

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

E.I. DUPONT DE NEMOURS AND
COMPANY,

Plaintiff,

v.

UNIFRAX I LLC,

Defendant.

Civil Action No. 14-1250-RGA

MEMORANDUM OPINION

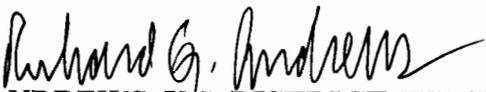
Richard L. Horwitz, David E. Moore, Bindu A. Palapura, Stephanie E. O’Byrne, POTTER ANDERSON & CORROON LLP, Wilmington, Delaware; Mark L. Levine, Christopher D. Landgraff, Christopher R. Hagale, Sharon Desh, BARTLIT BECK HERMAN PALENCHAR & SCOTT LLP, Chicago, Illinois.

Attorneys for Plaintiff

Frederick L. Cottrell, III, Kelly E. Farnan, Jason J. Rawnsley, Katharine L. Mowery, RICHARDS, LAYTON & FINGER, P.A., Wilmington, Delaware; Joseph G. Curatolo, Salvatore A. Sidoti, CURATOLO SIDOTI CO. L.P.A., Cleveland, Ohio; Jake M. Holdreith, David A. Prange, Alyssa N. Lawson, Brenda L. Joly, Emily E. Niles, George Ashenmacher, ROBINS KAPLAN LLP, Minneapolis, Minnesota.

Attorneys for Defendant

September 12, 2017


ANDREWS, U.S. DISTRICT JUDGE:

This Memorandum Opinion addresses Plaintiff E.I. du Pont de Nemours and Company's Post-Trial Motion for a Permanent Injunction, Supplemental Damages, and Interest. (D.I. 367). I have reviewed the briefing for this motion. (D.I. 368; D.I. 376; D.I. 383). On May 19, 2017, I entered judgment for Plaintiff that Defendant's FyreWrap Combi-Film 3G11 infringed U.S. Patent No. 8,607,926 (the "'926 patent"). (D.I. 346). I also entered judgment for Plaintiff that the '926 patent was not invalid. (*Id.*).

I. DISCUSSION

A. Permanent Injunction

Courts "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. "According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief." *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006). "A plaintiff must demonstrate: (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." *Id.* "The essential attribute of a patent grant is that it provides a right to exclude competitors from infringing the patent." *Acumed LLC v. Stryker Corp.*, 551 F.3d 1323, 1328 (Fed. Cir. 2008).

1. Irreparable Injury

"To satisfy the first *eBay* factor, the patentee must show that it is irreparably harmed by the infringement." *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 639 (Fed. Cir. 2015). "This requires proof that a 'causal nexus relates the alleged harm to the alleged infringement.'" *Id.*

“This just means that there must be proof that the infringement causes the harm.” *Id.* “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).

Defendant’s predecessor Combi-Film 396 product was dissatisfactory to Boeing. (Tr. 286:7–24). There is evidence that the predecessor product would not have qualified under Boeing’s new specification. (Tr. 946:20–947:4, 992:15–24, 847:12–22). Defendant’s 3G11 product uses Plaintiff’s patented flame barrier laminate design to qualify for this specification and compete in this market. (Tr. 747:16–748:3). Defendant is Plaintiff’s only competitor in Boeing’s flame barrier laminate market. (Tr. 1500:10–16). Plaintiff projected that its Nomex XF would have sales of \$32 million in 2013 to 2015. (Tr. 193:4–194:9). Defendant’s presence in the market directly reduced Plaintiff’s sales. (*See, e.g.*, Tr. 776:9–19, 199:9–200:4; PTX-259; PTX-388).

This reduction in sales reflects a causal nexus relating the harm to the infringement. Had Defendant not infringed Plaintiff’s design, Defendant would not have qualified its 3G11 product and would not have been able to compete in the flame barrier market under Boeing’s new specification. Defendant thus would not have cut into sales of Nomex XF. Plaintiff and Defendant are direct competitors. There is sufficient evidence establishing irreparable harm to Plaintiff. *See Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1152 (Fed. Cir. 2011).

Defendant notes that Defendant took the 3G11 product off the market and no longer offered it for sale as of May 19, 2017. (D.I. 377 ¶ 4). This is not a persuasive reason to deny the request for an injunction. *See, e.g., Cartier, Inc. v. Four Star Jewelry Creations, Inc.*, 2003 WL

21056809, at *6 (S.D.N.Y. May 8, 2003) (“[A] bare promise by a party in the course of litigation to discontinue past or ongoing misconduct does not justify denial of injunctive relief, since such unilateral action hardly suffices to ensure that the party will not, in the future, reverse course and resume its challenged activities.”). Defendant fails to “make an affirmative showing that continuing infringement was, practically speaking, nearly impossible.” *Lyons P’ship, L.P. v. Morris Costumes, Inc.*, 243 F.3d 789, 800 (4th Cir. 2001).

2. Remedies Available at Law

Monetary damages are inadequate to compensate Plaintiff here because Plaintiff would be forced to compete against a rival gaining market share with Plaintiff’s technology. *See Douglas*, 717 F.3d at 1345 (“[M]ere damages will not compensate for a competitor’s increasing share of the market, a market which [Plaintiff] competes in, and a market that [Plaintiff] has in part created with its investment in patented technology.”). Additionally, Plaintiff asserts that it never agreed to a royalty payment through a license to the technology. Defendant does not dispute this. (*See generally* D.I. 376).¹ Furthermore, a royalty would not adequately compensate Plaintiff, unless the royalty rate were greater than or equal to Plaintiff’s profit margin of \$1.19 per square foot. Presently, Plaintiff’s profit margins on Nomex XF are greater than Defendant’s profit margins on 3G11. (*See* Tr. 769:24–771:14, 771:16–772:14; D.I. 340, 1550:11–1551:11).

3. Balance of Hardships

This factor weighs in Plaintiff’s favor because requiring Plaintiff to compete against its own invention would be a substantial hardship. *See Robert Bosch*, 659 F.3d at 1156

¹ *See also Acumed*, 551 F.3d at 1328 (“The fact of the grant of previous licenses . . . may affect the district court’s discretionary decision concerning whether a reasonable royalty from an infringer constitutes damages adequate to compensate for the infringement.”).

("[R]equiring [Plaintiff] to compete against its own patented invention, with the resultant harms described above, places a substantial hardship on [Plaintiff].").

4. Public Interest

Defendant argues that an injunction would harm the public interest because the public is better off with a multiple-supplier market for products affecting public safety. Defendant provides some evidence that Plaintiff may have had supply issues with its product. (Tr. 1528:13–1535:17). Plaintiff provides evidence that suggests that there would not be a public safety issue. (Tr. 838:13–840:4, 490:1–503:13, 1528:11–1535:17, 1564:2–1571:20). Overall, I am not concerned with Plaintiff's ability to supply its product. Even if there were concerns, it could still be appropriate to award an injunction. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1343 (Fed. Cir. 2016) ("Congress has expressly indicated that injunctions may be granted in cases involving lifesaving goods, such as pharmaceutical drugs."). It is also the case that "copies of patented inventions have the effect of inhibiting innovation and incentive." *Douglas*, 717 F.3d at 1346. Guarding against such copies could foster the development of more technologies aimed at enhancing public safety. Overall, the public interest leans towards a grant of a permanent injunction.

Plaintiff meets the four-factor test in *eBay*. The request for a permanent injunction is granted.

5. Terms of the Injunction

Plaintiff requests "a permanent injunction to prohibit Unifrax from selling the infringing 3G11 flame barrier laminate or any substantially similar products." (D.I. 368 at p. 19). Defendant argues that the injunction should be limited in scope to only the specific 3G11 product found infringing that was described in JTX-15 and PTX-1 and described at trial by DuPont as

including a PEEK film, a pressure sensitive adhesive as described in JTX-2, and a vermiculite layer without any carrier material such as resin or adhesive. Plaintiff's request is adopted. Defendant's position is unreasonably narrow and there is support for Plaintiff's position. *See, e.g., United Constr. Prod., Inc. v. Tile Tech, Inc.*, 843 F.3d 1363, 1372 (Fed. Cir. 2016) ("We see no problem with the use of the term 'substantially similar' in the injunction to the extent that it prevents [Defendant] from infringing [Plaintiff's] patent . . ."). I note that the injunction should not be understood to exclude a valid design-around that retains the 3G11 name.

Defendant argues that Plaintiff should post an injunction bond in the amount of \$1.75 million pending appeal. Although this is a matter of course in the preliminary injunction context, Defendant does not point to any clear authority requiring this in the permanent injunction context. *See* Fed. R. Civ. P. 65(c). Defendant cites to *Contour Design, Inc. v. Chance Mold Steel Co.*, 2013 WL 2102149 (D.N.H. May 14, 2013), for the proposition that the failure to request an injunction bond pending appeal can limit the ability of a party that is ultimately successful on appeal from recovering damages for the erroneous issuance of a permanent injunction. While this may be the case, this argument is not entirely persuasive because there appears to be an unjust enrichment exception to this rule. *See Contour Design, Inc.*, 2013 WL 2102149 at *3. Furthermore, I think the risk of incorrectly issuing an injunction is much lower if it is issued after a full trial than if it were issued without the benefit of a full trial. Thus, I do not think that it is reasonable to require Plaintiff to post an injunction bond under the present circumstances.

Defendant alternatively requests that Plaintiff file an "undertaking" providing that the amount of damages for which Plaintiff might be liable will not be limited or negated, should it be liable for any, as a result of a wrongful issuance of the injunction. Defendant cites to *Continuum*

Co. v. Incepts, Inc., 873 F.2d 801, 804 (5th Cir. 1989), for this proposition, but this case pertained to an interlocutory injunction. Thus, I am also not persuaded that requiring an undertaking is a reasonable term.

Defendant argues that the injunction should automatically dissolve if the existing judgment is vacated or reversed, or the patent is found invalid, unenforceable or expires. Defendant further requests that it be allowed to move to dissolve the injunction should Boeing, Triumph, or Airbus develop a need for the enjoined product in the interests of public safety. Plaintiff argues that existing mechanisms are adequate. I agree with the Plaintiff. Defendant provides no hint as to why existing mechanisms would be inadequate.

The terms of the permanent injunction should conform to the discussion above.

B. Supplemental Damages

Defendant argues that no supplemental damages are warranted because the jury verdict fully compensated Plaintiff. “[T]he amount of supplemental damages following a jury verdict ‘is a matter committed to the sound discretion of the district court.’” *SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1384 (Fed. Cir. 2013). “Typically, supplemental damages are calculated based on the jury's damages verdict.” *Veracode, Inc. v. Appthority, Inc.*, 137 F. Supp. 3d 17, 84 (D. Mass. 2015).

At the time of trial, Defendant only produced sales information for 3G11 through February 2017. (PTX-386). From October 2014 through February 2017, the proper royalty base is 5,930,488 sq. ft. (Tr. 1560:10–12). The jury awarded damages of \$3,272,000. (D.I. 332 at 3). Defendant acknowledges that between March 1st and May 19th of 2017, Defendant sold 120,312.5 sq. ft. of 3G11. (*See* D.I. 377 ¶ 3). By dividing \$3,272,000 by 5,930,488 sq. ft., Plaintiff requests a royalty rate of \$0.55 per square foot (resulting in \$66,171.87 of supplemental

damages). Defendant argues that the proper rate is \$0.38 per square foot (resulting in \$45,718.75 of supplemental damages). Defendant's theory of how the jury arrived at the \$3,272,000 figure is as follows. Plaintiff's damages expert opined that the appropriate royalty rate was \$0.64 per square foot. (Tr. 768:14–19). Defendant's damages expert opined that the appropriate royalty rate was \$0.12 per square foot. (Tr. 1560:5–14). The average of \$0.64 per square foot and \$0.12 per square foot is \$0.38 per square foot. In addition to the 5,930,488 sq. ft. sales figure, another sales figure communicated to the jury was 8,610,438 sq. ft. The 8,610,438 sq. ft. figure is based on sales of 3G11 from December 2013 through February 2017. (Tr. 1550:4–1551:11; D.I. 378-1 at 16). Multiplying \$0.38 per square foot by 8,610,438 sq. ft. yields a \$3,271,966.44 figure. Rounding this figure to the nearest hundred results in the damages figure of \$3,272,000.

I am adopting Plaintiff's \$0.55 per square foot royalty. Defendant's royalty theory requires too much guesswork. One would have to assume that the jury compromised on a royalty of \$0.38 per square foot. One would have to assume that the jury applied an improper royalty base, one that no one suggested as a royalty base. One would have to assume that the jury ignored expert testimony that the proper royalty base is 5,930,488 sq. ft. (Tr. 1560:5–14). One would also have to assume that the jury ignored my jury instruction that specified that the date that damages would begin to be calculated would be October 1, 2014. (D.I. 325 at 44). Considering everything, I find that the royalty rate for the calculation of supplemental damages is \$0.55 per square foot.

Defendant argues that the award of supplemental damages is improper because Plaintiff has been fully compensated based on the jury's improper use of sales prior to October 2014. Because I decline to find that the royalty rate was based on the jury's improper use of sales prior to October 2014, an award of supplemental damages in full is proper.

Plaintiff, in reply, further requests the timing of Defendant's sales so Plaintiff can calculate pre-judgment interest on those sales. This request is reasonable and is granted.

C. Pre-Judgment Interest

Plaintiff seeks pre-judgment interest on 3G11 sales after October 1, 2014. Plaintiff argues that pre-judgment interest should be set at the prime rate, compounded quarterly. Defendant argues that the rate should be set at Plaintiff's corporate bond rate or the Treasury-Bill ("T-Bill") rate, compounded annually. "Courts have recognized that the prime rate best compensate[s] a patentee for lost revenues during the period of infringement because the prime rate represents the cost of borrowing money, which is 'a better measure of the harm suffered as a result of the loss of the use of money over time.'" *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 227 (D. Del. 2007). Thus, I agree with Plaintiff that pre-judgment interest should be set at the prime rate, compounded quarterly. See, e.g., *Ironworks Patents, LLC v. Apple, Inc.*, 2017 WL 2535877, at *14 (D. Del. June 12, 2017); *LG Display Co. v. AU Optronics Corp.*, 722 F. Supp. 2d 466, 475 (D. Del. 2010). Again, because I decline to find that the jury improperly used sales prior to October 2014, an award of pre-judgment interest in full is proper.

D. Post-Judgment Interest

Plaintiff agrees that the date of judgment is May 19, 2017. (D.I. 383 at 15). 28 U.S.C. § 1961(a) provides, "Such interest shall be calculated from the date of the entry of the judgment, at a rate equal to the weekly average 1-year constant maturity Treasury yield, as published by the Board of Governors of the Federal Reserve System, for the calendar week preceding[] the date of the judgment." The parties dispute whether to use the weekly average rate for the week ending on May 12, 2017 or May 19, 2017. The weekly average rate for the week ending on May 12, 2017 is 1.13%. (BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, <https://www.federal>

reserve.gov/datadownload/Preview.aspx?pi=400&rel=H15&preview=H15/H15/RIFLGFCY01_N.WF (last visited Aug. 30, 2017)). The rate for the week ending on May 19, 2017 is 1.10%. (*Id.*) I think that under a plain reading of the statute, “the calendar week preceding[] the date of the judgment” must be a week that is over before the day of the date of the judgment. Thus, the proper weekly average rate here is the weekly average rate for the week ending on May 12, 2017. *See Allen v. Dist. of Columbia*, 2017 WL 2634635, at *13 (D.D.C. June 16, 2017).

II. CONCLUSION

Within five days the parties shall submit a proposed final judgment consistent with this Memorandum Opinion.