

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

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CRANE SECURITY)		
TECHNOLOGIES, INC. and VISUAL)		
PHYSICS, LLC,)		
)		
Plaintiffs,)		
)		
v.)	Civil Action No. 14-12428-LTS	
)		
ROLLING OPTICS AB,)		
)		
Defendant.)		
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ORDER ON POST-TRIAL MOTIONS (DOC. NOS. 491, 495, & 497)

August 23, 2018

SOROKIN, J.

In this intellectual property dispute, Plaintiffs Crane Security Technologies, Inc. and Visual Physics, LLC (together, “Crane”) alleged that Defendant Rolling Optics AB (“RO”) infringed five of Crane’s patents. RO moved to dismiss for lack of personal jurisdiction, and the Court denied that motion. Doc. No. 34. RO then asserted defenses and counterclaims for declaratory judgment of invalidity and non-infringement. The Court held a hearing pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), and issued an order construing five claim terms. See Crane Sec. Techs. Inc. v. Rolling Optics AB, 166 F. Supp. 3d 76 (D. Mass. 2016) (the “Markman Order”). The parties subsequently filed motions for summary judgment. The Court entered summary judgment in favor of Crane as to infringement of Crane’s patents by certain RO products made with technology retired in 2013 (the “old technology”) and with

technology in place since 2013 (the “new technology”),¹ as well as to the validity of certain claim terms. See Crane Sec. Techs. Inc. v. Rolling Optics AB, 2018 WL 575697 (D. Mass. Jan. 26, 2018) (the “Summary Judgment Order”). The facts of this case are described in detail in the Markman Order and the Summary Judgment Order.

Following a trial, the jury returned a verdict on May 9, 2018 in favor of Crane, finding that RO actively induced infringement by third parties, that Crane was entitled to damages for the direct and induced infringement in the amount of \$119,186, and that RO’s infringement was willful. The jury also rejected RO’s two remaining invalidity defenses. Doc. No. 475. Pending before the Court are RO’s renewed motion for judgment as a matter of law, Doc. No. 495, Crane’s motion for a permanent injunction, Doc. No. 497, and Crane’s motion for enhanced damages and attorneys’ fees, Doc. No. 491. For the reasons that follow, the Court **ALLOWS** in part and **DENIES** in part RO’s motion for judgment as a matter of law and **ALLOWS** in part and **DENIES** in part Crane’s motions for injunctive relief, enhanced damages, and attorneys’ fees. The Court enjoins RO from future infringement of Crane’s patents to the extent outlined herein and orders RO to pay Crane enhanced damages of \$326,244.

I. RENEWED MOTION FOR JUDGMENT AS A MATTER OF LAW (DOC. NO. 495)

RO renews its motion for judgment as a matter of law in its favor on the issues of active inducement, actual notice of infringement, and anticipation of Claims 62 and 63 of the ‘360 patent by the Matsumoto patent application (“Matsumoto”).

¹ The Court determined that RO infringed 22 asserted claims across the five patents in suit: U.S. Patent Nos. 7,468,842 (the “‘842 patent”), 8,009,360 (the “‘360 patent”), 8,111,462 (the “‘462 patent”), 8,120,855 (the “‘855 patent”), and 8,254,030 (the “‘030 patent”).

A court may grant judgment as a matter of law after conclusion of a jury trial when the evidence “points so strongly and overwhelmingly in favor of the moving party that no reasonable jury could have returned a verdict adverse to that party.” Monteagudo v. Asociacion de Empleados del Estado Libre Asociado de Puerto Rico, 554 F.3d 164, 170 (1st Cir. 2009) (citations omitted). The Court examines “the evidence presented to the jury, and all reasonable inferences that may be drawn from such evidence, in the light most favorable to the jury verdict.” Cigna Ins. Co. v. Oy Saunatec, Ltd., 241 F.3d 1, 8 (1st Cir. 2001) (citations omitted).

A. Active Inducement

RO first contends that Crane failed to introduce evidence at trial sufficient to support a verdict that RO actively induced infringement with respect to each of the following products imported into the United States by third parties: (1) the Blu Giovello products, (2) the Luna di Luna products, (3) the Taittinger products, (4) the Hennessy products, (5) the UGG products, or (6) the Pierce Atwood business cards. The Court instructed the jury that, to prove active inducement of infringement, Crane was required to show (i) that RO aided, instructed, or otherwise acted with the intent to cause another party to import its foils or labels into the United States; (ii) that RO knew of, or showed willful blindness to the existence of, Crane’s patents; and (iii) that RO knew, or showed willful blindness to the fact, that the induced acts constituted patent infringement.² Doc. No. 473. RO does not object to the instruction delivered and does not contend that it was unaware of Crane’s patents.

² See Commil USA, LLC v. Cisco Sys. Inc., 135 S.Ct. 1920, 1926 (2015) (internal quotations omitted); Global-Tech Appliances, Inc. v. SEB S.A., 563 U.S. 754, 766-67 (2011) (finding that willful blindness satisfies knowledge requirement).

As to the Blu Giovello, Taittinger, and Luna di Luna labels, Crane does not oppose RO's motion for judgment as a matter of law and does not oppose a corresponding reduction in the jury's damages award by \$10,438. Doc. No. 509 at 2 n. 2. The Court therefore **ALLOWS** RO's motion with respect to these products.³

With respect to the Hennessy labels and the UGG labels sent to CMR, the Court finds that the evidence, viewed in the light most favorable to the verdict, supports a reasonable jury determination of active inducement of infringement. First, the trial evidence sufficiently supports the conclusion that RO understood, or at least was willfully blind, to the fact that the importation and use of its products in the United States infringed Crane's patents. RO's co-founder, Axel Lundvall, had extensive knowledge of Crane's patents throughout the development of RO's technology. He took note of the debut of Crane's technology on the Swedish kroner in 2006. See Doc. No. 481 at 54-55. He learned of the application for the parent patent to Crane's patents-in-suit in 2007, upon the rejection in Sweden of Lundvall's own patent application. Id. at 55-56. Lundvall testified at trial that, after that 2007 rejection, he reviewed Crane's parent patent application and concluded that "so long as we could stay over 50 microns, we didn't have to mind—or bother about that patent." Id. at 58 (referring to the diameter of the lenses in the micro-optic system). The record contains no particular support for that distinction. Lundvall also became aware of the '842 patent by 2009. Id. at 68-69. In an internal Discussion Paper dated April 2012, Lundvall remarked of the parent patent and the '842 patent: "The applications ... are some of the most detailed and comprehensive seen in the patent process and

³ Crane suggests that evidence outside of the trial record supports a finding of active inducement with respect to these three labels. Doc. No. 509 at 2 n. 2. In allowing the unopposed motion as to these products, the Court only decides that the evidence at trial was legally insufficient for a reasonable jury to find active inducement with respect to these three products.

all that can be done is to raise your hat for a job well done.” Trial Ex. 60. RO conducted further inspection of Crane’s products in late 2013 and early 2014, when Lundvall asked a RO employee to look at a Crane-made HP label to “determine how [Crane’s] lenses are manufactured.” Trial Exs. EQ and ER.

For most of the period of its infringement of Crane’s patents, including after receiving two notice letters of potential infringement from Crane, RO operated without obtaining any legal opinion as to whether its products infringed Crane’s patents. Even after receiving legal advice to stop its activities, RO continued to send infringing products to the United States. The evidence does not support RO’s contention that it had a good faith belief that its products did not infringe Crane’s patents or that it was merely indifferent to the risk of infringement. Rather, the jury heard sufficient evidence at trial reasonably to infer that RO was at least willfully blind to the fact that importation of its products into the United States infringed Crane’s patent rights—that is, that RO subjectively believed that there was a high probability that the patents would be infringed and that RO deliberately avoided learning of the probable infringement.

Second, the evidence at trial supports a reasonable inference that RO sold these foils or labels with more than mere knowledge that they would be imported into the United States. RO argues that it did no more. However, each of these product sales involved other indicia of inducement sufficient to support the verdict. Cognac labels that RO sent to Hennessy and that were imported into the United States expressly indicated “USA.” Doc. No. 480 at 66-67 (Lundvall testimony acknowledging “there are some evidence that show that we had artwork in our possession that said USA on it”). The jury could reasonably infer that RO had manufactured and sold the Hennessy label with the intent to cause the Hennessy products to be sold in the United States. While CMR purchased labels from RO in Sweden and imported them into the

United States, RO also sent free samples to CMR, a U.S. company. Id. at 57. This additional conduct supports a reasonable inference that RO acted with the intent to promote the sale by CMR of products bearing RO labels in the United States. The evidence of active inducement is stronger with the new technology that RO provided to its counsel, Pierce Atwood, for its business cards. RO provided these cards in lieu of payment of certain legal fees. The jury could infer that RO negotiated with Pierce Atwood for this alternative form of payment and caused the importation into the United States of these RO products for use by attorneys primarily located and conducting business in the United States. With each of these three products, no additional “communication between the alleged inducer and the third-party direct infringer” was needed, Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc., 843 F.3d 1315, 1331 (Fed. Cir. 2016); the circumstances of the sales themselves permit a reasonable inference that RO induced the third party’s infringement.

Accordingly, the Court DENIES RO’s motion with respect to the Pierce Atwood cards and the labels sent to CMR and Hennessy.

B. Actual Notice of Infringement

Second, RO claims that it is entitled as a matter of law to judgment that Crane’s April 2010 letter did not convey to RO actual notice of infringement for purposes of the accrual of damages. The Court previously denied RO’s request for summary judgment on this issue. In its Summary Judgment Order, the Court noted that “[a] reasonable factfinder could conclude that [the] statements” in the April 2010 letter “provided a charge of infringement and sufficiently specific product identification for purposes of actual notice.” Crane, 2018 WL 575697 at *16.

In its motion for judgment as a matter of law, RO recycles its summary judgment arguments, which the Court rejects again here. Additionally, RO urges that the testimony at trial revealed that Crane was not aware of whether RO's products actually infringed its patents, such that no reasonable jury could find that the April 2010 letter contained the requisite, specific charge of infringement. Compare Doc. No. 479 at 119-120 (Crane executive William Westervelt's testimony that, upon investigating a sample of RO's technology, "we believe[d] that it was possible that it infringed part of our intellectual property") with id. at 137-138 (Westervelt's testimony acknowledging he had not formed a conclusion about whether the RO product infringed Crane's patent at that time). Even assuming, without deciding, that Crane's subjective belief of RO's infringement at the time bears on whether Crane effectuated actual notice, the Court draws all reasonable inferences in favor of the verdict and finds that the trial testimony was sufficient to support a conclusion that Crane believed that RO infringed its patents at the time that it sent the April 2010 letter. Thus, the Court DENIES RO's motion for judgment on this issue of actual notice of infringement.

C. Anticipation by Matsumoto

Third, RO moves for judgment as a matter of law that the Matsumoto patent application anticipated claims 62 and 63 of the '360 patent, such that those claims are invalid. In the Summary Judgment Order, the Court summarized the contradictory evidence in the reports of RO's expert Leger and Crane's expert Barbastathis and concluded that a genuine issue of fact remained as to whether the Matsumoto reference discloses (i) "the production of an array with substantially regular spacing" and/or (ii) "the disposition of picture elements and lenses at a uniform distance." Crane, 2018 WL 575697 at *9. RO now alleges various deficiencies with

Barbastathis's rebuttal testimony on these two claim terms. However, the alleged deficiencies merely mirror the arguments that RO made at the summary judgment stage. At trial, the jury was entitled to evaluate the credibility of each expert witness in the face of conflicting expert testimony. Kinetic Concepts, Inc. v. Smith & Nephew, Inc., 688 F.3d 1342, 1362 (Fed. Cir. 2012) (citation omitted). The Court thus does not resolve the conflicting expert testimony here, as the expert evidence on Matsumoto's anticipation of these two claim terms did not "point[] so strongly and overwhelmingly in favor of [RO] that no reasonable jury could have returned a verdict" rejecting RO's anticipation claim. See Monteagudo, 554 F.3d at 170. The Court accordingly DENIES RO's motion for judgment on the issue of anticipation by the Matsumoto reference.

II. PLAINTIFF'S MOTION FOR ENHANCED DAMAGES AND ATTORNEYS' FEES (DOC. NO. 491)

Crane seeks enhanced damages under 35 U.S.C. § 284 and attorneys' fees under 35 U.S.C. § 285. Crane highlights the jury's finding of willful infringement and stresses that RO knowingly copied Crane's patented design, continued infringing activities despite Crane's written notices and the filing of this suit, and never possessed any good-faith belief in either non-infringement or invalidity. Doc. No. 492 at 1. Crane also maintains that, after the Court issued its Markman Order, RO "filed a string of meritless motions, shifted and re-litigated its claim construction positions, serially offered untimely expert opinion and evidence, and otherwise pursued a litigation strategy designed to drive up Crane's costs." Id.

A. Attorneys' Fees

Crane seeks an award of attorneys' fees arising from the litigation of this case since the Markman Order. Section 285 provides: "The court in exceptional cases may award reasonable attorney fees to the prevailing party." 35 U.S.C. § 285. An "exceptional case" is "simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." Octane Fitness, LLC v. ICON Health & Fitness, Inc., 134 S.Ct. 1749, 1756 (2014). A fee award may result based on factors that would not be independently sanctionable under Fed. R. Civ. P. 11. Id. at 1756-57. The Court determines whether this case is "exceptional" in the "case-by-case exercise of [its] discretion, considering the totality of the circumstances." Id. at 1756.

Based on the totality of the circumstances in this case, drawn from the Court's review of the pleadings submitted on the motion, counsels' arguments at the hearing, and the Court's role as presiding judge throughout this litigation over the past four years, including in the recent trial, the Court makes the following findings and rulings.

Crane is a large, well-financed company. It acquired the patents-in-suit for a substantial sum of money—in excess of \$100 million. The intellectual property Crane acquired in that transaction has become a central feature of its currency business, which is the core of Crane and has been for over a century. Protecting and enforcing these patents is a principal, understandable, and justifiable concern of Crane's, not because Crane overpaid for the patents, as RO has at times contended, but because the patents safeguard an important security mechanism for Crane's currency business going forward. Crane learned of potential—and now determined to be actual—infringement of its patents by RO. Armed with sufficient factual basis, Crane filed

the present lawsuit asserting claims across five patents, all expressed in five counts, each alleging infringement, inducement of infringement, contributory infringement (not ultimately pursued), and willful infringement. Crane also retained a large international law firm to represent it. While perhaps sweeping and aggressive in light of the small amount of business, then known to Crane, that RO conducted in the United States, Crane's response was reasonable given the business importance of the patents to Crane as well as RO's intent in pursuing currency business.

RO is a relatively small Swedish startup company, founded in approximately 2005, that has never to date turned a profit. At the time this suit was filed in 2014, RO had developed a suite of foils and labels that exhibited motion, floating, or other visual effects for use on various products. Its customers were primarily outside the United States. From the outset of the lawsuit, the case had many "bet the company" attributes. Crane's claims targeted every, or virtually every, product RO made. Success by Crane as a practical matter would likely end RO as a viable entity or require RO to invent new technology, even though Crane's patents apply only in the United States. Crane's chief goal in this litigation has been to secure an injunction that would not only close the United States market to sales by RO, but also restrict RO's ability to make sales outside of the United States to companies intending to import RO products (e.g., a French winemaker incorporating RO labels on bottles of wine destined for the United States).⁴

Unsurprisingly, RO vigorously denied Crane's infringement claims and aggressively challenged the validity of Crane's patents in a defense led by two experienced intellectual property partners at a leading regional law firm. Just as this was a "bet the company case" for RO, the case had almost equivalent significance to Crane. It viewed RO's infringement of its patents in the

⁴ Neither party expected that damages found at trial for the infringement or induced infringement would be significant. Indeed, the jury found damages of a mere \$119,186, which was every dollar claimed by Crane. Doc. No. 475 at 2.

product branding context as a threat to its patented technology's (almost) exclusive use for currency. Crane also viewed RO as a nascent competitor to its core currency business and as a threat to the technology upon which it relies in that core business.⁵

The inevitable result was a hard-fought patent dispute in which each party always had one eye on the anticipated motion for a permanent injunction that Crane intended to file at the conclusion of this case, subject to a favorable jury verdict. RO's position and conduct plainly reflected a "zealous" defense, as RO's counsel has described it. The Massachusetts Rules of Professional Conduct, which govern in this Court, see LR, D. Mass. 83.6.1(a), recognize that an attorney "should represent a client zealously within the bounds of the law," SJC Rule 3:07 at 1.3, although they also distinguish between the scope of permissible argument in civil and criminal proceedings, SJC Rule 3:07 at 3.1.

At no point has the Court sanctioned RO or its lawyers. However, the Supreme Court has made clear that the question is whether the case is "exceptional," and that "exceptional" can encompass cases in which a party neither engaged in sanctionable conduct nor litigated in bad faith. Here, RO fought hard. On one material occasion, the Court commented on RO's conduct. With respect to RO's motion to dismiss for lack of personal jurisdiction, the Court observed that RO's "argument ... suggests some pause for the conclusion one might draw from the argument as advanced—that Rolling Optics had no contacts in the United States—was contradicted by

⁵ Despite RO's various disclaimers at times in this case, the trial evidence revealed that RO in fact did have an interest in expanding into the currency business and that RO had taken steps to seek such business. Compare Doc. No. 478 at 60 (counsel's statement in opening arguments: "That's because Rolling Optics doesn't do currency. Rolling Optics is interested in brand identification and brand security, as you'll see.") with Trial Ex. 61 at 2, 4, 12 (December 2014 presentation to 3M describing RO's "high security" and banknote capabilities) and Doc. No. 481 at 108-110 (Lundvall's trial testimony confirming RO's work on banknotes).

facts then known to Rolling Optics.” Doc. No. 168.⁶ Later, RO pursued at summary judgment a new interpretation of one claim term not rendered by the Court in its Markman Order and then rehashed its position in a motion for reconsideration. See Doc. No. 357 at 29 n. 16; Doc. No. 360. Crane also complains that RO made a losing motion to compel, gave up certain arguments late in the case, and pressed in Crane’s view an unreasonable sanctions motion. However, these motions and efforts were not baseless or without legitimate purpose.

Section 285 focuses on whether RO’s conduct in this litigation was “exceptional.” It was not. RO did not engage in sanctionable conduct or bad faith litigation. The arguments that it pursued were not frivolous. RO raised numerous arguments because the case had great importance to it. Each party litigated many issues, not just for each issue’s independent significance, but also for each issue’s bearing on the eventual motion for injunctive relief at the end of the case. RO vigorously fought an important case, always aiming to defeat an injunction on its new technology. The conduct was not exceptional, considered under the totality of the circumstances and in light of the Supreme Court’s guidance in Octane Fitness.

Crane is understandably unhappy. It litigated this case reasonably. While at times Crane sought more than that to which the Court thought it was entitled, see Doc. No. 69, its lawyers provided superb representation in this case and regularly focused their efforts on targeted issues.⁷ In their fee motion, Crane sought “only” fees since the Markman Order. Assuming without

⁶ The Court found that another motion bordered on frivolous. See Doc. No. 531. But, that was a tiny procedural motion at the tail end of the case. Neither alone nor in combination with the rest of the case does that motion support a finding that this case is exceptional.

⁷ RO’s counsel argued at the hearing on this motion that Crane’s litigation of this case was “a rather cynical attempt to either force [RO] out of the market or put it out of business, by imposing the costs of patent litigation on Rolling Optics.” Doc. No. 536 at 71. While the Court denies Crane’s motion for attorneys’ fees, the Court also rejects this characterization of Crane’s conduct.

deciding that Crane has merely narrowed the universe of conduct and that the statute permits such a narrowing, Crane still has not established that the conduct is exceptional. Perhaps a different defendant, different defense counsel, or a different combination of adverse lawyers or parties would have settled this case or more parsimoniously litigated it while preserving each party's right to appeal from any stage of it. But, Crane has not established that this case or RO's defense of it was exceptional within the meaning of Section 285.

Accordingly, the motion for attorneys' fees is DENIED.

B. Enhanced Damages

Crane also requests that the Court enhance RO's damages up to three times. Section 284 provides that a court "may increase damages up to three times the amount found or assessed" by the jury. 35 U.S.C. § 284. While Section 284 grants district courts discretion to award enhanced damages in response to culpable behavior, "such punishment should generally be reserved for egregious cases typified by willful misconduct." Halo Electronics, Inc. v. Pulse Electronics, Inc., 136 S.Ct.1923, 1934 (2016). Courts must take into account "the particular circumstances of each case." Id. at 1933.

Crane proposes that the Court analyze its motion for enhanced damages along the factors outlined in Read Corp. v. Portec, Inc., 970 F.2d 816 (Fed. Cir. 1992).⁸ While the Court broadly considers the particular circumstances of the case as a whole, several of the Read factors are instructive.

⁸ "Because a finding of willful infringement does not command the enhancement of damages, the Read factors, although not mandatory, do assist the trial court in evaluating the degree of the infringer's culpability and in determining whether to exercise its discretion to award enhanced damages at all, and if so, by how much the damages should be increased." WCM Industries, Inc. v. IPS Corp., 721 Fed.Appx. 959, 972 (Fed. Cir. 2018).

The first Read factor is “whether the infringer deliberately copied the ideas of another.” Read Corp., 970 F.2d at 827. This factor weighs in Crane’s favor. RO contends that Lundvall independently developed RO’s technology based on Hutley’s moiré magnifier, which he discovered prior to learning of Crane’s patents. RO also stresses that RO made no changes to its lenses after examining Crane’s HP label. RO developed a technology that mirrored Crane’s claimed invention over a period during which it had reviewed Crane’s patents and inspected Crane’s products in detail. Moreover, to distinguish its product, RO relied on a design-around (the 50 micron dimensional limit) that did not find support in Crane’s patent claims. The Court observes that the similarities of RO’s technology to Crane’s patented invention, coupled with RO’s extensive knowledge of Crane’s intellectual property rights and products, support the inference of copying that favors enhancement. See Veracode, Inc. v. Appthority, Inc., 137 F.Supp.3d 17, 85 (D. Mass. 2015) (observing that “competing product development after learning about the patentee’s product [permits] the inference of copying for factor 1” and citing WBIP, LLC v. Kohler Co., 2014 WL 585854, at *7 (D. Mass. Feb. 12, 2014)).

The second factor is “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.” Read Corp., 970 F.2d at 827. This factor also favors enhanced damages. Crane claims that RO, via Lundvall, admitted to having no good faith belief that RO did not infringe Crane’s patents or that Crane’s patents were invalid. This is not quite true; Lundvall’s deposition and trial testimony expressed unwillingness to state a firm legal conclusion on these points rather than a lack of belief. Lundvall testified that he believed that RO’s products would not infringe Crane’s patents if they employed lenses of a certain size. Doc. No. 481 at 58-59. Lundvall also testified that he believed that the Crane patents claimed a

structure already in the prior art. *Id.* at 81-82. However, the opinions of Lundvall, who is not a lawyer and has no expertise in U.S. patent law, alone could not have supported a good faith belief by RO that Crane's patents were invalid or that RO's products did not infringe Crane's patents. *See, e.g., Metabolite Laboratories v. Laboratory Corp. of America Holdings*, 370 F.3d 1354, 1370-71 (Fed. Cir. 2004) (finding that district court "could easily have determined that [defendant] did not conduct a reasonable investigation" where defendant relied on the conclusions of corporate officer with no training in patent law). Further, RO relied on two separate prior art references (Matsumoto and Drinkwater) at trial, but RO presented no evidence that Lundvall or RO was aware of those references before this litigation. Thus, these references could not have been the basis for a good faith belief in the invalidity of Crane's patents during the period of infringement. In fact, the record does not indicate that any of the specific theories of non-infringement and invalidity that RO advanced in this litigation arose before Crane filed its complaint.⁹

Beyond Lundvall's personal assessments, RO presented no evidence that it meaningfully investigated any outstanding U.S. patents or checked for potential infringement by its products before affirmatively entering the U.S. market by sending free samples or otherwise. RO at all times had the wherewithal and sophistication to arrange for such a review. Further, RO presented no evidence of having obtained the advice of counsel on the questions of infringement and invalidity.¹⁰ Even once counsel had advised RO to cease activity in the United States, RO

⁹ Crane further alleges that RO "went to trial without a single invalidity defense for 13 of the 22 infringed claims." Doc. No. 492 at 11. This fact reflects RO's decision to abandon its defense with respect to its old technology entirely; the Court therefore draws no inferences about RO's good faith belief from this fact.

¹⁰ RO barely tries to disguise its advice-of-counsel-type argument with respect to its lawyers' demonstration of "faith in the new technology by ordering foils for [counsel's] own business cards." Doc. No. 505 at 16. The Court rejects RO's back-door implication. During Lundvall's

continued to send samples and market its products to U.S. companies like 3M. While RO defended its conduct as an inadvertent error, nothing in the record demonstrates any effort to withdraw samples or instruct RO personnel not to market products in the United States upon discovery of the purported error. The Court draws the inference that RO simply took the chance, given the importance of the opportunity with 3M. The absence of investigation and RO's disregard of legal advice with respect to its U.S. market activities belie RO's assertions of good faith during the period of infringement.

The third Read factor is "the infringer's behavior as a party to the litigation." Read Corp., 970 F.2d at 827. For the reasons outlined with respect to Crane's motion for attorneys' fees, this is not a factor weighing against RO for purposes of the Court's determination of enhanced damages.

The fourth Read factor is the infringer's size and financial condition. Id. Though of a relatively small, start-up size, RO retained high-quality counsel and vigorously defended a lengthy, complex patent case. Moreover, the damages awarded by the jury for infringement were relatively modest. Thus, RO's size means less in the context of this case.

Read factor six,¹¹ the duration of the infringer's misconduct, id., favors an award of enhanced damages. RO's infringement of Crane's patents began with the old technology in 2010

trial testimony about the business cards, the Court instructed the jury that it was "entitled to consider the fact, as you've just heard these facts, that Rolling Optics talked to a lawyer, but you're not drawing inferences on what the lawyers did or did not tell them. So you don't draw the inference, either way, that lawyers told them it was okay, or not okay." Doc. No. 481 at 84. Neither side objected to this instruction. At this stage, the Court likewise considers the business cards only as relevant to whether RO had a good faith belief in non-infringement or invalidity, and not as indicative of any actual advice of counsel that RO did or did not receive.

¹¹ The Court does not consider Read factors five (the closeness of the case) or eight (Defendant's motivation for harm) instructive with respect to the facts of this case. Read Corp., 970 F.2d at 827.

and continued with RO's new technology, through the filing of this action in June 2014. During that period, Crane sent RO two notice letters warning RO of potential patent infringement. RO marketed its products to 3M in December 2014 and continued to ship samples to the United States through March 2015, nine months after the filing of this action and seven months after RO received legal advice to stop such shipments. At no point prior to this case did RO obtain advice of counsel or curtail U.S.-related activities.

Read factor seven, remedial action by Defendant, id., also favors enhanced damages. The evidence in this case indicates that RO took no remedial action to avoid infringement of Crane's patents upon receiving either of Crane's notice letters. Further, even as Crane and RO entered litigation, RO continued shipments and sales pitches. Lundvall testified that these post-2014 activities occurred because it "took some time for the organization to understand that it might be – [n]ot a good idea to send further examples to the US." Doc. No. 480 at 62. However, RO presented no evidence that RO contacted the recipients to retract any of these samples or product offers or why it took a small company so long to change course.

The Court does not consider the ninth Read factor—whether RO attempted to conceal its misconduct—determinative of enhanced damages. Read Corp., 970 F.2d at 827. RO's mere denial of the charges in Crane's April 2010 notice letter and subsequent shipments of infringing samples to the United States lack affirmative indicia of concealment, as does RO's non-response to Crane's December 2012 notice letter. Similarly, RO's cancellation of a trade show appearance—based on a decision "that it would be unwise to start actively selling our security applications in front of Crane's nose[,]" Trial Ex. 63—suggests concerns related to challenging Crane's core business more than it does efforts to hide infringing activities from Crane.

RO correctly notes that a jury finding of willful infringement neither mandates nor creates a presumption of enhanced damages. However, the Court finds an enhancement warranted in this case. RO's infringement was not, as RO characterizes it, *de minimis* or "barely an infringement at all." Doc. No. 505 at 20. In its Summary Judgment Order, the Court found patent infringement by RO products of both the old and new technologies. The Court's Summary Judgment Order and the jury's verdict together established that RO both directly infringed and induced third parties to infringe. Moreover, the jury found that such infringement was willful—hardly justifying RO's casual dismissal of the infringement findings. RO contends that it did not think that sending free samples to the United States infringed Crane's patents, Doc. No. 505 at 16; that RO derived no profit from those shipments, id. at 1; and that Crane suffered no harm from those shipments, id. These contentions, even assumed to be accurate, are beside the point. RO intended for the sending of these samples to result in sales.¹² In any event, mere importation causes a product to infringe, and the evidence at trial supports the conclusion that RO imported its products with a deliberate disregard for Crane's patent rights. Counsel's argument that importation was only added to the patent statutes in 1990 is of no significance, as Lundvall was then only a teenager and RO did not yet exist.

Accordingly, the Court awards enhanced damages. RO willfully sent infringing products into the U.S. market without a good faith belief in non-infringement or invalidity, and with a willful disregard for Crane's patent rights. Against legal advice, it pursued sales possibilities with an important potential U.S. customer. Finally, it passed itself off as not competing with

¹² RO also contends that "Plaintiffs introduced no evidence that Rolling Optics had ... offered for sale ... any accused product in the United States." Doc. No. 505 at 1. Even setting aside the evidence of RO's marketing to 3M in March 2015, the Court rejects any suggestion that these free samples somehow were not an offer for sale.

Crane's core business when it in fact did. See supra n. 5. Accordingly, considering all the circumstances, the Court triples the jury's damages determination under Section 284 and orders RO to pay Crane damages of \$326,244.¹³

III. PLAINTIFF'S MOTION FOR PERMANENT INJUNCTION (DOC. NO. 497)

Crane moves for the Court to permanently enjoin RO from future infringing activity. A court may grant an injunction "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." 25 U.S.C. § 283. A permanent injunction is warranted if the patent owner 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, LLC, 547 U.S. 388, 391 (2006). The parties agree that the Court should impose an injunction prohibiting direct and induced infringement.

For largely the reasons outlined in Crane's brief, Doc. No. 498-2, the Court finds that the eBay factors favor a permanent injunction in this case. Despite suggestions by counsel in this case, RO is a competitor to Crane, both in the brand protection business and, as expressed by RO and Lundvall, in the banknote business. See supra n. 5. Thus, future activity by RO implicating Crane's patent rights is likely. Crane has suffered irreparable harm from RO's infringement in the form of lost market exclusivity and damaged reputation Douglas Dynamics, LLC v. Buyers

¹³ The Court bases this figure on a damages finding herein of \$108,748 (the damages found at trial reduced by the corresponding amount for the products found not to have been the subject of induced infringement).

Products Co., 717 F.3d 1336, 1345 (Fed. Cir. 2013) (“Exclusivity is closely related to the fundamental nature of patents as property rights. It is an intangible asset that is part of a company’s reputation, and here, [patent holder’s] exclusive right to make, use, and sell the patented inventions is under attack by [the] infringement.”). RO’s infringement introduced into the market technology that diluted the anti-counterfeiting value of Crane’s invention to Crane’s banknote customer in the United States. Remedies at law are inadequate to address with accuracy the impaired goodwill and any competitive injury Crane has suffered. Crane’s interest in enforcing its intellectual property rights outweigh any hardship of an injunction to RO, which already has ceased business in the United States. Finally, no countervailing public interest cautions against an injunction.

As to the scope of the injunction, the Federal Circuit has noted that “injunctions have satisfactory scope when they prohibit infringement of the patent by the adjudicated devices and infringement by devices not more than colorably different from the adjudicated devices.” United Construction Products, Inc. v. Tile Tech, Inc., 843 F.3d 1363, 1371 (Fed. Cir. 2016) (internal quotations and citations omitted). Crane requests that the injunction enumerate prohibited inducement activities and include notice and disclosure provisions. RO opposes these additional requests and additionally argues that the injunction that Crane proposes would have impermissible, extraterritorial reach.

The Court considers enumeration of activities that would constitute inducement of infringement unnecessary. While Fed. R. Civ. P. 65(d)(1)(C) requires an injunction to “describe in reasonable detail [...] the act or acts restrained or required[,]” a prohibition on actively inducing infringement that itself mirrors the relevant statutory provisions provides the requisite detail.

In light of RO's prior disregard of Crane's patent rights and the likelihood of future infringement or inducement of infringement, the Court finds it reasonable and necessary for the permanent injunction to require some measure of ongoing notice to RO's customers and disclosure of such notice to the Court. However, the degree of notice and disclosure proposed by Crane exceeds the remedial and prophylactic purposes of such requirements. The Court therefore enjoins RO from offering for sale or selling to any of its customers or potential customers an infringing product without providing the notice, which RO now currently provides, that such product is not for sale in, use in, or delivery to the United States. The Court also orders RO to provide notice of the permanent injunction to any person or entity that RO learns has infringed Crane's patents in connection with RO's infringing products. Further, RO must file with the Court, and serve copies designated for attorneys' eyes only to the parties in this case, the names of any persons or entities to which it has provided notice of the injunction pursuant to the injunction's terms. Finally, the Court considered requiring RO, as a remedial measure, to give notice of the injunction to any person who purchased or received an infringing product from RO since 2015 and any person or entity that RO has reason to believe possesses an infringing product. However, no evidence suggests that RO has sent products into the United States since 2015 or that any products that RO sold in Europe or elsewhere have been imported into the United States during that time. Thus, notice to prior customers of the permanent injunction is not warranted.

Accordingly, the Court **ALLOWS** in part and **DENIES** in part Crane's motion for injunctive relief and enters a Permanent Injunction in the form attached hereto.

IV. CONCLUSION

For the foregoing reasons, the Court ALLOWS in part and DENIES in part RO's motion for judgment as a matter of law (Doc. No. 495) as set forth herein; ALLOWS Crane's motion for enhanced damages but DENIES Crane's motion for attorneys' fees (Doc. No. 491); and ALLOWS in part and DENIES in part Crane's motion for injunctive relief (Doc. No. 497). The Court hereby enjoins RO from future infringement of Crane's patents to the extent outlined in the attached Permanent Injunction and orders RO to pay Crane enhanced damages of \$326,244. The parties shall submit a proposed final judgment conforming to this Order within seven days.

SO ORDERED.

/s/ Leo T. Sorokin
Leo T. Sorokin
United States District Judge