UNITED STATES DISTRICT COURT

DISTRICT OF MINNESOTA

JODI A. SCHWENDIMANN, f/k/a JODI A. DALVEY

Civil No. 11-820 (JRT/HB)

Plaintiff,

v.

MEMORANDUM OPINION AND ORDER

ARKWRIGHT ADVANCED COATING, INC.

Defendant.

ARKWRIGHT ADVANCED COATING, INC.

Counterclaim Plaintiff,

v.

JODI A. SCHWENDIMANN, f/k/a JODI A. DALVEY and COOLER CONCEPTS, INC.

Counterclaim Defendants.

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Plaintiff Jodi Schwendimann brought this patent-infringement action against Arkwright Advanced Coating, Inc. ("AACI"), for infringement of a number of patents related to dark T-shirt transfer technology. AACI countered with infringement allegations of its own. The jury returned a verdict in favor of Schwendimann, finding that AACI has directly infringed at least one claim of her patents, and that AACI's patents are invalid. The jury awarded Schwendimann \$2,624,228.00 in damages and found that AACI had infringed willfully. Both Schwendimann and AACI have filed a number of post-trial motions with respect to damages and post-trial relief. The Court will consider each motion in turn.

BACKGROUND

I. FACTUAL BACKGROUND

A. Schwendimann's Patents

Schwendimann's companies, NuCoat and Cooler Concepts, produce specialty paper products, including inkjet image transfer paper or sheets. Schwendimann alleged that AACI's 888 and 889 products infringe five of Schwendimann's patents:

- 1. U.S. Reissued Patent No. RE41,623 ("the '623 Patent")
- 2. U.S. Patent No. 7,749,581 ("the '581 Patent")
- 3. U.S. Patent No. 7,754,042 ("the '042 Patent")
- 4. U.S. Patent No. 7,766,475 ("the '475 Patent")
- 5. U.S. Patent No. 7,771,554 ("the '554 Patent")

B. AACI's Patents

AACI also produces inkjet image transfer paper or sheets, including the accused 888 and 889 products. AACI alleged that Schwendimann's products infringe two of AACI's patents:

- 1. U.S. Patent No. 6,667,093 ("the '093 Patent")
- 2. U.S. Patent No. 7,943,214 ("the '214 Patent")

C. ACT, Cooler Concepts, and NuCoat

In 1992, Schwendimann began working for American Coating Technologies ("ACT"), which was owned by Bill Nasser. (Trial Tr. Vol. II at 91:2-20, Nov. 27, 2017, Docket No. 761.) Between 1993 and 1994, ACT developed light T-shirt transfer products. (Id. at 97:16-98:16.) ACT began marketing these products in 1996. (Id.)

ACT's light T-shirt transfer products did not properly display the transferred image on colored T-shirts. (Id. at 101:13-103:3.) As a solution, ACT and its employees, primarily Nasser, Schwendimann, and Mike Galatowitsch, began developing dark T-shirt transfer products in 1995. (Id. at 99:2-101:12.) ACT sold these products from 1999 until it closed in 2001 (Id. at 110:18-23; Trial Tr. Vol. III at 359:4-364:16, Nov. 27, 2017, Docket No. 762.) Schwendimann now sells these dark T-shirt transfer products through Cooler Concepts and NuCoat. (Trial Tr. Vol. II at 108:10-109:6; 159:20-160:3.)

D. Arkwright and AACI

Arkwright and Schwendimann were direct competitors in the dark T-shirt transfer market. (Trial Tr. Vol. II at 147:4-24; Trial Tr. Vol. V at 925:19-22, Nov. 27, 2017, Docket No. 764.) Arkwright first began developing its dark T-shirt transfer products in 2000. (Trial Tr. Vol. III at 497:5-18.) Arkwright began selling these products in 2001. (Id. at 496:18-22; 507:15-25.)

In July 2008, Sihl purchased Arkwright's assets, including the rights to its dark T-shirt transfer products. (Trial Tr. Vol. V at 919:18-922:1.) Following this acquisition,

AACI was formed. (Id. at 922:2-19.) AACI ceased selling its 888 and 889 products in 2015. (Trial Tr. Vol. VII at 1334:1-2; 1338:8-10, Nov. 27, 2017, Docket No. 766.)

II. PROCEDURAL BACKGROUND

A. Pre-Trial

Both parties in this case engaged in substantial pre-trial motion practice.

On December 16, 2016, the Court issued its summary-judgment order. Schwendimann v. Arkwright Advanced Coating, Inc. ("Summary Judgment Order"), 220 F. Supp. 3d 953 (D. Minn. 2016). The Court granted AACI's motion for summary judgment with respect to Schwendimann's infringement of the '093 Patent. Id. at 963. The Court denied AACI's motion for summary judgment with respect to Schwendimann's lost-profits claim. Id. at 972-75 The Court concluded that genuine questions of material fact remained over whether NuCoat's and Cooler Concepts' profits flowed inexorably to Schwendimann and that Schwendimann must present "contractual, structural, or historical" of inexorable flow. Id. at 974-75.

On the eve of trial, both parties brought numerous motions in limine. Schwendimann v. Arkwright Advanced Coating, Inc. ("Motions in Limine Order"), No. 11-820, 2017 WL 4277142 (D. Minn. Sept. 25, 2017). First, the Court concluded that Schwendimann was only entitled to seek damages starting on July 6, 2010. Id. at *3. Second, the Court denied AACI's motion to exclude Schwendimann's arguments about lost profits and testimony from Donald Gorowsky, but the Court warned Schwendimann that "she must product contractual, structural, historical evidence showing that her companies' profits inexorably flow to her lest she risk dismissal of her theory of lost

profit damages." Id. at *4. Third, the Court denied AACI's motion to preclude Schwendimann from testifying that other competitors infringe her patents. Id. at *6. Fourth and finally, the Court denied AACI's motion to exclude Schwendimann from arguing or introducing evidence that AACI copied her products. Id.

B. Trial

In October 2017, the case proceeded to trial. Schwendimann called a number of current and former ACT, NuCoat, and Cooler Concepts employees. Schwendimann – the plaintiff in this case – began working at ACT in 1992 and now owns NuCoat and Cooler Concepts. (Trial Tr. Vol. II at 91:11-20, 105:7-109:2.) Bill Nasser was the owner of ACT from approximately 1985 until it closed in 2001. (Trial Tr. Vol. III at 359:16-362:22.) Mike Galatowitsch worked at ACT from 1989 to 2001 and NuCoat from 2013 to 2016. (Trial Tr. Vol. IV at 528:2-529:10, 535:15-20, Nov. 27, 2017, Docket No. 763.)

Both parties called a number of current and former Arkwright and AACI employees. Frank Shea was Arkwright's Marketing Director from 1999 to 2003. (Trial Tr. Vol. III at 494:22-495:6.) Melissa Jendzejec-Blanchard worked at Arkwright from 1997 to 2008 and has worked at AACI since 2008. (Trial Tr. Vol. VI at 1108:10-1109:11, 1112:1-20, Nov. 27, 2017, Docket No. 765.) Stephanie Provost worked at Arkwright from 1998 to 2008 and has worked at AACI since 2008, serving as Chief Financial Officer since 2014. (Trial Tr. Vol. VII at 1326:19-1327:17.) Phil Hursh began working at Sihl in 1996 as its Chief Executive Officer ("CEO") and served as CEO of AACI from 2008 until 2013. (Trial Tr. Vol. V at 917:23-919:2, 922:9-22, 924:5-7.)

Both parties called expert witnesses to testify about the technical composition of Schwendimann's and AACI's products. Schwendimann called Dr. Scott Williams. (Trial Tr. Vol. IV at 579:12-580:4.) AACI called Dr. Chris Macosko. (Trial Tr. Vol. VII at 1371:10-12.)

Both parties also called expert witnesses to testify about damages. Schwendimann called Donald Gorowsky, who provided an opinion about the amount of lost profits that the jury should award Schwendimann. (Trial Tr. Vol. V at 983:111-14; 995:23-996:7.) Gorowsky opined that Schwendimann should be awarded \$6.7 million in lost profits. (Id. at 1009:1-7.) He did not testify about the amount of a reasonable royalty that Schwendimann should be awarded. (Id. at 1032:16-25.) AACI called Arthur Cobb, who did provide an opinion about the amount of a reasonable royalty that Schwendimann should be awarded. (Trial Tr. Vol. VIII at 1639:23-1640:4, Nov. 27, 2017, Docket No. 767.) Cobb opined that, if the jury found that AACI infringed Schwendimann's patents, the jury should award Schwendimann a reasonable royalty of 2% or \$337,105. (Id. at 1686:14-1687:21.) He also testified that Schwendimann should not be awarded lost profits. (Id. at 1676:22-25.)

Following Schwendimann's case-in-chief, AACI moved for judgment as a matter of law on the issues of willful infringement and lost profits. (AACI's Mot. for J. as a Matter of Law, Oct. 13, 2017, Docket No. 637.) The Court denied AACI's motion with respect to the willful-infringement issue but noted that the issue was "somewhat close." (Trial Tr. Vol. VIII at 1835:22-25.) However, the Court granted AACI's motion with respect to lost profits because Schwendimann failed to present sufficient evidence on the

absence of acceptable, noninfringing alternatives. (Id. at 1836:11-25.) Schwendimann moved for reconsideration. (Mot. to Reconsider, Oct. 17, 2017, Docket No. 651.) The Court denied Schwendimann's motion. (Trial Tr. Vol IX at 1917:2-23, Nov. 27, 2017, Docket No. 768.)

C. Verdict and Post-Trial Motions

The jury returned a verdict in favor of Schwendimann. (Am. J., Nov. 14, 2014, Docket No. 705.) The jury found:

- 1. Schwendimann has proven that AACI has directly infringed at least one claim of the '623, '581, '475, '042, or '554 Patents;
- 2. As a result of AACI's conduct, plaintiff is entitled to damages in the amount of \$2,624,228.00;
- 3. Schwendimann has proved that AACI willfully infringed;
- 4. Schwendimann and Cooler Concepts have proven that Claims 1 and 11 of the '093 Patent (Yuan) are invalid;
- 5. Neither Schwendimann nor Cooler Concepts directly infringes the '214 Patent (Bamberg);
- 6. Schwendimann did not actively induce NuCoat or Cooler Concepts to infringe the '214 Patent (Bamberg).

(Id.)

The parties have now filed post-trial motions. On February 23, 2018, the Court denied Schwendimann's Motion for Attorney Fees. Schwendimann v. Arkwright Advanced Coating, Inc., ("Attorney Fees Order"), No. 11-820, 2018 WL 1041038 (D. Minn. Feb. 23, 2018). On February 26, the Court denied AACI's Renewed Motion for Judgment as a Matter of Law on Infringement of the Schwendimann Patents. Schwendimann v. Arkwright Advanced Coating, Inc., ("Infringement Order"), No. 11-820, 2018 WL 1064556 (D. Minn. Feb. 26, 2018).

The parties have filed a number of motions that collectively relate to damages or other forms of post-trial relief. AACI has filed the following motions:

- Motion for New Trial on Damages or Remittitur ("Damages Motion"), Nov.
 20, 2017, Docket No. 730; and
- Renewed Motion for Judgment as a Matter of Law or, in the Alternative, a
 New Trial on Willful Infringement ("Willful Infringement Motion"), Nov. 20,
 2017, Docket No. 734.

Schwendimann has filed the following motions:

- 1. Motion to Amend Judgment to Include Pre-Judgment and Post-Judgment Interest ("Interest Motion"), Nov. 20, 2017, Docket No. 716;
- 2. Motion for Permanent Injunction ("Injunction Motion"), Nov. 20, 2017, Docket No. 721;
- Motion for New Trial on Lost Profits Damages ("Lost Profits Motion"), Nov.
 20, 2017, Docket No. 726; and
- 4. Motion to Amend Judgment to Include Enhanced Damages ("Enhanced Damages Motion"), Nov. 20, 2017, Docket No. 743.

The Court will address each motion in turn.

DISCUSSION

I. STANDARD OF REVIEW

Federal Circuit law governs substantive patent law; regional circuit law governs a district court's rulings on post-trial motions for judgment as a matter of law and for a new trial. Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1202 (Fed. Cir. 2010).

Under Rule 50(a)(1) of the Federal Rules of Civil Procedure, the Court may resolve an issue as a matter of law if "a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." A party may renew its motion after trial. Fed. R. Civ. P. 50(b). "A motion for judgment as a matter of law should be granted when all the evidence points one way and is susceptible of no reasonable inferences sustaining the position of the nonmoving party." Hunt ex rel. Hunt v. Lincoln Cty. Mem'l Hosp., 317 F.3d 891, 893 (8th Cir. 2003) (quoting Neely v. Am. Family Mut. Ins. Co., 123 F.3d 1127, 1129 (8th Cir. 1997)). In making this determination, the Court must

consider the evidence in the light most favorable to the prevailing party, assume that the jury resolved all conflicts of evidence in favor of that party, assume as true all facts which the prevailing party's evidence tended to prove, give the prevailing party the benefit of all favorable inferences which may reasonably be drawn from the facts, and deny the motion, if in light of the foregoing, reasonable jurors could differ as to the conclusion that could be drawn from the evidence.

Minneapolis Cmty. Dev. Agency v. Lake Calhoun Assocs., 928 F.2d 299, 301 (8th Cir. 1991) (quoting Atlas Pile Driving Co. v. Dicon Fin. Co., 886 F.2d 986, 989 (8th Cir. 1989)).

Under Rule 59(a) of the Federal Rules of Civil Procedure, the Court may grant a motion for a new trial "on all or some of the issues." Fed. R. Civ. P. 59(a)(1). "A new trial is appropriate when the first trial, through a verdict against the weight of the evidence . . . or legal errors at trial, resulted in a miscarriage of justice." Gray v. Bicknell, 86 F.3d 1472, 1480 (8th Cir. 1996). "The authority to grant a new trial is within the

discretion of the district court." Id. The Court may grant a new trial where erroneous evidentiary rulings "had a substantial influence on the jury's verdict." Littleton v. McNeely, 562 F.3d 880, 888 (8th Cir. 2009) (quoting Harris v. Chand, 506 F.3d 1135, 1139 (8th Cir. 2007)). Further, only if the jury's verdict is so against the great weight of the evidence that it constitutes a miscarriage of justice should a motion for a new trial be granted. Ogden v. Wax Works, Inc., 214 F.3d 999, 1010 (8th Cir. 2000).

II. LOST PROFITS

The Court must decide whether to order a new trial on lost profits. During trial, the Court granted AACI's motion for judgment as a matter of law after concluding that Schwendimann did not meet her burden of demonstrating the absence of noninfringing alternatives. (Trial Tr. Vol. VIII at 1836:1-25.) The Court will deny Schwendimann's motion for a new trial.

A. Elements of Lost Profits

"To recover lost profits damages for patent infringement, the patent owner must show that it would have received the additional profits 'but for' the infringement. The patent owner bears the burden to present evidence sufficient to show a reasonable probability that it would have made the asserted profits absent infringement." Kings Instruments Corp. v. Perego, 65 F.3d 941, 952 (Fed. Cir. 1995). Courts apply the four-factor Panduit test to assess whether the patent holder has satisfied the but-for test:

- (1) Demand for the patented product;
- (2) Absence of acceptable, noninfringing alternatives;
- (3) Manufacturing and marketing capability to exploit the demand; and

(4) The amount of profit it would have made.

Panduit Corp v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1156 (6th Cir. 1978) (emphasis added).

Lost profits "under Panduit are not easy to prove." Mentor Graphics Corp. v. EVE-USA, Inc., 851 F.3d 1275, 1285 (Fed. Cir. 2017). "The second factor, absence of acceptable non-infringing alternatives, often proves the most difficult obstacle for patent holders." Id. at 1286. "[I]f there is a noninfringing alternative which any given purchaser would have found acceptable and bought, then the patentee cannot obtain lost profits for that particular sale." Id. Instead, "[f]or sales in which the patentee cannot prove the elements necessary to establish entitlement to lost profits, the statute guarantees the patentee a reasonable royalty for those sales." Id.

A party's argument for lost profits must be supported by "sound economic proof of the nature of the market." Akamai Techs., Inc. v. Limelight Networks, Inc., 805 F.3d 1368, 1379 (Fed. Cir. 2015) (quoting Ericsson, Inc. v. Harris Corp., 352 F.3d 1369, 1377 (Fed. Cir. 2004)). "To show 'but for' causation and entitlement to lost profits, a patentee must reconstruct the market to show, hypothetically, 'likely outcomes with infringement factored out of the economic picture.' Such market reconstruction, though hypothetical, requires 'sound economic proof of the nature of the market.'" Crystal Semiconductor Corp. v. TriTech Microelectronics *Int'l*, Inc., 246 F.3d 1336, 1355 (Fed. Cir. 2001) (quoting Grain Processing Corp. v. Am. Maize-Prods., 185 F.3d 1341, 1350-51 (Fed. Cir. 1999)).

B. Absence of Acceptable, Noninfringing Alternatives

The Court previously found that Schwendimann failed to prove an absence of acceptable, noninfringing alternatives. The Court will conclude that Schwendimann has neither proved an absence of acceptable, noninfringing alternatives nor presented sound economic proof of the nature of the market.

Both parties acknowledge that the dark T-shirt transfer market is not a two-player market because they at least acknowledge Neenah as a competitor. At trial, Schwendimann argued that Neenah's products also infringe her patents. There are two Neenah products that are potentially acceptable, noninfringing alternatives. (Trial Tr. Vol. II at 272:11-276:6.) Williams tested one of the Neenah products and concluded that it infringes. (Trial Tr. Vol. V at 815:12-23.) Perhaps, with more evidence, a reasonable jury could draw an inference that if one Neenah product infringes the untested Neenah product also infringes. But there is no evidence that would allow a reasonable jury to make this inference. Williams did not testify about whether the untested Neenah product infringes Schwendimann's patents or whether the product is so substantially similar to the tested Neenah product that infringement can be inferred. Schwendimann therefore did not carry her burden as to whether this second Neenah product is an acceptable, noninfringing alternative.

Moreover, Neenah is not the only other competitor in the market. Evidence at trial revealed a number of competitors in the dark T-shirt transfer market. Schwendimann herself testified about four particular companies that sell or previously sold dark T-shirt transfer products:

- Iya: Schwendimann testified that Iya was a competitor and that it was in the marketplace at the time frame she is claiming lost profits. (Trial Tr. Vol. II at 270:2-270:11.)
- Chemica: Schwendimann testified at trial that Chemica was a "potential" competitor when her deposition was taken in 2015. (Id. at 270:12-271:8.)
- Siser: Schwendimann testified that she knows Siser has produced dark T-shirt transfer products in the past, but was not certain if it was still doing so. (Id. at 271:9-12.)
- Stahls: Schwendimann testified that Stahls is a competitor. (Id. at 271:13-14.)

 At a minimum, Schwendimann conceded that Iya and Stahls are competitors in the dark

 T-shirt transfer market. Jendzejec-Blanchard also identified Neenah, Siser, One Step,

 Stahls, and Chemica as competitors of AACI, NuCoat, and Cooler Concepts. (Trial Tr.

 Vol. VI at 1181:8-1191:2.) Cobb also testified that he identified Stahls, Siser, and

 Chemica as competitors of AACI, NuCoat, and Cooler Concepts. (Trial Tr. Vol. VIII at

 1657:12-20.)

Other evidence established that there are other competitors beyond the four mentioned by Schwendimann. Hursh testified that the dark T-shirt transfer market is a "small niche industry," but that "there are certainly other manufacturers outside the United States." (Trial Tr. Vol. V at 924:21-926:9.) He later stated that "there [are] certainly a lot of brands" in the dark T-shirt transfer market but he was not sure "[w]here those brands source their product from." (Id. at 932:21-22.) In particular, Hursh testified that Forever GmbH and "any number of Chinese companies" manufacture dark T-shirt

transfer products that are sold "[w]orldwide, including the United States." (Id. at 933:24-934:7.) Jendzejec-Blanchard identified Upsilon Enterprises as a foreign competitor who manufactures dark T-shirt transfer products and sells them in the United States. (Trial Tr. Vol. VI at 1191:16-1192:6.) Cobb also identified various Chinese firms as "other manufacturers" who compete with AACI, NuCoat, and Cooler Concepts. (Trial Tr. Vol. VIII at 1657:12-20.)

To prepare a proper market analysis, Schwendimann had to present evidence showing (1) what percentage of the marketplace these competitors occupy, (2) that these competitors' products infringe Schwendimann's patents, or (3) that these competitor's products are not acceptable alternatives to Schwendimann's products. See Crystal Semiconductor Corp., 246 F.3d at 1355.

Beyond the identification of competitors, Schwendimann's own testimony also established that there must be some alternatives to Schwendimann's products. When AACI stopped producing dark T-shirt transfer products, Schwendimann tried to solicit the business of Roland, a former customer of AACI. (Trial Tr. Vol. II at 271:18-25.) Roland did not opt to purchase Schwendimann's products. Schwendimann did not know from which of her competitors Roland now purchases dark T-shirt transfer products. (Id. at 271:23-25 ("I mean, I don't know who has it now. I know that [Siser was] competing for it.").) Jendzejec-Blanchard testified that Roland began purchasing from Siser. (Trial Tr. Vol. VI at 1192:20-24.) Schwendimann did not present any evidence suggesting that the product Roland buys infringes her patents, acknowledging that she did not know which of her competitors' products infringed her patents. (Trial Tr. Vol. II at 270:5-8

("As far as who was infringing my patents, I couldn't tell you that.").) There is no evidence to suggest that Siser's products infringe Schwendimann's patents.

At a minimum, Schwendimann cannot argue that she is entitled to lost profits on 100% of AACI's infringing sales because she cannot establish that there is an absence of acceptable noninfringing alternatives. "[T]he presumption that all of the infringer's sales would have accrued to the patentee absent the infringement is unreasonable in the multicompetitor landscape, where presumably some portion of the infringer's sales would have accrued to competitors other than the patent holder itself." Fuji Photo Film Co. v. Jazz Photo Corp., 249 F. Supp. 2d 434, 454 (D.N.J. 2003) (citing State Indus., Inc. v. Mor-Flo Indus., Inc., 883 F.2d 1573, 1578 (Fed. Cir. 1989)). The testimony at trial established that there are numerous competitors in the dark T-shirt transfer market and that at least some of these competitors sell acceptable alternatives. In order for Schwendimann to claim lost profits on 100% of AACI's infringing sales, she had to prove that all of these competitors' products were not acceptable, noninfringing alternatives. She presented no evidence in support, and, as such, it was unreasonable for her to argue for lost profits on 100% of AACI's sales – particularly in light of evidence that at least one customer (Roland) opted to purchase from a competitor (Siser).

However, Schwendimann could still claim lost profits – on less than 100% of AACI's infringing sales – if she reconstructed the market and presented evidence about what percentage of her profits she would have earned had AACI never infringed. Schwendimann had the burden to reconstruct the market with sound economic proof. Crystal Semiconductor Corp., 246 F.3d at 1355. Schwendimann presented her evidence

of lost profits through the testimony of Gorowsky. (Trial Tr. Vol. V at 996:1-7.) The Court finds that Gorowsky's analysis did not sufficiently reconstruct the market.

First, Gorowsky failed to account for the fact that Schwendimann presented evidence that only one Neenah product infringed. Gorowsky testified that the dark T-shirt transfer market is primarily a three supplier market, including Schwendimann's companies, AACI, and Neenah. (Id. at 999:18-1000:14, 1045:5-11.) Gorowsky explained that AACI and Neenah are alleged infringers, and therefore Schwendimann would have received profits on 100% of those sales had it not infringed. (Id. at 1044:19-15) However, Williams only tested one of the two Neenah products alleged to infringe Schwendimann's patents. Gorowsky excluded Neenah from his calculations based on his belief that the Neenah products infringe Schwendimann patents. (Trial Tr. Vol. VI at 1075:5-1076:22.) Again, there is no evidence to allow a reasonable jury to draw the inference that the untested Neenah product infringes Schwendimann's patents. Gorowsky's analysis failed to explain what market share the untested Neenah product would have received.

Second, Gorowsky "didn't perform [an] investigation" to determine whether the alleged competitors were manufacturers or sellers. (Trial Tr. Vol. VI at 1079:2-7.) Schwendimann attempts to distinguish between companies that manufacture dark T-shirt transfer products and those selling them. But Schwendimann did not present any evidence about whether the identified competitors are manufacturers or sellers. Even if Schwendimann had presented this evidence, she still had the burden to reconstruct the market and prove that sellers – as compared to manufacturers – are not part of the market.

Both sellers and manufacturers sell to **someone**. Schwendimann had the burden to prove that – in the but-for world – profits from AACI's sales would not have gone to sellers because sellers do not occupy the same marketspace as AACI and Schwendimann.

Third and finally, Gorowsky acknowledged that Hursh identified Forever GmbH and numerous Asian companies as sellers of dark T-shirt transfer products in the United States, but stated "[Hursh] never did give testimony that they were a competitor or a serious competitor." (Id. at 1048:5-12.) The question is not whether these competitors were "serious competitors." These companies sell dark T-shirt transfer products and, therefore, Schwendimann had the burden to prove that these products are not acceptable, noninfringing alternatives or that these companies are not part of the same market as Schwendimann and AACI. Schwendimann had the burden to produce "sound economic proof of the nature of the market." Crystal Semiconductor Corp, 246 F.3d at 1355. Schwendimann and Gorowsky did nothing more than sweep aside these competitors without explanation as to why (1) they are so small as to be not in the market, (2) their products infringed, or (3) their products are not acceptable alternatives.

Schwendimann presented no evidence about market share and instead chose to rely on her argument that the dark T-shirt transfer market has three players and the other two players infringe Schwendimann's patents. Evidence did not support this argument. The Court concludes that Schwendimann did not meet her burden of satisfying the second Panduit factor.

The Court will deny Schwendimann's motion for a new trial on the issue of lost profits.

III. DAMAGES

AACI moves for numerous forms of relief from the jury's damages award. The Court will consider each argument in turn and will deny AACI's motions.

A. Motion to Amend Judgment

The Court must decide whether Schwendimann waived her right to a reasonable royalty and whether to amend the judgement accordingly. AACI argues that Schwendimann waived her right to any damages because she chose to argue only for lost profits and presented no argument with respect to a reasonable royalty. (Mem. Supp. Damages Mot. at 2, Nov. 20, 2017, Docket No. 733.) The Court will deny AACI's motion.

"When a party files a motion to amend the judgment or in the alternative to grant a new trial on the amount of damages awarded by a jury, 'the trial court determines whether the jury's verdict is against the clear or great weight of the evidence." Unisplay, S.A. v. Am. Elec. Sign Co., 69 F.3d 512, 517 (Fed. Cir. 1995) (quoting Standard Havens Prods. v. Gencor Indus., 953 F.2d 1360, 1367 (Fed. Cir. 1991)).

The patent-damages statute, 35 U.S.C. § 284, "is unequivocal that the district court must award damages in an amount no less than a reasonable royalty' when infringement is found." Promega Corp. v. Life Techs. Corp., 875 F.3d 651, 660 (2017) (quoting Dow Chem. Co. v. Mee Indus., Inc., 341 F.3d 1370, 1381 (Fed. Cir. 2003)). However, the Federal Circuit held in Promega that a patentee "expressly waived its rights to any award based on a reasonable royalty" when the patentee's counsel stated,

"Royalties? Don't want them. Wouldn't take them. Don't expect them." Id. Instead, the patentee there sought only lost profits. Id.

It is axiomatic that "waiver is the intentional relinquishment or abandonment of a known right." Hamer v. Neighborhood Housing Servs. of Chi., 138 S. Ct. 13, 17 n.1 (2017) (quoting United States v. Olano, 507 U.S. 725, 733 (1993)). And Promega applies only if the patentee **expressly** waives his or her right to a reasonable warranty. 341 F.3d at 1381.

The Court finds that Schwendimann did not expressly waive her right to a reasonable royalty. Throughout the entire case, both parties proceeded as though Schwendimann was seeking a reasonable royalty. First, in her Amended Complaint, Schwendimann asserted that she was entitled to "compensatory and exemplary damages, but not less than a reasonable royalty." (Am. Compl. at 12, May 21, 2015, Docket No. 264.) Second, AACI acknowledged in its opening statement that Schwendimann intended to argue for a reasonable royalty. (Trial Tr. Vol. I at 70:5-15, Nov. 27, 2017, Docket No. 760.) Third, Cobb testified that if AACI was found to infringe Schwendimann's patents, then she should receive a reasonable royalty in the amount of two percent. (Trial Tr. Vol VIII at 1686:9-17.) Fourth, at the charge conference – after the Court had granted judgment as a matter of law on the issue of lost profits -Schwendimann argued for certain instructions that were "relevant to a reasonable royalty requirement." (Trial Tr. Vol. IX at 1918:11-15.) Fifth, in its closing argument, AACI argued that the jury had to decide what constituted a reasonable royalty "for both parties." (Id. at 2048:2-4, 2071:13-2073:5.) Sixth and finally, in her closing argument,

Schwendimann explained the Georgia-Pacific factors and how the jury should consider them in determining Schwendimann's reasonable royalty. (Id. at 2120:7-2124:1.)

The Court acknowledges that Gorowsky did not offer any opinion on Schwendimann's reasonable royalty because he believed that the appropriate measure of damages was lost profits. (Trial. Tr. Vol. V. at 1032:17-25.) However, neither Schwendimann's conduct nor Gorowsky's testimony constitutes an express waiver of Schwendimann's right to a reasonable royalty; it is merely an acknowledgement that Gorowsky himself was not opining on the amount that Schwendimann should be awarded for a reasonable royalty.

The Court finds that Schwendimann consistently asserted her right to a reasonable royalty. Unlike the patentee in Promega, Schwendimann never made a statement asserting that she would refuse a reasonable royalty. While AACI consistently argued that Schwendimann had not presented any evidence of the amount that should be awarded as a reasonable royalty, AACI never argued at trial that Schwendimann had waived her right to a reasonable royalty. In both its opening and closing statements, AACI maintained that, if the jury found that AACI infringed Schwendimann's patents, Schwendimann should receive a reasonable royalty of two percent. Thus, AACI consistently argued as though Schwendimann was still seeking a reasonable royalty.

Accordingly, the Court concludes that Schwendimann did not "expressly waive" her right to a reasonable royalty. Promega Corp., 875 F.3d at 660.

B. New Trial

AACI argues that the Court should award it a new trial on three grounds. (Mem. Supp. Damages Mot. at 3.) First, AACI argues that the jury's damages award is excessive. Second, AACI argues that the Court's failure to instruct the jury regarding its dismissal of Schwendimann's lost-profits claim misled and had a probable effect on the jury. Third and finally, the Court's failure to exclude the expert testimony of Gorowsky impacted the jury and its verdict. The Court will deny AACI's motion on all three grounds.

1. Excessiveness of Jury Award

The Court must decide whether to award a new trial on the grounds that the jury's damages award is excessive and unsupported by the evidence. The Court will deny AACI's motion because the jury's damages award was supported by sufficient evidence.

Because the Court granted judgment of matter of law against Schwendimann on the issue of lost profits, Schwendimann was only entitled to a reasonable royalty. See Mentor Graphics, 851 F.3d at 1286. The Court must decide whether sufficient evidence supports the jury's implicit finding that AACI would have agreed to a royalty of \$2,624,288 in a hypothetical negotiation between the parties. See Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1325 (Fed. Cir. 2009). "Although this analysis necessarily involves an element of approximation and uncertainty, a trier of fact must have some factual basis for a determination of a reasonable royalty." Unisplay, S.A, 69 F.3d at 517. "A party challenging a jury's verdict on damages 'must show that the award is, in view of all the evidence, either so outrageously high or so outrageously low as to be

unsupportable as an estimation of a reasonable royalty." Powell v. Home Depot U.S.A., Inc., 663 F.3d 1221, 1238 (Fed. Cir. 2011) (quoting Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1554 (Fed. Cir. 1995) (en banc)).

The fifteen Georgia-Pacific factors are relevant to the determination of a reasonable royalty:

- 1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
- 2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
- 3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
- 4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
- 5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
- 6. The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
- 7. The duration of the patent and the term of the license.
- 8. The established profitability of the product made under the patent; its commercial success; and its current popularity.

- 9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.
- 10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.
- 11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.
- 12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
- 13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
- 14. The opinion testimony of qualified experts.
- 15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).

The Court instructed the jury on all fifteen Georgia-Pacific factors. (Jury Inst. No. 30,

Oct. 17, 2017, Docket No. 780.)

AACI argues that "the only evidence presented at trial was Cobb's opinion that a reasonable royalty for the Schwendimann Patents was 2% for a total of \$337,105 in damages." (Mem. Supp. Damages Mot. at 15, Nov. 20, 2017, Docket No. 733.) But AACI ignores that "the factual determination of a reasonable royalty, however, need not be supported, and indeed, frequently is not supported by the specific figures advanced by either party." SmithKline Diagnostics, Inc. v. Helena Labs. Corp., 926 F.2d 1161, 1167 (Fed. Cir. 1991). "On the contrary, the determination of a reasonable royalty must be based upon the entirety of the evidence and the [factfinder] is free to, indeed, must reject the royalty figures proffered by the litigants . . . where the record as a whole leads the [factfinder] to a different figure." Id. at 1168. The jury was free to reject AACI's proposed reasonable-royalty rate of 2%.

In the alternative, AACI argues that the jury's damages award "does not appear to be based on a reasonable royalty since it amounts" to obscure percentages. (Mem. Supp. Damages Mot. at 9.) As a threshold matter, AACI cites no authority requiring the jury to award a reasonable royalty based on a round number. But even then, AACI's inability to trace the jury's logic is unfortunate, because the Court can arrive at the \$2,624,288 damages amount with simple math.

The jury was presented with two sales figures by two different experts. Cobb testified that AACI made \$16,855,265 on sales of the infringing products. (Trial Ex. D0180, Nov. 20, 2017, Docket No. 750.) If the jury used Cobb's calculation of AACI's sales, the royalty rate amounts to 15.56918%. Gorowsky testified that AACI made \$17,005,828 on sales of the infringing products. (Trial Tr. Vol. V at 1010:10-13.) If the

jury used Gorowsky's calculation of AACI's sales, the rate comes to 15.43134%. This is what confuses AACI.

AACI assumes that the jury had to have agreed with either Cobb or Gorowsky, and disagreed with the other. Perhaps the jury found that the actual sales figure was somewhere between the figures proposed by Cobb and Gorowsky. A reasonable jury may have resolved this discrepancy by averaging the two sales figures, which results in a sales figure of \$16,930,546. The jury's damages award of \$2,624,288 is 15.5% of \$16,930,546. Although not required by law, the Court finds that 15.5% is a clean royalty rate that a jury could be reasonably expected to award Schwendimann for AACI's infringement.

The Court therefore must decide whether Schwendimann offered sufficient evidence related to the Georgia-Pacific factors and whether that evidence could have led a reasonable jury to award a reasonable royalty of \$2,624,288 or 15.5% of the averaged sales figures. The Court will conclude that sufficient evidence supports this award.

First, the jury heard evidence about "[t]he commercial relationship between the licensor and licensee, such as whether they are competitors in the same territory in the same line of business." Georgia-Pacific Corp., 318 F. Supp. at 1120. The testimony of Schwendimann and Hursh showed that AACI and Schwendimann are direct competitors in the dark T-shirt transfer market. (Trial Tr. Vol. II at 147:4-24; Trial Tr. Vol. V at 925:19-22.) A reasonable jury could have found that Schwendimann would have demanded a higher royalty because AACI and Schwendimann directly compete for the same customers.

Second, the jury heard evidence about "the utility and advantages," in addition to the "nature," "character," and "benefits," of ACT's one-step dark T-Shirt transfer compared to the two-step dark T-Shirt transfer products that antedated Schwendimann's invention. Georgia-Pacific Corp., 318 F. Supp. at 1120. Schwendimann explained that the two-step product was "very difficult to use." (Trial Tr. Vol. II at 102:23-103:3.) Nasser also explained that the two-step product was more expensive to manufacture and therefore more expensive for consumers. (Trial Tr. Vol. III at 400:14-401:1.) Schwendimann's one-step dark T-Shirt transfer was designed to eliminate these disadvantages to the two-step products. Schwendimann explained that her one-step dark T-Shirt transfer product was designed to make transfers "oops proof." (Trial Tr. Vol. II at 103:17-25.) Nasser testified that the one-step product was better because it "stretched and gives you a better feel versus the [two-step product] that's stiff because you have two layers." (Trial Tr. Vol. III at 399:19-401:4.) A reasonable jury could have found that Schwendimann's patented one-step dark T-shirt transfer invention was greatly advantageous compared to the two-step product and, therefore, worth a higher royalty.

Third and finally, the jury heard evidence about the profitability of both AACI and Schwendimann's dark T-shirt transfer products. See Georgia-Pacific, 318 F. Supp. at 1120. "While either the infringer's or the patentee's profit expectation may be considered in the overall reasonable royalty analysis, neither is an absolute limit to the amount of the reasonable royalty that may be awarded upon a reasoned hypothetical negotiation analysis under the Georgia-Pacific factors." Powell, 663 F.3d at 1238-39 (citation omitted). Gorowsky and Cobb testified that AACI sold about \$17 million worth

of the infringing product during the damages period. (Trial Tr. Vol. V at 1010:10-13; Trial Tr. Vol. VI at 1728:3-11.) According to Gorowsky, AACI made about \$8.1 million in gross profit on the sales of the infringing products. (Trial Tr. Vol. V at 1011:15-1012:4.) According to Cobb, AACI made a profit margin of 67% on the 888 product and a profit margin of 43% on the 889 product. (Trial Tr. Vol. VIII at 1724:24-1726:22.) A royalty rate of 15.5% is both (1) less than half the profit margins of AACI's products and (2) reasonable in light of these profit margins.

Accordingly, the Court concludes that sufficient evidence supported the Georgia-Pacific factors and a reasonable jury could have awarded Schwendimann a reasonable royalty of \$2,624,288.

The Court has no reason to believe that the jury awarded Schwendimann lost profits. The jury awarded \$2,624,288, which is significantly less than the \$6.7 million in lost profits that Schwendimann requested. In addition, at closing arguments, AACI informed the jury that the Court had dismissed Schwendimann's claim for lost profits. (Trial Tr. Vol. IX at 2047:17-2048:1.) And, the jury's award is exactly 15.5% of AACI's sales. AACI's argument that the jury actually awarded Schwendimann lost profits is unavailing.

In sum, the Court concludes that the jury's damages award was supported by sufficient evidence. The Court will deny AACI's request for a new trial on this ground.

2. Jury Instruction on Lost Profits

The Court must decide whether to award AACI a new trial because the Court did not instruct the jury on the dismissal of Schwendimann's lost-profits claim. The Court

will deny AACI's motion because it was not erroneous to exclude the proposed instruction and AACI was not prejudiced by the exclusion of the proposed instruction.

The Court need not "give every proposed instruction as long as the court adequately presents the law and the issues to the jury." Fleming v. Harris, 39 F.3d 905, 907 (8th Cir. 1994). When a party moves for a new trial on the basis of failure to give a proposed instruction, the failure to give the instruction must have seriously impaired the party's ability to present an effective case (i.e., must have resulted in prejudice) in order for the Court to grant the motion. See Cox v. Dubuque Bank & Tr. Co., 163 F.3d 492, 497 (8th Cir. 1998). For three reasons, the Court will conclude that AACI's case was not prejudiced by the exclusion of the proposed instruction informing the jury that the Court had dismissed Schwendimann's lost-profits claim.

First, the Court's instructions properly reflected the law and issues with respect to damages. The Court instructed the jury that, if it found AACI infringed Schwendimann's patents, it was to award Schwendimann "adequate compensation, no less than a reasonable royalty." (Jury Inst. No. 28.) The Court's instructions defined "reasonable royalty" and enumerated all fifteen of the Georgia-Pacific factors. (Jury Inst. No. 29-30.) The Court's instructions on damages were limited to the law and issues related to a reasonable royalty. Nothing in the Court's instructions permitted the jury to award lost profits. The Court adequately presented the law and the relevant issues on damages to the jury. Fleming, 39 F.3d at 907.

Second, AACI informed the jury in its closing argument that the Court had dismissed Schwendimann's lost-profits claim. (Trial Tr. Vol. IX 2047:18-25 ("[T]he

court has determined that Ms. Schwendimann is not entitled to lost profits. You are not going to be awarding Ms. Schwendimann her lost profits.").) The Court's refusal to give the proposed instruction did not prevent AACI from arguing to the jury that the Court had dismissed Schwendimann's claim for lost profits. See Cox, 163 F.3d at 497. Therefore, the jury was informed that the Court had dismissed Schwendimann's lost-profits claim.

Third and finally, the proposed instruction would not have affected the jury's verdict. As the Court discussed above, the jury awarded Schwendimann a reasonable royalty and that award was supported by sufficient evidence. With or without the proposed instruction, the jury could not – and did not – award Schwendimann lost profits. The Court concludes that AACI was not prejudiced by the exclusion of the proposed instruction.

The Court concludes that it did not err in refusing to instruct the jury on the dismissal of Schwendimann's lost-profits claim and, accordingly, will deny AACI's request for a new trial on this ground.

3. Exclusion of Gorowsky

The Court must decide whether to award AACI a new trial because the Court did not exclude the testimony of Gorowsky. The Court will deny AACI's motion because the exclusion of Gorowsky's testimony would not produce a different result.

The exclusion of Gorowsky's testimony was a significant issue throughout this case. On December 12, 2016, the Court denied AACI's motion for summary judgment on the issue of lost profits. Summary Judgment Order, 220 F. Supp. 3d at 972-75. At issue was whether Schwendimann could establish that her companies' profits "flowed

inexorably" to her. Id. at 973. The Court concluded that Schwendimann could not rest on NuCoat's and Cooler Concept's tax statuses and must present "contractual, structural, or historical" evidence to demonstrate that the companies' profits in fact flowed inexorably to Schwendimann. Id. at 974-75.

On February 14, 2017, the Court denied AACI's motion to exclude Gorowsky's testimony on lost profits. (Mots. Hr'g Tr. at 42:7-18, Feb. 14, 2017, Docket No. 446.) Again, the Court warned Schwendimann that it would exclude Gorowsky's testimony on lost profits if Gorowsky did not support his conclusion of inexorable flow with "contractual, structural, historical evidence." (Id. at 41:24-42:6.) The Court also concluded that Gorowsky's opinions with respect to noninfringing alternatives were not "so fundamentally unsupported as to warrant exclusion" and that AACI's challenge was "really to the factual basis of his opinion" and more suited for cross-examination. (Id. at 42:7-18.) But the Court cautioned: "I think there is a proper concern over whether Schwendimann can meet her legal burden regarding the second Panduit factor, but I think that the challenges to the factual basis of his opinions generally go to the weight of the testimony, rather than the admissibility." (Id.)

On September 25, 2017, the Court denied AACI's motion in limine to exclude Gorowsky's testimony about whether the profits from Schwendimann's companies inexorably flow to Schwendimann. Motions in Limine Order, 2017 WL 4277142, at *4. Again, the Court warned "Schwendimann that she must produce contractual, structural, historical evidence showing that her companies' profits inexorably flow to her lest she risk dismissal of her theory of lost profit damages." Id.

Trial commenced. Just before Gorowsky took the stand, AACI moved once again to exclude his testimony. AACI moved for exclusion of Gorowsky's testimony exclusively on the basis that Schwendimann had not presented sufficient evidence to establish inexorable flow. (Trial Tr. Vol. V at 971:5-22.) At trial, AACI **did not** move to exclude Gorowsky's testimony on the grounds that he failed to adequately address acceptable, noninfringing alternatives. The Court denied the motion, reasoning that there was sufficient evidence to "at least raise a jury question depending . . . on what Mr. Gorowsky testifies to in his examination." (Id. at 975:10-21.)

After Schwendimann rested, AACI moved for judgment as a matter of law on the issue of lost profits on two grounds: (1) insufficient evidence that the profits inexorably flowed to Schwendimann and (2) insufficient evidence about the absence of acceptable, noninfringing alternatives. (Mem. in Supp. of AACI's Mot. for J. as a Matter of L. at 23-34, Oct. 13, 2017, Docket No. 638.) The Court concluded that there was sufficient evidence for a jury to make a determination that Schwendimann's profits flowed inexorably to her. (Trial Tr. Vol. VIII at 1836:1-6.) However, the Court concluded that there was insufficient evidence concerning the absence of acceptable, noninfringing alternatives because Schwendimann needed to introduce evidence of a market reconstruction to demonstrate what percentage of profits she would have received. (Id. at 1836:11-25.)

Now, AACI argues that the Court should have either (1) excluded Gorowsky's testimony on lost profits for his failure to reconstruct the market and account for noninfringing alternatives, or (2) instructed the jury to disregard Gorowsky's testimony.

(Mem. Supp. Damages Mot. at 18.) The Court concludes that it did not err in either respect.

First, the Court did not err by refusing to instruct the jury to disregard Gorowsky's testimony. As demonstrated before, Gorowsky's testimony was still relevant to the jury's reasonable-royalty determination because his testimony examined a number of the Georgia-Pacific factors. See Georgia-Pacific Corp., 318 F. Supp. at 1120. In particular, the profitability of the invention is one factor the jury can consider in deciding to award a reasonable royalty. Id. The jury might have been confused about which portions of Gorowsky's testimony it could permissibly consider if the Court had instructed it to disregard the portions of his testimony that went to Schwendimann's lost-profits claim. The Court did not err in refusing to give this instruction.

Second, the Court did not err by failing to exclude Gorowsky's testimony. Gorowsky's testimony was relevant, based on his expertise, based on sufficient facts, and the result of reliable methods and principles. See Fed. R. Evid. 702. The Court dismissed Schwendimann's lost-profits claim because her entire case – not just Gorowsky's testimony – demonstrated a failure to meet her burden on the issue of lost profits. Moreover, when AACI moved in limine and again at trial to exclude Gorowsky's testimony, it only did so on the grounds that Gorowsky had not presented sufficient evidence to establish inexorable flow. Motions in Limine Order, 2017 WL 4277142, at *4; (Trial Tr. Vol. V at 971:5-22). AACI did not renew its evidentiary objections on the grounds that Gorowsky failed to adequately address acceptable, noninfringing alternatives.

Third and finally, even if the Court erred in admitting the Gorowsky's testimony, the failure to exclude his testimony was not inconsistent with substantial justice. Harris, 506 F.3d at 1138. The Court dismissed Schwendimann's lost-profits claim. The Court has concluded that the jury did not award Schwendimann lost profits and awarded her only a reasonable royalty. And finally, AACI explained to the jury why they should discount Gorowsky's testimony:

[Gorowsky] only offered lost profits. He gave you no evidence, no guidance on what a reasonable royalty was. He was asked what's a more appropriate measure of damages, lost profits or royalties. He said lost profits. The court has disagreed. His testimony is irrelevant to what you have to decide, which is a reasonable royalty.

(Trial Tr. Vol. IX at 2071:13-20 (emphasis added).) The Court concludes that the exclusion of Gorowsky's testimony would not have resulted in a different damages award.

Because the Court finds AACI's three arguments unpersuasive, the Court will deny AACI's motion for a new trial.

C. Remittitur

The Court must decide whether to remit the jury's damages award to \$337,105. A district court should order remittitur "only when the verdict is so grossly excessive as to shock the conscience of the court." Eich v. Bd. of Regents for Cent. Mo. State Univ., 350 F.3d 752, 763 (8th Cir. 2003) (quoting Ouachita Nat'l Bank v. Tosco Corp., 716 F.2d 485, 488 (8th Cir. 1983)). The Court has concluded that the jury's damages award was not excessive. Accordingly, the Court will deny AACI's motion for remittitur.

IV. WILLFUL INFRINGEMENT AND ENHANCED DAMAGES

Both parties bring a motion with respect to the jury's finding of willful infringement. Schwendimann moves for an award of enhanced damages in light of the jury's finding of willful infringement. After considering the totality of the circumstances, the Court will deny Schwendimann's motion. AACI moves for judgment as a matter of law or, in the alternative, a new trial on willful infringement. Because the Court will deny Schwendimann's motion and decline to award her enhanced damages, the Court will deny AACI's motion as moot.

A. Enhanced Damages

The Court will first consider – in light of all the evidence and the jury's finding of willful infringement – whether to award Schwendimann enhanced damages. The Court will decline to award enhanced damages in this case.

The Court "may increase the damages up to three times the amount found or assessed." 35 U.S.C. § 284. Enhanced damages are "designed as a 'punitive' or 'vindictive' sanction for egregious infringement behavior." Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923, 1932 (2016). "The sort of conduct warranting enhanced damages has been variously described... as willful, wanton, malicious, bad-faith, deliberate, consciously wrong, flagrant, or – indeed – characteristic of a pirate." Id. Importantly, "[e]nhanced damages are generally only appropriate in **egregious cases** of misconduct." Presidio Components, Inc. v. Am. Tech. Ceramics Corp., 875 F.3d 1369, 1382 (Fed. Cir. 2017).

The decision to award enhanced damages is committed to the court's discretion. Halo Elecs., 136 S. Ct. at 1934-35. In deciding whether to award enhanced damages, the court considers "the particular circumstances of the case to determine whether it is egregious." Presidio Components, 875 F.3d at 1383. Even in cases where the jury finds willful infringement, a court is not required to award enhanced damages. Id. at 1382.

Courts traditionally examine the Read factors in deciding whether to award enhanced damages:

- 1. Whether the infringer deliberately copied the ideas or design of another;
- 2. Whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed;
- 3. The infringer's behavior as a party to the litigation;
- 4. Defendant's size and financial condition:
- 5. Closeness of the case;
- 6. Duration of defendant's misconduct:
- 7. Remedial action by the defendant;
- 8. Defendant's motivation for harm; and
- 9. Whether defendant attempted to conceal its misconduct.

Read Corp. v. Portec, Inc., 970 F.2d 816, 827 (Fed. Cir. 1992). The Read factors are "non-exclusive," but provide a structure to the Court's analysis. Georgetown Rail Equip. Co. v. Holland L.P., 867 F.3d 1229, 1244-45 & n.6 (Fed. Cir. 2017).

Several of the Read factors relate to issues "that were not before the jury and/or which the jury would not have been in a position to assess." Idenix Pharms. LLC v.

Gilead Scis., Inc., 271 F. Supp. 3d 694, 697 (D. Del. 2017). "Therefore, it is entirely appropriate, even required, for the Court to consider – based on its extensive familiarity with the entire course of this case, as well as what it observed a trial – where, notwithstanding the jury's verdict in favor of [Schwendimann], substantial contrary evidence was presented by [AACI]." Id. Certainly, the Court cannot substitute its factual determination for a jury's willfulness finding. Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc., 265 F.3d 1294, 1311 (Fed. Cir. 2001). However, this does not prevent the Court from "observing where, as the case may be, there was also substantial evidence presented by the willful infringer, where the jury may have made findings that were not supported by the record, and where the jury heard no evidence and cannot be presumed to have made a particular finding." Idenix Pharms., 271 F. Supp. 3d at 697.

1. Copying

First, the Court considers whether AACI deliberately copied Schwendimann's products. See Read Corp., 970 F.2d at 827. Throughout her motion, Schwendimann conflates the conduct of Arkwright, Inc., and AACI. For example, Schwendimann states, "On Thanksgiving 2000, AACI had a potential customer, Avery, demanding a dark fabric transfer product by March 1, 2001." (Pls.' Mem. Supp. Enhanced Damages Mot. at 11, Nov. 20, 2017, Docket No. 745.) This 2000 deal was between Arkwright and Avery, not AACI and Avery. (Trial Tr. Vol. III at 508:16-22 ("[Avery] obviously [was] anxious to get into the market, so at that point they decided to choose Arkwright.")). For reasons the Court will explain, this distinction is important to determining whether **AACI** knowingly copied Schwendimann's products.

Schwendimann claims that Arkwright reverse engineered samples of her products, which Arkwright obtained from Avery, in order to produce dark T-shirt transfer products for Avery. (Mem. Supp. Enhanced Damages Mot. at 11.) Indeed, Arkwright had facilities able to reverse engineer a competitor's dark T-shirt transfer products, and had reverse engineered other products in the course of developing their own products. (Trial Tr. Vol. VI at 1219:9-15.) Schwendimann testified that she provided Avery samples of ACT's products in 1999. (Trial Tr. Vol. II at 160:3-12.) Schwendimann failed to obtain Avery's business for dark T-shirt transfer products. (Id. at 160:13-15.) Frank Shea testified that, in 2001, Arkwright began selling its dark T-shirt transfer product to Avery. (Trial Tr. Vol. III at 507:6-25.)

What Schwendimann lacks is evidence that Avery provided "Schwendimann's samples to Arkwright to show Arkwright what Avery was looking for in a product." (Mem. Supp. Enhanced Damages Mot. at 11.) Schwendimann herself testified that she lacked this evidence. When asked whether she had evidence of whether AACI copied her product, Schwendimann answered, "No." (Trial Tr. Vol. II at 226:9-10.) Schwendimann explained, "Well, I don't have evidence that they got samples and tested it and copied it." (Id. at 226:13-16.)

Schwendimann misrepresents portions of Shea's testimony to make it appear as though Avery first approached Arkwright about developing a dark T-shirt transfer product. (Id. at 11 ("Avery had asked Arkwright to develop a dark transfer product on

Thanksgiving of 2000.")).¹ In fact, Shea testified that Arkwright approached Avery first with "product development samples and talked to them about the potential to supply it to them." (Trial Tr. Vol. III at 508:15-22.) When asked whether Arkwright was working "to actually fulfill and start providing [Avery] with product" or whether it was to "be able to show them a product that you could receive orders for," Shea testified, "No. We had already showed [Avery]." (Id. at 507:6-12.)

Shea consistently testified that Arkwright approached Avery with samples first, and then Avery chose to purchase from Arkwright. It is true that Avery demanded that Arkwright **produce** the product faster than expected, but Shea's testimony makes clear that Arkwright had **developed** the product before engaging with Avery.² Contrary to Schwendimann's argument, Shea's testimony does not suggest that Avery approached Arkwright about **developing** a dark T-shirt transfer product. In fact, Shea corrected the attorney each time he tried to imply that Arkwright had developed its product specifically for Avery.³ Additionally, Shea did not know whether Avery had discussed purchasing its products from ACT. (Id. at 508:25-509:7.)

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¹ Schwendimann goes so far as to get the date wrong. Frank Shea testified that Avery called him the day **after** Thanksgiving. (Trial Tr. Vol. III at 508:1-6 ("I remember being called the day after Thanksgiving, and I was in my laundry room, and they just caught me, someone from Avery; and they said, we need it by the 1st of March. Can you do it?").)

² "Typically, the way it works is the marketer to the retailers had slots where they could introduce new products, and [Avery] had an opening, and they were very satisfied with the quality of the product, and they asked for it to be developed a little faster than we would have liked to." (Trial Tr. Vol. III at 501:15-24.)

³ The transcript is replete with examples, but the Court will highlight two:

Schwendimann testified that the only evidence she has that Arkwright copied her product is that Arkwright's products and her products have a similar structure. (Trial Tr. Vol. II at 226:9-16.) The Court agrees that the products are similar. Even products dissimilar from a patentee's commercial embodiment of the patent can still infringe the patent. But it is not surprising that in cases involving a relatively simple device, where function is more important than form, that two independently designed products would necessarily be similar. This is true in many "typical infringement case[s]." See Halo Elecs., 136 S. Ct. at 1932. As all of the experts and inventors testified at trial, dark T-shirt transfer products are relatively simple and require specific chemical compositions to

Q. Once this CTM 60 product was transferred over to Arkwright and Arkwright made its changes to the product to go to the market to meet Avery's needs –

A. Well, the market's needs.

(Trial Tr. Vol. III at 511:4-7.)

Q. Okay. And now, you talked about this product development need to go faster than a nine-month time frame because Avery had a retail commitment?

A. Well, no. At the end of the – that happened at the end, but we were very anxious to get the product developed, so we pushed really hard to get the product developed quickly. And then we had a customer requirement that made it even go faster. So I was it was at a fast pace either way.

Q. Okay. And, you know, this period of time that, you know, you were working to meet Avery's needs, was that to actually fulfill and start providing them with product or be able to show them a product that you could receive orders for?

A. No. We had already showed them.

(Id. at 506:22-507:11.)

work properly. Therefore, the Court finds it unsurprising that AACI's products were similar to Schwendimann's products and does not believe this circumstantial evidence is a strong indicium of copying, if even one at all.

The Court finds that Schwendimann has not presented persuasive evidence – at least for purposes of assessing the amount to award in enhanced damages – that Arkwright copied Schwendimann's products.

In order to show that **AACI** copied her products, Schwendimann also needed to prove that (1) AACI knew that Arkwright copied and (2) AACI acted willfully in continuing to produce the copied product. AACI acquired Arkwright's product lines, including the 888 and 889 products at issue in this case. (Trial Tr. Vol. VI at 1164:1-4; 1279:16-20.) Many of Arkwright's research-and-development employees became AACI employees. (Id. at 1280:4-15.) However, the Court struggles to impute knowledge of copying to AACI without more persuasive evidence that Arkwright actually copied Schwendimann's products in the first place.

For purposes of assessing enhanced damages, the Court finds Schwendimann's main argument of copying tenuously founded on speculation about a hidden agreement between Avery and Arkwright. Schwendimann presented no evidence – not even circumstantial evidence – that such a nefarious exchange occurred. Ignoring Schwendimann's pure speculation, the evidence presented at trial suggests that Arkwright was nothing more than a market participant engaged in standard production bidding. Moreover, the evidence suggests that Arkwright developed its product before marketing it to Avery, contrary to Schwendimann's speculative argument. Accordingly, the Court

will exercise its discretion and accord little weight to the evidence of copying in deciding whether to award enhanced damages.

2. Investigation

Second, the Court considers whether AACI investigated the scope of the patent and formed a good-faith belief that its products did not infringe Schwendimann's patents. Read Corp., 970 F.2d at 827.

Schwendimann cites long-overturned precedent for this Read factor. Schwendimann argues that, "the law imposes an affirmative duty of due care to avoid infringement of the known patent rights of others" and that "this duty includes seeking and obtaining competent legal advice before engaging in activity that may result in infringement." Electro Med. Sys., S.A. v. Cooper Life Scis., Inc., 34 F.3d 1048, 1056 (Fed. Cir. 1994). In 2007, the Federal Circuit "abandon[ed] the affirmative duty of due care" and "reemphasize[d] that there is no affirmative obligation to obtain opinion of counsel." In re Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc), abrogated on other grounds by Halo Elecs., 136 S. Ct. 1923.

AACI did not seek the opinion of counsel to determine whether its products infringed Schwendimann's patents. (Trial Tr. Vol. V at 924:1-4.) However, AACI did not have affirmative obligation to obtain such an opinion. See Seagate, 497 F.3d at 1371.

As part of its acquisition of Arkwright, AACI's technical team investigated whether the products being purchased infringe Schwendimann's patents. (Id. at 923:12-21.) Ultimately, AACI's technical team concluded that its products did not infringe Schwendimann's patents. (Id.; Tr. Trial Vol. VI at 1200:11-14.) At least one other court

has found that enhanced damages are not warranted when the infringer undertook a technical evaluation without the assistance of counsel – even when the jury's award topped \$2.5 billion. Idenix Pharms., 271 F. Supp. 3d at 699-700 (finding investigation was sufficient where inventor instructed chemists to examine the patents and develop an invention that fell outside the patent, and declining to enhance the jury's \$2.54 billion award).

Certainly it is more prudent to rely on a patent lawyer's noninfringement opinion than an engineer's. However, AACI conducted **some** due diligence to ascertain whether its products infringed Schwendimann's patents. Failure to seek the advice of patent counsel might have been ill-advised, but the Court cannot conclude that it is an "egregious case[] of misconduct." Presidio Components, Inc., 875 F.3d at 1382. The Court concludes that AACI's investigative efforts, or insufficiency thereof, does not weigh in favor of enhanced damages.

3. Behavior During Litigation⁴

Third, the Court considers AACI's behavior as a party to this litigation. Read Corp., 970 F.2d at 827.

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⁴ The Supreme Court's decision in Halo suggests that the infringer's **litigation** conduct is not an appropriate factor to consider in deciding whether to award enhanced damages. 136 S. Ct. at 1937 (Breyer, J., concurring) ("[E]nhanced damages may not 'serve to compensate patentees' for infringement-related costs or litigation expenses. That is because § 284 provides for the former prior to any enhancement. And a different statutory provision, § 285, provides for the latter." (citations omitted) (citing Octane Fitness, LLC v. ICON Health & Fitness, Inc., 134 S. Ct. 1749, 1756 (2014))). Even if the Court did not consider AACI's litigation conduct, it would not award Schwendimann enhanced damages.

The Court already considered AACI's behavior in the Court's order denying attorney fees. Attorney Fees Order, 2018 WL 1041038, at *1. The Court concluded that "Schwendimann vastly overstate[d] the nature of the facts that she contend[ed] constitute egregious litigation conduct." Id. The Court also concluded that AACI presented meritorious defenses that resulted in a grant of summary judgment with respect to infringement of the '093 Patent. Id. at *2. In the end, the Court concluded that "[b]oth parties engaged in excessive motion practice, dilatory tactics, and histrionic argumentation" and that "[b]oth parties are at fault for the length of litigation." Id. at *2.

The Court finds Schwendimann's allegations that AACI's arguments were "a blatant lie" and that AACI "ignored Court orders" ironic in light of Schwendimann's recent post-trial conduct. (See, e.g., Order at 2 n.1, Feb. 27, 2018, Docket No. 879.)

In sum, both parties papered the Court with frivolous and misleading arguments. Although the Court is evaluating AACI's litigation conduct, AACI's conduct was no more egregious – if not less – than Schwendimann's. The Court concludes that AACI's litigation conduct does not weigh in favor of enhanced damages.

4. Defendant's Size and Financial Condition

Fourth, the Court considers AACI's size and financial condition. Read Corp., 970 F.2d at 827. Generally, this factor weighs against an award of enhanced damages. See Idenix Pharms., 271 F. Supp. 3d at 701. For example, in Virginia Panel Corp. v. Mac Panel Co., the court awarded a very small enhanced damages award after concluding that "a large enhancement of damages could drive [the infringer] out of business" and "could

be equivalent to an organizational death sentence." 887 F. Supp. 880, 885 (W.D. Va. 1995).

AACI's financial condition appears to be grave. AACI has not been profitable since 2008. (Trial Tr. Vol. at VII 1329:7-10.) In 2015, AACI suffered a net loss of more than \$1 million. (Id. at 1329:4-6.) As a result of its financial condition, AACI is "not creditworthy" and "cannot get outside financing." (Id. at 1329:12-15.) AACI had 181 employees in 2008, but now has only 60. (Id. at 1328:16-23.) AACI is a small company in financial decline. As such, the Court finds that AACI does not have the financial wherewithal to pay enhanced damages. The Court concludes that AACI's size and financial condition weighs against awarding enhanced damages.

5. Closeness of the Case

Fifth, the Court considers the closeness of the case. Read Corp., 970 F.2d at 827. Schwendimann is correct that the jury found for her on every issue. But the Court finds that both parties took strong positions on the various issues raised with respect to invalidity, infringement, and damages. See Power Integrations, Inc. v. Fairchild Semiconductor *Int'l, Inc.*, No. 09-5235, 2017 WL 130236, at *4 (N.D. Cal. Jan. 13, 2017). "[N]early every aspect of this case was 'close' in the sense that it easily could have gone the other way." Idenix Pharms., 271 F. Supp. 3d at 701; see also Attorney Fees Order, 2018 WL 1041038, at *2. And AACI presented a number of meritorious motions and convincing arguments. AACI secured a grant of summary judgment of infringement by Schwendimann of its '093 patent. Summary Judgment Order, 220 F.

Supp. 3d at 962-63. AACI also secured a grant of judgment as a matter of law on Schwendimann's lost-profits claim. (Trial Tr. Vol. IX at 1917:2-23.)

In particular, the willful-infringement issue was close. (Trial Tr. Vol. VIII at 1835:22-25 (describing the issue of willful infringement as "somewhat close"). The Court acknowledges that it failed to consider the exclusion of evidence of copying under Federal Rule of Civil Procedure 37(c)(1) and, therefore, the Court finds that the willful-infringement issue is far closer upon post-trial review than when the Court denied AACI's original motion for judgment as a matter of law at trial. (Compare AACI's Mem. Supp. Mot. in Limine at 3-4, Sept. 6, 2017, Docket No. 504 (moving to exclude copying evidence under Rule 37), with Motions in Limine Order, 2017 WL 4277142, at *7 (considering exclusion of copying evidence only under Fed. R. Evid. 401 and 403).) The Court concludes that the closeness of the willfulness issue alone is a reason to deny enhanced damages.

The Court finds that the closeness of the case weighs against awarding enhanced damages.

6. Length of Infringement

Sixth, the Court considers the length of AACI's infringement. Read Corp., 970 F.2d at 827. The Court finds that the length of infringement in this case is longer than in many other cases in which enhanced damages were awarded. See, e.g., Saint-Gobain Autover USA, Inc. v. Xinyi Glass N. Am., Inc., 707 F. Supp. 2d 737, 754 (N.D. Ohio 2010) (awarding enhanced damages where defendant infringed for more than two years after learning of the asserted patents). The Court acknowledges that AACI believed that

it was not infringing Schwendimann's patents during this period. (Trial Tr. Vol. V at 923:12-21; Trial Tr. Vol. VI at 1200:11-14.) However, because the period of infringement was so long, the Court concludes that this factor weighs slightly in favor of awarding enhanced damages.

7. Remedial Action Taken by AACI

Seventh, the Court considers whether AACI took remedial action to avoid infringement. Read Corp., 970 F.2d at 827. AACI made no efforts to remedy its infringement. However, AACI proceeded on the belief that its products did not infringe Schwendimann's patents. (Trial Tr. Vol. V at 923:12-21; Trial Tr. Vol. VI at 1200:11-14.) Moreover, AACI ceased selling the infringing products during litigation. (Trial Tr. Vol. VII at 1334:1-2; 1338:8-10.) The Court concludes that this factor weighs in favor of awarding enhanced damages, but only nominally.

8. Motivation for Harm

Eighth, the Court considers whether AACI was motivated to harm Schwendimann.

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

Schwendimann primarily argues that AACI's copying of her products shows that it was motivated to harm her. Again, the Court finds the evidence of copying unconvincing. Schwendimann's best evidence of motivation to harm is AACI's threat that it has "no sense of cost" and that litigation would cost "upwards to a million dollars for both parties." (Trial Tr. Vol. I at 179:10-20.) These comments do not indicate that AACI was motivated to harm Schwendimann **by infringing her patents**. Taken in context, the Court understands these statements as strong-arm puffery aimed at forcing

Schwendimann into settlement negotiations. Without additional evidence of motivation to harm, the Court will not credit Schwendimann's arguments that AACI had a motivation to harm her companies.

Traditional evidence demonstrating motivation to harm is not present in this case. As other courts have noted, the line between competitive behavior and motivation to harm is elusive. Power Integrations, 2017 WL 130236, at *5. Evidence at trial suggested that AACI and Schwendimann sold their products at similar prices. (Trial Tr. Vol. V at 1015:10.); cf. Saint-Gobain Autover, 707 F. Supp. 3d at 755 (awarding enhanced damages where defendant significantly undercut plaintiff's prices). The only motive of AACI's that Schwendimann has shown is profit. See Idenix Pharms., 271 F. Supp. 3d at 702. "[T]he fact that the infringer acted pursuant to a financial motive does not distinguish this case from the garden-variety infringement case." Sprint Commc's Co. v. Time Warner Cable, Inc., No. 11-2686, 2017 WL 978107, at *14 (D. Kan. Mar. 14, 2017). "Simply because a company seeks to gain a business advantage,' however, 'does not mean that the company has a "motivation to harm."" Power Integrations, 2017 WL 130236 at *5 (quoting Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 762 F. Supp. 2d 710, 724 (D. Del. 2011), vacated on other grounds, 711 F.3d 1348 (Fed. Cir. 2013)). The Court finds that there is no evidence that AACI was motivated by a desire to harm Schwendimann.

The Court concludes that this factor weighs against awarding enhanced damages.

9. Concealment

Ninth and finally, the Court considers whether AACI concealed its infringement. Read Corp., 970 F.2d at 827. The Court finds Schwendimann's argument on this point unpersuasive because she conflates the third and ninth Read factors. Having reviewed the record, the Court finds no evidence that AACI attempted to conceal its infringement. Accordingly, the Court concludes that this factor weighs against awarding enhanced damages.

Having considered the totality of the circumstances, the Court concludes that AACI has not behaved as a "wanton and malicious pirate." Seymour v. McCormick, 57 U.S. 480, 488 (1853) (cited in Halo Elecs., 136 S. Ct. at 1932). This is nothing more than a "typical infringement case." Halo Elecs., 136 S. Ct. at 1932. In making this determination, the Court finds (1) Schwendimann's evidence of copying was speculative; (2) AACI conducted a technical investigation and relied on that investigation in determining that it did not infringe; (3) both parties behaved in a similar manner throughout litigation; (4) AACI does not have the financial stability to afford enhanced damages; (5) the issues in this case – particularly willful infringement – were close; (6) there is no evidence that AACI was motivated to harm Schwendimann; and (7) there is no evidence that AACI sought to conceal its infringement. The Court acknowledges that (1) the length of infringement and (2) AACI's failure to take remedial action weigh slightly in favor of awarding some enhanced damages. However, considering the totality of the circumstances, the Court finds that these factors matter little for the Court's

determination. Accordingly, the Court will exercise its discretion to not award enhanced damages.

B. Judgment as a Matter of Law and New Trial

The Court must decide whether to grant AACI judgment as a matter of law or a new trial on the issue of willful infringement. A court's denial of enhanced damages renders a motion for judgment as a matter of law on willful infringement moot. See Laitram Corp. v. NEC Corp., 115 F.3d 947, 955 (Fed. Cir. 1997). "[A]ssuming a lawful verdict of willfulness, whether or not [AACI's] infringement was indeed willful cannot affect the amount of damages awarded to [Schwendimann]." Id. Accordingly, the Court will deny as moot AACI's motion.

V. PREJUDGMENT INTEREST

The Court must decide how much prejudgment interest to award Schwendimann.

"[P]rejudgment interest should ordinarily be awarded under [35 U.S.C.] § 284." Gen. Motors Corp. v. Devex Corp., 461 U.S. 648, 657 (1983). "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." Id. at 655. The Court has "wide latitude in the selection of interest rates." Uniroyal, Inc. v. Rudkin-Wiley Corp., 939 F.2d 1540, 1545 (Fed. Cir. 1991). Section 284 does not specify the interest rate to be used, and "[a] variety of rates have been utilized by courts in patent cases, including statutory rates set by state statutes, the U.S. Treasury bill rate, the prime rate, the prime rate plus a percentage, and a rate on borrowed funds." Global Traffic Techs. LLC v. Emtrac Sys., Inc., 2014 WL 1663420, at

*15 (D. Minn. Apr. 25, 2014), aff'd in part, rev'd in part on different grounds, 620 F. App'x 895 (Fed. Cir. 2015). "[C]ourts often use the statutory interest rate of the state in which they sit." Id. at *16. Prejudgment interest is awarded from the date of infringement to the date of judgment. Nickson Indus., Inc. v. Rol Mfg. Co., 847 F.2d 795, 800 (Fed. Cir. 1988).

First, the Court must decide what interest rate should be used in calculating prejudgment interest. Schwendimann requests that the Court award her prejudgment interest of 10% pursuant to Minn. Stat. § 549.09. (Mem. Supp. Interest Mot. at 4, Nov. 20, 2017, Docket No. 718.) In support, Schwendimann has submitted Gorowsky's calculation of prejudgment interest, totaling \$1,915,328. (Decl. of Donald A. Gorowsky ¶ 2, 7, Ex. B at 3, Nov. 20, 2017, Docket No. 719.) AACI argues that the Court should apply an interest rate of 1.42%, which was the highest one-year Treasury yield rate since the beginning of the infringement period. (Mem. Opp'n Interest Mot. at 6 & n.5, Dec. 11, 2017, Docket No. 798.) A rate of 1.42% results in a prejudgment interest amount of \$173,626.49.

Minn. Stat. § 549.09 requires an award of 10% prejudgment interest per year on a judgment of over \$50,000. Minn. Stat. § 549.09(c)(2). In other patent-infringement cases, the Court has awarded prejudgment interest in the amount of 10% to "honor the objective of Minnesota Statute § 549.09." August Tech. Corp. v. Camtek, Ltd., No. 05-1396, 2015 WL 520546, at *8 (D. Minn. Feb. 9, 2015). In enacting the statute, the Minnesota Legislature acknowledged that a rate of 10% is sufficient in cases exceeding \$50,000, and therefore the Court finds that it is the appropriate measurement of

prejudgment interest in this case. The Court is unpersuaded that AACI's proposed rate of 1.42% is sufficient to place Schwendimann "in as good a position as [s]he would have been in had [AACI] entered into a reasonable royalty agreement." Devex, 461 U.S. at 655.

Second, the Court must decide whether to base its calculation of prejudgment interest on the amount of AACI's final settlement offer or the amount of the damages awarded by the jury. (See Mem. Opp'n Interest Mot. at 9); Minn. Stat. § 549.09(b). As AACI notes, the statute provides a different calculation for cases in which a settlement offer was made:

If either party serves a written offer of settlement, the other party may serve a written acceptance or a written counteroffer within 30 days. . . . The prevailing party shall receive interest on any judgment or award from the time of commencement of the action . . . until the time of verdict, award, or report only if the amount of its offer is closer to the judgment or award than the amount of the opposing party's offer. If the amount of the losing party's offer was closer to the judgment or award than the prevailing party's offer, the prevailing party shall receive interest only on the amount of the settlement offer or the judgment or award

Id. (emphasis added). The settlement offer must be written. See Hogenson v. Hogenson, 852 N.W.2d 266, 275 (Minn. Ct. App. 2014). AACI claims that it offered to pay Schwendimann \$675,000, and in response Schwendimann demanded \$8 million. (Mem. Opp'n Interest Mot. at 9.) AACI did not submit evidence that this settlement offer was written, and Schwendimann's reply confirms that it was a verbal offer. (Pls.' Reply Mem. at 12-13, Dec. 21, 2017, Docket No. 860.) Because the settlement offer was not a written offer, the Court will not apply the statute's alternative calculation.

Third and finally, the Court must consider whether to calculate prejudgment interest based on the number of infringing sales per year. AACI argues, "In the hypothetical negotiation between Schwendimann and AACI, the parties would have agreed to a royalty **rate**, not a lump sum payment for any and all infringing future sales, regardless of what the actual sales numbers were." (Mem. Opp'n Mot. to Amend J. at 8-9, Dec. 11, 2017, Docket no. 798.) Consistent with the plain language of Minnesota Statute § 549.09, the Court concludes that it is appropriate to calculate prejudgment interest on the total damages award and not based on the number of infringing sales per year.

Accordingly, the Court will award Schwendimann prejudgment interest on the damages award in the amount of \$1,915,328 (calculated by applying the Minnesota statutory rate from July 6, 2010, to October 23, 2017).

VI. POST-JUDGMENT INTEREST

The Court must decide how much post-judgment interest to award Schwendimann. Under 28 U.S.C. § 1961(a), "[i]nterest shall be allowed on any money judgment in a civil case recovered in a district court." "Such interest shall be calculated from the date of the entry of judgment, at a rate equal to the weekly average 1-year constant maturity Treasury yield . . . for the calendar week preceding the date of judgment." 28 U.S.C. § 1961(a) (footnote omitted). Post-judgment interest applies to both the amount awarded in damages and prejudgment interest. Travelers Prop. Cas. Ins. Co. of Am. v. *Nat'l* Union Ins. Co., 735 F.3d 993, 1008 (8th Cir. 2013). The judgment was entered on October 23, 2017, and the 1-year constant maturity yield for the week prior was 1.42%. (Decl. of

Laura L. Myers ¶ 13, Dec. 11, 2017, Docket No. 808; Sealed Ex. L at 3, Dec. 11, 2017, Docket No. 819.) The Court will grant Schwendimann's motion for post-judgment interest at the simple rate of 1.42% from October 23, 2017, until the judgment is satisfied.

VII. PERMANENT INJUNCTION

The Court must decide whether to grant Schwendimann's motion for a permanent injunction. In her motion, Schwendimann requests a permanent injunction prohibiting AACI from "making, using, offering to sell, or selling within the United States – or importing in to the United States – any products covered by Schwendimann's Patents-in-Suit, including but not limiting to AACI's 889 Product and 888 Product, through September 9, 2019." (Mem. Supp. Inj. Mot. at 13, Nov. 20, 2017, Docket No. 723.) The Court will grant Schwendimann's motion, but will modify the injunction to avoid overbreadth.

A. Standard of Review

In a patent-infringement action, 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. The Court may grant a permanent injunction if a plaintiff demonstrates:

(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.

eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006). Historically, courts have granted permanent injunctions "in the vast majority of patent cases." Id. at 395 (Roberts, C.J., concurring).

"[T]he decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that such discretion must be exercised consistent with traditional principles of equity." Id. at 394 (majority opinion). But even when a patent owner successfully proves patent infringement, a successful verdict is not per se evidence of irreparable injury. See Robert Bosch LLC v. Pylon Mfg. Corp., 659 F.3d 1142, 1149 (Fed. Cir. 2011).

B. Irreparable Injury

"To prove irreparable injury, a patentee must show '1) that absent an injunction, it will suffer irreparable harm, and 2) that a sufficiently strong casual nexus relates the alleged harm to the alleged infringement." Presidio Components, 875 F.3d at 1383 (quoting Apple, Inc. v. Samsung Elecs. Co., 695 F.3d 1370, 1374 (Fed. Cir. 2012)). "Where two companies are in competition against one another, the patentee suffers the harm – often irreparable – of being forced to compete against products that incorporate and infringe its own patented inventions." Douglas Dynamics, LLC v. Buyers Prods. Co., 717 F.3d 1336, 1345 (Fed. Cir. 2013).

The Court finds the Federal Circuit's opinion in Robert Bosch instructive in this case. 659 F.3d 1142. There, the Federal Circuit concluded that "the [district] court committed a clear error of judgment when it concluded that Bosch failed to demonstrate irreparable harm in the face of overwhelming evidence to the contrary." Id. at 1150-51.

This overwhelming evidence consisted of: "(1) the parties' direct competition; (2) loss in market share and access to potential customers resulting from Pylon's introduction of infringing [products]; and (3) Pylon's lack of financial wherewithal to satisfy a judgment." Id. at 1151. The Court does not find AACI's efforts to distinguish Robert Bosch persuasive. (Mem. Opp'n Inj. Mot. at 7-8, Dec. 11, 2017, Docket No. 800.)

Schwendimann has produced evidence of (1) direct competition between her companies and AACI; (2) loss in market share as a result of AACI's sale of dark T-shirt transfer products; and (3) AACI's inability to satisfy a judgment. First, Schwendimann produced evidence at trial that AACI and her companies are direct competitors. (Trial Tr. Vol V. at 925:19-22; 992:2-15.) Second, Gorowsky testified that Schwendimann has the capacity to produce and sell more dark T-shirt transfer products, but that AACI's presence in the market resulted in a loss of market share for Schwendimann. (Id. at 1018:2-1019:24.) Third and finally, the evidence significantly calls into question whether AACI would be able to satisfy subsequent judgments that would result from continued infringement. Provost testified that (1) AACI suffered a loss of more than a million dollars in 2016, (2) AACI has "not had a year where [it] made any money since 2008," (3) AACI's retained earnings are negative, and (4) AACI is not creditworthy. (Trial Tr. Vol. VII at 1327:8-9, 1329:2-15.) There is a significant doubt as to whether AACI can afford to pay Schwendimann the judgment in this case, let alone subsequent judgments that would result from continued infringement.

The Court therefore finds that Schwendimann has demonstrated irreparable harm. See Robert Bosch LLC, 659 F.3d at 1150-51.

C. Inadequate Remedies

Generally, monetary damages are sufficient to adequately compensate a patentee in the future. See id. at 1155. The Court may consider the "questionable financial condition" of the infringer in deciding whether monetary damages are an adequate remedy. Id. Moreover, monetary damages often cannot repair lost market share, lost business opportunities, and price erosion absent an injunction. Id. Where monetary damages alone are insufficient to compensate the patentee, the Court may exercise its discretion and afford relief in one of a number of ways: "(1) it can grant an injunction; (2) it can order the parties to attempt to negotiate terms for future use of the invention; (3) it can grant an ongoing royalty; or (4) it can exercise its discretion to conclude that no forward-looking relief is appropriate in the circumstances." Whitserve, LLC v. Comput. Packages, Inc., 694 F.3d 10, 35 (Fed. Cir. 2012).

At trial, Schwendimann demonstrated that she lost market share and customers as a result of AACI's involvement in the dark T-shirt transfer market.⁵ (Trial Tr. Vol. IV at 1018:2-1019:24.) If AACI reentered the dark T-shirt transfer market, Schwendimann would continue to lose business and customers, depriving her of market share. See Robert Bosch LLC, 659 F.3d at 1155. The Court is also concerned that, if AACI reentered the market, Schwendimann's prices would be eroded because "both companies pric[e] their products very, very similarly." (Trial Tr. Vol. V at 1015:20-1016:1.)

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⁵ Schwendimann also argues that she should be awarded a permanent injunction because the Court ruled that Schwendimann is not able to recover lost profits and, therefore, she would only be entitled to a reasonable royalty. Schwendimann has it backwards. Lost profits remedy the past; injunctions remedy the future. The fact that Schwendimann could not prove her lost-profits case is immaterial to the Court's permanent-injunction determination.

Additionally, AACI's questionable financial condition raises concern whether monetary damages (such as an ongoing royalty) would be sufficient to remedy future infringement. Due to AACI's financial state, the Court finds that there is little certainty that Schwendimann could ever collect on a subsequent judgment. See Robert Bosch LLC, 659 F.3d at 1155.

Because Schwendimann would lose market share if AACI reentered the market and it is not certain AACI could satisfy a future judgment, the Court concludes that some form of equitable relief for ongoing infringement is warranted.

In lieu of an injunction, AACI argues that the Court should order an ongoing 2% royalty for AACI's continued use of Schwendimann's patents. (Mem. Opp'n Inj. Mot. at 10-12.) The Court concludes that AACI's request is unreasonable. At trial, AACI requested that the jury award Schwendimann a 2% royalty. (Trial Tr. Vol. IX at 2071:21-2071:19-21.) The jury awarded Schwendimann a reasonable royalty of 15.5%. In light of the jury's verdict, the Court concludes that an ongoing 2% royalty would be inadequate for future infringement.

Moreover, it would be improper for the Court to set a reasonable royalty rate without first allowing the parties to negotiate a license. See Paice LLC v. Toyota Motor Corp., 504 F.3d 1293, 1315 (Fed. Cir. 2007). The Court will not order negotiations in this case. After years of failed settlement negotiations, the Court highly doubts that the parties would reach a licensing agreement. Indeed, AACI rejected Schwendimann's offer to license the patents during settlement negotiations. (Trial Tr. II at 178:18-179:21.) Licensing negotiations would be unproductive in this case.

The Court concludes that Schwendimann has inadequate remedies to compensate her in the event of future infringement and that an injunction is an appropriate remedy in this case.

D. Balance of Hardships

The balance-of-hardships factor "assesses the relative effect of granting or denying an injunction on the parties." *i4i Ltd. P'ship v.* Microsoft Corp., 598 F.3d 831, 862 (Fed Cir. 2010). The Court considers "the parties' sizes, products, and revenue sources" in balancing the hardships. Id.

The Court finds that the balance of hardships weighs heavily in favor of Schwendimann. AACI concedes that it stopped manufacturing and selling dark T-shirt transfer products in 2015 and has sold all of the machinery necessary to make dark T-shirt transfer products. (Mem. Opp'n Inj. Mot. at 3-4.) AACI also states that it has "evidenced no intent to imminently reenter the market." (Mem. Opp'n Inj. Mot. at 2.) But an infringer's voluntary decision to stop producing infringing products "is generally not a reason for denying an injunction against further infringement." W.L. Gore & Assocs. v. Garlock, Inc., 842 F.2d 1275, 1281-82 (Fed. Cir. 1988), abrogated on other grounds by eBay Inc., 547 U.S. 388. Indeed, the Court is perplexed as to why AACI would ever be harmed by a permanent injunction prohibiting it from selling infringing products if it has no intent to reenter the market.

Of course, if AACI reentered the market, Schwendimann would be greatly harmed by lost profits and customers. Moreover, a permanent injunction will prevent both AACI and others "who are in active concert or participation with" AACI from infringing Schwendimann's patents, which may protect Schwendimann from infringement by others acting with AACI. Fed. R. Civ. P. 65(d)(2)(C).

The Court concludes that the balance of hardships weigh in favor of Schwendimann.

E. Public Interest

"[T]he touchstone of the public interest factor is whether an injunction, both in scope and effect, strikes a workable balance between protecting the patentee's rights and protecting the public from the injunction's adverse effects." *i4i Ltd. P*'ship, 598 F.3d at 863. AACI does not challenge that Schwendimann can meet the public-interest prong. Dark T-shirt transfer products do not present an issue of public health or deprive the public of any sort of necessity. AACI has already removed itself from the market and, therefore, the injunction will not have any adverse effects on the public. The Court concludes that the proposed injunction strikes a workable balance between Schwendimann's rights and protecting the public from the injunction's adverse effects.

Because Schwendimann has met her burden with respect to all four factors, the Court will grant Schwendimann's request for a permanent injunction.

F. Scope of Injunctive Relief

The Court must resolve one final issue: whether Schwendimann's proposed injunction is overbroad. It is.

Injunctions must be specific. Fed. R. Civ. P. 65(d); see Calvin Klein Cosmetics Corp. v. Parfums de Coeur, Ltd., 824 F.2d 665, 669 (8th Cir. 1987). In patent cases, "the only acts the injunction may prohibit are infringement of the patent by the adjudicated

devices and infringement by devices not more than colorably different from the adjudicated devices." *Int'l Rectifier Corp. v. IXYS Corp.*, 383 F.3d 1312, 1316 (Fed. Cir. 2004). Courts cannot issue injunctions that "simply prohibit[] future infringement of a patent." Id.

Schwendimann's proposed injunction would prohibit AACI from

infringing, inducing infringement, or contributing to the infringement of Schwendimann's Patents-in-Suit (the RE41,623 Reissue Patent, and U.S. Patent Nos. 7,749,581, 7,754,042, 7,766,475, and 7,771,554 Patents), including prohibiting AACI from making, using, offering to sell, or selling within the United States – or importing in to the United States – any products covered by Schwendimann's Patents-in-Suit, including but not limited to AACI's 889 Product and 888 Product, through September 9, 2019.

(Pl.'s Proposed Order at 2, Nov. 20, 2017, Docket No. 725.)

Schwendimann's proposed injunction is overbroad. The Court will modify the injunction to read:

Defendant Arkwright Advanced Coating, Inc. ("AACI") and other persons who are in active concert or participation with AACI are prohibited from making, using, offering to sell, or selling within the United States – or importing into the United States – its 888 Product and 889 Product, and all substantially similar products, through September 9, 2019.

The Court concludes that this narrower injunction resolves the overbreadth problem.

ORDER

Based on the foregoing, and all the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that:

- 1. Schwendimann's Motion for New Trial on Lost Profit Damages [Docket No. 726] is **DENIED**.
- 2. AACI's Motion to Alter or Amend the Judgment on Damages Or, in the Alternative, for a New Trial on Damages Or, in the Alternative, Remittitur [Docket No. 730] is **DENIED**.
- 3. Schwendimann's Motion to Amend Judgment to Include Enhanced Damages [Docket No. 743] is **DENIED**.
- 4. AACI's Renewed Motion for Judgment as a Matter of Law or, in the Alternative, a New Trial on Willful Infringement of the Schwendimann Patents [Docket No. 734] is **DENIED as moot**.
- 5. Schwendimann's Motion to Amend Judgment to Include Prejudgment and Post-Judgment Interest [Docket No. 716] is **GRANTED**.
 - a. The Court's order of judgment entered on November 14, 2017, is amended to include the order that Schwendimann is entitled to damages in the amount \$2,624,228.00, plus prejudgment interest in the amount of \$1,915,328.00.
 - b. The Court's order of judgment entered on November 14, 2016, is amended to include the order that Schwendimann is entitled to post-judgment interest at the simple rate of 1.42%, accruing from October 23, 2017, until the judgment is satisfied.
- 6. Schwendimann's Motion for Permanent Injunction [Docket No. 721] is **GRANTED**. AACI and other persons who are in active concert or participation with

AACI are **PROHIBITED** from making, using, offering to sell, or selling within the United States – or importing into the United States – its 888 Product and 889 Product, and all substantially similar products, through September 9, 2019.

LET JUDGMENT BE ENTERED ACCORDINGLY.

DATED: July 30, 2018 at Minneapolis, Minnesota.

s/John R. Tunheim

JOHN R. TUNHEIM

Chief Judge

United States District Court