

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

AUGUST TECHNOLOGY
CORPORATION and RUDOLPH
TECHNOLOGIES, INC.,

Civil No. 05-1396 (JRT/FLN)

Plaintiffs,

**MEMORANDUM OPINION
AND ORDER**

v.

CAMTEK, LTD.,

Defendant.

Thomas R. Johnson, William D. Schultz, Daniel W. McDonald, Heather J. Kliebenstein, Joseph E. Lee, and Rachel C. Hughey, **MERCHANT & GOULD PC**, 80 South Eighth Street, Suite 3200, Minneapolis, MN 55402, for plaintiffs.

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Plaintiffs August Technology Corporation and Rudolph Technologies, Inc. brought this patent infringement action against Defendant Camtek, Ltd. (“Camtek”) in 2005 alleging infringement of claims 1 through 5 of United States Patent No. 6,826,298 (the “6,298 patent”). In 2009, a jury found that Camtek had infringed claims 1 and 3,

and the Court entered judgment and a permanent injunction. In 2011, the Federal Circuit vacated the judgment and remanded for further proceedings with an amended claim construction. Applying the new claim construction, this Court entered summary judgment for Plaintiffs on the issue of infringement in March 2014.

The case is now before the Court on Camtek's motion for new proceedings and a jury trial to determine damages responsive to the revised claim construction, and Plaintiffs' motion for final judgment and a permanent injunction. Because no genuine issues of material fact remain for a jury to decide, and because recent Federal Circuit precedent affects the injunctive relief previously entered in this case, the Court will deny Camtek's motion and grant Rudolph Technologies, Inc.'s motion in part. The Court will also vacate the contempt order entered against Camtek [Docket No. 764], based on the Federal Circuit's decision in *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 769 F.3d 1371 (Fed. Cir. 2014).

BACKGROUND¹

Plaintiff August Technology Corporation developed the inventions that are the subject of the '6,298 patent. (Thirty-Second Decl. of Joseph E. Lee, Ex. A, July 2, 2012, Docket No. 835.) Rudolph Technologies, Inc. purchased August Technology in 2006, and Rudolph and August Technology (collectively, "Rudolph") are now co-owners of the

¹ A more detailed recitation of the facts can be found in the Court's previous orders. *See August Tech. Corp. v. Camtek, Ltd.*, No. 05-1396, 2012 WL 3568823, at *1-2 (D. Minn. Aug. 17, 2012); (Mem. Op. & Order ("2014 Summary Judgment Order") at 3-15, Mar. 31, 2014, Docket No. 964.).

'6,298 patent. Camtek directly competes with Rudolph in the market for automated wafer inspection systems, particularly through its "Falcon" device. (Mem. Op. & Order ("Markman Order") at 2, Jan. 3, 2008, Docket No. 268; Compl. ¶¶ 3-5, July 14, 2005, Docket No. 1.) In 2005, Rudolph filed this action against Camtek for infringing the '6,298 patent.

I. THE '6,298 PATENT

The '6,298 patent contains five claims. Claims 1 and 3 are the most relevant to the issue of infringement.

A. Claim 1

Claim one of the '6,298 patent recites:

An automated system for inspecting a substrate such as a wafer in any form including whole patterned wafers, sawn wafers, broken wafers, and wafers of any kind on film frames, dies, die in gel paks, die in waffle paks, multi-chip modules often called MCMs, JEDEC trays, Auer boats, and other wafer and die package configurations for defects, the system comprising:

a wafer test plate;

a wafer provider for providing a wafer to the test plate;

a visual inspection device for visual inputting of a plurality of known good quality wafers during training and for visual inspection of other unknown quality wafers during inspection;

at least one of a brightfield illuminator positioned approximately above, a darkfield illuminator positioned approximately above, and a darkfield laser positioned approximately about the periphery of the wafer test plate, all of which are for providing illumination to the unknown quality wafers during inspection and at least one of which strobes to provide short pulses of light during movement of a wafer under inspection based on a velocity of the wafer; and

a microprocessor having processing and memory capabilities for developing a model of good quality wafer and comparing unknown quality wafers to the model.

(Compl., Ex. A 20:55-21:9.)

B. Claim 3

Claim three of the ‘6,298 patent recites:

An automated method of inspecting a semiconductor wafer in any form including whole patterned wafers, sawn wafers, broken wafers, and wafers of any kind of film frames, dies, die in gel paks, die in waffle paks, multi-chip modules often called MCMs, JEDEC trays, Auer boats, and other wafer and die package configurations for defects, the method comprising:

training a model as to parameters of a good wafer via optical viewing of multiple known good wafers;

illuminating unknown quality wafers using at least one of a brightfield illuminator positioned approximately above, a darkfield illuminator positioned approximately above, and a darkfield laser positioned approximately about the periphery of a wafer test plate on which the wafer is inspected, all of which are for providing illumination to the unknown quality wafers during inspection and at least one of which flashes on and off during movement of a wafer under inspection at a sequence correlating to a velocity of the wafer; and

inspecting unknown quality wafers using the model.

(*Id.*, Ex. A 21:17-22:15.)

II. PROCEDURAL HISTORY

A. Claim Construction and Trial

In a January 3, 2008 *Markman* order, the Court construed a number of terms in the ‘6,298 patent that are relevant to the current motions, including:

Wafer. The Court construed “wafer” to mean “[a] thin slice of semiconductor material with circuitry thereon that is ready for electrical testing, or any part thereof.” (*Markman* Order at 8, 11.)

Training. The Court construed training to mean “[e]xamining wafers to develop a model of a good quality wafer.” (*Id.* at 20.) In adopting this construction, the Court rejected Rudolph’s construction which incorporated “telling the system what a ‘good die’ comprises, and viewing good die to form a model based on common characteristics, elements, and ranges. The model is then used to inspect die to locate defects.” (*Id.* at 19-20 (internal citation omitted).) Instead, the Court found that “Plaintiffs[’] reliance on the step in which the model is used to inspect die to locate defects is a step separate from training, and need not be used to define training.” (*Id.* at 20.)

Based on the Court’s claim construction, after an eighteen-day trial, a jury returned a special verdict finding that Camtek and its Falcon device literally infringed both claims 1 and 3 of the ‘6,298 patent. (Special Verdict Form at 1-4, Mar. 5, 2009, Docket No. 466.) The jury found that Camtek’s infringement was not willful, and awarded \$6,782,490 in lost profits to Rudolph. (*Id.* at 6-7.)

The Court denied Camtek’s motion for judgment as a matter of law or a new trial on validity, infringement, and damages. (Mem. Op. & Order at 2, 8, 14-15, Aug. 25, 2009, Docket No. 545.) Specifically, the Court rejected Camtek’s argument that the Court had erred in instructing the jury with respect to the meaning of “on sale.” (*Id.* at 3-6.) The Court also determined that the jury verdict was not against the clear weight of the evidence with respect to the date of sale of the NSX-80 device. (*Id.* at 7-8.) Finally, the

Court granted Rudolph's motion to dismiss Camtek's inequitable conduct defense and counterclaim, which had previously been bifurcated from the original trial, because those theories of defense had been precluded by the jury verdict. (*Id.* at 2, 8-12.)

B. Appeal

Camtek appealed to the Federal Circuit, challenging the jury's damages award, the permanent injunction entered by the district court, the validity of the '6,298 patent itself, and two infringement issues (Thirty-Second Lee Decl., Ex. E.)² Camtek argued first that "the Falcon trains on only a single wafer, not multiple wafers," and second, that "the Falcon strobe[] [is] based on the position of the wafer, not the velocity of the wafer." (*Id.*, Ex. E at 5, 31, 43.) As to the single versus multiple wafer issue, Camtek argued that the district court had erred when it construed the term wafer as "a thin slice of semiconductor material with circuitry thereon that is ready for electrical testing, **or any part thereof.**" *August Tech. Corp. v. Camtek, Ltd.*, 655 F.3d 1278, 1282 (Fed. Cir. 2011) (internal quotation marks omitted). Camtek argued that the Falcon only trains individual die, which can all be found on a single wafer. (Thirty-Second Lee Decl., Ex. E at 43-44.)

The Federal Circuit agreed with Camtek that the district court had erred in its construction of "wafer" and provided a new construction for the term "wafer":

The district court's construction is in error so far as it defines a wafer as any portion of a wafer having two or more dies. We construe a wafer as recited in the claims at issue as a thin, discrete slice of semiconductor material with circuitry thereon that is ready for electrical testing having one

² Page references to Exhibit E of the Thirty-Second Lee Declaration refer to the CM/ECF pagination.

or more dies. A plurality of wafers means more than one physically distinct wafer.

August Tech. Corp., 655 F.3d at 1286. Because it found that the district court had erred in its claim construction, the Federal Circuit “vacate[d] the district court’s judgment of infringement, its award of damages, and its grant of a permanent injunction, and remand[ed] for further proceedings consistent with [its] opinion.” *Id.* at 1281. The court remanded the case to the district court “for a limited trial on infringement,” *id.* at 1286, and advised the district court that if it found Camtek’s Falcon to infringe under the revised claim construction, it should take into account the effect of *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296 (Fed. Cir. 2010) (“*Transocean*”), when crafting an appropriate injunction, *August Tech.*, 655 F.3d at 1291.

C. Summary Judgment Order

On March 31, 2014, the Court granted summary judgment to Rudolph on the issue of infringement, using the Federal Circuit’s claim construction. (Mem. Op. & Order (“Summ. J. Order”), Mar. 31, 2014, Docket No. 964.) The Court determined that “no material issues of fact remain[ed] as to whether Camtek’s product was capable of practicing the infringing method and did, in fact, practice such a method.” (*Id.* at 2.) More specifically, “[b]ecause the Falcon is capable of using multiple, physically discrete wafers to create the inspection parameters [for die], it infringes claim 1” (*Id.* at 33.) The Court noted that claim 3 “requires Rudolph to show that the Falcon has in fact trained a model through the viewing of multiple known wafers, not that it is merely

capable of such an action.” (*Id.* at 28.) Rudolph presented evidence sufficient to enable a reasonable jury to conclude that Camtek used the Falcon in a manner that infringed claim 3, but Camtek offered no evidence to refute Rudolph’s showing, and the Court also granted summary judgment with respect to claim 3. (*Id.* at 36-37.) Because “the Federal Circuit limited the issues on remand to the training elements of claims 1 and 3 as they relate to the use of multiple, physically discrete wafers,” (*id.* at 17), the March 2014 order granting summary judgment to Rudolph on infringement of claims 1 and 3 addressed all remanded infringement issues.

ANALYSIS

I. CAMTEK’S MOTION FOR NEW PROCEEDINGS AND JURY TRIAL

In light of the Court’s summary judgment order, Camtek has moved for new proceedings and a jury trial to determine damages responsive to the new infringement scope. After reviewing the briefing and holding oral argument, the Court remains unclear about the precise authority for Camtek’s motion. Camtek cites no basis for the motion in their briefing. At oral argument, Camtek represented that its motion for new proceedings is not a Rule 59 motion for a new trial but rather a request for “an original trial” under the mandate rule. The Federal Circuit did not mandate a new jury trial in this case as part of its remand, however. As a result, the Court will treat Camtek’s motion as the closest analogue presented in Camtek’s briefs – a request for a jury trial pursuant to the Seventh Amendment guarantee in civil cases.

A. Standard of Review

The Seventh Amendment provides that “[i]n Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved” U.S. Const. amend. VII. The right to a jury trial applies to patent infringement actions in which the plaintiff requests money damages. *See, e.g., Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 733 F.3d 1369, 1379 (Fed. Cir. 2013). “This right exists only with respect to disputed issues of fact,” however, so “[a] grant of summary judgment does not violate the Seventh Amendment right to a jury trial.” *Harris v. Interstate Brands Corp.*, 348 F.3d 761, 762 (8th Cir. 2003).

B. Whether Material Facts Remain Disputed

Camtek alleges that material facts are disputed and thus the Seventh Amendment entitles them to a new jury trial on the issue of damages in this case. Specifically, Camtek asserts that a jury needs to determine whether lost profits are available, including whether some Falcon products constitute acceptable non-infringing alternatives; whether the patented feature drove demand for the whole product; and whether Rudolph is entitled to reasonable royalty damages. Because these matters have already been resolved by the Court or are not at issue, the Court will deny Camtek’s motion for a new jury trial.

The scope of the remand in this case was decidedly narrow. The Federal Circuit found the Court’s claim construction to be “in error so far as it defines a wafer as any portion of a wafer having two or more dies.” *August Tech.*, 655 F.3d at 1286. The

Federal Circuit instructed the Court as to the correct construction of the term “wafer” and indicated that “[b]ecause the jury was given a flawed claim construction, the verdict of infringement must be vacated.” *Id.* The Federal Circuit declined to make a determination as to whether Camtek’s product infringed even under the revised claim construction and “instead remand[ed] to the district court for a limited trial on infringement with respect to this claim element.” *Id.* The court explicitly did “not reach the parties’ contentions regarding damages.” *Id.* at 1290. The decision from the Federal Circuit gave no directions about the handling of money damages but merely stated that the court was remanding “for further proceedings consistent with this opinion.” *Id.* at 1291.

Following the Federal Circuit’s instructions, this Court conducted further proceedings, operating under the revised claim construction, and determined that Plaintiffs were entitled to summary judgment because Camtek’s Falcon product infringed under the new construction. The Court concluded that “[n]o material issues of fact remain as to whether Camtek’s product was capable of practicing the infringing method and did, in fact, practice such a method.” (Summ. J. Order at 2.) In so finding, the Court contemplated that the Falcon product could potentially be capable of being operated in a non-infringing manner. But the Court determined that summary judgment for Plaintiffs was appropriate because the only evidence on the issue indicated that Camtek trained its customers to use multiple discrete wafers when using the Falcon’s training function. Camtek provided no evidence to the contrary and in fact provided no evidence of any non-infringing uses of the Falcon by Camtek employees or customers during the relevant

time period. Consequently, the Court concluded that no issues of material fact remained as to infringement, which was the narrow question on which the Federal Circuit remanded.

Although a new jury was not empaneled for the purposes of making this determination, the grant of summary judgment was entirely consistent with the Federal Circuit's directive to hold "a limited trial on infringement." *August Tech.*, 655 F.3d at 1286. Indeed, "[w]here no material factual issues are present, a summary judgment proceeding is the functional equivalent of a new trial; under such circumstances a full-scale trial is neither necessary nor helpful." *Publishers Res., Inc. v. Walker-Davis Publ'ns, Inc.*, 762 F.2d 557, 559 (7th Cir. 1985). The grant of summary judgment does not leave any disputed infringement issues – such as the possibility that some Falcon devices constitute acceptable non-infringing alternatives – at the damages stage now, nor does it "violate [Camtek]'s right to a jury trial where, as here, the moving party [was] entitled to judgment as a matter of law." *Junk v. Terminix Int'l Co.*, 628 F.3d 439, 450 (8th Cir. 2010).

In light of the limited scope of the Federal Circuit's remand and this Court's March 2014 summary judgment order, no material issues of fact remain in this case. Thus, the first two issues Camtek argues require jury determinations – whether lost profits are available based on the possible existence of acceptable non-infringing alternatives and if so, what amount is appropriate, depending on whether the patented feature drove product sales – are no longer disputed issues requiring a jury finding. The remaining grounds Camtek cites as necessitating a jury determination – as to the

appropriate amount of reasonable royalty damages – are irrelevant because Rudolph clarified at oral argument that the Plaintiffs are not seeking reasonable royalty damages. All that remains to be done in this case is award damages; no disputed facts await a jury determination.

C. Reinstating the Jury’s Original Damages Award

Rudolph asks the Court to reinstate the jury’s original damages award now that infringement has been resolved under the revised claim construction. Camtek argues that to do so would be improper, citing the Federal Circuit’s recent decision in *Apple Inc. v. Motorola, Inc.* (“*Apple-Motorola*”), 757 F.3d 1286 (Fed. Cir. 2014). In *Apple-Motorola*, Apple raised patent infringement claims based on multiple patents; Motorola counterclaimed based on its own patents, and each party pursued declarations of patent invalidity and non-infringement as to the other’s patents. *Id.* at 1294. The district court granted summary judgment of non-infringement with respect to some patent infringement claims and excluded much of the expert testimony proposed by the parties as to damages for the remaining claims. *Id.* On appeal, the Federal Circuit found that the district court operated under an incorrect claim construction for one of the patents. *Id.* at 1300-04. The court concluded that the district court had erred by excluding expert testimony on damages and ultimately denying damages based on an incorrect claim construction. *Id.* at 1315-16. Under those circumstances, the Federal Circuit explained that the district court’s error “would require reversal and remand because the erroneous claim construction . . . tainted the . . . damages analysis.” *Id.* Camtek avers that the same is

true in this case and a new jury trial is required to determine damages under the revised claim construction. The Court will reject this argument.

Camtek is correct that the original jury award was based on the old claim construction, but without more, that does not inherently and permanently divest the jury's calculation of all value to the Court. Because the award in this case was based on an incorrect claim construction, the Federal Circuit vacated the award and remanded, just as it did in *Apple-Motorola* when the district court's damages determination was based on a faulty claim construction. But if a new determination is made, under the corrected claim construction, that the jury's determination was based on an accurate scope of infringement, the jury's damages award can be revived. Such is the case here. The Court's March 2014 summary judgment order concluded that the scope of Camtek's infringement under the Federal Circuit's revised claim construction is identical to the scope of the infringement found by the jury under the incorrect claim construction. Rudolph is therefore entitled to the same amount of damages now that the jury was previously prepared to award.

Where the remand from the Federal Circuit is directed at claim construction and infringement, a district court may reinstate the jury's damages award where it is consistent with the Federal Circuit's opinion and mandate. For example, in *Cordis Corp. v. Medtronic Vascular, Inc.* ("*Cordis*"), 576 F. Supp. 2d 645 (D. Del. 2008), the jury found infringement and made a damages determination. *Id.* at 647, 653 n.11. The district court subsequently granted judgment as a matter of law ("JMOL") as to non-infringement of the patent at issue in the case; the Federal Circuit reversed the JMOL and remanded to

the district court. *Cordis Corp. v. Medtronic AVE, Inc.* (“*Cordis—JMOL*”), 339 F.3d 1352, 1356, 1365 (Fed. Cir. 2003). On remand from the Federal Circuit, the district court found no evidence in the record supporting the defendant’s argument that some of its products constituted non-infringing alternatives. *Cordis*, 576 F. Supp. 2d at 652. Accordingly, the court refused to “prolong this litigation further based on mere speculation” of acceptable non-infringing alternatives and denied the motion for a new trial on damages. *Id.* As a result of its infringement determination, the district court entered a final judgment for the plaintiff in an amount “comprised of the [original] jury’s verdict . . . together with damages for post-verdict sales . . . and prejudgment interest . . .” *Cordis Corp. v. Medtronic Vascular, Inc.* (“*Cordis—Final Judgment*”), Civ. Nos. 97-550, 98-19, 2008 WL 6579771, at *2 (D. Del. Sept. 30, 2008).³

As was the case in *Cordis*, no material issues of fact remain in this case as to the scope of the infringement on which damages must be based. Therefore, to empanel a new jury to make a second damages determination would merely offer Camtek another

³ Similarly, in *Lexion Medical, LLC v. Northgate Technologies, Inc.*, the jury found patent infringement by the defendant and awarded damages for Lexion; the defendant appealed, and the Federal Circuit vacated the jury’s verdict due to a claim construction error. 618 F. Supp. 2d 896, 898-99 (N.D. Ill. 2009). On remand, the district court granted summary judgment of infringement for the plaintiff, concluding that there was no evidence supporting non-infringement under the Federal Circuit’s revised claim construction. *Id.* at 900-01. In light of the entry of summary judgment, the court entered a final judgment nearly identical to the jury’s original damages award, without conducting additional proceedings on damages. (Case No. 04-cv-5705 (N.D. Ill.), Order of Final Judgment at 1, July 7, 2009, Docket No. 323 (awarding plaintiff damages in the amount of \$759,714.48); Minute Entry, Oct. 13, 2006, Docket No. 221 (noting jury’s verdict on damages in the amount of \$769,644.00).)

bite at the apple. This Court will not allow the parties to reargue issues that have already been decided.

Entering damages for Rudolph in the amount originally calculated by the jury, plus prejudgment interest, is the most appropriate course of action in this case. Where a jury has already awarded damages to a plaintiff, “a judicial re-assessment of a prior jury’s damage award would be in derogation of Defendant’s Seventh Amendment right to a jury trial.” *Oiness v. Walgreen Co.*, 838 F. Supp. 1420, 1422 (D. Colo. 1993). “Although the Circuit did not specifically remand for a new trial, the law in this area directs that this Court may not unilaterally determine the damage issue.” *Id.* Indeed, the very error for which the Federal Circuit reversed and remanded in *Apple-Motorola* was the district Court’s decision to “substitute[e] its own opinion” for the experts’ conclusions on which the jury relied in awarding damages. *Apple-Motorola*, 757 F.3d at 1316. Thus, the Court will not attempt to modify the jury’s calculation – based on an infringement scope that is co-extensive with the scope this Court found under the Federal Circuit’s new claim construction – but rather will proceed with the entry of a final judgment.

II. PLAINTIFFS’ MOTION FOR FINAL JUDGMENT AND PERMANENT INJUNCTION

A. Final Judgment

Because the Court granted summary judgment with respect to all remaining infringement issues, Rudolph moves for a final judgment in this case. Rudolph asserts that no fact issues remain unresolved, so there is no basis for waiting on the entry of a final judgment granting Rudolph damages as determined by the jury. As explained

above, the Court will grant this request. The Court concludes that further delay is not warranted because all infringement issues have been resolved. Under the Federal Circuit's revised claim construction, the same number of Camtek's products infringe Rudolph's patent as found at trial by the jury. Therefore, a final judgment reinstating the jury's damages award is appropriate at this time.

Rudolph also requests that the Court award prejudgment interest at the Minnesota statutory rate. Rudolph urges that "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." *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655-56 (1983); *Bio-Rad Labs. v. Nicolet Instruments Corp.*, 807 F.2d 964, 967 (Fed. Cir. 1986). Specifically, Rudolph requests interest from the date of infringement until the date the Court enters its final judgment. *See Bio-Rad Labs.*, 807 F.2d at 967 ("The normal procedure under *Devex* is to award pretrial interest from the date of infringement to the date of payment"); *Nickson Indus., Inc. v. Rol Mfg. Co., Ltd.*, 847 F.2d 795, 800 (Fed. Cir. 1988).

The Court previously awarded prejudgment interest at the Minnesota statutory rate in the final judgment following the jury trial in this case. (Order on Final J. & Injunctive Relief at 3-4, Aug. 28, 2009, Docket No. 547 (accepting the Minnesota statutory rate as set out in Minn. Stat. § 549.09 and awarding prejudgment interest accordingly).) The Court will continue to apply the same rate of "ten percent per year" now. Minn. Stat. § 549.09, subd. 1(c)(2). Camtek protests that this will offer a windfall to Rudolph, because the five-year delay in this case was not prompted by Camtek's foot-dragging or

other bad-faith actions. Instead, Camtek asserts that the delay was due to Camtek's successful appeal of the claim construction issue to the Federal Circuit. Although the Court recognizes Camtek's concern, it is nevertheless the case that "the purpose of [awarding] prejudgment interest is to compensate the patentee for its 'foregone use of the money [the royalty payments] between the time of the infringement and the date of the judgment'" *Bio-Rad Labs.*, 807 F.2d at 969 (quoting *Devex*, 461 U.S. at 656). Camtek's contention that it succeeded in obtaining a revised claim construction on appeal is accurate, but as the Court has already explained, the revised claim construction did not alter the scope of infringement or the damages due Rudolph. Denying prejudgment interest for the intervening period of time "not only undercompensates the patent owner but may also grant a **windfall to the infringer** and create an incentive to prolong litigation." *Devex*, 461 U.S. at 655 n.10 (emphasis added).

Accordingly, the Court will honor the objective of Minnesota Statute § 549.09 and grant prejudgment interest on the damages and supplemental damages awards, at the Minnesota statutory rate. The Court will calculate prejudgment interest on the primary damages award from February 1, 2005⁴ until the date of this order entering final

⁴ As a general rule, "prejudgment interest should be awarded from the date of infringement to the date of judgment." *Nickson Indus., Inc.*, 847 F.2d at 800. In this case, the Court will use February 1, 2005, which is specified in Rudolph's amended complaint as the date on which August Technology Corporation put Camtek on notice that their Falcon device was an infringing product. (Am. Compl. ¶ 8, Apr. 12, 2006, Docket No. 103.)

judgment in this case. Prejudgment interest on the supplemental damages award will run from January 24, 2009 until the date of this order.⁵

B. Permanent Injunction

1. Standard of Review

A plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief:

(1) [T]hat [the plaintiff] 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).

2. Former Injunction

The Court has previously determined that these four factors are met in this case by Camtek's infringement of the '6,298 patent. On August 28, 2009, the Court entered a permanent injunction against Camtek. (Order on Final J. & Injunctive Relief at 4-8.)

⁵ The supplemental damages award is based on four infringing sales, taking place on September 20, 2008; November 20, 2008; January 26, 2009; and May 29, 2009. (R&R ("Nov. 2010 R&R") at 3, 7-9, Nov. 17, 2010, Docket No. 683.) Supplemental damages were awarded for only two of the four infringing sales, however, based on Rudolph's 60% control of a multiple-supplier market. (Nov. 2010 R&R at 9.) Thus, the Court cannot base prejudgment interest on the dates of all four infringing sales. To capture the "infringement" date for the supplemental damages award as accurately as possible, then, the Court will use January 24, 2009, which is halfway between September 20, 2008 (the date of the first of the four additional infringing sales) and May 29, 2009 (the date of the last of the four additional infringing sales). The Court will again calculate the prejudgment interest at the Minnesota statutory rate of ten percent per year (or, on the supplemental damages award of \$645,946, \$176.97 per diem), until the date of this final judgment.

The injunction was based on the evidence presented to the jury, which the Court determined was sufficient to establish that Rudolph had “suffer[ed] and [would] continue to suffer irreparable harm, and that the remedies at law, such as monetary damages, would not adequately compensate [them] for their injury.” (*Id.* at 4.) The Court addressed all four factors under *eBay*, concluding that a permanent injunction was appropriate to prevent future infringements by Camtek.

Camtek challenged the permanent injunction on appeal to the Federal Circuit. In particular, Camtek disputed paragraph 5(a) of the injunction, which stated:

[Camtek is enjoined from] communicating with third parties (in person, via phone, via email, or by any other means) located in the United States for the purposes of offering to sell Falcon machines or machines that are colorable imitations thereof, notwithstanding where the third party intends to use the machines[.]

(*Id.* at 8.) When the Federal Circuit revised the claim construction in this case and vacated the jury’s damages award, the court also vacated the permanent injunction. *August Tech.*, 655 F.3d at 1281, 1290-91. The Federal Circuit left open the possibility that the Court could “craft[] an appropriate injunction” in this case if the Court found Camtek’s Falcon to infringe under the revised claim construction. *Id.* at 1291.

Because the Court previously determined that a permanent injunction was warranted in this case, and the Court confirmed that Camtek’s product infringed even under the new claim construction, the Court will re-issue a permanent injunction at this stage. As explained below, however, the Court will not fully reinstate the initial permanent injunction issued in 2009. Rather, to be consistent with recent Federal Circuit

precedent, the Court will modify the original injunction so as not to prohibit sales activities relating to products destined for consumers outside the United States.

3. Rudolph's Proposed Injunction and the Impact of *Transocean* and *Halo Electronics*

When the Federal Circuit vacated and remanded the injunction in this case, it directed the Court, if the Court found Camtek's product to infringe under the revised claim construction, to "take into account the effect, if any, *Transocean* has when crafting an appropriate injunction." *August Tech.*, 655 F.3d at 1291. In *Transocean*, the Federal Circuit considered "whether an offer which is made in [a foreign country] by a U.S. company to a U.S. company to sell a product within the U.S., for delivery and use within the U.S. constitutes an offer to sell within the U.S. under § 271(a). We conclude that it does." *Transocean*, 617 F.3d at 1309. The court went on to explain that "for an offer to sell to constitute infringement, the offer must be to sell a patented invention **within the United States**. The focus should not be on the location of the offer, but rather the location of the future sale that would occur pursuant to the offer." *Id.* (emphasis added).

Rudolph contends that the original permanent injunction, including paragraph 5(a), was fully consistent with *Transocean* and thus should be reinstated in its entirety. Rudolph asks the Court to read *Transocean* as referring only to offers for products to be delivered within the United States. *Transocean*, 617 F.3d at 1308-09. In line with that reading, Rudolph submitted a proposed permanent injunction largely identical to the August 28, 2009 injunction, with the addition of a new paragraph, which states:

8. Camtek is barred from meeting with potential customers anywhere in the world for the purposes of selling or using Falcons if the contemplated location of the delivery of the Falcon or use of the method of claim 3 is within the United States.

(Proposed Order on Final J. & Permanent Inj. at 7, May 19, 2014.)

Rudolph claims that the addition of paragraph 8 in its proposed injunction is also compatible with *Transocean* and the goal of preventing Camtek from making offers outside the United States for the sale of Falcons to be used within the United States. This interpretation appears to be based largely on the patent code's infringement or "offer to sell" provision, which states:

[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

35 U.S.C. § 271(a).

But Rudolph's arguments and proposed injunction run afoul of the Federal Circuit's recent decision in *Halo Electronics*. In *Halo Electronics*, the Federal Circuit made clear that a product whose contemplated sale occurs outside the United States does not infringe a U.S. patent. *Halo Elecs.*, 769 F.3d at 1381. In doing so, the court upheld the logic of *Transocean* and applied it to facts very similar to those found in the instant case. The court explained that the facts in *Halo Electronics* were "the opposite situation [from *Transocean*], where the negotiations [for a product sale] occurred in the United States, but the contemplated sale occurred outside the United States." *Id.* Although the factual scenarios were reversed – with *Transocean* involving negotiations outside the United States for a transaction within the United States – the Federal Circuit in *Halo*

Electronics employed the same reasoning underlying the decision in *Transocean*. *Id.*

The court announced its conclusion that the defendant in *Halo Electronics*

did not directly infringe the [Plaintiff’s] patents under the “offer to sell” provision by offering to sell in the United States the products at issue, because the locations of the contemplated sales were outside the United States. . . . If a sale outside the United States is not an infringement of a U.S. patent, an offer to sell, even if made in the United States, **when the sale would occur outside the United States, similarly would not be an infringement of a U.S. patent.**

Id. (emphasis added).

Applying the Federal Circuit’s reasoning from *Transocean* and *Halo Electronics* to this case, the Court concludes that both the original permanent injunction [Docket No. 547] and Rudolph’s proposed permanent injunction are too broad. Both of those injunctions ban Camtek from selling the Falcon product to a third party notwithstanding where the third party intends to use the product. Such a provision cannot be reconciled with the Federal Circuit’s ruling in *Halo Electronics* that “[a]n offer to sell, in order to be an infringement, must be an offer contemplating sale in the United States.” *Id.* The Court will therefore grant Rudolph’s motion for a permanent injunction but will modify, rather than reinstate in full, the 2009 permanent injunction, so that Camtek is not barred from negotiations or offers to sell when the contemplated destination is outside the United States.

C. Contempt Order

Halo Electronics bears not only on Rudolph’s requested injunctive relief but also on the contempt order previously entered in this case. The Magistrate Judge found

Camtek in contempt of the Court's original permanent injunction for two Falcon product sales in late 2009. (Report & Recommendation ("Contempt R&R"), Aug. 11, 2011, Docket No. 731.) The recommended finding of contempt, which the Court adopted,⁶ was based on one Falcon sale for use in Malaysia and one Falcon sale for use in China. (*Id.* at 3.) Although Camtek held discussions and negotiations relating to the sales at locations in the United States, the contemplated destinations were both abroad. In 2011, the Court found them both to be infringing sales because of the negotiations and offers that took place in the United States. (*Id.* at 4-11.)

In light of the Federal Circuit's recent ruling in *Halo Electronics*, however, the Court finds that the Falcon sales to Malaysia and China are not infringing sales. Product discussions or even offers to sell that take place within the United States cannot convert into infringing sales products that are destined for consumers outside the United States. *Halo Elecs.*, 769 F.3d at 1381. Therefore, they do not constitute a basis for a contempt order and sanctions. The Court will accordingly vacate the contempt order and sanctions award based on the Malaysia and China Falcon sales.

ORDER

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

⁶ The Court adopted the 2011 contempt Report & Recommendation in March 2012, imposing double damages. (Mem. of Law & Order, Mar. 3, 2012, Docket No. 764.) The Court subsequently reduced the sanctions award by half to \$645,946 so that they were compensatory rather than punitive. (Mem. Op. & Order at 2, 5-8, Aug. 17, 2012, Docket No. 913.)

1. In light of the Federal Circuit's recent decision in *Halo Electronics*, the contempt order and sanctions award [Docket Nos. 764, 913] is **VACATED**.

2. Defendant's Motion for New Proceedings and Jury Trial [Docket No. 966] is **DENIED**.

3. Plaintiffs' Motion for Final Judgment [Docket No. 981] is **GRANTED in part** and **DENIED in part** as follows.

a. Plaintiffs' request for a final judgment reinstating the original damages award is **GRANTED**. Defendant shall pay plaintiffs damages of \$7,428,436.00 (reflecting the original jury award of \$6,782,490.00 and the Court's supplemental damages award of \$645,946.00 [Docket No. 707]) for infringement of claims 1 and 3 of the '6,298 patent.

b. The Court awards prejudgment interest on the principal damages award in the amount of \$6,693,113.42 (calculated by applying the Minnesota statutory rate⁷ from the February 1, 2005 to the date of this order). The Court also awards prejudgment interest on the supplemental damages award in the amount of \$390,749.76 (calculated by applying the Minnesota statutory rate⁸ from

⁷ In this case, the rate dictated by Minnesota Statute section 549.09 (ten percent per year), applied to the principal damages award of \$6,782,490.00, yields a per diem interest of \$1,828.22.

⁸ Ten percent per year, applied to the supplemental damages award of \$645,946, yields a per diem interest of \$176.97.

January 24, 2009 to the date of this order), for a total of \$7,083,863.18 in prejudgment interest.⁹ Post-judgment interest will be addressed separately.

4. Plaintiffs' Motion for Permanent Injunction [Docket No. 981] is **GRANTED in part** as follows:

a. Camtek is enjoined from making, using, selling, and offering to sell any of its Falcon machines and any machines that are colorable imitations thereof in the United States, **intended for sale and use within the United States**, until the expiration of the '6,298 patent. Falcon machines as used herein are Camtek's inspection machines that Camtek has referred to under the name Falcon regardless of the specific model numbers of the machines. An offer for sale is any communication – such as an advertisement, brochure, price quotation, product manual, webpage, verbal offer for sale, or the like – that contains sufficient information regarding the terms of sale for the Falcon machine and any machines that are colorable imitations thereof so as to constitute an offer under the applicable law.

b. Camtek is enjoined from practicing the method of Claim 3 or inspection methods that are colorable imitations thereof within the United States until the expiration of the '6,298 patent.

⁹ When the damages, supplemental damages, and prejudgment interest are combined, Camtek shall pay to Plaintiffs in this case a total of \$14,512,299.18.

c. The following specific enjoined activities fall within the conduct described in ¶¶ 2(c)(i)-(ii) above:

i. Communicating with third parties (in person, via phone, via email, or by any other means) **located anywhere in the world** for the purposes of offering to sell Falcon machines or machines that are colorable imitations thereof, **where the contemplated destination of the machine is within the United States.**

ii. Advertising or marketing the Falcon machines or machines that are colorable imitations thereof in the United States unless it is made clear on the marketing or advertisements that Camtek's Falcon machines or machines that are colorable imitations thereof are not for sale or use in the United States.

iii. Providing operator training for Falcon machines or machines that are colorable imitations thereof **within the United States** to the extent that such training is not directly tied to service and repair of such machines that were sold and delivered to customers prior to March 5, 2009; and

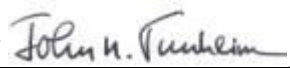
iv. Reconstructing the Falcon machines sold and delivered prior to March 5, 2009 located **within the United States**, which includes substantially improving or otherwise substantially changing such machines relative to the state in which they were originally accepted by the customer including, among other things, providing substantial software or hardware upgrades.

d. Camtek is also ordered to identify and secure **within the United States** (pending appeal), for possible destruction upon exhaustion of any and all appeals, all Falcon machines or colorable imitations thereof, not yet shipped to customers that are currently located **within the United States**.

e. Defendant Camtek Ltd. shall provide written notice of this judgment, and the injunction ordered herein, to: its subsidiaries (including but not necessarily limited to Camtek USA), parents, officers, directors, sales and service agents, servants, employees, attorneys, and any other persons who are in active concert or participation with the above-identified individuals and entities (herein referred to as “Camtek”). Defendant shall take whatever means are necessary or appropriate to ensure proper compliance with this order.

LET JUDGMENT BE ENTERED ACCORDINGLY.

DATED: February 9, 2015
at Minneapolis, Minnesota.

s/ 

JOHN R. TUNHEIM
United States District Judge