previously articulated in *Seagate*, which required a patentee to establish, by clear and convincing evidence, both that there was an objectively high likelihood that the accused infringer's actions constituted patent infringement, and that the risk was "either known or so obvious that it should have been known to the accused infringer." *See* 497 F.3d at 1371. The Supreme Court rejected this ap-

period for which it sought damages. We need not reach this issue, because we affirm the finding that Zimmer infringed the '807 and '329 patents, which is sufficient to support all of Stryker's award of damages for lost profit. However, we note that the jury was indeed incorrectly instructed that it should consider "whether some portion of the Stryker products not marked with a particular patent number were marked with other related patent notices." Stryker Corp. v. Zimmer, Inc., No. 10-1223, slip op. at 18 (W.D. Mich. Aug. 7, 2013), ECF No. 537 ("Post-Verdict Order") (emphasis added). Because of this instruction, the jury could have been misled to consider a product marked with the number of a patent related to the '383 patent—but not with the '383 patent number itself—as being sufficiently marked. While the district court appears to have relied on cases that suggest that there is some flexibility in what constitutes sufficient marking, the statute is not so broad as to allow marking with a different patent—with different claims—to provide sufficient notice to the public. Rather, the plain language of the marking statute provides that the patented article be marked with the "number of the patent." 35 U.S.C § 287(a) (emphasis added).

proach and explained that "[t]he subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless." *Halo Elecs., Inc.*, 136 S. Ct. at 1932. The Supreme Court also rejected the use of a clear and convincing standard in favor of a preponderance of the evidence standard. *Id.* at 1934.

On appeal, Zimmer did not appeal the jury's finding of subjective willfulness under the *Seagate* test. On the record in this case, willful misconduct is sufficiently established by the jury's finding. The jury made its determination under the clear and convincing evidence standard, which is a higher standard than is now necessary. We therefore affirm the jury's finding of willful infringement.

In doing so, we think the best course is to vacate the award of enhanced damages and remand to the district court for consideration of this issue. As *Halo* makes clear, the decision to enhance damages is a discretionary one that the district court should make based on the circumstances of the case, "in light of the longstanding considerations ... as having guided both Congress and the courts." *Id.* at 1934. Thus, it is for the district court to determine whether, in its discretion, enhancement is appropriate here. We therefore vacate the district court's award of enhanced damages and remand to the district court so that it may exercise its discretion.

Attorneys' Fees

The district court's award of attorneys' fees was based solely on its determination that Zimmer was liable of willful infringement. Though we uphold the district court's willfulness determination, it does not necessarily follow that the case is exceptional. As with the determination of whether enhanced damages are appropriate, "[d]istrict courts may determine whether a case is 'exceptional' in the case-by-case exercise of their discretion, considering the totality of the circumstances." Octane Fitness, LLC v. ICON Health & Fitness, Inc., 134 S. Ct. 1749, 1756 (2014). Because there exist further allegations of litigation misconduct in this case and because the standard for finding an exceptional case has changed since the district court issued its ruling regarding attorneys' fees, we also remand this issue for further consideration by the district court.

IV

For the aforementioned reasons, we affirm the jury's verdict of infringement and validity of all three patents at issue, as well as its award of lost profits and its willfulness determination. However, we vacate and remand the district court's award of trebled damages. We also vacate and remand the district court's finding of an exceptional case and its award of attorneys' fees. The case is remanded for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, VACATED-IN-PART, AND REMANDED

Costs

Each party shall bear its own costs.

APPENDIX C

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

Case No. 1:10cv1223

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., and STRYKER SALES CORPORATION,

Plaintiffs and Counter-Defendants,

v.

ZIMMER INC., and ZIMMER SURGICAL, INC.,

Defendants and Counter-Plaintiffs.

Filed July 19, 2017 Hon. Robert J. Jonker U.S. District Judge

JOINT PROPOSED AMENDED FINAL JUDGMENT AND PERMANENT INJUNCTION AFTER REMAND

Pursuant to Federal Rule of Civil Procedure 60(a), the parties hereby submit a Joint Proposed Amended Final Judgment and Permanent Injunction After Remand ("2017 Amended Final Judgment"). The 2017 Amended Final Judgment updates the Final Judgment and Permanent Injunction After Remand entered by the Court on July 12, 2017 (Doc. 609 at PageID.19989-19991) to set forth a calculation of prejudgment interest on the attorneys' fees awarded to Stryker and to include Stryker's supplemental damages for the period of July 1, 2013 to September 4, 2013, which had been

awarded in the Court's Amended Final Judgment and Permanent Injunction (Doc. 580 at PageID.19041-19043) but was inadvertently omitted in the July 12, 2017 judgment.

Based on the prior rulings of the Court and the verdict of the jury, and after considering the proposed form of amended judgment submitted by the parties, IT IS ORDERED, ADJUDGED, DECLARED and DECREED that the Plaintiffs Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation ("Stryker") have judgment against Defendants Zimmer Inc. and Zimmer Surgical, Inc. ("Zimmer"), as follows:

- 1. That Zimmer has infringed, literally and under the doctrine of equivalents, claim 2 of Stryker U.S. Patent No. 6,022,329, claims 45, 50, 51, and 52 of Stryker U.S. Patent No. 6,179,807, and claims 1, 2, 3, 8, 10, 11, 13, 17, 19, 20, 22, 24, 27, 38, 40, and 46 of Stryker U.S. Patent No. 7,144,383;
- 2. That Defendants' infringement of the asserted claims of Stryker U.S. Patent Nos. 6,022,329, 6,179,807, and 7,144,383 was willful;
- 3. That this case is exceptional pursuant to 35 U.S.C. §285;
- 4. That enhanced damages are appropriate pursuant to 35 U.S.C. §284;
- 5. That the counterclaims and defenses raised by Zimmer are dismissed with prejudice, and that normal principles of issue and claim preclusion govern any unasserted counterclaims and defenses;

- 6. That Stryker is entitled to and awarded lost profits damages in the amount of \$70 million;
- 7. That Stryker is entitled to and awarded supplemental damages in the amount of \$2,351,257.66 for the period December 1, 2012 to February 28, 2013;
- 8. That Stryker is entitled to and awarded supplemental damages in the amount of \$3,739,919.91 for the period March 1, 2013 to June 30, 2013;
- 9. That Stryker is entitled to and awarded supplemental damages in the amount of \$1,113,797.88 for the period July 1, 2013 to September 4, 2013;
- 10. That Stryker is entitled to and awarded \$231,614,926.35 as treble damages on its lost profits award as well as its supplemental damages awards;
- 11. That Stryker is entitled to and awarded attorneys' fees in the amount of \$8,000,000, plus \$1,671,309.26 in prejudgment interest calculated at a rate of 3.83 percent, compounded monthly;
- 12. That Stryker is entitled to and awarded costs in the amount of \$112,451.28;
- 13. That Stryker is entitled to and awarded prejudgment interest of \$11,167,670.50 on the jury award and the supplemental damages incurred from December 1, 2012 to February 28, 2013, prejudgment interest of \$1,094,982.78 on the damages incurred from March 1, 2013 to June 30, 2013, and prejudgment interest of \$606,010.31 on the damages incurred from July 1, 2013 to September 4, 2013 for a total prejudgment interest award of \$12,868,663.59 on the lost profits and supplemental damages awards;

- 14. That Stryker is entitled to and awarded postjudgment interest of \$217,987.56 on the original damages award through July 15, 2015;
- 15. That Stryker is awarded a total of \$254,485,338.04 for the above-identified damages, interest, and costs;
- 16. That Zimmer paid Stryker \$90,291,626.60 on July 15, 2015 in satisfaction of the May 18, 2015 Amended Final Judgment such that the remaining amount owed by Zimmer to Stryker for punitive damages, attorney fees with prejudgment interest, and costs as of July 12, 2017 is \$164,193,711.44;
- 17. That Stryker is entitled to and awarded postjudgment interest on the remaining award in an amount to be calculated in accordance with the statute;

IT IS FURTHER ORDERED, ADJUDGED, DECLARED and DECREED that Defendants Zimmer Inc. and Zimmer Surgical, Inc. are hereby permanently enjoined from the manufacture, use, importation, sale, or offer for sale within the United States of the pulsed lavage products found to infringe claims 45, 50, 51, and 52 of U.S. Patent No. 6,179,807, and products no more than colorably different therefrom.

Dated: July 19, 2017

/s/ Robert J. Jonker

Robert J. Jonker Chief United States District Judge

APPENDIX D

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

CASE NO. 1:10-CV-1223

STRYKER CORP., et al., Plaintiffs/Counter-Defendants,

v.

ZIMMER, INC., et al., Defendants/Counter-Plaintiffs.

Filed July 12, 2017 HON. ROBERT J. JONKER

ORDER ON REMAND

This patent case is before the Court on remand from the United States Court of Appeals for the Federal Circuit (ECF No. 597). The Federal Circuit instructed this Court to reconsider its award of enhanced damages in light of the Supreme Court's clarification of the governing standard in Halo Electronics, Inc. v. Pulse Electronics, Inc. The Federal Circuit also directed this Court to reconsider its attorneys' fees award because the Supreme Court clarified the standard for finding an exceptional case warranting an attorneys' fee award in Octane Fitness, LLC, v. Icon Health & Fitness, Inc. For the following reasons, this Court reaffirms its award of enhanced damages and attorneys' fees.

BACKGROUND

At the time of trial, proof of willful infringement required "clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent, and this objectively-defined risk ... was either known or so obvious that it should have been known." In re Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007). This Court instructed the jury based on the then-applicable willfulness standard. The jury, in its verdict, found that Stryker had proven by clear and convincing evidence that Zimmer willfully infringed one or more claims in all three of the patents-in-suit (ECF No. 381).

In 2013, in its Order on a series of the parties' postverdict motions, this Court concluded that, "given the one-sidedness of the case and the flagrancy and scope of Zimmer's infringement," enhanced damages in a trebled amount were warranted (ECF No. 537, Page-ID.17965). Additionally, the Court concluded that this case was exceptional and awarded attorney's fees under 35 U.S.C. § 285. Id. at PageID.17958. The Federal Circuit, upon de novo review, applied the Seagate test and—without disturbing the jury's findings that the patents were valid and infringed—reversed this Court's willfulness determination, holding that Zimmer's defenses to the infringement of each patent claim were not objectively unreasonable. Stryker v. Zimmer, 782 F.3d 649, 653 (Fed. Cir. 2014) Additionally, the Federal Circuit vacated this Court's award of treble damages and attorneys' fees, and remanded the case back to this Court. Id. The Supreme Court granted certiorari.

On June 13, 2016, the United States Supreme Court abrogated the Seagate test in Halo Electronics, Inc. v. Pulse Electronics, Inc., holding that the Federal Circuit's two-part test was inconsistent with Section 284 of the Patent Act. 136 S. Ct. 1923, 1925 (2016). In particular, the Halo Court held "[t]he subjective willfulness of the patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless" as was previously required by Seagate. Id. Instead, the Halo Court held "Section 284 permits district courts to exercise their discretion in a manner free from the inelastic constraints of the Seagate test." Id. at 1933-34. The Supreme Court also rejected two other aspects of the Federal Circuit's approach: first, it ruled the patentee's burden of proof was simply a preponderance of the evidence, not clear and convincing; and second, it ruled the Federal Circuit's standard of review for a district court's ruling on willfulness was abuse of discretion, not de novo. Id. at 1934. The Supreme Court vacated and remanded the case to the Federal Circuit for review under the proper standard. Id. at 1935.

On remand from the Supreme Court, the Federal Circuit affirmed the jury's finding of willful infringement. Stryker v. Zimmer, 837 F.3d 1268, 1279 (Fed. Cir. 2016). Additionally, the Federal Circuit recited that Zimmer's infringement and invalidity defenses were "not unreasonable" even though ultimately unsuccessful. Id. at 1272. The Federal Circuit determined that this Court should be given the opportunity to exercise its discretion to decide whether enhanced damages are appropriate in light of the new standard announced in Halo. Id. at 1279. Because the standard for finding an exceptional case changed since this Court

awarded attorneys' fees,¹ the Federal Circuit also remanded this Court's exceptional case finding and attorneys' fees award for renewed consideration by this Court. *Id*.

This Court requested supplemental briefing addressing the impact of Halo on this Court's enhanced damages determination and the impact of Octane on this Court's exceptional case finding. With the benefit of the arguments raised in the parties' supplemental briefing and an additional oral argument, the Court now reaffirms its original award of enhanced damages under Halo and attorneys' fees under Octane. In simplest terms, the Court believes that its and the jury's original fact findings against Zimmer, coupled with multiple legal changes that actually make it easier to enhance damages and make exceptional case findings, fully support the Court's original awards in the case. The ability of Zimmer's trial and appellate counsel to craft some post hoc litigation defenses that the Federal Circuit found objectively reasonable does not undermine the jury's and this Court's conclusion that Zimmer's overall conduct was a case of egregious piracy warranting fully enhanced damages and attorney fees.

¹ In Octane Fitness, LLC, v. Icon Health & Fitness Inc., the Supreme Court held that a district court has discretion to make an exceptional-case finding based on the totality of the circumstances, rather than only after a finding of subjective bad faith and objective baselessness, which was the standard previously established by the Federal Circuit in Brooks Furniture Manufacturing, Inc. v. Dutailier International, Inc., 393 F.3d 1378, 1381 (Fed. Cir. 2005). 134 S. Ct. 1744, 1749 (2014).

DISCUSSION

I. Enhanced Damages

Section 284 of the Patent Act provides that, in case of infringement, courts "may increase the damages up to three times the amount found or assessed." U.S.C. § 284. In 2007, the Federal Circuit adopted the two-part Seagate test for determining when a district court may increase damages under § 284. But, as noted above, Halo rejected the Seagate test, holding that the two-part test used to determine enhanced damages was inconsistent with Section 284 of the Patent Act. 136 S. Ct. at 1925. Instead, the Supreme Court held "Section 284 permits district courts to exercise their discretion in a manner free from the inelastic constraints of the Seagate test." Id. at 1933-34. "Although there is 'no precise rule or formula' for awarding damages under § 284, a district court's 'discretion should be exercised in light of the considerations' underlying the grant of that discretion." Id. That is, "[a]s with any exercise of discretion, courts should ... take into account the particular circumstances of each case in deciding whether to award damages, and in what amount ... [and 'be guided by [the] sound legal principles' developed over nearly two centuries of application and interpretation of the Patent Act." Id. at 1933, 1935 (quoting Martin v. Franklin Capital Corp., 546 U.S. 132, 139 (2005)).

The *Halo* Court held that enhanced damages should be reserved for "egregious" cases typified by "willful misconduct." *Id.* "Awards of enhanced damages under the Patent Act ... are not to be meted out in a typical infringement case, but are instead designed as a 'punitive' or 'vindictive' sanction for egregious infringement behavior. The sort of conduct warranting enhanced damages has been variously described in our

cases as willful, wanton, malicious, bad faith, deliberate, consciously wrongful, flagrant, or-indeed-characteristic of a pirate." *Id.* at 1932.

The objective reasonableness of the infringer's litigation defense(s) does not preclude a finding of "willful misconduct." *Id.* Instead, "[t]he subjective willfulness of the patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless" as was previously required by *Seagate*. *Id.* at 1933. Further, the Supreme Court held that the enhancement determination should be governed by the preponderance of the evidence standard rather than *Seagate*'s clear and convincing evidence standard. *Id.* at 1934.

After Halo, courts use the Read factors "not as a formal checklist," Dominion Resources, Inc. v. Alstom Grid, Inc., No. 15-224, 2016 WL 5674713, at *21 (E.D. Pa. Oct. 3, 2016), but as "useful guideposts," PowerIntegrations, Inc. v. Fairchild Semiconductor Int'l, Inc., No. 09-5235, 2017 WL 130236, at *4 (N.D. Cal. Jan. 123, 2017), in considering the totality of the circumstances to determine whether an infringer's conduct is egregious. See Polara Eng'g, Inc. v. Campbell Co., No. 13-00007, 2017 WL 754609, at *25 (C.D. Cal. Feb. 27, 2017). "While the *Read* factors remain helpful to the Court's execution of its discretion, [under Halo,] an analysis focused on 'egregious infringement behavior' is the touchstone for determining an award of enhanced damages rather than a more rigid, mechanical assessment." Imperium IP Holdings (Cayman), Ltd. v. Samsung Elecs. Co., No. 4:14-371, 2016 WL 4480542, at *6 (E.D. Tex. Aug. 24, 2016). "The paramount determination in deciding to grant enhancement and the amount thereof is the egregiousness of the defendant's conduct based on all the facts and circumstances." Read Corp. v. Por*tec.*, *Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992). The nine *Read* factors include:

(1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other's patent, investigated the patent and formed a good faith belief that it was invalid or that it was not infringed; (3) the infringer's behavior in the litigation; (4) the infringer's size and financial condition; (5) the closeness of the case; (6) the duration of the misconduct; (7) the remedial action by the infringer; (8) the infringer's motivation for harm; and (9) whether the infringer attempted to conceal its misconduct.

Spectralytics, Inc. v. Cordis Corp., 649 F.3d 1336, 1348 (Fed. Cir. 2011) (citing Read, 970 F.2d at 826-27). "An award need not rest on any particular factor, and not all relevant factors need to weigh in favor of an enhanced award." Imperium IP Holdings, No. 4:14-371, 2016 WL 4480542, at *6 (citing SRI Int'l., Inc. v. Advanced Tech. Labs., Inc., 127 F.3d 1462, 1469 (Fed. Cir. 1997)).

This Court finds—as it did in its previous order—that Zimmer engaged in "egregious infringement behavior." In fact, in its previous Order finding enhanced damages were warranted, this Court noted that "because the *Read* factors so overwhelmingly favor enhancement, the real question is not whether enhancement is warranted, but how much enhancement is appropriate." (ECF No. 537, PageID.17965). Because of "the one-sidedness of the case and the flagrancy and scope of Zimmer's infringement" this Court awarded treble damages to Stryker. *Id.* And that determination was made under *Seagate*—a legal standard that the Supreme Court in *Halo* rejected for the very reason that

it overly constrained district courts from exercising their discretion to punish willful patent infringers under § 284. See Halo, 136 S. Ct. at 1933. Post-Halo, where, as here, willful infringement is found, the question of enhancement is firmly committed to the sound discretion of the district court.² See id. at 1931 (quoting Martin, 546 U.S. at 136) ("That language [in § 284] contains no explicit limit or condition, and we have emphasized that the word 'may' clearly connotes discretion.") (internal quotation marks omitted). This Court now exercises that discretion, and holds that the factual findings supporting this Court's holding—which warranted enhancement under a clear-and-convincing standard and which were not disturbed on appeal—are more than sufficient to support an enhancement for treble damages under the Halo preponderance-of-theevidence standard.

As to the first factor, this Court found that it favored enhancement. This Court noted that multiple trial witnesses consistently testified that Zimmer deliberately copied Stryker's patented inventions (ECF No. 537, PageID.17964). First, "evidence of copying

² "An enhancement of damages often follows a finding of willful infringement." Arctic Cat Inc. v. Bombardier Rec. Prods., Inc., 198 F. Supp. 3d 1343, 1349 (S.D. Fla. July 27, 2016). In fact, the Federal Circuit has held that, upon such a finding, "courts should provide reasons for not increasing a damages award" under § 284. Jurgens v. CBK, Ltd., 80 F.3d 1566, 1570 (Fed. Cir. 1996) (holding that district court abused its discretion in refusing to enhance damages without an explanation of any proper mitigating factors) (emphasis added); see also Whitserve, LLC v. Computer Packages, Inc., 694 F.3d 10, 37 (Fed. Cir. 2012) ("[T]rial court abused its discretion in denying the motion for enhanced damages without independent justification."). However, as the Halo Court noted, "none of this is to say that enhanced damages must follow a finding of egregious misconduct." Halo, 136 S. Ct. at 1933 (emphasis added).

came from [Zimmer's lead engineer Bill] Donizetti, who admitted that Zimmer instructed Donizetti's design team to model its design after features of Stryker's products." *Id.* at PageID.17933 (citing ECF No. 358, PageID.7734). Additionally, Var-A-Pulse designer Dan Olson admitted that using gear drives such as the ones ultimately incorporated in the Pulsavac Plus "would be probably copying somebody." (ECF No. 406-1, Page-ID.10201). This Court finds no basis to deviate from its previous finding on this factor. See nCUBE Corp. v. SeaChange Int'l, Inc., 313 F. Supp. 2d 361, 387-88 (D. Del. 2004) (finding deliberate copying supported enhanced damages).

On the second factor, this Court found it favored enhancement because "Zimmer presented no evidence that it investigated the scope of Stryker's patents to form a good faith belief about invalidity or infringement" prior to trial, let alone at the time it learned about the patents (ECF No. 537, PageID.17964). The jury found that Zimmer knew about each of the three patents-in-suit prior to this lawsuit (ECF No. 604, PageID.19607).⁴ This factor continues to favor enhancement.

³ Contrary to Zimmer's argument, Zimmer's conduct prior to the issuance of the patents can be, and is, probative of copying under *Read*. *Read* specifically refers to copying "the ideas or design of another" and states in a footnote that this "would encompass, for example, copying the commercial embodiment, *not merely the elements of a patent claim*." *Read*, 970 F.2d at 827 n.7 (emphasis added). "A patent need not have issued before the ideas of that inventor can be copied in bad faith." *Barry v. Medtronic, Inc.*, No. 1:14-cv-104, 2017 WL 1536492, at *4 (E.D. Tx. April 20, 2017).

⁴ Zimmer notes that, at trial, some Zimmer employees generally contested the extent of Zimmer's corporate awareness of several of the patents. The jury, however, evidently discredited those

The Court also found the third factor favored enhancement because Zimmer needlessly delayed in producing requested information concerning its application of a patent for the Pulsavac Plus. Zimmer's needless delays in producing key documents continues to favor enhanced damages in this case. *See Imperium*, 203 F. Supp. 3d at 763-64 (trebling damages where the court found Defendants failed to produce key documents—despite repeated requests for them—until the fourth day of trial).⁵

The fourth factor favored enhancement because Zimmer is a multi-billion dollar company with reported annual profits of \$755,000,000 in 2012 (ECF No. 408-4). This Court noted that a \$70 million verdict may sound large in the abstract, but in context it may not be enough, without enhancement, to deter infringing conduct. This remains the case today. Zimmer's reported

employees. Instead, the evidence established that Zimmer "got its product to the market quickly" and "did not seek advice of outside patent counsel to assess the potential for infringement of Stryker's patents, or to opine on the validity of Stryker's patents." *Id.* at PageID.17911.

⁵ Additionally, the Court notes that many of Zimmer's positions throughout the litigation were unjustified, resulting in the unnecessary prolonging of litigation. See i4i Ltd. P'Ship v. Microsoft Corp., 598 F.3d 831, 859 (Fed. Cir. 2010) (holding that litigation misconduct includes holding "unjustified" positions during the case and committing "acts that unnecessarily prolong litigation."). Only one of Zimmer's twenty-one noninfringement arguments survived summary judgment, because—as this Court noted in its order granting summary judgment—Zimmer's purported defenses were "impossibly cramped" and "unreasonable." (ECF No. 247, PageID.5103-5105). Moreover, as this Court noted in its Order on the parties' post-verdict motions, Stryker's evidence regarding secondary considerations of non-obviousness made it highly unlikely that Zimmer's invalidity defenses were reasonable (ECF No. 537, PageID.17932).

net sales for 2016 increased 28.1% from the previous year to \$7.684 billion (ECF No. 603-6).

As to the fifth factor, this Court held it favored enhancement because this was not a close case. Every major decision—from claim construction to post-verdict motions—went against Zimmer (ECF No. 381). This continues to be the case. The Federal Circuit affirmed this Court's summary judgment rulings and the jury's liability, damages, and willfulness findings on all three patents-insuit. Stryker, 837 F.3d at 1279. Accordingly, this factor favors enhancement. See PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC, No. 11-761, 2016 WL 6537977, at *5 (N.D.N.N. Nov. 3, 2016) (holding that the case was not close where multiple issues were resolved on summary judgment and remaining issues at trial were "not particularly close"). The objective reasonableness the Federal Circuit found for a handful of Zimmer's litigation positions in no way detracts from the lopsided victory Stryker garnered on the core issues of liability, damages, and willfulness; indeed, on the whole course of the case in general. See Halo, 136 S. Ct. At 1933 ("[C]ulpability is generally measured against knowledge of the actor at the time of the challenged conduct."); R-BOC Representatives, Inc., et al., v. Minemyer, Nos. 11-C-8433, 07-C-1763, 2017 WL 543045, at *33 (N.D. Ill. Feb. 10, 2017) ("And we are concerned, not with what defenses or stories were devised, but what the infringer knew or thought.").

The sixth factor favored enhancement because "Zimmer's infringement spans more than a decade, from 2000 all the way through the present—a considerable amount of time." (ECF No. 537, PageID.17964-17965). In fact, in its Order on the parties' post-trial motions, this Court held that a preliminary injunction immediately and permanently enjoining Zimmer from

manufacturing, marketing, or selling the infringing products at issue was warranted as a remedy for Zimmer's persistent infringing activity (ECF No. 537, PageID.17955). The Court sees no basis to deviate from its prior holding on this factor.⁶

This Court held the seventh factor favored enhancement because Zimmer failed to take any remedial action to stop infringement or mitigate damages at any point in time, including during the two-plus years covered by this litigation. As noted above, even after the jury returned its verdict, Zimmer continued to manufacture and sell the infringing products. This was consistent with the market and litigation strategy the Court found Zimmer followed—"competing immediately and aggressively in the pulsed lavage market and opt[ing] to worry about the potential legal consequences later." *Id.* at PageID.17965. This factor continues to favor enhancement.

The eighth factor favored enhancement because Zimmer and Stryker were the only two major competitors in the orthopedic pulsed lavage device market, so that Zimmer's infringement of Stryker's patents could only have been motivated by a desire to harm Stryker by depriving it of market share (ECF No. 537, Page-ID.17965). This continues to be the case today. Accordingly, this factor still favors enhancement. See Parker-Hannifin Corp. v. Wix Filtration Corp., No. 07-1374, 2011 WL 976559, at *17 (N.D. Ohio Mar. 17, 2011) (moti-

⁶ Of course, as Zimmer argues, if Stryker had brought the suit earlier, then the period of infringement would have been shorter. This argument, however, misses the point. Any delay by Stryker—and this Court previously determined that the delay in this case is insufficient to support a laches defense—was not the cause of Zimmer's infringement. Zimmer is responsible for its own actions.

vation to take business from "fierce competitor" weighed in favor of enhanced damages).

Lastly, this Court found the ninth factor favored enhancement. This Court reasoned that although Zimmer did not attempt to hide the entirety of its misconduct, it did attempt to prevent Stryker from discovering certain aspects of its infringement in the run-up to trial. (ECF No. 537, PageID.17965). Specifically, over the course of six months-and despite dozens of pointed requests-Zimmer refused to turn over certain details regarding its patent application. These details contained key information regarding the structure and use of the Pulsavac Plus, which severely undercut Zimmer's noninfringement defenses. Zimmer finally revealed this information after discovery had ended. The Court finds this factor continues to favor enhancement. See I-Flow Corp. v. Apex Med. Techs., Inc., No. 07-1200, 2010 WL 114005, at *3 (S.D. Cal. Jan. 6, 2010) (requesting non-publication of patent application constituted concealment favoring enhancement); Joyal Prods., Inc. v. Johnson Elec. N. Am., Inc., No. 04-5172, 2009 WL 512156, at *5 (D.N.J. Feb. 27, 2009) (failure to provide discovery in response to discovery requests favors enhancement).

The conduct described above provides ample foundation for an enhancement of treble damages under the *Halo* standard. Zimmer's conduct was egregious infringement behavior today just like it was when this Court made its original determination that enhanced damages were appropriate. While perhaps more egregious cases exist, the test is not whether this case is the worst possible that can be imagined. Zimmer's conduct was more egregious than most, and Zimmer is precisely the type of egregious infringer the Supreme Court had in mind when it relaxed the *Seagate* standard to pro-

vide district courts with the freedom to exercise their discretion to enhance damages in cases of willful infringement. See Halo, 136 S. Ct. at 1933-34. Accordingly, this Court reaffirms its prior finding that Zimmer engaged in egregious infringement behavior and awards Stryker treble damages on the jury's \$70 million verdict and the Court's \$6,108,892.66 supplemental damages award.

II. Attorneys' Fees

On remand, the Federal Circuit also instructed this Court to reconsider its finding of exceptional case and its attorneys' fees award in light of the standard enunciated by the Supreme Court in Octane. As the Supreme Court held in Octane, an "exceptional" patent case is one that "stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." Octane, 134 S. Ct. at 1756. The strength of Stryker's litigating position certainly "stands out" for this Court. This Court and the jury both found, by clear and convincing evidence, that Zimmer willfully infringed the '329, '807, and '383 patents. The jury's "subjective willfulness" finding was sufficient for an "exceptional" case finding under the rigid Brooks framework, and is certainly sufficient for such a finding under the more flexible, totality-of-the circumstances standard enunciated by Octane Fitness. See Halo, 136 S. Ct. at 1932-33 (citing Octane Fitness, 134 S. Ct. at 1757) (equating "subjective bad faith" with "subjective willfulness"); see also Golight, Inc. v. Walmart Stores, Inc., 355 F.3d 1327, 1340 (Fed. Cir. 2004) ("Our cases uniformly indicate that ... willfulness, may be a sufficient basis in a particular case for finding the case 'exceptional"). Moreover, the facts underpinning this Court's attorneys' fees award have not changed. If anything, they provide even more support for this Court's award of attorneys' fees: Stryker and this Court continue to expend considerable resources in the name of a case that was not terribly close. Accordingly, this Court reaffirms its prior finding that this is an exceptional case and reissues the entirety of its award for fees and expenses to Stryker.

ACCORDINGLY, IT IS ORDERED THAT Stryker's renewed Motion for Treble Damages and Attorney's Fees (ECF No. 602) is **GRANTED**. Zimmer shall pay Stryker its reasonable attorneys' fees, and the Court awards Stryker treble damages on the jury's \$70 million verdict and the Court's \$6,108,892.66 supplemental damages award. Because Stryker has decided not to seek additional attorney fees for litigation after the original Judgment, the Court will enter Judgment using the same numbers in the original Judgment.

IT IS SO ORDERED.

Dated: July 12, 2017 /s/ Robert J. Jonker

ROBERT J. JONKER CHIEF UNITED STATES DISTRICT JUDGE

APPENDIX E

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

CASE NO. 1:10-CV-1223

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., and STRYKER SALES CORPORATION,

Plaintiffs and Counter-Defendants,

v.

ZIMMER INC., and, ZIMMER SURGICAL, INC., Defendants and Counter-Plaintiffs.

> Filed August 7, 2013 HON. ROBERT J. JONKER

ORDER REGARDING PARTIES' POST-VERDICT MOTIONS

I. BACKGROUND

Stryker and Zimmer are the two principal participants in the market for orthopedic pulsed lavage devices. A modern, orthopedic pulsed lavage device is a combination spray-gun and suction-tube, used by medical professionals to clean wounds and tissue during surgery. In 2010, Stryker sued Zimmer, alleging that Zimmer's line of Pulsavac Plus pulsed lavage devices infringed three of Stryker's patents—U.S. Patent No. 6,022,329 ("the 329 patent"), U.S. Patent No. 7,144,383 ("the 383 patent"), and U.S. Patent No. 6,179,807 ("the

807 patent"). After claims construction and a round of summary judgment, one infringement claim and 22 invalidity defenses remained for trial. So did a series of remedial issues. (See Order Regarding Stryker's Motion for Partial Summary Judgment of Infringement, doc. # 247).

After two weeks of trial—featuring hundreds of exhibits and more than a dozen witnesses—and multiple days of deliberation, the jury returned a verdict unequivocally in Stryker's favor. In particular, the jury found: (1) that the Pulsavac Plus products infringed claim 2 of the 329 patent; (2) that Zimmer failed to establish any of its 22 invalidity contentions; and (3) that Stryker was entitled to \$70 million in lost profits. (Verdict, doc. # 381.) The jury also found that Zimmer willfully infringed the valid claims under the patents in suit. (*Id.*)

The jury's verdict for Stryker means that the postverdict motions must be evaluated against the prevailing narrative at trial. Here is a summary of that narrative. Through the proceedings, the jury learned that pulsed lavage devices had, for years, served an important function in surgical procedures—cleaning out wounds and removing necrotic tissue from wound sites. Early-model pulsed lavage devices were bulky and required a centralized power source. They had to be wheeled around a hospital, from one room to another. Stryker solved the problems associated with the size and power needs of pulsed lavage devices by designing a portable, disposable, battery-powered, hand-held pulsed lavage device. Zimmer's Manufacturing Manager and Rule 30(b)(6) witness agreed that the Stryker products were "pioneering."

Zimmer had no answer for Stryker's new technology and saw its market share fall precipitously, to the point where Zimmer's presence in the pulsed lavage marketplace was at risk. Rather than relying on their own engineers to develop an alternative, Zimmer hired an independent contractor with no experience in pulsed lavage devices. In essence, Zimmer handed the independent contractor a copy of Stryker's product and said, "Make one for us." Under those conditions, it is not surprising that the finished Zimmer product turned out to look and function like Stryker's product. Nevertheless, Zimmer got its product to market quickly and in direct competition with Stryker. In doing so, it did not seek advice of outside patent counsel to assess the potential for infringement of Stryker's patents, or to opine on the validity of Stryker's patents.

Once Zimmer introduced its competing product, there was fierce, direct market competition between Stryker and Zimmer. Zimmer constantly sought to lure customers away from Stryker and had a fair amount of success in doing so with its new product. Then, in 2007, Zimmer was forced to pull its product from the market due to technical problems. Zimmer had received so many complaints about its product that it decided to cease production entirely and not re-start production until December 2008, when it reentered the market. Upon reentering the market, Zimmer recaptured most of the market share it had forfeited by its year-plus absence.

Stryker filed this suit against Zimmer in 2010, alleging infringement of the 329, 807, and 383 patents. Zimmer lost every argument it advanced at claim construction, then lost most of the disputed claims on summary judgment. It lost all of its remaining claims at trial. At the time the jury announced its verdict,

Zimmer had not changed its product design.¹ This is consistent with both the market and litigation strategy that Zimmer has followed for years. 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. When Stryker sued, Zimmer's able counsel offered the most plausible defenses that were available to them given Zimmer's pre-litigation market conduct. Ultimately, however, the trial proofs demonstrated that this was not a close case. The relative quality of the expert testimony on liability was notably favorable to Stryker. On damages, the quality of the expert testimony was closer, but still favored Stryker. Zimmer ultimately stuck with an "all or nothing" damages defense—rather than trying to chip away at Stryker's proposed lost profit number or its alternative theory and lost, as the jury's verdict demonstrates.

Both sides have brought a number of post-verdict motions. Zimmer has brought ten post-verdict motions for judgment as a matter of law ("JMOL") or for a new

¹ On May 21, 2013, almost four months after the close of trial and weeks after the parties completed their third and final round of briefing on their post-verdict motions, Zimmer unilaterally filed a brief attempting to move to introduce new evidence of a recently-completed redesign of the Pulsavac Plus (doc. # 531). Stryker promptly moved to strike (docket # 534). The Zimmer redesign referenced in the unilateral filing (docket #531) was not available to the jury at trial. Nor was the redesign raised in the course of the parties' extensive post-verdict briefing. Moreover, Stryker has not had an opportunity to conduct discovery of Zimmer's redesign or the individuals responsible for it. In light of those factors, the Court grants Stryker's motion to strike (docket #534). In addressing the parties' post-verdict motions, the Court will not consider the information Zimmer unilaterally submitted after the jury returned its verdict, and after the parties completed post-verdict briefing.

trial. Specifically, Zimmer has moved: (1) for JMOL to preclude Stryker from recovering lost profits damages from before November 5, 2010 (doc. # 369); (2) for JMOL as to the invalidity of claim 2 of the 329 patent, or, in the alternative, for a new trial on the validity of claim 2 (doc. # 401); (3) for JMOL barring Stryker from recovering pre-suit damages under the doctrine of laches (doc. #418); (4) for JMOL of non-infringement of claim 2 of the 329 patent, or, in the alternative, for a new trial on the issue of non-infringement of claim 2 (doc. # 425); (5) for JMOL limiting Stryker's damages because Stryker failed to mark its pulsed lavage devices in accordance with 35 U.S.C. § 287(a) and for a new trial on the issue of marking (doc. #430); (6) for a new trial (doc. # 435); (7) for JMOL that Stryker's asserted claims under the 383 patent are invalid, or, in the alternative, for a new trial on the validity of those claims (doc. # 438); (8) for JMOL that claims 45, 50, 51, and 52 of the 807 patent are invalid, or, in the alternative, for a new trial on the validity of those claims (doc. # 442); (9) for JMOL that Zimmer did not wilfully infringe Stryker's patents (doc. # 447); and (10) for JMOL to preclude Stryker from receiving lost profits damages and limiting Stryker's reasonable royalty recovery, or, in the alternative, for a new trial on damages (doc. # 453). Stryker has brought five post-verdict motions, seeking (1) a permanent injunction against Zimmer or, in the alternative, an ongoing royalty (doc. # 396); (2) supplemental damages (doc. # 414); (3) a finding of an "exceptional case" and an award of attorney's fees (doc. # 410); (4) an award of prejudgment interest (doc. # 399); and (5) enhanced damages for willful infringement (doc. #405).

Both parties' post-verdict motions are addressed in this Order. The Court does not believe oral argument is necessary to illuminate the issues exhaustively briefed by the parties. For the reasons set out below, each of Zimmer's motions is **DENIED** and each of Stryker's motions is **GRANTED**.

II. ZIMMER'S POST-VERDICT MOTIONS

Zimmer is not entitled to prevail on any of its postverdict motions.

A. Motion for JMOL to Preclude Stryker from Recovering Lost Profits Damages from Before November 5, 2010 (doc. # 369)

Zimmer's first motion is for judgment as a matter of law ("JMOL") to preclude the Stryker plaintiffs from recovering lost profits damages from before November 5, 2010, on the ground that Stryker Sales Corporation lacks constitutional standing to sue for lost profits from before that date. A party is entitled to lost profits damages from an infringer if, during the period of infringement, the party had the right to exclude others from making, using, selling, or offering to sell inventions practicing the patents-in-suit. See WiAV Solutions LLC v. Motorola, Inc., 631 F.3d 1257, 1264 (Fed. Cir. 2010) (citing 35 U.S.C. § 271(a) and Warth v. Seldin, 422 U.S. 490, 500 (1975)). The question raised by Zimmer's motion is whether Stryker Sales Corporation had that right before November 5, 2010. See id. (citing Morrow v. Microsoft Corp., 499 F.3d 1332, 1340 (Fed. Cir. 2007)).

At the outset, the parties dispute whether Stryker's motion is properly characterized as asserting a lack of standing or merely as arguing against a particular damages theory. The distinction is an important one. Constitutional standing is a component of federal subject matter jurisdiction, meaning a party's lack of standing may be raised at any time in the litigation. See Zurich Ins. Co. v. Logitrans, Inc., 297 F.3d 528, 531 (6th Cir. 2002) ("Article III standing is a jurisdictional requirement that cannot be waived, and such may be brought up at any time in the proceeding."); see also FED. R. CIV. P. 12(h)(3) (issues concerning a court's subject matter jurisdiction may be raised at any time). A motion to limit damages, on the other hand, goes to the merits of a party's claim and, therefore, may be waived if not included in the final pre-trial order. See Rockwell Int'l Co. v. United States, 549 U.S. 457, 474 (2007) ("[C]laims, issues, defenses or theories of damages not included in the pretrial order are waived."); Ghandi v. Detroit Police Dep't, 823 F.2d 959, 962-63 (6th Cir. 1987) ("[A]n attempt to pursue any issue not listed in the [final pre-trial] order may be rejected by the Court."). The issue was not preserved in the final pre-trial order in this case. (See Order Accepting Parties' Pretrial Order, doc. # 345; Proposed Final Pretrial Order, doc. # 338.)

Zimmer casts its motion as asserting that Stryker lacks standing to pursue lost profits damages from before November 5, 2010. But Zimmer does not contest that Stryker Sales Corporation has standing to pursue lost profits damages after that date. Zimmer acknowledges, then, that Stryker Sales Corporation has standing to pursue *some* lost profits damages; it simply believes that Stryker is not entitled to *all* the lost profits damages it seeks. The dispute underlying Zimmer's motion, in other words, is not whether Stryker has claimed an injury that might entitle it to lost profits damages; it is the extent of that injury. That is the essence of the difference between a motion to limit damages and a motion challenging standing. Cf. *Davis v. FEC*, 554 U.S. 724, 734 (2008) (to survive a standing

challenge, a plaintiff need only demonstrate that it has "standing for each claim [it] seeks to press and for each form of relief that is sought") (internal quotations omitted). Because Zimmer's motion is one to limit lost profits damages, rather than a motion challenging Stryker's standing to pursue lost profit damages altogether, it is waived unless Zimmer raised it in the pre-trial order. A review of the Court's pre-trial order reveals that Zimmer did not raise the issue there, meaning it waived the argument going forward. (See Proposed Pre-Trial Order, doc. # 338; Order Accepting Pre-Trial Order Subject to Limitations, doc. # 345.) Consequently, Zimmer's motion must be denied as untimely.

Even on the merits, Zimmer is not entitled to prevail. Stryker Sales Corporation or other Stryker affiliates had full control over the patents-in-suit from 2002, when the earliest one issued. Stryker never shared with anyone outside the Stryker family more than a non-exclusive license to practice certain aspects of one of the patents. A series of nunc pro tunc agreements executed among the Stryker plaintiffs on November 5, 2010 formalized the rights among the Stryker parties. (See, Nunc Pro Tunc Amendment, Pls.' Trial Ex. 124-27.) By their terms, the agreements were retroactive, so that, under the agreements, Stryker Sales Corporation's exclusive license stretches back to January 1, 2002. (Id.) No one other than a Stryker party has ever had power to exclude others from practicing the patents-in-suit.

Zimmer complains, first, that Stryker had only a bare license, not an exclusive license. An exclusive license is one that gives the licensee the right to exclude others from making, using, selling, or offering to sell inventions practicing particular patents. See WiAV Solutions LLC v. Motorola, Inc., 631 F.3d 1257, 1264

(Fed. Cir. 2010). A bare license, by contrast, is simply a covenant by the licensor not to sue the licensee for using the licensor's property in a specified manner. See *Ortho Pharm. Corp. v. Genetics Inst., Inc.*, 52 F.3d 1026, 1032 (Fed. Cir. 1995). Only an "exclusive licensee"—that is, the holder of an exclusive license—may sue for lost profits damages. *Id.* Because Stryker independently gave Davol a limited license to practice the patents-in-suit for pulsed lavage devices with batteries in the handpiece, Zimmer contends that Stryker Sales Corporation is precluded from seeking lost profits.

The Court disagrees and concludes that Stryker had the right to seek lost profits as an exclusive licensee. By its terms, Stryker Sales Corporation's license empowered it to exclude others from selling or offering to sell pulsed lavage devices practicing the patents-insuit with batteries outside the handpieces. (See Nunc *Pro Tunc* Amendment, Pls.' Trial Ex. 126, ¶ 7 (granting Stryker Sales Corporation "Exclusive Sub-Licens[e] and Exclusive Distributor[ship] with Respect to Pulsed Lavage Products"); see also Distribution Agreement, Pls.' Trial Ex. 120, ¶ 2.01 (giving Stryker Sales Corporation rights as "exclusive distributor").) That made the license an exclusive one. The license was exclusive, not because Stryker Sales Corporation was the one and only party practicing the patents-in-suit in certain categories of pulsed lavage devices, but because it gave Stryker Sales Corporation the power to choose who else could practice the patents-in-suit for those categories of pulsed lavage devices (i.e., the power to exclude others from practicing the patents-in-suit). Morrow v. Microsoft Corp., 499 F.3d 1332, 1340 (Fed. Cir. 2007) ("Parties that hold the exclusionary rights [under a patent] are often identified as exclusive licensees, because the grant of an exclusive license to make, use, or sell the patented invention carries with it the right to prevent others from practicing the invention."); Intellectual Prop. Dev., Inc. v. TCI Cablevision of Cal., 248 F.3d 1333, 1346 (Fed. Cir. 2001) ("A party ... that has the right to exclude others from making, using, and selling an invention described in the claims of a patent is ... injured by another entity that makes, uses, or sells the invention."). Stryker Sales Corporation did not lose the power to exclude when it allowed Davol to practice the patents-in-suit, any more than a landowner loses the power to exclude the whole public from his property when he chooses to admit a guest. In particular, Stryker Sales Corporation retained the right to keep Zimmer from practicing the patents-in-suit in pulsed lavage devices with batteries outside the handpiece. Thus, Davol's limited license to practice the patents-insuit did not change the fact that Stryker Sales Corporation's license was exclusive for purposes of this suit.

Zimmer's broader challenge is to the retroactive application of the nunc pro tunc agreements. Zimmer contends that the agreements cannot give Stryker Sales Corporation the right to lost profits damages for a period when Stryker Sales Corporation was not actually an exclusive licensee of the patents-in-suit. At bottom, that is just another way of saying that nunc pro tunc agreements should not be retroactively effective. As Stryker points out, crediting Zimmer's argument would eliminate the possibility of nunc pro tunc agreements, despite their well-established use in the law. Indeed, the Federal Circuit has, in the past, given retroactive effect to nunc pro tunc agreements like the ones here at issue. See, e.g., Mas-Hamilton Grp. v. LaGard, Inc., 156 F.3d 1206, 1210-11 (Fed. Cir. 1998). Of course, a party may not use nunc pro tunc agreements to manufacture standing where it would not otherwise exist. See, e.g., Enzo APA & Son, Inc. v. Geapag A.G., 134 F.3d 1090, 1093 (Fed. Cir. 1998). That is not an issue here, though. As noted above, Stryker Sales Corporation unquestionably has standing to sue for lost profits damages in this case, regardless of whether the nunc pro tunc agreements are retroactively effective. Consequently, the agreements are enforceable as written, meaning Stryker Sales Corporation is entitled to lost profits damages for any infringement by Zimmer during the period at issue in this litigation. See Mas-Hamilton Grp., 156 F.3d at 1211.

B. Motions for JMOL as to the Invalidity of Claim 2 of the 329 Patent and the Asserted Claims of the 383 and 807 Patents, or, in the Alternative, for a New Trial on the Validity of Those Claims (doc. ## 401, 438, and 442)

Zimmer next argues that the jury erred in rejecting Zimmer's invalidity defenses on several claims of the patents-in-suit, so that JMOL on invalidity is appropriate. Rule 50 of the Federal Rules of Civil Procedure permits a court to render JMOL only if a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue. FED. R. CIV. P. 50(a)(1). Phrased differently, the question is "whether a party has produced evidence 'legally sufficient' to warrant a jury determination in that party's favor." Tellabs, Inc. v. Makor Issues & Rights, Ltd., 551 U.S. 308, n.5 (2007) (quoting Fed. R. Civ. P. 50(a)(1)). Rule 50's standard for JMOL mirrors Rule 56's standard for summary judgment so that, in ruling on a motion for JMOL, a court must consider the entire record and draw all reasonable inferences in favor of the nonmoving party.

Reeves v. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150-51 (2000).

The validity of the claims at issue in this case has been thoroughly explored—both before and during this litigation. In deciding to issue the patents-in-suit, the Patent Office conferred a presumption of validity on the claims. At summary judgment, the Court thoroughly considered the validity of several claims in the patents-in-suit. And, at trial, each side spent hours arguing the issue of validity to the jury. At every stage, the decision-maker rejected Zimmer's contention that claims within the patents-in-suit were invalid. Everything about the history of this case suggests that a reasonable jury could readily conclude that Zimmer failed to establish invalidity by the clear and convincing evidence required. See 35 U.S.C. § 282 ("A patent shall be presumed valid."); Dayco Prods., Inc. v. Total Containment, Inc., 329 F.3d 1358, 1370 (Fed. Cir. 2003) (emphasizing the same); Order Denying Zimmer's Mot. for Summ. J. of Invalidity, doc. # 249; Radvansky v. City of Olmsted Falls, 496 F.3d 609, 614 (6th Cir. 2007) (to prevail on motion for JMOL, movant "must overcome the substantial deference owed to a jury verdiet"); Static Control Components, Inc. v. Lexmark Int'l, Inc., 697 F.3d 387, 414 (6th Cir. 2012) (same). Zimmer's bare disagreement with the jury's conclusion on validity is not, by itself, a reason to second-guess all those earlier decisions.

In each of its motions for JMOL on invalidity, Zimmer asserts that Stryker either read nonexistent limitations into the contested claims or misrepresented the law regarding anticipation and obviousness. For instance, with respect to the validity of claim 2 of the 329 patent, Zimmer says "Stryker argued [the] Ito [device] is not a pulsed irrigation handpiece because its

water reservoir is too small for knee surgery ... [notwithstanding that claim does not require a certain sized water reservoir nor is its use limited to knee surgery." (Def.'s Br. in Supp. of Motion for JMOL, doc. # 402, at 5.) The purported "limitations" of which Zimmer complains, however, are really just distinctions between the prior art references and the claimed inventions. Far from rendering such distinctions impermissible, the law on obviousness expressly requires the jury to consider whether a prior art reference is "from the same field of endeavor [or] reasonably pertinent to the particular problem with which the inventor is involved." In re Clay, 966 F.2d 656, 658-59 (Fed. Cir. 1992). Evidence that a device from one field has no clear connection to a second field, or that it would be impractical to use the device in the second field, plainly makes it less likely that the device rendered obvious an invention in the second field. For that reason, Stryker's arguments distinguishing its inventions from Zimmer's prior art references furnish an adequate basis from which a reasonable jury could conclude that the claimed inventions were non-obvious.

More to the point, what Stryker argued at trial is not dispositive for purposes of reviewing a motion for JMOL. The question on JMOL is whether Zimmer can show, based on the record evidence, that the jury could not reasonably have found for Stryker. FED. R. CIV. P. 50(a)(1). But a reasonable jury could very well have found in Stryker's favor on the validity issues, based on the record in this case. In the course of hours of testimony, first by the inventor of the patents-in-suit, and then by Stryker's technical expert, Stryker meticulously distinguished its inventions from Zimmer's prior art references—by pointing out why the prior art references did not constitute "prior art" under 35 U.S.C.

§ 103, by emphasizing why the patents-in-suit were not rendered obvious by the prior art references, and by illustrating why the prior art references did not disclose a particular element from a given claim. (See, e.g., Trial. Tr., doc. # 388, at 20 (testimony by Stryker's technical expert, Neil Sheehan, explaining why a person of ordinary skill in the art would not think the Ito device rendered the patents-in-suit obvious); id. at 22-23 (testimony by Sheehan explaining that the Ito device does not, in fact, disclose a yoke)). Zimmer, obviously, disagreed with those distinctions and its own technical expert spent several hours at trial explaining why he thought they were wrong. The jury, however, was entitled to credit Stryker's expert's opinions about whether the claims at issue were anticipated or whether they would have been obvious to one of ordinary skill in the art. It was certainly not unreasonable for doing so, any more than the patent office was unreasonable for granting the patents in the first place, or the Court was unreasonable for denying Zimmer's earlier motions for summary judgment on the basis of invalidity. Because the jury could reasonably have adopted Stryker's distinctions over Zimmer's arguments to the contrary, JMOL is simply not appropriate here.

For many of the same reasons, Zimmer's motions for a new trial on the validity of the contested claims are also denied. Under Rule 59, after a jury trial, "[a] court may, on motion, grant a new trial on all or some of the issues ... for any of the reasons for which new trials have heretofore been granted in an action at law in federal court." FED. R. CIV. P. 59(a)(1)(A). "Generally, a court may grant a new trial under Rule 59 if the verdict is against the weight of the evidence, if the damages award is excessive, or if the trial was influenced by prejudice or bias, or otherwise unfair to the moving

party." Conte v. Gen. Housewares Corp., 215 F.3d 628, 637 (6th Cir. 2000); see also Holmes v. City of Massillon, 78 F.3d 1041, 1045-46 (6th Cir. 1996) (same point). A court reviewing a motion under Rule 59 "must compare and weigh the opposing evidence." Clay v. Ford Motor Co., 215 F.3d 663, 672 (6th Cir. 2000). However, "while the district judge has a duty to intervene in appropriate cases, the jury's verdict should be accepted if it is one which could reasonably have been reached." Conte, 215 F.3d at 637 (quoting Toth v. Yoder Co., 749 F.2d 1190, 1197 (6th Cir. 1984)).

Stryker's technical expert plausibly distinguished the claimed inventions from Zimmer's prior art references and explained why the claimed inventions would not have been obvious to one of ordinary skill in the art based on those references. Zimmer's bare disagreement with those distinctions does not mean the jury's verdict implicitly adopting them was against the great weight of the evidence. See, e.g., Pregis Corp. v. Kappos, 700 F.3d 1348, 1353-54 (Fed. Cir. 2012) (noting that, while the question of obviousness is ultimately one of law, the question of what a reference teaches or whether a person of ordinary skill in the art would have been motivated to combine the teachings of separate references are questions of fact, entitled to deference). To the contrary, Stryker's expert on validity issues was clear, understandable, and convincing in his testimony. Consequently, Zimmer is not entitled to a new trial on the validity of any of the asserted claims.

C. Zimmer's Motion for JMOL of Non-Infringement of Claim 2 of the 329 Patent, or, in the Alternative, for a New Trial (doc. # 425)

Zimmer's next motion is for JMOL—or, alternatively, a new trial on the issue—of non-infringement of

claim 2 of the 329 patent. The sole issue in the motion is whether, as a matter of law, the motor in the Pulsavac Plus devices is in the handle of the devices. At claim construction, the Court defined "handle" to mean "a portion of the device designed to be held by a hand or hands." (Mem. Op., doc. # 106, at 8-9.)

Zimmer's motion for JMOL of non-infringement is substantively identical to Zimmer's earlier motion for summary judgment of non-infringement on the same claim (doc. # 165). It raises the same arguments and relies on the same evidence. At summary judgment, the Court categorically dismissed those arguments and found that a "reasonable jury could conclude that the Pulsavac Plus devices include an electric motor in a part of the housing designed to be held by the hand or hands." (Order Denying Mot. for Summ. J. of Non-Infringement, doc. # 248, at 3.)

The Court sees no reason to upset its earlier conclusions, especially in light of the testimony from multiple witnesses—including the designer of the Pulsavac Plus and the individual in charge of developing the Pulsavac Plus—that the battery in the Pulsavac Plus devices was in a part of the device designed to be held by the hand or hands. (See, e.g., May Dep. Tr., doc. #458-5, at 6 (testimony of design engineer of Pulsavac Plus explaining that Pulsavac Plus was "designed to be held in multiple locations" and proceeding to demonstrate how "you can technically say [the portion of the Pulsavac Plus housing the motor] is a handle"); see also Trial Tr., doc. # 359, at 28-30 (testimony of Stryker's expert, Neil Sheehan, explaining how Pulsavac Plus meets "handle" limitation under Court's construction of that term)). That testimony affords an entirely legitimate basis from which a reasonable jury could conclude that the motor in the Pulsavac Plus devices was in the handle of the devices. As with practically all issues raised at trial, Zimmer presented some evidence suggesting the opposite conclusion. But that evidence was not so substantial or overwhelming as to render the jury's verdict on infringement of claim 2 categorically unreasonable, or even against the great weight of the evidence. See *Denhof v. City of Grand Rapids*, 494 F.3d 534, 543 (grant of new trial was inappropriate "where the case came down to a question of who the jury believed").

Zimmer's other objections—that Stryker's statements during prosecution of an earlier patent foreclosed its infringement claims in this case, and that Stryker is estopped from claiming infringement—were thoroughly addressed and properly rejected at the summary judgment stage. (See Order Denying Mot. for Summ. J. of Non-Infringement, doc. # 248, at 3-5.) Nothing that has happened since summary judgment has affected the validity of the Court's decision.

D. Zimmer's Motion for JMOL Limiting Damages Under 35 U.S.C. § 287(a) and for a New Trial on the Issue of Patent Marking (doc. # 430)

Next, Zimmer argues that it is entitled to JMOL and a new trial because Stryker did not mark substantially all of the commercial embodiments of the patents-in-suit with the appropriate patent numbers. The patent marking statute provides that:

Patentees ... may give notice to the public that [a product] is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent, or by fixing thereon the word "patent" or the abbreviation "pat." together with an address of a posting on the Internet, accessible to the public

without charge for accessing the address, that associates the patented article with the number of the patent, or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of a failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

35 U.S.C. § 287(a). Compliance with the marking statute does not require that a patentee mark every patented article with the corresponding patents. Rather, it suffices that "substantially all" of the patented articles are properly marked. *Nike, Inc. v. Wal-Mart Stores, Inc.*, 138 F.3d 1437, 1446 (Fed. Cir. 1998). Furthermore, as the patent marking statute suggests, when it is impracticable to mark the product itself, a patentee may comply with the marking statute by marking the patent numbers on the packaging for the product. See, e.g., *Sessions v. Romadka*, 145 U.S. 29, 50 (1892).

Zimmer urges that Stryker should not be permitted to recover damages from before December 10, 2010 (the day it filed suit in this matter) for four reasons: (1) it failed to mark any of its actual products with the numbers for the patents-in-suit; (2) it failed to provide evidence from which a reasonable jury could conclude that Stryker marked substantially all of its product labels with the numbers for the patents-in-suit; (3) it

failed to mark, in any way, over 800,000 of its actual products with the numbers for the patents-in-suit; and (4) it failed to provide evidence from which a reasonable jury could find that Stryker marked substantially all of its products with the 383 and 807 patents before October 14, 2010, and with the 329 patent before August 14, 2006.

The Court addressed and rejected Zimmer's first and third arguments for JMOL at summary judgment. (Order, doc. # 246, at 5-8.) Zimmer has not come forward with any new arguments on either of those fronts, so there is no reason for the Court to revisit its earlier determinations.

Zimmer's second and fourth arguments for JMOL go to the sufficiency of the evidence Stryker presented at trial and, as such, were not addressed in the Court's earlier orders. Neither argument is meritorious however. Zimmer's second argument—that Stryker failed to produce evidence sufficient to convince a reasonable jury that it marked substantially all of its product labels with the numbers for the patents-in-suit—is belied by the record. Stryker employee Jan Haan, for example, testified to having personally reviewed hundreds of documents confirming that Stryker marked the appropriate patent number on the labeling of substantially all of its products during the period in question. (See, e.g., Trial Tr., doc. # 384, at 793-96, 803-05.) Zimmer objects that Haan's testimony did not distinguish between marking the product label and marking the carton label or the instructions for use. Not only does the case law fail to distinguish between marking one form of labeling as opposed to another for purposes of the marking statute, but a sampling of actual product labels from the period in question appears to confirm that Stryker marked the product labels, themselves, with the patent numbers. (See Def.'s Tr. Ex. AAU (copies of product labels for numerous product codes, all showing appropriate patent numbers on the product label).) All of which is to say that there was enough evidence for a reasonable jury to conclude that Stryker marked substantially all of the product labels with the appropriate patent numbers.

Zimmer's remaining argument in support of its motion for JMOL is that Stryker failed to provide sufficient evidence of the date when it began marking its labels with the patents-in-suit. Specifically, it argues that no reasonable jury could have found, as did the jury in this case, that Stryker marked substantially all of its patented products with the 329 patent prior to August 14, 2006, and with the 383 and 807 patents prior to October 14, 2010, as there was no evidence at trial of the "date by which [Stryker] began to mark substantially all of its products." (Def.'s Br. in Supp., doc. # 431, at 12.) But the marking statute does not require Stryker to prove that it began marking products on a particular date. It only requires that, for the period for which it seeks damages, Stryker have marked substantially all of its products with the appropriate patent numbers. See Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1111 (Fed. Cir. 1996) (under marking statute, damages are computed from the time when the patentee "either began marking its products in compliance with section 287(a)[, constructive notice,] or when it actually notified [the accused infringer] of its infringement, whichever was earlier"). The relevant inquiry, then, is whether Stryker marked substantially all of its products with the 329 and 807 patents between December 10, 2004 and December 10, 2010, and whether it marked substantially all of its products with the 383 patent between December 15, 2006 and December 10, 2010. The

parties largely agree that, during those periods, Stryker marked roughly 99.52% of the relevant products with the 329 patent, 99.78% of the relevant products with the 807 patent, and 83.96% of the relevant products with the 383 patents. Although, as Zimmer argued at trial, a reasonable jury might conclude that those numbers did not amount to "substantially all" of the relevant products, it is equally true that a reasonable jury could conclude that, under the circumstances. each of those percentages rises to the level of "substantially all" products. See, e.g., Funai Elec. Co., Ltd. v. Daewoo Elec. Corp., 616 F.3d 1357, 1374-75 (Fed. Cir. 2010) (affirming that marking 88-91% of all the commercial embodiments of a patent sufficed to satisfy the marking statute). Accordingly, Zimmer is not entitled to JMOL on marking.

That leaves Zimmer's motion for a new trial on the issue of marking. Zimmer asserts that the Court erred when it instructed the jury that, in deciding whether Stryker complied with the marking statute, the jury could consider "whether some portion of the Stryker products not marked with a particular patent number were marked with other related patent notices." (See Final Draft Jury Instructions, doc. # 377-1, at Instruction # 29.) An erroneous jury instruction warrants a new trial only if the party moving for a new trial establishes, inter alia, that the instructions were legally erroneous and that the instructions had a prejudicial effect on the jury. Bettcher Indus. v. Bunzl USA, Inc., 661 F.3d 629, 638 (Fed. Cir. 2011); NTP, Inc. v. Research In Motion, Ltd., 418 F.3d 1282, 1311-12 (Fed. Cir. 2005).

In this case, Zimmer has not established that the challenged instruction was erroneous or that it had a prejudicial effect on the jury. As to whether the instruction was erroneous, Zimmer has not pointed to a single case holding that marking a product with a given patent is necessarily not an effective means of notifying other parties that the product is also covered by other, related patents from the same family as the patent with which the product is marked. To the contrary, in at least some circumstances, marking the product with a closely related patent would appear to provide reasonable persons with exactly the sort of constructive notice the patent marking statute is calculated to effect. See, e.g., Ethicon Endo-Surgery, Inc. v. Hologic, Inc., 689 F. Supp. 2d 929, 945-46 (S.D. Ohio 2010) (noting "the [Supreme] Court's long-standing focus on the notice effected by the method of marking the patented article rather than on the precise mechanistic compliance with the statute."). Given the broad, functional reading courts have ascribed to the patent marking statute, the Court's instruction on marking was not so clearly erroneous.

Moreover, even if the Court's instruction was erroneous, Zimmer has not produced any evidence that the challenged instruction was prejudicial. To determine whether an instruction was prejudicial, a court must consider "the entirety of the proceedings, including the jury instructions as a whole." Delta-X Corp. v. Baker Hughes Prod. Tools, Inc., 984 F.2d 410, 415 (Fed. Cir. 1993). Looking at Jury Instruction 29 in its entirety, it is clear the thrust of the instruction was that the jury should consider whether Stryker had shown, by a preponderance of the evidence, that it marked its products in accordance with the patent marking statute. The instruction defined "marking" as "placing the word 'patent' or the abbreviation 'PAT' with the number of the patent on substantially all of the products it sold that included the patent invention." (Final Draft Jury Instructions, doc. # 377-1, at 42.) That is, almost verbatim, the language Zimmer insists in its motion the Court should have used. It is telling, moreover, that, at trial, Zimmer argued that the challenged language from Instruction 29 actually *helped* Zimmer's case. (See Trial Tr., doc. # 389, at 138 ("So Mr. Vogler's pointing to something he says helps him. It doesn't. It makes it worse.").) On balance, then, the whole of the instructions, together with Zimmer's own arguments from trial, make clear that the jury was not erroneously instructed in a way that prejudiced Zimmer. Thus, there is no basis for granting a new trial.

E. Zimmer's Motion for JMOL of No Willful Infringement (doc. # 447)

Zimmer's next motion is for JMOL of no willful infringement. "To establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its action constituted infringement of a valid patent." In re Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007). "[T]he patentee must also demonstrate that this objectively-defined risk ... was either known or so obvious that it should have been known to the accused infringer." Id. Willfulness, then, consists of two elements: (1) an objective element that is often, but not always, a question of law, and (2) a subjective element that is inherently a question of fact, to be decided by the jury. Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc., 682 F.3d 1003, 1007 (Fed. Cir. 2012).

Zimmer's motion raises several discrete issues, the first of which is whether Stryker presented any evidence at trial from which the jury could have concluded that Zimmer knew or should have known about the asserted patents. Zimmer suggests that Stryker did not, but its suggestion is belied by the record. For example, Stryker's expert, Neil Sheehan, testified that, "Zimmer knew about the patents in suit, and to the extent there are assertions that—I believe there's an assertion they didn't know about the 383. Well, they should have known. They are in the business. They should be looking at each other's patents. That's what people—that's what competitors do." (Trial Tr., doc. # 359, at 50-51.) Furthermore, as discussed above, Stryker presented ample evidence at trial that it marked substantially all of its products with the corresponding patents-in-suit, from which the jury could reasonably have inferred that Zimmer, as Stryker's chief—and, as a practical matter, only—competitor in the pulsed lavage market, either knew or should have known of the patents-insuit well in advance of the litigation. That is especially true here, where Stryker also presented testimony from several members of Zimmer's design team that Zimmer instructed them to review Stryker's patented devices in designing the accused products. (See, e.g., Donizetti Dep., doc. # 458-3, at 3 (noting that Zimmer showed its design team a Stryker product as a model for developing the accused products); see also Trial Tr., doc. # 388, at 14-19, 60-64 (referencing Zimmer's reliance on Stryker products in developing the accused products).) From this, as well, the jury could reasonably have inferred that Zimmer either knew or had reason to know of the patents-in-suit. (See also Def.'s Resp. to Interrog., doc. # 406-2, at 4 (admitting to knowledge of the 329 and 807 patents in 2000 and 2001, respectively).)

The next issue raised in Zimmer's motion is the relevance of Stryker's decision not to seek a preliminary injunction against Zimmer. Zimmer argues that Stryker is not entitled to enhancement of any damages it incurred after filing the suit, since it could have effectively prevented those damages in the first place by seeking a preliminary injunction at the time it filed. As support for its position, Zimmer cites the Federal Circuit's decision in In re Seagate, 497 F.3d 1360, 1375 (Fed. Cir. 2007), where that Court observed: "a patentee who does not attempt to stop an accused infringer's activities [by seeking a preliminary injunction] should not be allowed to accrue enhanced damages based solely on the infringer's post-filing conduct." Zimmer reads Seagate as setting an absolute bar on any enhancement of post-filing damages when the patentee does not seek a preliminary injunction. On closer inspection, though, Seagate does not bear that reading. For one thing, taken to its logical conclusion, Zimmer's position on Seagate would apply, not just to post-filing willfulness damages, but also to pre-filing willfulness damages. After all, following Zimmer's logic, Stryker could have protected itself by filing earlier and seeking a preliminary injunction right away. That result, however, would all but eliminate enhancement of damages, in a way that no Federal Circuit case has suggested. Zimmer's position presumes Additionally. Stryker's efforts to obtain a preliminary injunction would have been successful. But there is no such guarantee, particularly given Zimmer's dogged reliance on laches and other defenses. And the idea that Stryker could have prevented Zimmer's ongoing infringement by merely filing for a preliminary injunction is controverted by the fact that, even after Stryker prevailed on dozens of distinct motions and issues pre-trial, Zimmer refused to even modify, let alone halt, its infringing conduct. Thus, the idea that Stryker had it entirely within its power to cut off Zimmer's continuing infringement by means of a preliminary injunction is simply not borne out by the facts of this case. The Court is not inclined to read *Seagate* in a way that requires such counterintuitive results. The case is more naturally read for the proposition that a patentee's decision not to seek a preliminary injunction is relevant to, but not dispositive of, the issue of enhanced damages.

Having addressed Zimmer's two preliminary arguments in this motion, the Court turns to the first prong of the willfulness analysis—whether Zimmer's conduct was objectively reasonable. If an "accused infringer's position is susceptible to a reasonable conclusion of no infringement," the infringer's conduct cannot be objectively unreasonable. Cohesive Techs., Inc. v. Waters Corp., 543 F.3d 1351, 1374 (Fed. Cir. 2008). Zimmer's central argument on this point is that, because the Court did not grant Stryker's motions for summary judgment on the issues that went to trial, Zimmer's positions on those issues were, necessarily, In other words, Zimmer contends that reasonable. since the Court determined that a reasonable jury might agree with Zimmer's view, Zimmer was not objectively unreasonable in holding that view. The flaw in Zimmer's argument is that there is a difference between an "objectively reasonable" position and a position with which a reasonable jury could agree. The bare fact that some jury, somewhere might adopt Zimmer's position does not mean Zimmer's position is objectively reasonable. See Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314, 1337 (Fed. Cir. 2009) ("[T]he fact that an issue was submitted to a jury does not automatically immunize an accused infringer from a finding of willful infringement"). To the contrary, an action is objectively unreasonable if "the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent." *In re Seagate Tech.*, *LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007).

In this case, while it was conceivable that the jury could have accepted one or more of Zimmer's defenses. it was far from likely. For instance, at trial, the jury heard testimony that Zimmer all-but instructed its design team to copy Stryker's products. Along the same lines, Zimmer's lead engineer, Bill Donizetti, acknowledged Stryker's inventions to be "pioneering." suggesting they were novel and, therefore, non-obvious. On top of all that, Stryker's evidence regarding secondary considerations of non-obviousness made it dramatically less likely that Zimmer's invalidity arguments were Specifically, Stryker clearly established reasonable. that its inventions: (1) were a major commercial success; (2) solved a long-felt, unmet need to free up operating room space and replace large capital equipment with a self-contained, disposable device; (3) were copied by others, including Stryker's two leading competitors; (4) were licensed by Davol; and (5) were praised by others, including Zimmer. (See Trial Tr., doc. # 384, at 25-28 (expert testimony on secondary considerations of non-obviousness); Trial Tr., doc. # 388, at 10-20 (same).) Given the considerable evidence that Stryker's patents were neither anticipated nor obvious, there was an objectively high likelihood that Zimmer's actions constituted infringement of Stryker's valid patents. While that high likelihood was not necessarily a certainty and, thus, did not allow summary judgment on all of Stryker's claims—it was high enough to satisfy the requirements for objective willfulness.

On the subjective willfulness prong, substantial evidence supports the jury's finding that Zimmer willfully infringed Stryker's patents. In assessing whether in-

fringement is subjectively willful under the totality of the circumstances, fact-finders should consider: whether the infringer copied the patentee's commercial products; (2) whether the infringer presented evidence that it obtained opinions of counsel to justify its infringing actions; (3) whether the infringer attempted to avoid infringement by designing around the patents; and (4) whether the infringer acted in accordance with the standards of commerce. See K-TEC v. Vita-Mix Corp., 696 F.3d 1364, 1378 (Fed. Cir. 2012); Broadcom Corp. v. Qualcomm Inc., 543 F.3d 683, 398 (Fed. Cir. 2008): Creative Internet Adver. Corp. v. Yahoo! Inc., No. 6:07-cv-354, 2009 WL 2382132, at *2 (E.D. Tex., July 30, 2009). At trial, evidence of copying came from Donizetti, who admitted that Zimmer instructed Donizetti's design team to model its design after features of Stryker's products. (See, e.g., Trial Tr., doc. # 358, at 126 ("Q: And you copied. I mean, you stated just a second ago you copied. A: Yes."); id. at 125 ("Q: That's what Zimmer copied from Stryker, isn't it? A: I guess you could say that.").) By contrast, Zimmer presented no evidence that it obtained the advice of counsel as to whether its accused products infringed Stryker's patents. Zimmer acknowledged at trial that it did not take any actions to stop selling the accused products, even after the Court found that Zimmer was infringing several claims of the patents-in-suit. And, finally, Zimmer offered no evidence that its behavior—copying a competitor's product, without attempting to design around the competitor's patents and without first seeking clearance from counsel on infringement concerns was in keeping with standards of commerce in the medical device industry. All told, the jury had ample justification for finding, as a subjective matter, that Zimmer willfully infringed the patents-in-suit.

F. Zimmer's Motion for JMOL to Preclude Stryker from Receiving Lost Profits Damages and to Limit Stryker's Reasonable Royalty Recovery, or Alternatively for a New Trial on Damages (doc. # 453)

Zimmer's next motion for JMOL challenges the jury's decisions on damages. It includes five arguments for JMOL. First, Zimmer argues that Stryker's nunc pro tunc agreements were insufficient to confer standing on any of the Stryker plaintiffs in this suit. Next, Zimmer argues that the jury erred in disregarding Zimmer's arguments that it could easily have offshored its manufacturing facilities and/or changed its infringing design to eliminate any possible infringement. Third, Zimmer argues that the jury's royalty base improperly included Zimmer's foreign sales revenue when it should have counted only domestic sales revenue. Fourth, Zimmer argues that the jury erred in calculating damages by basing its calculations on the entire value of the patented devices, since it should have calculated damages based solely on the value of the patented features. Finally, Zimmer argues that the jury's 25% royalty rate is unsupported by the evidence and "legally inappropriate." In the alternative, Zimmer argues that a new trial is warranted because the jury's damages findings were against the great weight of the evidence.

With respect to Zimmer's first JMOL argument, the Court has largely addressed Zimmer's standing arguments earlier in this Order and concluded that Stryker Sales Corporation had an exclusive license to market and sell the patented devices, such that it has standing to sue. See *supra* Part III.A. The only twist in Zimmer's argument this time around is Zimmer's pointing to a distribution agreement between Stryker

Sales Corporation and Stryker Puerto Rico. (See PTX-125, doc. # 471-5.) True, the distribution agreement provides that "Stryker Corporation holds an exclusive right and exclusive sub-license to utilize [the patentsin-suit] ... to market and sell Pulsed Lavage Products." (Id. at 3.) Other language in the agreement, however, makes clear that it excludes "Pulsed Lavage Products or any other products subject to any exclusive distribution agreement between [Stryker Puerto Rico] and Stryker Corporation," including the products at issue in this case. (Id. at 2.) Indeed, the agreement expressly states that, "Nothing in this Agreement should be construed in a manner that controverts the exclusivity of Stryker Corporation's exclusive right and exclusive sub-license under the Pulsed Lavage Patents." (Id. at 3.) Thus, the distribution agreement does not change the Court's earlier finding that Stryker Sales Corporation had an exclusive sub-license to market and sell pulsed lavage devices practicing the patents in suit.

Stryker's other evidence of non-exclusivity is no more compelling. For example, the fact that Bruce Henniges happened to use the word "share" in describing the licensing arrangement between the Stryker plaintiffs is not legally significant for the simple reason that Henniges is not in a position to authoritatively interpret the agreements' terms. Likewise, the fact that Stryker's licenses may be revoked at any time does not make them any less exclusive in the absence of revocation. Zimmer has not identified, and the Court has not found, any cases suggesting otherwise. Zimmer has failed to show why the Stryker plaintiffs lack standing, as exclusive licensees, to pursue lost profits damages.

Zimmer's next argument is that the jury improperly disregarded Zimmer's two proposed non-infringing alternatives: (1) moving its manufacturing and sales operations overseas, or (2) utilizing a two-piece drain tube so as to avoid infringement. Zimmer's principal evidence of the viability of offshoring was: Stryker's damages expert, Catharine Lawton's testimony that companies make business decisions to move manufacturing locations "based on the opportunities and issues they face"; (2) Zimmer employee Joan Fishel's testimony that Stryker moved its Var-A-Pulse manufacturing operation from Ohio to North Carolina in 2001; and (3) a draft Zimmer strategic plan containing the words "Offshore/outsourcing manufacturing," but with the words "Offshore/outsourcing" crossed out. None of that evidence establishes that it was feasible for Zimmer to offshore its manufacturing and sales operations for the accused products. Indeed, the fact that the word "offshore/outsourcing" are crossed out in the strategic plan memo suggests exactly the opposite: that it was deemed impracticable for Zimmer to move manufacturing locations. That conclusion was buttressed by Fishel's testimony that offshoring "was never something that Zimmer wanted to do." (See Trial Tr., doc. # 387, at 151 (counsel for Stryker reading Fishel's testimony).)

In the face of the evidence suggesting that offshoring was not a viable alternative, Zimmer produced no concrete evidence that relocating its manufacturing centers would actually work. It never came forward with a plan for outsourcing, never said where it would relocate to, never said how much it would cost to offshore, and never said when it would have made the move. Zimmer did not have to go into exhaustive detail about its offshoring plans, but, to rely on offshoring as a defense in this case, it plainly must do more than merely declare that it could have moved its operations out of the country. The jury can hardly be blamed for reject-

ing a defense that has no concrete evidentiary support. See *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341, 1353 (Fed. Cir. 1999) ("Mere speculation or conclusory assertions will not suffice to overcome the inference [of impracticability that attaches to proposed non-infringing alternatives not actually implemented in the damages period].").

The same holds true with Zimmer's proposed design-around—using a two-piece drain tube, rather than the single-piece drain tube covered by the patents-insuit. Because Zimmer only manufactured and sold a single piece drain tube, the law presumes that a twopiece drain tube was not commercially available. *Id*. Zimmer's attempts throughout the proceedings to prove that a two-piece drain tube was commercially available were largely unavailing. Zimmer first came forward with a two-piece drain tube concept as part of its damages expert's report. Reviewing the proposed design, Stryker's technical expert observed that it was unclear whether the proposed tube, as constructed by Zimmer, would even fit in the existing handpiece. (Trial Tr., doc. # 359, at 79-80.) Zimmer then proposed another two-piece drain tube, made by cutting the Pulsavac Plus suction tube approximately eight inches below the handpiece, then adding an external connector to re-connect the suction tube. (Trial Tr., doc. # 385, at When asked about the proposed design-212-13.) around, however, Zimmer's own expert admitted that it was still a single piece drain tube and that, from an engineering vantage point, the proposed design around was not "a good decision." (Trial Tr., doc. # 387, at 49.) In short, Zimmer's evidence that a two-piece drain tube was a viable, non-infringing alternative to infringement was far from overwhelming, and the jury could reasonably have concluded, from the record before it, that Zimmer's proposed design-around was not commercially feasible.

Zimmer's next JMOL argument is that the jury applied the wrong royalty base by including noninfringing sales from Zimmer's foreign affiliates to foreign end users. According to Zimmer, the jury should only have accounted for the value of Zimmer's sales from its Dover facility to its foreign affiliates, since the foreign sales are not covered by the Patent Act. What Zimmer's argument overlooks is that it is the manufacture of infringing products in this country—not just the sale of infringing products—that constitutes the infringement for which Stryker is entitled to damages "adequate to compensate for infringement." See 35 U.S.C. §§ 271(a), 284. Zimmer does not dispute that it manufactured its infringing products in America, nor does it dispute that it realized value from this infringement by selling its products both in the United States and abroad. The jury's decision to include the profits Zimmer realized abroad as a result of its domestic infringement was a reasonable way of ascertaining the value Zimmer ultimately realized from its infringement. The testimony of Stryker's damages expert, Catharine Lawton, confirmed as much and the jury was not unreasonable for adopting that testimony over Zimmer's competing account of damages calculations. See Fujifilm Corp. v. Benun, 605 F.3d 1366, 1372-73 (Fed. Cir. 2010) (inclusion of foreign revenue as part of royalty base is fundamentally a question of fact, to be decided by the jury).

Zimmer's fourth JMOL argument is that the jury wrongly based its damages calculations on the total value of the Stryker products, rather than on the value the patents-in-suit contributed to those products. Zimmer says that, under the "entire market value"

rule," the jury should only have considered the percentage of revenues or profits attributable to the patents, themselves, rather than to the whole product.

At the outset, Zimmer waived its "entire market value" argument by failing to propose a jury instruction on the rule at trial. See FED. R. CIV. P. 51(c); see also Republic Tobacco Co. v. N. Atl. Trading Co., Inc., 381 F.3d 717, 733 (7th Cir. 2004) (appellant waived argument by failing to propose jury instruction on the subject of the argument). Because the jury had no way of knowing about the "entire market value rule," it cannot be faulted for failing to apply it. Even had the jury been apprised of the "entire market value rule," moreover, there is no basis for Zimmer's argument that the rule precludes the jury's royalty calculations in this case. The general rule is that royalties must be based on the value of the "smallest salable patent-practicing unit." LaserDynamics, Inc. v. Quanta Computer, Inc., 694 F.3d 51, 67 (Fed. Cir. 2012). What the smallest salable patent-practicing unit is appears to be a classic question of fact. Lawton explained in great detail at trial why the patents-in-suit could not be parsed out into individual components, but, rather, were inseparable elements of the whole pulsed lavage handpiece. (Trial Tr., doc. # 384, at 140 ("And all of these products, the tips and the splash shields and the tubing, it all functions together So all of these types of products function together in a functional unit.") From Lawton's testimony, in particular, the jury had an ample basis from which to conclude that the smallest salable unit in this case was the pulsed lavage handpiece. Zimmer, by contrast, presented no evidence that the patents-in-suit could be separated from the handpieces, so as to be independent, saleable units. Thus, the jury was not unreasonable in deciding that the smallest salable patentpracticing unit here was the pulsed lavage handpiece as a whole, and using the value of the whole device in its royalty calculations.

Zimmer's final JMOL argument is that the jury's 25% royalty rate is unsupported by the record. There is, however, substantial evidence in the record from which the jury could have concluded that a 25% royalty rate was appropriate. For example, after a detailed analysis of the parties, the market for pulsed lavage devices, and the nature of the patents-in-suit, Lawton opined to the jury that the parties would have negotiated a royalty rate of 32.2%. (Id. at 199-217 (detailing basis for Lawton's royalty calculations).) That figure was not some arbitrary percentage; it was supported by evidence, referenced throughout the trial, all tending to show that Stryker's inventions had made it the dominant player in the pulsed lavage market, so that Zimmer was rapidly losing market share with its competing devices to the point that Zimmer was in danger of being forced out of the pulsed lavage market entirely. (See id. at 203-17.) Furthermore, testimony from Stryker's technical expert, Neil Sheehan, confirmed that Stryker's patents were difficult to design-around, so that a higher royalty would be expected. Finally, because Stryker and Zimmer were, in effect, the only two competitors in the market, there was evidence that they would have preferred to maintain the exclusivity of their patented inventions. (Id. at 206-07.) From those facts, and based on her calculations of both parties' expected profits under various scenarios, Lawton determined that a 32.2% royalty was appropriate. That the jury ultimately departed downward from this figure does not make its ultimate decision arbitrary. See, e.g., Spectralytics, Inc. v. Cordis Corp, 649 F.3d 1336, 1346-47 (Fed. Cir. 2011) ("The jury was entitled to choose a damages award within the amounts advocated by the opposing parties."); *Monsanto Co. v. McFarling*, 488 F.3d 973, 979-81 (Fed. Cir. 2007), cert. denied, 128 S. Ct. 871 (2008) (affirming jury award of reasonable royalty rate in between parties' proffered royalty rates). More likely, it means that the jury rejected some of the advantages Lawton attributed to Stryker in her hypothetical negotiation. Whatever the jury's reasons, though, the fact remains that there was ample evidence from which the jury could have concluded that a 25% royalty rate was reasonable.

The last part of Zimmer's motion asks for a new trial on damages, arguing that the damages verdict is against the great weight of the evidence. Zimmer's argument, in essence, is that the cumulative effect of the jury's various errors in calculating damages warrants a new trial. For the reasons set out above, the Court does not agree that the jury's decisions were erroneous, especially not so erroneous as to warrant a new trial. Rather, the jury's findings on damages were supported by substantial evidence, making a new trial inappropriate.

G. Zimmer's Motion for a New Trial (doc. # 435)

Next is Zimmer's motion for a new trial. Zimmer argues that a new trial is warranted because: (1) the Court allowed Stryker to reference the Court's summary judgment rulings on infringement; (2) the Court prevented Zimmer from reciting to the jury the Court's statements on the reasonableness of some of Zimmer's positions; and (3) the Court instructed the jury to answer questions regarding remedies regardless of its finding on liability.

With respect to its first argument—that Stryker should not have been allowed to introduce evidence of the Court's rulings from summary judgment that Zimmer had infringed several of Stryker's claims—Zimmer understates the relevancy of the Court's earlier rulings. As the Court emphasized at trial, its prior rulings referred to as the "litigation scorecard"—were necessary factual predicates to Stryker's argument that Zimmer did not change its marketing or sales position after various milestones in the litigation. (Trial Tr., doc. #359, at 574-76.) In addition to serving as a factual predicate for Stryker's change of position argument, moreover, the litigation scorecard also buttressed Stryker's willfulness argument to the extent it showed Zimmer's infringement defenses to have been unreasonable. Because the litigation scorecard bears at least some connection to the reasonableness of Zimmer's defenses, it was properly before the jury.

Not only was the litigation scorecard relevant, but any prejudicial effect it might have had was minimal. To begin with, the issue summary chart—to which Zimmer assented before trial—made it clear to the jury that the Court had decided most of the infringement claims in Stryker's favor prior to trial. (See Issue Summary Chart, doc. # 352-1, at 1.) Thus, Stryker's references to the Court's earlier references did not tell the jury anything it did not already know. If anything, referencing the Court's earlier infringement rulings was necessary to avoid confusing and help the jury understand why it was being asked to decide certain infringement questions but not others. Furthermore, the Court carefully explained in its jury instructions that its earlier rulings on some claims at summary judgment were in no way probative on the claims the jury was asked to decide. (See, e.g., Jury Instructions, doc. # 377-1, at 15 ("In deciding your infringement issue, do not use my infringement decisions to sway your decision in either direction.").) The Court thereby made clear to the jury that its previous rulings were only useful for purposes of framing the questions before the jury, not to suggest a particular answer to any of those questions. On balance, then, the relevance of the litigation scorecard substantially outweighed any prejudice from it.

Zimmer's second argument for a new trial is that the Court did not allow Zimmer to read to the jury the Court's statements on the reasonableness of some of Zimmer's positions. As the Court noted at trial, there are obvious problems with placing the Court in the position of a witness whose statements are to be read to the jury. Most notably, the Court is not subject to cross-examination, so introducing its statements is problematic from an evidentiary perspective. See FED. R. EVID. 605 (presiding judge may not testify in trial as a witness). Moreover, because of the Court's role in directing the case, allowing the Court's statements into evidence runs the risk that the jurors will place undue emphasis on those statements, possibly to the exclusion of other relevant evidence.

Furthermore, the bare fact that Zimmer was unable to quote the Court's opinions to the jury did not necessarily prevent it from making its case. Just as Stryker pointed to the Court's earlier rulings as evidence of willfulness, Zimmer was also free to point out that the Court had expressly declined to grant summary judgment on the claims now before the jury, implying there were reasonable disputes about infringement on those claims. See, e.g., *Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1235 (Fed. Cir. 2011) (defendant argued that district court's denial of plaintiff's "request for a preliminary injunction and the closeness of the inequitable conduct case indicate[d] that it did

not act despite an objectively high likelihood of infringement"). Just as Stryker's witnesses expounded on the meaning of the Court's rulings, Zimmer's expert was free to opine on the reasonableness of Zimmer's arguments in light of the Court's refusal to grant summary judgment to Stryker on those claims. All of this was available to Zimmer without using the Court's own words. Thus, Zimmer cannot show that it was prejudiced from the Court's decision not to allow its own words into evidence, any more than Stryker was prejudiced by the Court's refusal to allow other language from the Court's opinions—much more favorable to Stryker—into evidence.

Zimmer's final argument for a new trial is that the Court erred in instructing the jury to answer questions of remedy regardless of its findings on infringement and invalidity. Zimmer argues that, in so doing, the Court implied to the jury that some sort of remedy was warranted in the case. But the Court's instructions did no such thing. Indeed, the jury was expressly instructed that the Court's asking them to answer questions of remedy in no way implied that they were to find against Zimmer. (Jury Instruction No. 25, doc. # 377-1, at 34 ("You should not interpret the fact that I am giving instructions about the plaintiff's damages as an indication in any way that I believe that the plaintiff should, or should not, win this case. I am instructing you on damages only so that you will have guidance to answer the questions on remedial issues for our use in the event plaintiff ultimately prevails.").) Courts in other patent cases routinely ask juries to answer such questions in exactly the manner the Court did. See, e.g., KEVIN F. O'MALLEY ET AL., FED. JURY PRAC. & INSTR. § 106:02 (6th ed.) ("The fact I have instructed you as to the proper measure of damages should not be considered as indicating any view of mine as to which party is entitled to your verdict in this case."). To suggest that the Court's instructions somehow prejudiced the jury is really just to say that the jury was incapable of listening to and following those same instructions.

Even if Zimmer could show some prejudice from any or all of the alleged errors, moreover, that prejudice would not rise to the level necessary to grant a new trial. See, e.g., Brooks v. Toyotomi Co., Ltd., 86 F.3d 582, 588 (6th Cir. 1996) ("A court should refrain from interfering with a jury's verdict unless it is clear that the jury reached a seriously erroneous result. The simple fact that a grant of a new trial might result in a different outcome is not a valid basis for disturbing a jury's verdict which is otherwise based upon legally sufficient evidence."). In this case, the evidence overwhelmingly favored Stryker, a fact reflected in the onesidedness of the jury's verdict and the proceedings leading up to it. Zimmer has not suggested any reason for thinking that Stryker's evidence at trial—even without the evidence Zimmer challenges in its motion for a new trial—was legally insufficient to support the jury's verdict. On those facts, a new trial is simply not warranted.

H. Zimmer's Motion for Judgment Barring Pre-Suit Damages Under the Defense of Laches (doc. # 418)

Zimmer's final motion is for judgment barring presuit damages under the equitable defense of laches. Zimmer argues that Stryker knew of the infringing Pulsavac Plus products at least as early as 2000, and that Stryker's delay in filing suit against Zimmer until 2010 resulted in the loss or destruction of evidence that would have been valuable to Zimmer's defense. Zim-

mer brings its motion under Rule 52(c), which addresses judgment on partial findings. Although, by its terms, Rule 52(c) applies only to bench trials, because Zimmer's laches defense deals with a question of equity, and because the jury was therefore not allowed to consider laches at trial, the Court may properly address it here. In considering whether to grant judgment under Rule 52(c), the district court applies the same standard of proof and weighs the evidence as it would at the conclusion of a bench trial.² That, in turn, means the court does not view the evidence through a particular lens or draw inferences favorable to either party. See Ritchie v. United States, 451 F.3d 1019, 1023 (9th Cir. 2006). Moreover, the court is free to make findings on the issue in accordance with its own view of the evidence. See id. A court's fact-finding authority under Rule 52(c) is limited, however, by the fundamental principle that, on issues presented to the jury, the court may not make a finding contrary to a jury-found fact. See Beacon Theatres, Inc. v. Westover, 359 U.S. 500, 508-10 (1959).

To succeed on a laches defense, an accused infringer must ordinarily show that (1) the patentee delayed in filing the suit for an unreasonable length of time, and (2) that the delay actually prejudiced the alleged infringer. A.C. Aukerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020, 1032 (Fed. Cir. 1992). Actual prejudice may be either economic or evidentiary. Id. at 1033. Economic prejudice exists only when the accused infringer changes its economic position as a result of the patentee's delay in filing suit. Gasser Chair Co. v. Infanti Chair Mfg. Corp., 50 F.3d 770, 775 (Fed. Cir.

² Both parties elected to rely only on the evidence presented to the jury for this defense.

1995). Evidentiary prejudice arises only where the defendant is unable "to present a full and fair defense on the merits." A.C. Aukerman Co., 960 F.2d at 1033. Even when an accused infringer shows undue delay and some form of actual prejudice, however, the Court still has discretion to decide against finding laches. *Id.* at 1036 (emphasizing that laches is, at bottom, a discretionary doctrine).

At summary judgment, the Court considered and denied most of the laches arguments Zimmer now raises, specifically finding that Zimmer had not made the required showing of evidentiary prejudice. (See Order Denying Mot. for Summ. J. Barring Pre-Suit Damages Pursuant to Defense of Laches, doc. # 251.) Zimmer nevertheless insists that it is now entitled to laches because, at trial, Stryker took advantage of Zimmer's inability to produce the lost or destroyed evidence. Stryker's conduct at trial, Zimmer says, established precisely the sort of evidentiary prejudice that supports a grant of laches. The Court disagrees and finds, as a matter of fact, that Zimmer did not suffer evidentiary prejudice attributable to any delay by Stryker.

Zimmer argues it was prejudiced because it could not show certain devices and documents to the jury, as those documents were allegedly lost or destroyed before Stryker filed suit. At trial, however, Zimmer's witnesses testified in detail about those same devices and the subject matter of those same documents, introduced photographs of allegedly destroyed devices, and otherwise demonstrated for the jury the content of the evidence they could not procure directly. (See, e.g., Trial Tr., doc. # 386, at 179 (introducing photograph of allegedly destroyed Pulsavac I device in the course of Zimmer's technical expert's trial testimony).) Because Zimmer was able to thoroughly convey to the jury the

information it would have conveyed had it had access to the allegedly lost or destroyed evidence, Zimmer cannot credibly argue that the alleged loss of evidence materially prejudiced its case. And without such a showing of prejudice, laches is inappropriate. Cleveland Newspaper Guild, Local 1 v. Plain Dealer Publ'g Co., 839 F.2d 1147, 1153 (6th Cir. 1988) (laches requires showing of actual prejudice).

Laches is doubly inappropriate here given the volume of documentary and testimonial evidence Zimmer otherwise compiled for this case—almost twenty hours of witness testimony and thousands upon thousands of pages of documents. As the Court observed in denying Zimmer's motion for summary judgment on the basis of laches: "The sheer size of the record in this matter belies the claim that Zimmer's defense might fail for want of additional information. More importantly, the record does not disclose any critical evidentiary gap for Zimmer that is fairly traceable to Stryker's alleged delay." (Order Denying Mot. for Summ. J. Barring Pre-Suit Damages Pursuant to Defense of Laches, doc. # 251, at 8.) What was true before trial remains true now. The Court concludes, therefore, that Zimmer has not shown evidentiary prejudice sufficient to warrant a grant of laches.

Zimmer raises one genuinely new argument in its Rule 52(c) motion, an argument not addressed in the Court's summary judgment order (doc. # 251). Zimmer's new argument is that, had Stryker sued sooner, Zimmer would have considered and implemented potential design-arounds, saving it time and money. That argument has both an evidentiary and economic aspect to it. In terms of establishing evidentiary prejudice, Zimmer might be suggesting that, had Stryker forced it to consider and implement the design-arounds, then, at

trial, Zimmer could have pointed to its attempts to implement the design-arounds as evidence of their feasibility. In other words, because Stryker did not force Zimmer to implement the design-arounds, Zimmer has no evidence that the design-arounds were feasible. That argument fails because nothing about it suggests that any evidence was actually lost or destroyed as a result of Stryker's delay in bringing suit. Zimmer remained free as ever to explain the feasibility of its potential design-arounds and, indeed, it did so on several occasions—not just at trial, but in a number of its filings. Moreover, there was nothing to prevent Zimmer from implementing the design-arounds before Stryker brought the suit. In that sense, the fact that Zimmer lacks evidence of the feasibility of the designarounds can hardly be blamed on Stryker.

Alternatively, Zimmer's argument about designarounds might be viewed as an argument showing economic prejudice, i.e., that Zimmer forewent a less costly alternative because Stryker did not sue for infringement. That argument fails for several reasons. Most obviously, there is no evidence that Zimmer actually would have resorted to its proposed design-arounds had Stryker sued at an earlier date (see *infra*). Indeed Zimmer's position in this litigation—that Stryker's patents are invalid and unenforceable—suggests it would not have sought to completely overhaul its products or productions systems to avoid infringing those patents. Had Zimmer seriously contemplated implementing the design-arounds, moreover, it could have done so after Stryker filed this lawsuit, thereby avoiding possible liability for supplemental damages. The fact that Zimmer did nothing to alter the infringing products or their manufacture after Stryker filed this lawsuit suggests that it has not seriously contemplated the proposed design-arounds. Granting laches on the basis of those design-arounds would, therefore, be inequitable. See Ecolab, Inc. v. Envirochem, Inc., 264 F.3d 1358, 1371-72 (Fed. Cir. 2001) (defendant's firm belief that its product was non-infringing, coupled with continuation of infringing conduct after being contacted by patentee, demonstrated lack of economic prejudice); James River Corp. v. Hallmark Cards, 915 F. Supp. 968, 978 (E.D. Wis. 1996) ("An infringer's continuation of infringing activity is probative of a lack of prejudice.").

Finally, also with respect to Zimmer's proposed design-arounds, the jury's award implicitly rejected Zimmer's claim that its proposed design-arounds would have saved it from infringement. At trial, Stryker asked for \$70 million in lost profit damages. Zimmer argued that figure was excessive because it could have avoided infringement at any time by implementing its proposed design-arounds. The jury's decision to award Stryker all the lost profit damages it sought implies that it totally rejected Zimmer's proposed designaround defense. Thus, there is simply no basis for granting Zimmer's laches argument based on the availability of its proposed design-arounds. As Zimmer has established neither economic nor evidentiary prejudice, it is not entitled to prevail on its Rule 52(c) motion for judgment based on the defense of laches.

After thoroughly reviewing each of Zimmer's ten post-trial motions, the Court finds no basis for departing from the jury's verdict. In light of the evidence presented at trial, the jury reached a reasonable result, one the law does not empower this Court to disturb.

III. STRYKER'S POST-VERDICT MOTIONS

Stryker is entitled to prevail on each of its five post-verdict motions.

A. Motion for a Permanent Injunction or, in the Alternative, an Ongoing Royalty (doc. # 396)

Stryker's first motion is to permanently enjoin Zimmer from manufacturing the infringing Pulsavac Plus devices, to the extent those devices infringe the 807 patent.³ At summary judgment, the Court found that the accused Pulsavac Plus devices infringed the 807 patent, and, at trial, the jury rejected Zimmer's validity challenge. Thus, the only issue here is remedy.

A court "may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable." 35 U.S.C. § 283. A patentee is entitled to a permanent injunction where: (1) it has suffered an irreparable injury; (2) remedies available at law, such as money damages, are inadequate to compensate for that injury; (3) a remedy is warranted in light of the balance of hardships between the plaintiff and defendant; and (4) the public interest would not be disserved by a permanent injunction. eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006). The Federal Circuit has acknowledged "the long tradition of equity practice granting injunctive relief upon a finding of infringement in the vast majority of patent cases." Presidio Components, Inc. v. Am. Technical Ceramics Corp., 702 F.3d 1351, 1362 (Fed. Cir. 2012).

³ The injunction Stryker seeks does not cover infringement of the 329 and 383 patents because both of those patents expired earlier this year.

1. Irreparable Injury

Zimmer's infringement has harmed—and continues to harm—Stryker by depriving it of market share and diminishing Stryker's right to exclude others from practicing its patents, all to the direct and immediate advantage of Stryker's only major competitor in the orthopedic pulsed lavage market (Zimmer). As to the first of these sources of harm, the record establishes by a preponderance of the evidence that Zimmer's sale of infringing products costs Stryker between 15-18% market share. (See, e.g., PTX-166 Excerpts, doc. # 465-5, at 3 (showing loss of market share).) Loss of market share to an infringer is a textbook example of irreparable harm. See Presidio Components, Inc., 702 F.3d at 1363 ("This [loss of market share] squarely supports a finding of irreparable harm."); i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 861 (Fed. Cir. 2010) ("Past harm to a patentee's market share, revenues, and brand recognition is relevant for determining whether the patentee 'has suffered an irreparable injury."'). The loss is all the more significant in this case because Stryker has demonstrated a reluctance to license its patented technologies to competitors. See Presidio Components, Inc., 702 F.3d at 1363 ("The district court correctly found Presidio's unwillingness to license favored finding irreparable injury."). While it is true that Stryker did grant Davol a limited license to practice the 329 patent, the record discloses no license to prac-

⁴ The license was limited in two ways. First, it was limited in the sense that Davol is not a significant player in the orthopedic pulsed lavage market, so any competition with Stryker would, as a practical matter, be minimal. (See Trial Tr., doc. # 385, at 168-69 (Zimmer representative testifying that Davol does not compete effectively in the orthopedic area).) Second, the license was limited because it expressly restricted Davol to practicing the patent

tice the 807 patent at issue on this motion. Thus, Zimmer's infringement of the 807 patent did not just deprive Stryker of significant market share, but it did so using technology that Zimmer could not otherwise obtain.

On top of all that, both parties recognize that the orthopedic pulsed lavage market consists, for practical purposes, of just two players: Stryker and Zimmer. (See, e.g., Trial Tr., doc. # 385, at 168-69 (testimony from Zimmer brand manager acknowledging that Stryker and Zimmer are the two major competitors in the orthopedic pulsed lavage device market).) Those two companies are fiercely competitive with one another because, in a two player industry, one player's gain is almost invariably the other player's loss. For that reason courts have consistently treated infringement by a direct competitor as an important factor favoring a finding of irreparable harm. See, e.g., Presidio Components, Inc., 702 F.3d at 1363-64 ("Direct competition in the same market is certainly one factor suggesting strongly the potential for irreparable harm without enforcement of the right to exclude."). In this case, there is no doubt that Zimmer's infringement not only cost Stryker market share and deprived it of the exclusive use of proprietary technology, but that it directly benefitted Stryker's only rival in the orthopedic pulsed lav-

in devices with batteries in the handpiece. (See Trial Tr., doc. # 387, at 127 (Zimmer's damages expert testifying that the Davol license restricted Davol to selling the device with batteries in the handpiece).) Stryker's primary market is for pulsed lavage devices with batteries outside the handpiece. (See, e.g., Trial Tr., doc. # 387, at 134 (Stryker's damages expert testifying that 90% of Stryker's pulsed lavage sales are for devices with batteries outside the handpiece).)

age industry. That is more than enough to establish irreparable injury.

Zimmer makes two arguments as to why its ongoing infringement does not irreparably harm Stryker, but neither argument is availing. Zimmer's first argument is that Stryker's alleged delay in seeking injunctive relief—by, for example, not seeking a preliminary injunction at the outset of this action—shows that Stryker has not suffered irreparable harm. But the Federal Circuit has "never held that failure to seek a preliminary injunction must be considered as a factor weighing against a court's issuance of a permanent injunction." Mytee Prods., Inc. v. Harris Research, Inc., 439 Fed. App'x 882, 888 (Fed. Cir. 2011). Indeed, there is no obvious reason why it should be considered. To the contrary, an infringer's past successful infringement should not become a sort of de facto license to continue infringing. Infringement does not cease to be a problem just because the patent holder has not pursued a particular remedy.

Zimmer's other argument against finding irreparable harm is that Stryker has not shown that Zimmer's infringement of the 807 patent is what caused Stryker to lose market share. The premise of Zimmer's argument is that the 807 patent only covers a component of a pulsed lavage device, so that demand for the device might be driven by something other than demand for the component covered by the 807 patent. That premise is plainly flawed, since, by its express terms, the 807 patent covers the entire pulsed lavage handpiece. (See 807 Patent, doc. # 470-2, at 34 (disclosing "An irrigating handpiece for receiving a tip assembly having a discharge tube and a suction tube, said irrigating handpiece including ...").) As a result, demand for the 807 patent technology is inextricably linked to demand for

the whole handpiece. At trial, Zimmer made the same flawed argument to the jury as one basis for rejecting Stryker's damage theory. The verdict demonstrates that the jury also rejected Zimmer's theory. Zimmer's attempt to parse the 807 patent into separable components, and thereby negate Stryker's claim of irreparable injury, must therefore fail.

2. Inadequacy of Remedies at Law

Courts have consistently recognized that the financial harm accompanying loss of market share to an adjudged infringer is inherently difficult to quantify, so that damages will seldom be an adequate remedy. See, e.g., i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 861 (Fed. Cir. 2010) (monetary loss from loss of market share "is particularly difficult to quantify"). Likewise, because the right to exclude others from using a patented invention has value in and of itself, independent of its impact on the patentee's financial statements, monetary damages tend to be an inadequate remedy for continued infringement. Presidio Components, Inc., 702 F.3d at 1363 ("[The] historical practice of protecting the right to exclude through injunctive relief is not surprising given the difficulties of protecting this right solely with monetary relief."). For those reasons, money damages will not adequately compensate Stryker for Zimmer's infringement.

Zimmer argues that, because the jury awarded Stryker damages for past infringement, damages must also be a suitable remedy for future infringement. By that reasoning, any award of damages for past infringement would militate against injunctive relief for future infringement. This Court cannot sanction an approach so at odds with Federal Circuit precedent. See, e.g., *Atlas Powder Co. v. Ireco Chems.*, 773 F.2d 1230,

1233 (Fed. Cir. 1985) ("While monetary relief is often the sole remedy for past infringement, it does not follow that a money award is also the sole remedy against future infringement.").

3. Balance of Hardships

The balance of hardships in this case also favors granting Stryker's request for an injunction. Denying Stryker's motion would force Stryker to compete against its own technology, an outcome that "places a substantial hardship on [the patentee]." Bosch, 659 F.3d at 1156. By contrast, the only hardship Zimmer would face from an injunction would be having to stop infringing, something the law does not treat as a legitimate hardship. i4i Ltd. P'ship, 598 F.3d at 863 ("[N]either commercial success, nor sunk development costs, shield an infringer from injunctive relief.").

4. Public Interest

The public interest also weighs in favor of granting a permanent injunction. The public has a strong interest in maintaining the integrity of the patent system by enforcing a patent owner's right to exclude. See *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 704 (Fed. Cir. 2008) (acknowledging district court's conclusion that "it is generally in the public interest to uphold patent rights"); *Smith & Nephew, Inc. v. Synthes*, 466 F. Supp. 2d. 978, 985 ("As a general matter, the public maintains an interest in protecting the rights of patent holders, and injunctions serve that interest."). Without an injunction, there is every reason to believe that Zimmer will continue violating Stryker's right to exclude, undermining the policies that underlie the patent laws.

Zimmer counters that an injunction is contrary to the public interest because Stryker will probably raise prices on its pulsed lavage devices if Zimmer's infringing products are forced off the market. At the outset, Zimmer's argument is purely speculative. There is no concrete evidence that Zimmer's exit from the market will inevitably cause Stryker to increase prices for its pulsed lavage devices. Even taking Zimmer's speculation as true, moreover, Zimmer's argument proves too Every patent is a form of limited monopoly power from an economic perspective, but Congress has made the judgment that the value of the patent system outweighs whatever temporary monopoly profit may accrue to the patent holder. The Federal Circuit has repeatedly suggested that any potential short-term price reductions that infringement may trigger are usually outweighed by the long-term costs of infringement, including diminished incentives to invent and erosion of respect for the patent laws. See, e.g., Edwards Lifesciences AG v. CoreValve, Inc., 699 F.3d 1305, 1314 (Fed. Cir. 2012) ("The innovation incentive of the patent is grounded on the market exclusivity whereby the inventor profits from his invention.").

5. Timing of the Preliminary Injunction

Since all four injunction factors support granting Stryker's motion for a permanent injunction, it is clear that Zimmer should be permanently enjoined from producing or selling infringing products. The only remaining question is whether the injunction should be stayed until some future date. The Court may exercise its discretion to stay an injunction by considering: (1) whether Zimmer made a strong showing that it is likely to succeed on the merits; (2) whether Zimmer will be irreparably injured absent a stay; (3) whether the issuance of a stay will substantially injure Stryker; and (4)

whether delaying the stay is in the public interest. *Hilton v. Braunskill*, 481 U.S. 770, 776 (1987).

None of the four considerations for staying an injunction supports doing so here. Zimmer is unlikely to succeed on its argument that the 807 patent is invalid, for all the reasons that prompted the Court to reject that same argument at summary judgment and that prompted the jury to reject it at trial. (See Order Denying Zimmer's Motion for Summary Judgment of Invalidity, doc. # 249; Verdict, doc. # 381, at 2-3.) As noted above, an immediate injunction will only injure Zimmer to the extent Zimmer will no longer be allowed to infringe Stryker's patents, something it had no right to do in the first place. By contrast, staying the injunction means that Stryker will continue to lose market share to Zimmer and will continue to be deprived of its right to exclude others (especially its chief competitor) from practicing its patents. Lastly, the public's interest in enforcing the patent laws favors giving the injunction immediate effect in this case. For those reasons, Zimmer must be immediately and permanently enjoined from manufacturing, marketing, or selling any products found to have infringed the 807 patent, including the infringing Pulsavac Plus products.

B. Motion for Supplemental Damages (doc. # 414)

The jury's \$70 million lost profits award to Stryker only reflected the damages Stryker had suffered through November 30, 2012. That is because, at the time of trial, Zimmer's most up-to-date sales data only stretched through November 30, 2012. Zimmer has now produced supplemental sales data for its infringing products, reflecting sales from December 1, 2012 through Feburary 28, 2013. Based on that supplemental data, Stryker's damages expert has calculated

Stryker's additional lost profits for that time frame to be \$2,351,257.66. Stryker now asks for an award of supplemental lost profits damages in that amount.

The patent damages statute provides that a patentee is entitled to "damages adequate to compensate for [] infringement," including damages for sales not accounted for at trial, such as post-verdict sales. 35 U.S.C. § 284; see Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1213 (Fed. Cir. 2011) ("[A] patentee is not fully compensated if the damages award did not include future lost sales."). Zimmer concedes as much, but denies that Stryker is entitled to supplemental damages in this case because, it says, the jury's award is not supportable. Zimmer's arguments as to why the jury's award is not supportable are the same ones it made it made in its Post-Trial Motion No. 8 on Damages (doc. #454). The same reasons that compelled the Court to reject those arguments in addressing Zimmer's Post-Trial Motion No. 8 on Damages compel the Court to reject them here, as well. The methodology underlying Stryker's supplemental damages calculations is not unreasonable, just as it was not unreasonable at trial. (See Ex. B, doc. #415-2 (setting out updated damage schedules).) Therefore, consistent with the text of the patent damages statute, the Court grants Stryker's motion for supplemental lost profit damages in the amount of \$2,351,257.66.

C. Motion for Finding of Exceptional Case and for an Award of Attorneys' Fees (doc. # 410)

Stryker's next motion is for an award of attorneys' fees under 35 U.S.C. § 285. Section 285 provides that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." Determining whether to award attorneys' fees under § 285 is a two-

step process. *Highmark*, *Inc. v. Allcare Health Mgmt*. *Sys.*, *Inc.*, 687 F.3d 1300, 1308 (Fed Cir. 2012). "First, [the] prevailing party must establish by clear and convincing evidence that the case is 'exceptional." *Id.* "Second, if the case is deemed exceptional, a court must determine whether an award of attorneys' fees is appropriate." *Id.*

There are no ironclad rules for what makes a case "exceptional." The Federal Circuit, for example, has said that "[a] case may be deemed exceptional under § 285 where there has been willful infringement, fraud or inequitable conduct in procuring the patent, misconduct during litigation, vexatious or unjustified litigation, conduct that violates Federal Rule of Civil Procedure 11, or like infractions." *MarcTec*, *LLC v. Johnson & Johnson*, 664 F.3d 907, 916 (Fed. Cir. 2012). Even if a case is found to be exceptional, moreover, the law gives courts considerable discretion in deciding whether to award attorney's fees. See *Bard Peripheral Vascular*, *Inc. v. W.L. Gore & Assocs.*, *Inc.*, 670 F.3d 1171, 1191-92 (Fed. Cir. 2012).

Stryker argues that this case is "exceptional" for two reasons. First, it says that Zimmer's willful infringement was so pronounced as to warrant a finding of an exceptional case. Second, it says that Zimmer's conduct of the litigation was so unreasonable and vexatious as to warrant a finding of an exceptional case. The Court need only address Stryker's first argument to find this case "exceptional." While it is true willful infringement does not require a finding of an exceptional case, "[d]istrict courts have tended to award attorneys' fees when willful infringement has been proven, and [the Federal Circuit] has uniformly upheld such awards." S.C. Johnson & Son, Inc. v. Carters-Wallace Inc., 781 F.2d 198, 200 (Fed. Cir. 1986). Here, the

Court and the jury both found, by clear and convincing evidence, that Zimmer willfully infringed the 329, 807, and 383 patents. (See, e.g., Verdict, doc. # 381, at 6-7.) That is sufficient to support a finding of an exceptional case. *Modine Mfg. Co. v. Allen Grp., Inc.*, 917 F.2d 538, 543 (Fed. Cir. 1990) ("An express finding of willful infringement is a sufficient basis for classifying a case as 'exceptional,' and indeed, when a trial court denies attorney fees in spite of a finding of willful infringement, the court must explain why the case is *not* 'exceptional' within the meaning of the statute.") (emphasis in original).

Having found this case to be "exceptional," the Court must consider whether to award attorneys' fees. The decision on attorney's fees is left largely to the Court's discretion. Bard Peripheral Vascular, Inc., 670 F.3d at 1191-92. Exercising that discretion, the Court concludes that an award of attorneys' fees is appropriate in this case, based on the principles animating § 285. In particular, § 285 is meant to prevent the waste of judicial resources that comes from willful infringement and the oftentimes unnecessary litigation it engenders. Univ. of Pittsburgh v. Varian Med. Sys., Inc., No. 08cv-1307, 2012 WL 1436569, at *8-*9 (W.D. Penn. Apr. 25, 2012). By pursuing this action, Zimmer has forced Stryker and this Court to expend considerable resources in the name of a case that, for the most part, was not terribly close.⁵ That is the essence of the harm

⁵ This is in no way a comment on the quality of Zimmer's counsel's advocacy throughout these proceedings. Counsel for Zimmer has consistently made the best of a bad case, presenting arguments that were lucid and thoughtful. The problems with Zimmer's positions lie not in the quality of counsel's advocacy, but in the flagrancy of Zimmer's underlying infringement. No advocate could rescue Zimmer from that problem.

that § 285 was designed to remedy. See *Brooktree Corp. v. Advanced Micro Devices*, *Inc.*, 977 F.2d 1555, 1582 (Fed. Cir. 1992) ("The statutory purpose of such award is to reach cases where the interest of justice warrants fee-shifting."); *Central Soya Co., Inc. v. Geo. A. Hormel & Co.*, 723 F.2d 1573, 1578 (Fed. Cir. 1983) ("The purpose of § 285 is, in a proper case and in the discretion of the trial judge, to compensate the prevailing party for its monetary outlays in the prosecution or defense of the suit."). Accordingly, the Court awards Stryker its reasonable attorneys' fees.

D. Motion for Prejudgment Interest (doc. # 399)

Stryker's fourth motion is for prejudgment interest on: (1) the \$70 million in lost profit damages the jury awarded it; (2) the \$2,351,257.66 in supplemental damages the Court awards it (see Part III); and (3) its reasonable attorneys' fees (see Part IV). The patent damages statute provides that, "Upon finding for the claimant, the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C. § 284. "In the typical case an award of prejudgment interest is necessary to ensure that the patent owner is placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement." General Motors Corp. v. Devex, 461 U.S. 648, 655 (1983). This is because "[a]n award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments but also of the foregone use of the money between the time of infringement and the date of the judgment. Id. at 655-66. Despite that, an award of prejudgment interest is not mandatory. "For example, it may be appropriate to limit prejudgment interest, or perhaps even deny it altogether, where the patent owner has been responsible for undue delay in prosecuting the lawsuit." *Id.* at 657.

Zimmer argues that Stryker's undue delay in bringing this action justifies denying Stryker prejudgment interest. At the outset, it is not at all clear that Stryker's delay was "undue." For example, although some low level Stryker employees tested the allegedly infringing products in 2000, there is no evidence that anyone at Stryker with a knowledge of that company's patents knew of the infringing devices before 2005, by which time Stryker was on the verge of receiving additional patent protection (the '383 patent). Less than two years later, Zimmer recalled its infringing products, shut down its manufacturing facilities, and abandoned the market until December of 2008, during which time there was no reason for Stryker to pursue an infringement claim. For those reasons, Stryker's delay in bringing this suit is not necessarily undue, as Zimmer assumes.

Furthermore, no court has ever said that any kind of delay in filing suit requires a denial of prejudgment interest. See, e.g., Devex, 461 U.S. at 657 ("[I]t may be appropriate to limit prejudgment interest, or perhaps even deny it altogether, where the patent owner has been responsible for undue delay in prosecuting the lawsuit.") (emphasis added). Quite the opposite, courts have routinely noted that denial of prejudgment interest is the exception, not the rule, because denying prejudgment interest thwarts § 284's overriding aim of affording patent holders complete compensation. See, e.g., Bio-Rad Labs., Inc. v. Nicolet Instrument Corp., 807 F.2d 964, 967 (Fed. Cir. 1986) ("The normal proce-

dure under *Devex* is to award prejudgment interest from the date of infringement to the date of payment, since only such award will satisfy 'Congress' overriding purpose [in section 284] of affording patent owners complete compensation.") (quoting *Devex*, 461 U.S. at 655); *Sensonics*, *Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1574 (Fed. Cir. 1996) ("[P]rejudgment interest is the rule, not the exception."). There must be something exceptional about Stryker's delay, therefore, to justify denying it prejudgment interest.

One thing that could make a delay in filing suit "exceptional" would be if the delay actually harmed the infringer. Indeed, in the vast majority of cases where courts have declined to award prejudgment interest, they appear to have done so either because the plaintiff's delay in filing suit prejudiced the defendant or because the plaintiff harmed the court and the defendant by failing to comply with court orders after filing the suit. See, e.g., Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc., 246 F.3d 1336, 1362 (Fed. Cir. 2001) (prejudgment interest denied because plaintiff engaged in self-serving litigation tactics that prejudiced defendant); Minemyer v. R-Boc Representatives, Inc., No. 07-C-1763, 2012 WL 2423102, at *3 (N.D. Ill. June 26, 2012) (prejudgment interest denied where plaintiffs failure to comply with court orders caused three year delay of trial). But where the infringer is not prejudiced by the patentee's delay in filing suit and the patentee proceeded responsibly after filing suit, it is difficult to discern a good reason to deny prejudgment interest, especially given § 284's compensatory aim. After all, the delay does not harm the infringer financially. To the contrary, the principal financial consequence of a patentee's delay in filing suit is that the infringer gets to keep and make use of the proceeds from infringement for a longer period of time. See In the Matter of Mahurkar Double Lumen Hemodialysis Catheter Patent Litig., 831 F. Supp. 1354, 1394 (N.D. Ill. 1993). Thus, unless there is some legitimate reason to punish the patentee for its delay in filing suit—as, for example, where the patentee's delay unduly prejudices the infringer—the Court sees no reason to withhold prejudgment interest. As Zimmer has not demonstrated that Stryker's delay in filing suit prejudiced it in any meaningful way, prejudgment interest is appropriate here.

That leaves two questions. First, at what rate should prejudgment interest be calculated? The case law makes clear that determining the appropriate rate is largely left to the Court's discretion. See, e.g. Uniroyal, Inc. v. Rudkin-Wiley Corp., 939 F.2d 1540, 1545 (Fed. Cir. 1991) ("A trial court is afforded wide latitude ... and may award interest at or above the prime rate."). In this case, Stryker has proposed that interest be awarded at a rate of 3.83%, reflecting Stryker's weighted-average interest rate, excluding required fees, for all its borrowing during the damages period. The Court believes that rate is a reasonable one, insofar as it fairly accounts for what Stryker has shown it ultimately paid to borrow money it would have had absent Zimmer's infringement. (See Lawton Decl., doc. # 400-1, at ¶¶ 9, 12.) Zimmer argues that there is no evidence Stryker would have borrowed money even had Zimmer not infringed, but that argument is entirely speculative. The fact that Stryker chose not to use the cash it had available during the damages period to

⁶ Zimmer argues that Stryker has not adequately shown that it borrowed money at the rate it claims. In this respect, however, the report of Stryker's damages expert suffices to establish that Stryker's weighted-average interest rate was 3.83%.

avoid borrowing does not mean it would have borrowed had it had the additional \$70 million in lost profits on hand. On top of that, Stryker's proposed rate is considerably below the prime rate, which courts routinely use when calculating prejudgment interest. See, e.g., *Trading Techs.*, *Int'l v. eSpeed, Inc.*, No. 04-C-5312, 2008 WL 345604, at *11 (N.D. Ill. Feb. 5, 2008) ("In determining the rate of prejudgment interest awards in patent infringement cases, courts in this circuit have routinely used the prime rate."). Thus, prejudgment interest will be calculated at a rate of 3.83%.

The other remaining question is whether interest will be compounded monthly, as Stryker requests, or quarterly, as Zimmer suggests. Resolution of this question, also, is left largely to the Court's discretion. See Bio-Rad Labs., Inc. v. Nicolet Instrument Corp., 807 F.2d 964, 969 (Fed. Cir. 1986) ("The rate of prejudgment interest and whether it should be compounded or uncompounded are matters left largely to the discretion of the district court."). Zimmer's argument that interest should be compounded quarterly is based on the fact that Davol pays Stryker a royalty for use of a Stryker patent on a quarterly basis. But the damages in this case are for lost profits from infringing sales, not loss of a reasonable royalty, and Stryker accumulates sales revenue for its patented devices on a daily, not quarterly, basis. From that vantage point, then, Stryker's proposal that interest be compounded monthly is conservative. The Court agrees with Stryker, then, that compounding interest on a monthly basis is appropriate in this case. As such, Stryker is entitled to an award of \$11,167,670.50 in prejudgment interest on the jury award and supplemental lost profit damages Stryker incurred from December 1, 2012 to February 28, 2013. In addition, for the same reasons the Court found this to be an "exceptional case," the Court awards Stryker additional prejudgment interest, calculated at a rate of 3.83% and compounded monthly, on its reasonable attorney's fees. See *Mathis v. Spears*, 857 F.2d 749, 761 (Fed. Cir. 1988) ("[A] district court does have authority, in cases of bad faith or other exceptional circumstances, to award prejudgment interest on the unliquidated sum of an award made under Section 285.").

E. Motion for Enhanced Damages (doc. # 405)

Stryker's final motion is for enhanced damages under 35 U.S.C. § 284, based on Zimmer's willful infringement. Under § 284, "the court may increase the damages up to three times the amount found or assessed" at trial. 35 U.S.C. § 284; Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc., 670 F.3d 1171, 1191 (Fed. Cir. 2012). Whether and to what extent enhanced damages should be awarded "remains firmly within the scope of the district court's reasoned discretion, informed by the totality of circumstances." Bard Peripheral, 670 F.3d at 1191. "The paramount determination in deciding to grant enhancement and the amount thereof is the egregiousness of the defendant's conduct based on all the facts and circumstances." Read Corp. v. Portec, Inc., 970 F.2d 816, 826 (Fed. Cir. 1992). In evaluating the egregiousness of the defendant's conduct, courts typically rely on the nine Read factors, which are:

- (1) whether the infringer deliberately copied the patentee's ideas or design;
- (2) whether the infringer investigated the scope of the patent and formed a good faith belief that it was invalid or not infringed;
- (3) the infringer's conduct during litigation;

- (4) the infringer's size and financial condition;
- (5) closeness of the case;
- (6) duration of the infringing conduct;
- (7) remedial actions, if any, taken by the infringer;
- (8) the infringer's motivation for harm; [and]
- (9) whether the infringer attempted to conceal its misconduct.

Id. at 826-27.

In this case, all nine *Read* factors favor substantial enhancement of the jury's award. As to the first factor, multiple trial witnesses testified that Zimmer deliberately copied Stryker's patented inventions. (See, e.g., Trial. Tr., doc. #358, at 105 (testimony of Zimmer engineer and Rule 30(b)(6) witness that Zimmer copied Stryker); Olson Dep. Tr., doc. # 406-1, at 8 (testimony of Pulsavac Plus design engineer noting that use of gear drives, like the ones ultimately incorporated in the Pulsavac Plus devices, "would be probably copying").) On the second factor, Zimmer presented no evidence that it investigated the scope of Stryker's patents to form a good faith belief about invalidity or infringement, militating in favor of enhancement. The third factor also favors enhancement, to the extent Zimmer needlessly delayed in producing requested information concerning its application for a patent for the Pulsavac Plus. (See Stryker's Br. in Support of Mot. for Enhanced Damages, doc. # 406, at 11-14 (detailing Zimmer's persistent refusal to turn over requested information).) With respect to the fourth factor, Zimmer is a multi-billion dollar company with reported annual profits in excess of three-quarters-of-a-billion dollars. (See Ex. N, doc. # 408-4.) A \$70 million verdict sounds large in the abstract, but in context, it may not be enough, without

enhancement, to deter infringing conduct. As to the fifth factor, as the Court noted earlier and as reflected in the jury's verdict, this was not a close case. Every major decision—from claim construction through postverdict motions—went against Zimmer. Verdict, doc. #381 (finding for Stryker on every issue).) On the sixth factor, Zimmer's infringement spans more than a decade, from 2000 all the way through the present—a considerable amount of time. And, with respect to the seventh factor, at no point during its 12plus years of infringement did Zimmer take any remedial action to stop infringement or mitigate damages, including during the two-plus years covered by this litigation. In fact, to this very day, Zimmer continues to manufacture and sell the infringing products. eighth factor counsels in favor of enhancement principally because Zimmer and Stryker are the only major competitors in the orthopedic pulsed lavage device market, so that Zimmer's infringement of Stryker's patents can only have been motivated by a desire to harm Stryker by depriving it of market share. See, e.g., Parker Hannifin Corp. v. Wix Filtration Corp., No. 1:07-CV-1374, 2011 WL 976559, at *17 (N.D. Ohio Mar. 17. 2011) (motivation to take business from "fierce competitor" weighed in favor of enhanced damages). Finally, on the ninth factor, although Zimmer did not attempt to hide the entirety of its misconduct, it did attempt to prevent Stryker from discovering certain aspects of its infringement in the run up to trial. See Stryker's Br. in Support of Mot. for Enhanced Damages, doc. # 406, at 11-14 (detailing Zimmer's persistent refusal to turn over certain requested information before trial).)

Because the *Read* factors so overwhelmingly favor enhancement, the real question here is not whether en-

hancement is warranted, but how much enhancement is appropriate. Given the one-sidedness of the case and the flagrancy and scope of Zimmer's infringement, the Court concludes that treble damages are appropriate here. See, e.g., *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1226 (Fed. Cir. 2006) (affirming treble damages award); *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1353, 1371 (Fed. Cir. 2004) (affirming double damages award after finding only four *Read* factors).

The last question in this case is whether Stryker is also entitled to treble damages on the Court's award of supplemental damages. The Court answers that question in the affirmative. Zimmer acknowledges that enhancement of post-verdict supplemental damages may be warranted based on "the egregiousness of the defendant's conduct based on all the facts and circumstances." Spectralytics, Inc. v. Cordis Corp., 649 F.3d 1336, 1349 (Fed. Cir. 2011). In this case, the same factors that warrant treble damages on the jury's lost profits award counsel in favor of awarding treble damages on the Court's award of supplemental damages. Indeed, the case for treble damages on the supplemental damages award is even stronger than it is for the jury's lost profits damages award, since, during the time period addressed by the supplemental damages award, Zimmer had already been found to infringe two of the three patents-in-suit, and should have been aware of the strong likelihood of an unfavorable verdict. See Syngor, Inc. v. Artesyn Techs., Inc., 709 F.3d 1365, 1385 (Fed. Cir. 2013) (affirming treble damages for court's award of supplemental damages, "based on the 'egregiousness' of Defendants' conduct in continuing to sell the accused products after the jury found infringement."). At bottom, there is simply no good reason *not* to treble the award of

supplemental damages here when the Court has determined that treble damages are appropriate for pre-November-30th lost profits.

THEREFORE IT IS ORDERED THAT Zimmer's Motions for Judgment as a Matter of Law and/or for a New Trial (doc. ## 369, 401, 425, 430, 435, 438, 442, 447, 453) are **DENIED**.

IT IS FURTHER ORDERED THAT Zimmer's Motion for Judgment Barring Pre-Suit Damages Pursuant to the Defense of Laches (doc. # 418) is **DENIED**.

IT IS FURTHER ORDERED THAT Stryker's Motion to Strike Zimmer's Supplemental Brief to Disclose the Release of the Redesigned Pulsavac Plus (doc. #534) is **GRANTED**.

IT IS FURTHER ORDERED THAT Stryker's Motion for a Permanent Injunction (doc. # 396) is **GRANTED**. Upon entry of final judgment, Zimmer will be permanently enjoined from manufacturing, marketing, or selling any products found to have infringed the 807 patent, including the infringing Pulsavac Plus products.

IT IS FURTHER ORDERED THAT Stryker's Motion for Supplemental Damages (doc. # 414) is **GRANTED**. Supplemental lost profit damages in the amount of \$2,351,257.66 shall be included in the Final Judgment.

IT IS FURTHER ORDERED THAT Stryker's Motion for a Finding of Exceptional Case and for an Award of Attorneys' Fees (doc. # 410) is **GRANTED**. Zimmer shall pay Stryker its reasonable attorneys' fees.

IT IS FURTHER ORDERED THAT Stryker's Motion for Prejudgment Interest (doc. # 399) is GRANT-

ED. Prejudgment interest of \$11,167,670.50 on the jury award and supplemental lost profit damages Stryker incurred from December 1, 2012 to February 28, 2013 shall be included in the Final Judgment. In addition, Zimmer shall pay Stryker prejudgment interest, calculated at a rate of 3.83% and compounded monthly, on Stryker's reasonable attorneys' fees.

IT IS FURTHER ORDERED THAT Stryker's Motion for Enhanced Damages (doc. # 405) is **GRANTED**. The Court awards Stryker treble damages on the jury's \$70 million verdict and on the Court's \$2,351,257.66 supplemental damages award.

Final Judgment incorporating these rulings shall be entered.

IT IS SO ORDERED.

DATED: August 7, 2013 /s/ Robert J. Jonker

ROBERT J. JONKER

UNITED STATES DISTRICT JUDGE

APPENDIX F

NOTE: This order is nonprecedential.

UNITED STATES COURT OF APPEALS

FOR THE FEDERAL CIRCUIT

2017-2541

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., STRYKER SALES CORPORATION,

Plaintiffs-Appellees,

v.

ZIMMER, INC., ZIMMER SURGICAL, INC., Defendants-Appellants.

Appeal from the United States District Court for the Western District of Michigan in No. 1:10-cv-01223-RJJ, Judge Robert J. Jonker.

ON PETITION FOR PANEL REHEARING AND REHEARING EN BANC

Before Prost, Chief Judge, Newman, Lourie, Dyk, O'Malley, Reyna, Wallach, Taranto, Chen, and Hughes, Circuit Judges.* Per Curiam.

ORDER

Appellants Zimmer, Inc. and Zimmer Surgical, Inc. filed a combined petition for panel rehearing and rehearing en banc. A response to the petition was invited

^{*} Circuit Judges Moore and Stoll did not participate.

by the court and filed by appellees Stryker Corporation, Stryker Puerto Rico, Ltd. and Stryker Sales Corporation. The petition was referred to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on March 26, 2019.

FOR THE COURT

March 19, 2019 Date /s/ Peter R. Marksteiner Peter R. Marksteiner Clerk of Court

APPENDIX G

NOTE: This order is nonprecedential.

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

2013-1668

STRYKER CORPORATION, STRYKER PUERTO RICO, LTD., STRYKER SALES CORPORATION, Plaintiffs-Appellees,

v.

 $\begin{array}{c} {\rm ZIMMER, Inc., ZIMMER \, SURGICAL, Inc.,} \\ {\rm \it Defendants-Appellants.} \end{array}$

ZIMMER ORTHOPAEDIC SURGICAL PRODUCTS, Defendant.

Appeal from the United States District Court for the Western District of Michigan in No. 10-CV-1223, Judge Robert J. Jonker.

ON PETITION FOR PANEL REHEARING AND REHEARING EN BANC

Before Prost, *Chief Judge*, Newman, Lourie, Dyk, O'Malley, Reyna, Wallach, Taranto, Chen, and Hughes, *Circuit Judges**

PER CURIAM.

 $^{^{\}ast}$ Circuit Judge Stoll and Circuit Judge Moore did not participate.

ORDER

Appellants Zimmer Surgical, Inc. and Zimmer, Inc. filed a combined petition for panel rehearing and rehearing en banc. A response to the petition was invited by the court and filed by the appellees. The petition was referred to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on December 9, 2016.

FOR THE COURT

December 2, 2016
Date

/s/ Peter R. Marksteiner Peter R. Marksteiner Clerk of Court