

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

**JIAXING SUPER LIGHTING
ELECTRIC APPLIANCE CO., LTD. and
OBERT, INC.,**

Plaintiffs,

v.

**CH LIGHTING TECHNOLOGY CO.,
LTD., ELLIOTT ELECTRIC SUPPLY
INC., and SHAOXING RUISING
LIGHTING CO., LTD.,**

Defendants.

6:20-cv-00018-ADA

[AMENDED] MEMORANDUM OPINION & ORDER

Came on for consideration this date are Plaintiffs’ Motion for Enhancement of Damages Under 35 U.S.C. § 284, ECF No. 233; Plaintiffs’ Motion for Permanent Injunction, ECF No. 234; Plaintiffs’ Opposed Motion for Exceptional Case and Attorney Fees, ECF No. 241; and Plaintiffs’ Motion for Entry of Judgment, ECF No. 242.¹

I. BACKGROUND

On January 10, 2020, Plaintiffs Jiaxing Super Lighting Electric Appliance Co., Ltd. (“Super Lighting”) and Obert, Inc. (“Obert”) (collectively, “Plaintiffs”) initiated this Action by filing a complaint alleging that Defendants CH Lighting Technology Co., Ltd. (“CH Lighting” or “CH”), Elliott Electric Supply Inc. (“Elliott”), and Shaoxing Ruising Lighting Co. Ltd. (“Ruising”)

¹ The Court issued a sealed opinion on these motions on July 21, 2022. ECF No. 281. It then issued a public version of that sealed opinion on August 2, 2022. ECF No. 285. This amended order corrects typographical errors, including one instance in which the Court erroneously mixed up the parties. This amended order **SUPERSEDES** its earlier opinions at ECF Nos. 281 and 285 but should not be read to affect the final judgment at ECF No. 284 or any deadlines running from the date of its issuance.

(collectively, “Defendants”) infringe certain U.S. patents. ECF No. 1 (the “Complaint”). On March 16, 2020, Plaintiffs filed an amended complaint alleging infringement of U.S. Patent Nos. 10,295,125 (the “’125 patent”), 10,342,078, 10,352,540 (the “’540 patent”), and 10,426,003, 9,939,140 (the “’140 patent”), 10,378,700, 10,448,479, and 10,560,989. ECF No. 21 (the “FAC”). CH answered on December 3, 2020. ECF No. 67. The Plaintiffs’ patents and Defendants’ accused products are directed to light-emitting diode (LED) tube lamps and features thereof.

Super Lighting is a Chinese corporation and Obert is its North American affiliate. ECF No. 21 ¶¶ 1, 2. CH and Ruising are also Chinese corporations and Elliott is a customer of some sort based out of Texas. *See, e.g.*, ECF No. 237 at 40:12–20, 46:18–22, 78:9–79:10. Ruising is the subsidiary of CH charged with selling CH products.² *See id.* at 78:9–79:10. Super Lighting and CH are rivals in the tube lamp space. Ruising is owned at least by Caiying Gan, CEO of CH, and Qingbo “Jack” Jiang, who also runs Ruising. *See id.* at 78:9–79:10. Before he was at Ruising, Jack Jiang was a Super Lighting employee. He left in 2014 to join Ruising and later convinced Jun Yang, technical assistant and secretary to Super Lighting’s CEO and founder, to join him there. *See id.* at 82:15–83:7. According to Super Lighting’s CEO, Mr. Yang had access to Super Lighting’s most confidential, technical documents. *Id.* at 82:24–83:5. Mr. Yang is now a product manager at Ruising. *See id.* at 204:1–9.

On October 6, 2021, the Court held a pre-trial conference in this Action. *See* ECF Nos. 190, 191. Trial commenced on November 1, 2021. *See* ECF No. 216. At trial, Plaintiffs had narrowed their case such that they only asserted infringement of claim 1 of the ’125 patent, claims

² When the Court refers to CH it is oftentimes referring to CH and Ruising collectively.

1, 4, 5, 24, 28, and 31 of the '140 patent, and claims 13 and 14 of the '540 patent. Shortly before trial, Defendants stipulated that:

all existing versions of all products accused of infringing the '540 Patent infringe claims 13 and 14 of the '540 Patent, including the following products: CH1118 series, CH1128 series, CH1152 series, CH1152S series, CH1152-42W-FA8 series, CH1152AS series, CH1152SD series, CH1155C series, CH1156 series, CH1157 series, CH1157S series, CH1157AS series, CH1157SD series, CH1180 series, CH1198 series, CH1198D series, LV1118, LV1153DA, LV1155, LV1155NA, LV1156, ESL Vision GDT series, ESL Vision PBC series, GE Current BDT series (e.g., LED14BDT8/G4/840). The infringing products include products within the foregoing series manufactured by CH Lighting and Ruising for sale under different brand names; for example, the "CH1152S series" includes the Keystone-branded KT-LED7T8-24GC-840-DX2, others in that series, the Maxlite-branded L11.5T8DE440-CG4, and others in that series.

Id. at 8. Defendants further stipulated:

that all existing versions of all products accused of infringing the '125 Patent infringe claim 1 of the '125 Patent, including the following product series: CH1118 series, CH1128 series, CH1152S series, CH1152-42W-FA8 series, CH1152AS series, CH1152SD series, CH1155C series, CH1156 series, CH1157S series, CH1157AS series, CH1157SD series, CH1180 series, CH1180AX series, CH1198 series, CH1198D series, LV1118, LV1153DA, LV1155, LV1155NA, LV1156, ESL Vision GDT series, ESL Vision PBC series, GE Current BDT series (e.g., LED14BDT8/G4/840). The infringing products include products within the foregoing series manufactured by CH Lighting and Ruising for sale under different brand names; for example, the "CH1152S series" includes the Keystone-branded KT-LED7T8-24GC-840-DX2, others in that series, the Maxlite-branded L11.5T8DE440-CG4, and others in that series.

Id. at 8–9. Moreover, Defendants stipulated:

that the following products accused of infringing the '140 patent infringe claims 1, 4, 5, 24, 28, and 31 of the '140 Patent: CH1152S series, CH1152-42W-FA8 series, CH1152AS series, CH1157S series, CH1157AS series, CH1152SD series, CH1157SD series, CH1198D, ESL Vision GDT series, ESL Vision PBC series, GE Current BDT series (e.g., LED14BDT8/G4/840). This excludes such products sold with the LT2600 integrated circuit, which remain

disputed. The infringing products include products within the foregoing series manufactured by CH Lighting and Ruising for sale under different brand names; for example, the “CH1152S series” includes the Keystone-branded KT-LED7T8-24GC-840-DX2, others in that series, the Maxlite-branded L11.5T8DE440-CG4, and others in that series.

Id. at 9. Altogether, Defendants stipulated to infringement for all but one accused product— Defendants argued to the Jury that the LT2600 integrated circuit did not infringe the asserted claims of the ’140 patent. Defendants also presented an invalidity case against the ’125, ’140, and ’540 patents (the “Asserted Patents”) to the Jury.

On the third day of trial, the Court granted a pre-verdict motion for judgment as a matter of law (JMOL) under Federal Rule of Civil Procedure 50(a) on the issue of the invalidity relating to the ’125 patent and the ’540 patents. ECF No. 239 at 47:8–53:11. The Court held that there was not a legally sufficient evidentiary basis upon which a reasonable jury could have concluded that: claim 1 of the ’125 patent was invalid based on any of Defendants’ three prior-art grounds against that patent; or the asserted claims of the ’540 patent were invalid based on one of Defendants’ two prior-art grounds against that patent. *Id.* Defendants based these deficient prior-art grounds on system prior art—physical lighting tubes—that Defendants failed to introduce into evidence before evidence closed. *See id.*

On November 4, 2021, the Jury rendered a unanimous verdict, finding that Defendants infringed all Asserted Claims and that Defendants failed to prove that any Asserted Claim was invalid. ECF No. 230. The Jury awarded damages in the amount of \$13,872,872 from CH and Ruising and \$298,454 from Elliott and further found that CH and Ruising willfully infringed. *Id.*

On November 24, 2021, Plaintiffs moved for enhanced damages and a permanent injunction. ECF Nos. 233, 234. On December 2, 2021, Plaintiffs moved for attorneys’ fees and

entry of judgment. ECF Nos. 241, 242. The Court heard oral arguments on those motions on February 15, 2022. *See* ECF No. 279. Those motions are now ripe for judgment.

II. ENHANCED DAMAGES

Plaintiffs' Motion for Enhanced Damages, ECF No. 233, is **GRANTED-IN-PART**.

A. Legal Standard

Section 284 of Title 35 provides that, in a patent infringement case, “the court may increase the damages up to three times the amount found or assessed.” 35 U.S.C. § 284. As the Supreme Court has remarked in the seminal *Halo* decision, “That language contains no explicit limit or condition, and we have emphasized that the word ‘may’ clearly connotes discretion.” *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 579 U.S. 93, 103 (2016) (cleaned up). That discretion is not boundless and instead must be exercised “in light of considerations underlying the grant of that discretion.” *Id.* (cleaned up). In interpreting those considerations, the Supreme Court appealed to the judiciary’s 180-year history of awarding enhanced damages, in which courts have “generally reserved” enhancement for “egregious cases of culpable behavior.” *Id.* at 104. Egregious cases typically involve, in the Court’s opinion, conduct that is “willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate.” *Id.* at 103–04; *id.* at 107 (“[S]uch punishment should generally be reserved for egregious cases typified by willful misconduct.”).

“Willfulness largely turns on intent, which is an issue reserved to the jury.” *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016). Once the jury finds that the defendant’s infringement was willful, the Court must consider whether that alone justifies enhancement. According to the Federal Circuit, “*Halo* emphasized that subjective willfulness alone . . . can support an award of enhanced damages.” *WesternGeco L.L.C. v. ION Geophysical Corp.*, 837 F.3d 1358, 1362 (Fed. Cir. 2016), *rev’d on other grounds*, 138 S. Ct. 2129, 201 L. Ed. 2d 584 (2018);

Halo, 579 U.S. at 105 (“The subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless.”). Yet courts are vested with discretion to forbear enhancement under § 284 even in egregious cases, if that is what “the particular circumstances of” the case demand. *Id.* at 106; *cf. id.* at 111 (Breyer, J., dissenting) (“[W]hile the Court explains that ‘intentional or knowing’ infringement ‘may’ warrant a punitive sanction, the word it uses is *may*, not *must*. . . . It is ‘circumstanc[e]’ that transforms simple knowledge into such egregious behavior, and that makes all the difference.”).

The Federal Circuit has endorsed consideration of the *Read* factors to “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 Indus., Inc. v. IPS Corp.*, 721 F. App’x 959, 972 (Fed. Cir. 2018). As to burdens, the “party seeking enhanced damages under § 284 bears the burden of proof by a preponderance of the evidence.” *WBIP*, 829 F.3d at 1339.

B. Discussion

In *Read Corp. v. Portec, Inc.*, the Federal Circuit established a list of factors for district courts to evaluate when considering whether an infringer’s behavior warrants enhanced damages. 970 F.2d 816 (Fed. Cir. 1992). Although *Halo* likely overruled *Read*, the *Read* factors still serve as “useful guideposts” in the § 284 analysis. *See, e.g., Apple Inc. v. Samsung Elecs. Co.*, 258 F. Supp. 3d 1013, 1030 (N.D. Cal. 2017). As such, the Court uses *Read* as a tool in reviewing Defendants’ conduct. The *Read* factors are: (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when it knew of the other’s patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; (3) the infringer’s behavior as a party to the litigation; (4) defendant’s size and

financial condition; (5) closeness of the case; (6) duration of defendant's misconduct; (7) remedial action by the defendant; (8) defendant's motivation to harm; and (9) whether defendant attempted to conceal its misconduct. 970 F.2d at 827. The Court proceeds through each factor one by one.

1. Read Factor 1: Deliberate Copying

The first *Read* factor concerns whether Defendants deliberately copied Super Lighting's designs. The Court is not persuaded that Plaintiffs have shown any copying. While they detail Jack Jiang and Jun Yang's sojourn from Super Lighting to CH, Plaintiffs do not outright accuse those two of designing and developing the accused products to match Super Lighting's products. ECF No. 233 at 1–2, 17. That is, of course, the suggestion. But Plaintiffs do not offer evidence of how the accused products were designed and developed or who was involved. Defendants fill in the gaps, remarking that the bulk of Plaintiffs' infringement allegations for the '140 patent "relate to the use of an integrated circuit developed by third-party manufacturers . . . and purchased by CH." ECF No. 247 at 2. CH's corporate witness testified that CH has little understanding of the internal structure of those third-party-manufactured integrated circuits or how they work. *See* ECF No. 247-3 at 25:14–16. This evidence weighs against a finding of copying (at least for purposes of enhancement).

Plaintiffs' heavy reliance on documents found in CH's possession is not persuasive evidence of copying. It is undisputed that CH possesses confidential testing reports on Super Lighting tubes and a comparison of Super Lighting and CH tubes. As to the former, Plaintiffs do not tie the confidential Super Lighting testing reports to the design and development of the accused products. *See* ECF No. 247 at 3–4. As to the latter, in 2017 CH personnel drafted a one-page analysis comparing CH's accused tubes to Super Lighting's accused tubes, at Jack Jiang's request and with an eye, it seems, to features that the '140 patent happens to claim. ECF No. 233 at 17; ECF No. 225-6; ECF No. 237 at 140:18–142:5. Yet, as Defendants note, the analysis identifies

several differences between the accused product and Super Lighting's product. ECF No. 247 at 2. The Jury heard from the engineer who produced the comparison: "Both [CH and Super Lighting] can satisfy the UL standard, but their suppliers are different, their schematics are different, their chip solutions are also different." ECF No. 237 at 142:6–10. And he denied ever copying or being asked to. *Id.* at 141:12–17. This cuts against a finding of copying.

The Court also agrees with Defendants that CH's comparison of the *finished* accused product to Super Lighting's product has little bearing on copying. It would be a different story if CH had used a similar comparison to guide the design and development of its accused products. But benchmarking your finished accused product against your competitor's product is not, in this Court's estimation, strong evidence of copying. Especially in an industry where, as Super Lighting's own expert conceded, it is common practice to review competitor products. ECF No. 239 at 116:22–24.

Considering all this evidence, the Court is not persuaded that Plaintiffs have sufficiently shown copying.

2. Read Factor 2: Good-Faith Belief Regarding Defenses

The second *Read* factor asks whether the defendants, when they learned of the relevant patents, investigated their scope and formed a good-faith belief that the patents were invalid or not infringed. The Court finds that CH and Rusing investigated the scope of the Asserted Patents, but the Court is not convinced that that investigation vested in Defendants a good-faith belief that the patents were invalid or not infringed. The Court holds that CH and Rusing only gained that belief after offering good-faith invalidity and noninfringement defenses in response to Super Lighting's complaint.

The Court instructed the Jury of certain facts pertinent to Defendants' investigation. Specifically, that CH and Rusing learned about the '140 patent on February 16, 2019, and the

'540 and '125 patents in July 2019, and that they took “no actions other than to retain litigation counsel for this case on or about November 12, 2020.” ECF No. 226 at 20. The Court issued that instruction as a sanction, which Plaintiffs requested in response to inconsistencies in CH’s position regarding any opinions of counsel CH may have received related to the Asserted Patents. *See* ECF Nos. 176, 196. After the Court ordered that instruction from the bench, the parties negotiated its exact scope.

Some developments underlying that sanction are particularly relevant. Most notably, Defendants never substantively responded to Plaintiffs’ discovery requests regarding Defendants’ awareness of the Asserted Patents and any steps Defendants took once they gained that awareness. *See* ECF No. 176 at 3. Plaintiffs were surprised, then, to hear Jack Jiang, in a deposition conducted right before fact discovery closed, testify that he procured opinions of noninfringement and invalidity—covering Super Lighting’s entire patent portfolio—from Chinese counsel in mid-2019, well before CH responded to Super Lighting’s complaint. *Id.* Super Lighting filed suit against CH’s customer, MaxLite, in the U.S. District Court for the Central District of California in May 2019, prompting Jack Jiang’s investigation. *See id.* at 11 & n.15; *see also* Complaint, *Jiaxing Super Lighting Electric Appliance Co., Ltd. v. MaxLite, Inc.*, No. 2:19-cv-04047 (C.D. Cal. May 8, 2019). Guo Pengxin, CH’s director in charge of quality and certification, apparently helped CH’s Chinese counsel develop these opinions. ECF No. 176-2 at 83:15–24. Defendants consistently disclaimed any intent to use an opinion-of-counsel defense and—consistent with the Court’s instruction to the Jury—presented no evidence of Jack Jiang’s investigation to the Jury. The Court is not privy to the opinion of CH’s Chinese counsel but what the Court has heard about it inspires little confidence that it was sufficiently competent to engender a good-faith belief of noninfringement in CH and Ruising. Defendants’ waiver of the opinion-of-counsel defense further supports that suspicion.

The existence of the Chinese opinion does suggest that CH and Ruising were aware and concerned of the potential risks the Asserted Patents posed to Defendants' products. *Cf. Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1369 (Fed. Cir. 2006) (finding that incompetent opinions of counsel and surrounding facts are properly considered evidence of willfulness). The Jury heard that CH and Ruising personnel issued warnings that chips in CH's products had some "patent risk." *See* ECF No. 237 at 204:12–205:13; *see also* ECF No. 238 at 155:10–156:7 (discussing a SWOT analysis CH performed that suggested that its products were at risk, generally, for infringing patents). Those warnings were not specific to any of the Asserted Patents—but the products tagged with the "risk" label infringe the '140 patent, or so the Jury determined.

Shortly before it initiated this Action, Super Lighting attempted to notify CH that CH was infringing the Asserted Patents. On October 2, 2019, Super Lighting wrote to CH's CEO Caiying Gan and raised specific instances of CH's infringement of the Asserted Patents. *See* ECF No. 233 at 4. CH did not respond so Super Lighting wrote again on November 4, 2019. *See id.* CH was again silent. Super Lighting emailed Ms. Gan a third time on December 22, 2019. *See id.* Receiving no response, Super Lighting filed this Action in January 2020. CH did not respond to Super Lighting's complaint until December 2020, a month after it finally retained litigation counsel. *See* ECF No. 238 at 134:6–22, 145:2–10.

The Court instructed the Jury that, when evaluating Defendants' willfulness, it should consider whether Defendants had established a good-faith belief of non-infringement or invalidity. ECF No. 226 at 19–20. The Jury considered Defendants' evidence and nevertheless found CH's infringement to be willful. In this Court's opinion, that favors enhancement. *See Vectura Ltd. v. GlaxoSmithKline LLC*, No. CV 16-638-RGA, 2019 WL 4346502, at *4 (D. Del. Sept. 12, 2019)

“I agree that, in view of the willful infringement verdict, Defendants did not have a good-faith belief of noninfringement.”); *Bio-Rad Lab ’ys Inc. v. 10X Genomics, Inc.*, No. 15-CV-152-RGA, 2019 WL 3322322, at *10 (D. Del. July 24, 2019) (same), *vacated on other grounds*, 967 F.3d 1353 (Fed. Cir. 2020); *Alfred E. Mann Found. for Sci. Rsch. v. Cochlear Corp.*, No. CV 07-8108 FMO (SHX), 2018 WL 6190604, at *25 (C.D. Cal. Nov. 4, 2018) (finding that the jury considered evidence of the defendant’s good faith but found it unpersuasive), *aff’d*, 798 F. App’x 643 (Fed. Cir. 2020). The Court finds little of the evidence above to weigh against enhancement under this factor.

3. Read Factor 5: Closeness of the Case

The fifth *Read* factor concerns how “close” the case was.³ This factor favors enhancement, although only slightly. The speed and lopsidedness of the Jury’s verdict weighs in favor of enhancement while the fact that Defendants’ defenses survived to trial weighs against enhancement.

The Jury returned a unanimous verdict in less than two hours of deliberating, concluding that Defendants infringe all the Asserted Patents, that the Asserted Patents were not invalid, and that CH and Ruising’s infringement was willful. *See* ECF No. 279 at 40:12–13. As to damages, the Jury gave Plaintiffs exactly what they asked for. Other courts have enhanced damages based in part on the length of the jury’s deliberations and the asymmetry of the outcome. *See, e.g., EagleView Techs., Inc. v. Xactware Sols., Inc.*, 522 F. Supp. 3d 40, 52 (D.N.J. 2021); *Chamberlain Grp., Inc. v. Techtronic Indus. Co. Ltd.*, 315 F. Supp. 3d 977, 1014 (N.D. Ill. 2018). The Court will do the same here but to some lesser degree, appreciating that this Jury’s workload was

³ The Court takes this *Read* factor out of order, finding it related to the second factor.

relatively light, which could account for the brief deliberations. As to core issues, they only had to decide direct infringement for a single product and invalidity for two of the three Asserted Patents.

Plaintiffs contend that this factor more heavily favors enhancement because “virtually every argument CH presented was exposed as a sham.” ECF No. 233 at 17. The Court disagrees with the premise. Plaintiffs most compelling evidence on this point is CH’s stipulation to infringement for most of the accused products at a late stage in this Action, after the parties had already prepared expert reports. To be sure, that stipulation is weighty—this would have been a closer case had CH presented a non-frivolous noninfringement theory at trial. As this Court put it during oral arguments: “[I]f you’re going to trial, would you rather have a noninfringement defense or an invalidity defense? I don’t think anyone would pick, in most cases, the invalidity defense as what they would want to be their lead defenses.” ECF No. 279 at 66:21–67:2. Yet CH’s stipulation does not render the other defenses CH presented at trial a “sham.” If they were baseless, Plaintiffs could have convinced this Court to dispose of this Action at summary judgment. They did not even try—the Court did not receive any motions for summary judgment as to the infringement or invalidity issues CH presented to the Jury. Accordingly, the Court is not inclined to deem CH’s trial defenses baseless.

The Court cannot avoid remarking on the pre-verdict JMOL that disposed of CH’s invalidity case as to the ’125 patent. Super Lighting contends that this is a “true rarity in a patent case” and remarks on how it warned CH before trial that CH did not have sufficient evidence to mount an invalidity defense as to the ’125 patent. ECF No. 233 at 18. The nature of the JMOL ruling attenuates its impact under this factor. In rendering this ruling, the Court did not opine upon the merits of the prior art combination CH proffered; it only determined that defense counsel did not get critical system art—or representative pictures—into evidence before Defendants closed

their case. *See* ECF No. 239 at 47:8–53:9; *cf. Wapp Tech Ltd. P’ship v. Seattle SpinCo, Inc.*, No. 4:18-CV-469, 2021 WL 1574714, at *3 (E.D. Tex. Apr. 22, 2021) (upholding willfulness verdict despite JMOL dismissing invalidity defense because the JMOL sprung from the defendant’s bad time management and not merits of the defense). If that evidentiary snafu was inevitable, as Plaintiffs seem to suggest, Plaintiffs would (or should) have raised it with the Court *before* reaching trial—saving everyone time, energy, and resources. Their failure to do so speaks volumes.

In addition, the impact of the JMOL ruling is diminished given that it resolved invalidity for only one patent—it did not undercut theories applied to the two other Asserted Patents. Plaintiffs allege that the prior art tubes that Plaintiffs could not authenticate were “the heart of [Defendants’] invalidity case.” ECF No. 279 at 24:21–23. But the Court agrees with Defendants that “the bulk of the case related to the ’140 patent.” ECF No. 247 at 5. The distribution of asserted patent claims bears that out, as does, as the Court describes later, much of the discussion around the preliminary injunction focused on the shock-protection offered by the ’140 patent’s invention. *See infra* IV.B.2.

Also relevant is Defendants’ decision to drop its inequitable conduct claims by stipulation right before trial. ECF No. 233 at 6. The number of meritorious defenses levied against an ultimately successful infringement claim may speak to the closeness of a case. Generally, the more defenses, the closer the case. On the other hand, when defenses fall away, a case may become less close. CH’s inequitable conduct claims were so important to CH, it issued a press release describing how it was able to add them to its answer. *See infra* Section II.B.9. And though Defendants now conveniently argue that they dropped those inequitable conduct allegations because they “were most strong with respect to the” five patents that Plaintiffs dropped before trial, ECF No. 279 at 68:2–6, Defendants were not so careful to distinguish the strength of their

inequitable conduct allegations patent-by-patent when issuing a press release for the market's review. The Court finds that dropping such an ostensibly significant defense *must* mean that the case became less close.⁴ But because the defenses Defendants presented at trial were not frivolous, the Court is not convinced that dropping the inequitable conduct claim had a substantial impact under this factor.

None of the other gripes Plaintiffs raise under this factor are particularly persuasive. First, Plaintiffs ding Dr. Zane, Defendants' noninfringement expert, for resting his noninfringement position as to the LT2600 on mere criticism of the infringement opinion of Dr. D'Andrade, Plaintiffs' expert. ECF No. 233 at 17. The Court agrees with CH, however, that Dr. Zane analyzed the same documents and testing Dr. D'Andrade analyzed to draw a conclusion contrary to Dr. D'Andrade. ECF No. 247 at 4. Dr. Zane did not have to "conduct his own reverse engineering" to make this a close case (though it certainly would have helped). *Id.*

Second, Plaintiffs claim that CH deprived its technical experts of evidence of CH's copying and those same experts ignored evidence of commercial success. ECF No. 233 at 17. As to copying, CH states that it was Super Lighting's burden to prove copying as a secondary consideration of non-obviousness and CH's experts did not need to consider such evidence, especially where Super Lighting's expert did not even opine on that fact. ECF No. 247 at 6. CH's position is persuasive.

⁴ For comparison, CH argues that this Court must consider Super Lighting dropping several infringement claims pretrial, including one on which Defendants moved for summary judgment. ECF No. 247 at 6. The Court does not find, and Defendants have not sufficiently explained, how Super Lighting dropping several patents from this Action speaks to how close the case was as to the patents that made it to trial.

Third, Plaintiffs allege that CH's strongest defense constituted an obvious combination involving art the U.S. Patent and Trademark Office (USPTO) had already considered. ECF No. 233 at 17. Yet there is no evidence that the USPTO considered CH's combinations (or even a sufficiently comparable combinations). *See* ECF No. 247 at 4. The Court will not find that this case is not close merely because the USPTO reviewed one reference in an infringer's obvious combination.

This factor favors enhancement in view of the Jury's quick and lopsided decision. The Court will also not deny that Defendants' dropping their noninfringement case right before trial weighs in favor of enhancement. But this factor does not tilt overwhelmingly in Plaintiffs' favor at least because Defendants put on an invalidity case (and noninfringement for one product) at trial that was not frivolous or even exceptionally weak.

4. Read Factor 3: Infringer's Litigation Behavior

The third *Read* factor concerns the infringers' behavior as a party to the litigation. The Court's analysis of this factor overlaps significantly with its exceptionality analysis under § 285, above. As explained more thoroughly there, the Court finds that Defendants behaved unreasonably in several instances. *See infra* Section III.B.

5. Read Factor 4: Defendant's Size and Financial Condition

The fourth *Read* factor asks the Court to evaluate Defendants' size and financial condition. CH contends that trebling damages to \$42 million "would profoundly impact CH's business and production. In fact, trebling the damages would *exceed* the incremental profit CH made from any infringing sales by almost \$10 million." ECF No. 247 at 18. CH has not represented that trebling would drive it out of business and Plaintiffs remark that "CH made more than double that \$42 million by continuing to infringe." ECF No. 255 at 8. In addition, the Court does not consider CH and Rusing an unsophisticated party as it pertains to legal matters; Jack Jiang testified that their

Chinese counsel is a “famous law firm that we have been working with for about seven or eight years.” ECF No. 176-2 at 66:9–14. This factor does not discourage the Court from enhancement.

6. Read Factor 6: Duration of Defendant’s Misconduct

The sixth *Read* factor asks the Court to consider the duration of Defendants’ misconduct. It seems to this Court that CH and Ruising were concerned enough about the threat the Asserted Patents posed that they sought an opinion from Chinese counsel in mid-2019. *See supra* Section II.B.2. They nevertheless continued infringing and have not stopped yet. The Court is dubious that Super Lighting’s pre-suit emails to CH’s CEO did not give CH and Ruising actual notice of their infringement. Indeed, Jack Jiang’s pre-suit investigation may suggest that CH and Ruising knew of their infringement risk *before* those notice letter. Nevertheless, this factor does not weigh heavily in favor of enhancement because Super Lighting likely only knew for less than 18 months, if that. *WCM Indus., Inc.*, 721 F. App’x at 973 (holding that the duration of misconduct likely weighs against enhancement where the patents issued a short time before the filing of the lawsuit).

7. Read Factor 7: Remedial Actions

The seventh *Read* factor concerns whether Defendants took remedial action. As other courts have explained, this factor concerns “whether conduct during the pendency of the suit evinces an unrepentant defendant.” *Acantha LLC v. DePuy Synthes Sales Inc.*, 406 F. Supp. 3d 742, 761 (E.D. Wis. 2019); *Creative Internet Advert. Corp. v. Yahoo! Inc.*, 689 F. Supp. 2d 858, 869 (E.D. Tex. 2010) (“This factor looks to whether the defendant ceased the sale of the infringing product during the pendency of the litigation.”). CH all but concedes it has taken no remedial action but excuses itself on the ground that it has asserted good-faith defenses and will continue to do so in post-verdict motions and on appeal. ECF No. 247 at 19 (citing *Acantha*, 406 F. Supp. 3d at 761). That excuse, at least as to post-verdict conduct, holds little weight here. It is difficult for Defendants to maintain a good-faith belief that they do not infringe until either this Court, or a

higher court, vacates the Jury’s verdict. Or at least the Court will presume as much given that a jury verdict considerably narrows their ability to ultimately prevail in this dispute.

8. Read Factor 8: Defendant’s Motivation

The eighth *Read* factor asks whether the Defendants were motivated to harm Plaintiff. Super Lighting contends that its status as CH’s archrival motivated CH to harm Super Lighting by committing infringement. ECF No. 233 at 20. The Court is persuaded that the competition between Super Lighting and CH is fierce; it drove CH to poach Jack Jiang from Super Lighting by offering “unusually large benefits”—a rent-free house, a free office, and the power to run Ruising. *Id.* at 1, 20. Moreover, CH produced Super Lighting’s confidential documents—testing reports—relating to lamp tubes. *Id.* at 2. CH never explained why it had those documents. *Id.* at 2. All it could say was that some of them were dated after Jack Jiang and Jun Yang arrived at CH. *See* ECF No. 241 at 2 n.2. CH could not explain away Jack Jiang’s possession of Super Lighting’s customer lists, though. ECF No. 233 at 2. All this leads to a conclusion that CH and Super Lighting were rivals, potentially even “archrivals,” and indicates CH *did* have a motivation to harm Super Lighting.

The notion that “infringement by a direct competitor in [a small] market mitigates in favor of enhanced damages,” *TruePosition Inc. v. Andrew Corp.*, 611 F. Supp. 2d 400, 412 (D. Del. 2009), *aff’d*, 389 F. App’x 1000 (Fed. Cir. 2010), is compelling here. *EagleView Techs., Inc. v. Xactware Sols., Inc.*, 522 F. Supp. 3d 40, 54 (D.N.J. 2021). “Additionally, courts are even more willing to find that this factor should enhance damages when ‘the evidence supports the conclusion that [the infringer] preferred taking the risk of infringement over designing a non-infringing device.’” *Id.* (quoting *Polara Eng’g, Inc. v. Campbell Co.*, 237 F. Supp. 3d 956, 994 (C.D. Cal. 2017), *aff’d in part, vacated in part on other grounds*, 894 F.3d 1339 (Fed. Cir. 2018)). CH stipulated to infringement and continued infringing. The Jury found CH liable for infringement—even willfully so—and yet CH has continued infringing. Even if the Court found that CH was not

motivated to harm Super Lighting, CH's continued infringement evinces at least a reckless disregard for the harm it has and continues to cause to a rival. The Court therefore finds that this factor favors enhancement.

9. Read Factor 9: Infringer's Concealment

The final *Read* factor concerns whether Defendants attempted to conceal their misconduct. The Court agrees with CH that CH openly sold the accused products, and continues to do so, without any attempt to physically conceal the infringing components. And Plaintiffs adduce no evidence that CH kept any data about infringing sales back. Indeed, it seems the parties are continuing to keep an account of those sales.

The Court must also consider, however, CH and Ruising's withholding information relevant to willfulness—specifically, Jack Jiang's investigations into Super Lighting's patent portfolio in mid-2019—until late in the case. Moreover, the Court finds that CH and Ruising meant to improve their post-complaint market position by publicly obfuscating their true infringement risk. For example, this Court, after finding that adding claims of unclean hands and inequitable conduct would not be futile, granted Defendants leave to amend their answer to Super Lighting's complaint. *See* ECF No. 162. Yet Jack Jiang took to WeChat, a popular social platform in China, and described that ruling as an “acknowledgement that [Super Lighting's] patents were acquired illegally.” *See* ECF No. 233 at 12. That is a misrepresentation of this Court's order. *See* ECF No. 137 at 40:23–41:3 (discussing this issue when first raised). Jack Jiang and his counsel at Radulescu LLP also issued a press release through a proxy, in which they described the Court's ruling on the amendment in more accurate terms. ECF No. 233-5. That release, however, outlined CH's inequitable conduct theory in great and salacious detail. One would think from reading the announcement that Radulescu had unearthed a smoking gun, painting a generous picture. In reality,

CH's inequitable conduct theory as to the Asserted Patents would not survive to trial. ECF No. 233 at 6.

10. Conclusion

The Court finds that this case is egregious and therefore enhancement is warranted here based on: the Jury's willfulness finding; the fact that this case was not very close; CH and Ruising's disregard for their discovery obligations; Jack Jiang's mischaracterization of this Court's ruling regarding inequitable conduct; Jack Jiang and Radulescu's glowing press release; and CH and Ruising's motivation to harm Plaintiffs. The Court finds that doubling the damages award is adequate punishment for the level of culpability CH and Ruising have shown. Yet the Court finds it unjust to apply that multiple to an award covering the entire damages period. "Culpability . . . is generally measured against the actor's knowledge at the time of the challenged conduct." *Halo*, 579 U.S. at 114. As indicated above, the Court is satisfied that Defendants developed a good-faith belief that they were not infringing by the time they filed an answer to Plaintiffs' complaint. Accordingly, the Court will not cognize Defendants' infringement as willful or culpable for the period between filing an answer and receiving an adverse jury verdict. The Court will not multiply any damages attributed to CH and Ruising accrued during that period.

That said, a defendant "cannot insulate itself from liability for enhanced damages by creating an (ultimately unsuccessful) invalidity defense for trial." *WBIP*, 829 F.3d at 1340. As such, damages that CH and Ruising accrued outside that period, and after CH and Ruising first learned of the Asserted Patents—that is, the date CH and Ruising learned of the '140 patent according to the jury charge—will be doubled. *See Stryker Corp. v. Davol Inc.*, 234 F.3d 1252, 1260 (Fed. Cir. 2000) (affirming a tailored approach to enhancing damages based on culpability during a given period). The Court finds that the date CH and Ruising learned of the '140 patent is an appropriate starting point given the Court's instruction as to CH and Ruising's awareness of the

Asserted Patents, the Jury's unbounded willfulness finding, and Jack Jiang's admissions regarding the timing of his pre-suit investigation regarding the Asserted Patents.

III. ATTORNEYS' FEES

Plaintiffs' Motion for Attorneys' Fees, ECF No. 241, is **DENIED**.

A. Legal Standard

1. 35 U.S.C. § 285

Pursuant to the Patent Act, in "exceptional cases," a district court "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 . . . or the unreasonable manner in which the case was litigated." *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. 545, 554 (2014).

District courts must determine whether any particular case is "exceptional" in a "case-by-case exercise of their discretion, considering the totality of the circumstances." *Id.* Whether a case is "exceptional" or not "is a factual determination," *Forcillo v. Lemond Fitness, Inc.*, 168 F. App'x 429, 430 (Fed. Cir. 2006), and the court must make its determination by a "preponderance of the evidence," *Octane Fitness*, 572 U.S. at 558 (rejecting the prior requirement that a patent litigant establish its entitlement to fees under § 285 by "clear and convincing" evidence).

In assessing the "totality of the circumstances," courts may consider factors such as "frivolousness, motivation, objective unreasonableness (both in the factual and legal components of the case) and the need in particular circumstances to advance considerations of compensation and deterrence." *Id.* at 554 n.6 (citing *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 534 n.9 (1994) (addressing a similar fee-shifting provision in the Copyright Act)). A party's conduct need not be independently sanctionable to warrant an award of fees under § 285; however, fee awards should

not be used “as a penalty for failure to win a patent infringement suit.” *Munchkin, Inc. v. Luv n’ Care, Ltd.*, 960 F.3d 1373, 1378 (Fed. Cir. 2020) (quoting *Octane Fitness*, 572 U.S. at 548).

2. 28 U.S.C. § 1927

Under 28 U.S.C. § 1927, “[a]ny attorney or other person admitted to conduct cases in any court of the United States . . . who so multiplies the proceedings in any case unreasonably and vexatiously may be required by the court to satisfy personally the excess costs, expenses, and attorneys’ fees reasonably incurred because of such conduct.” Conduct is “unreasonable and vexatious” “if there is evidence of the persistent prosecution of a meritless claim and of a reckless disregard of the duty owed to the court.” *Morrison v. Walker*, 939 F.3d 633, 637–38 (5th Cir. 2019) (quotations omitted). Under § 1927, a court may award attorney fees, costs, and expenses that were “reasonably incurred” because of the attorney’s misconduct. *Id.* at 637.

B. Discussion

Plaintiffs take a kitchen-sink approach to argue their entitlement to attorneys’ fees. As a threshold matter, the Court appreciates the Jury’s willfulness determination but, again, that is not dispositive of Plaintiffs’ entitlement to fees under § 285. *SiOnyx LLC v. Hamamatsu Photonics K.K.*, 981 F.3d 1339, 1354 (Fed. Cir. 2020). The Court starts with what it considers the most uncommon conduct: CH and Ruising’s disregard for their discovery obligations; misrepresentations made to the public regarding this Court’s order on inequitable conduct; and Defendants’ failure to put its system prior art into evidence. It then moves to conduct the Court finds less objectionable. The Court concludes that “the [Jury]’s finding of willful infringement is not determinative of whether [this] case is exceptional under § 285, and that [Defendants’] litigation conduct was consistent with an aggressive,” and sometimes inept, “defense but was not otherwise uncommon or exceptional.” *Id.*

1. Defendants' Objectionable Litigation Conduct

a. *Defendants' Discovery Obligations*

Plaintiffs adduced evidence suggesting Defendants harbored a disregard for its discovery obligation in this Action. Plaintiffs highlighted this disregard for the Court during a discovery hearing on July 12, 2021, in which Plaintiffs identified discrepancies that arose when deposing key CH and Ruising witnesses. *See* ECF No. 137.

For example, Plaintiffs deposed Caiying Gan, at which point it became evident that she had not searched for any documents pertinent to this Action—despite her position as CH's CEO. *See id.* at 28:6–30:11. Indeed, she testified that no one had asked her to search for *or preserve* any relevant documents.⁵ *Id.*

Plaintiffs also deposed Jack Jiang, who revealed that he procured opinions on the Asserted Patents in mid-2019. *See supra* Section II.B.2. This was the first Plaintiffs learned of anything

⁵ Plaintiffs also contend that CH engaged in spoliation of evidence because, although Caiying Gan confirmed that Super Lighting sent notice letters to her email address, she could not locate them when conducting a search of her email account, at Super Lighting's counsel's request, during her deposition. ECF No. 233 at 10; ECF No. 241 at 8–9. Plaintiffs assert that Ms. Gan's email account does not have an auto-delete function, so the only explanation for why she could not find the notice letters is because someone deleted them. ECF No. 233 at 10; ECF No. 241 at 8–9.

Defendants counter that, Ms. Gan, who testified that she does not read any of her emails, was given fifteen minutes to perform an “inexpert search” for an eighteen-month-old email, written in a language she does not understand, all while she was experiencing technical difficulties *and* being asked questions by Super Lighting's counsel. ECF No. 247 at 8. Yet the Court notes that Jun Yang, Ruising personnel, testified that he could not find the notice letters when he searched Ms. Gan's email on her phone yet found it when searching the computer of another CH employee. ECF No. 237 at 207:12–208:2. The Court is, therefore, dubious that Ms. Gan's inability to locate Plaintiffs' letters under challenging circumstances leads to the conclusion that CH must have deleted these notice letters. Nor is the Court confident in the thoroughness of Jun Yang searching Ms. Gan's phone. The Court further agrees with CH that, “If Plaintiffs genuinely believed that such conduct gave rise to a spoliation claim, they should have sought a spoliation instruction.” *Id.* In stating that, the Court is not finding that CH did not have pre-suit notice of the Asserted Patents or their infringement, through the emails or otherwise. Indeed, the Court finds it more likely than not that CH had that notice.

approaching a formal investigation into the Asserted Patents, despite having served discovery requests that should have elicited this information much earlier in the case. *See id.* When asked why Defendants had not produced anything related to this opinion, Mr. Jiang stated: “It’s very simple. No one asked us about it. And we also didn’t know what documents we were supposed to provide.” ECF No. 176-2 at 67:9–15. Mr. Jiang also testified the Guo Pengxin, director in charge of quality and certification for CH, helped outside counsel develop these opinions. *Id.* at 83:15–24. Yet Guo Pengxin denied any involvement in any such opinions; Mr. Jiang supposed that Mr. Pengxin was mistaken, likely a result of stress and concern “that [he] might lose [his] job” if the deposition did not go well. *Id.* at 83:25–85:10. This inconsistency adds to the Court’s concern.

The Court heard arguments regarding Ms. Gan and Mr. Jiang’s testimony and Defendants’ failure to meet their discovery obligations and ordered additional document productions and more time for Plaintiffs to depose Ms. Gan and Mr. Jiang. ECF No. 137 at 27:11–18, 33:14–35:3. At that time, the undersigned refused to shift the costs for the additional depositions to Defendants. *Id.* at 37:3–23. Nevertheless, Defendants’ disregard for their discovery obligations is troubling.⁶

b. *Jack Jiang’s Public Statements*

At the same hearing, the Court expressed concern with Jack Jiang making public statements that did not accurately characterize this Court’s ruling on Defendants’ inequitable conduct claims. *Id.* at 40:23–41:3. That too is concerning.

⁶ Plaintiffs raise other discovery-related issues of lesser concern that the Court dealt with in short order. For example, the Court: excluded documents that Defendants produced from Lumixess and Maxlite; and excluded a late-identified Maxlite witness. *See* ECF No. 233 at 11; ECF No. 241 at 11–12. Plaintiffs also remark how CH initially withheld gross profit numbers for the accused lamps, stating that it did not track such numbers, before ultimately producing them. ECF No. 233 at 10; ECF No. 241 at 9. The Court is satisfied with Defendants’ contention that translation issues caused this misunderstanding, ECF No. 251 at 8–9, and that Defendants’ counsel undertook a reasonable investigation as to this information, ECF No. 279 at 94:8–25.

c. *The Court's JMOL*

Maybe the most extraordinary example of Defendants' conduct were the events surrounding the Court's ruling, in the middle of trial, that Defendants had failed to prove invalidity as to the '125 patent and one of two grounds of the '540 patent, all of which rested on tube lamps that were purported to be prior art. Dr. Leppy, Defendants' invalidity expert, propounded these invalidity grounds and testified that he had no personal experience with those tubes and he had not personally inspected them prior to issuing his report. *See* ECF No. 241 at 6. Rather, he had been provided photographs of teardowns of the prior art tubes; he did not know who took the photographs, when or where they were taken, or the qualifications of the person performing the teardown.⁷ *See id.*

At 7:00 PM the night before Dr. Leppy's trial testimony, CH served over 100 demonstratives containing new, never-before-disclosed photographs of the prior art tubes, along with (apparently) relevant commentary. *See* ECF No. 241 at 13. Defendants contend that Dr. Leppy needed these photos for demonstrative purposes because the tube lamps were proving "unwieldy." ECF No. 251 at 14–15. That excuse holds little water where Defendants already had photographs of the tubes—the photographs Dr. Leppy's report relied on in place of the physical tubes themselves. The Court finds it more likely that Defendants may have been intending to shore up issues related to authenticating the photographs in Dr. Leppy's report. Yet the morning of Dr.

⁷ The parties hotly debated the source of the photographs. At trial, Defendants alleged that they had an affidavit showing that Defendants' former counsel at Radulescu LLP took the photographs, but the affidavit only shows that possession of the physical tubes themselves passed from Radulescu to Defendants' current counsel. *See* ECF No. 241 at 13; ECF No. 244-7. The Court also *limined* out any suggestion that the person who took the photographs had a criminal record, which was a line of question down which Plaintiffs took Dr. Leppy during his deposition. *See* ECF No. 159 at 3.

Lebby's testimony, CH quickly agreed it would not use the new photographs. ECF No. 238 at 32:3–7. It did so with almost no argument, to the great surprise of Plaintiffs' counsel who had likely spent significant time—late at night and into the early morning—reviewing and preparing to respond to the new photographs and any attached commentary. *Id.* at 32:9–33:8. Thus, the new photographs wasted Plaintiffs' counsel time in the middle of trial and accomplished *nothing* else. ECF No. 241 at 13 (“This overhaul of Dr. Lebby’s opinions, which Super Lighting detailed for the Court in the wee hours of the morning, forced Super Lighting[’s] counsel to stay up all night and was clearly done to prejudice Super Lighting’s cross-examination.”); ECF No. 279 at 19:2–6 (“Mr. Reid and others on our team spent the entire night going through everything.”).

Once Dr. Lebby took the stand, he commented on the photographs in his report but Defendants never introduced them as evidence. *See* ECF No. 241 at 7. So when Super Lighting sought JMOL on the alleged prior art products, CH was unable to point to any record evidence supporting its invalidity case as to the ’125 patent and one ground of the ’540 patent. The Court granted JMOL. *See id.*

Defendants’ counsel’s conduct through this chain of events was not reasonable. It shows a disregard for opposing counsel’s time and a lack of diligence regarding evidentiary issues in the face of relevant warnings from opposing counsel. *See* ECF No. 233 at 18 (alluding to a pre-trial warning letter).

2. Defendants’ Other Litigation Conduct

a. *Dropped Defenses*

Plaintiffs contend that counterclaims and defenses to infringement that Defendants eventually dropped were “meritless.” The Court cannot agree. First are the noninfringement opinions that CH’s experts, Dr. Zane and Dr. Lebby, prepared before CH dropped those defenses. *See* ECF No. 241 at 5–6; ECF No. 152 at 20:15–22:9 (reading the narrowing agreement into the

record). Plaintiffs take umbrage with Dr. Zane’s dropped noninfringement theories as to the ’140 patent, which relied on an interpretation of the claims that Dr. Zane admitted would exclude preferred embodiments.⁸ ECF No. 241 at 5. Certainly, courts should “interpret claim terms in a way that excludes embodiments disclosed in the specification” only in rare circumstances. *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1276 (Fed. Cir. 2008); *Elekta Instrument S.A. v. O.U.R. Sci. Int’l, Inc.*, 214 F.3d 1302, 1308 (Fed. Cir. 2000). It is not clear to the Court whether this is that rare case. That is, it is not “apparent from the face of [the] patent” whether this noninfringement defense is reasonable or unreasonable. *Halo*, 579 U.S. at 114 (Breyer, J., dissenting).

Second is CH’s inequitable conduct defense: “CH filed over 150 pages of inequitable conduct allegations against Super Lighting, claiming everything from deliberate withholding from the PTO to improper inventors.” ECF No. 241 at 4. Super Lighting argues that aspects of that defense turned on “trivialities” and forced Super Lighting: to respond to CH’s motion to amend the inequitable conduct counterclaims into the case; to answer those counterclaims; and to address them in its validity expert report. *Id.* at 5. Only then did CH drop those allegations. Defendants respond that it was not a coincidence that Plaintiffs “dropped most of the patents targeted by those allegations” at the same time. ECF No. 251 at 8. Plaintiffs reply that it did not drop those patents because “of any particular defenses.” ECF No. 271 at 3. The more salient point, in this Court’s estimation, is that CH “abandoned its opportunity to assert unclean hands or inequitable conduct, not just against the patents” that Plaintiffs dropped, but also against “the three patents that were presented to the jury.” *Id.* at 4.

⁸ Plaintiffs further contend that Dr. Zane admitted his interpretation would make the ’140 patent impossible to practice but the Court cannot discern any such admission in Dr. Zane’s deposition transcript. *See* ECF No. 241-7 at 86:10–17, 87:4–20.

The Court is cognizant that “the mere fact that an issue was pleaded and then dropped prior to trial does not in itself establish vexatious litigation” supporting a finding of exceptionality. *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551 (Fed. Cir. 1989); *see also Medtronic Navigation, Inc. v. BrainLAB Medizinische Computersysteme GmbH*, 603 F.3d 943, 959 (Fed. Cir. 2010) (“A decision by a party to narrow its case for presentation to a jury does not generally suggest manipulation of the litigation process.”). Plaintiffs have not persuaded this Court that Defendants’ dropped claims and defenses were objectively unreasonable. *See Mach. Corp. of Am. v. Gullfiber AB*, 774 F.2d 467, 471 (Fed. Cir. 1985) (“[O]ne should not be penalized for merely defending or prosecuting a lawsuit.”). Dr. Zane’s theory regarding the ’140 patent is troubling but it is a challenge to adjudge its merits in this limited context. It is telling that Plaintiffs were not confident enough in the alleged weakness of Dr. Zane’s theory to move for summary judgment on the issue.

Beyond that, the Court detects no motive from the circumstances surrounding the claims or defenses, such as the timing of CH’s streamlining, that would suggest that CH committed litigation misconduct. *Cf. Kirtsaeng v. John Wiley & Sons, Inc.*, 579 U.S. 197, 209 (2016) (holding, in the context of a fee-shifting statute for copyright claims, that “a court may order fee-shifting because of a party’s litigation misconduct, whatever the reasonableness of his claims or defenses”).

b. *Delay & Avoid*

Plaintiffs contend that CH and its original counsel schemed to delay this Action and/or avoid litigating it in this District. For that proposition, Plaintiffs rely on what it refers to as the “DELAY and AVOID” email, in which CH’s original counsel, David Radulescu from Radulescu LLP, told Jack Jiang that he was evaluating whether: CH could avoid litigating this dispute in Texas or the United States altogether; or CH could delay litigating in Texas for more than a year

if Super Lighting fails to serve CH. *See* ECF No. 233 at 5; ECF No. 241 at 4. Even if CH interpreted the email as offering advice or instruction—as opposed to a status update—and even if CH followed through on it, the suggested course of conduct is not far from standard operating procedure for foreign defendants in a patent infringement case. Counsel does not cross any ethical boundaries by recommending that its client avoid forums counsel perceives as unfavorable.⁹ Nor is it, as a general proposition, improper for a foreign defendant to insist that plaintiff serve it via the Hague Convention. *See* ECF No. 266 at 12–13; *Sheets v. Yamaha Motors Corp.*, 891 F.2d 533, 537 (5th Cir. 1990) (“Thus, because the service that plaintiff attempted fell squarely within the scope of Hague Convention, insisting on service pursuant to its provisions was warranted by existing law.”). CH was not “dodging” service, as Super Lighting would have this Court believe. Under Plaintiffs’ rationale, an attorney acts unethically whenever it advises its client to reject a request to waive service or whenever it opposes a motion for leave to effect alternative foreign service, thereby prolonging litigation. *See* ECF No. 255 at 3 (citing Texas Disciplinary Rule of Professional Conduct 3.02). The Court disagrees.

At trial, Plaintiffs attempted to impeach Mr. Jiang after he testified that CH did not have “a strategy of dodging service and avoiding litigation in Texas.” ECF No. 233 at 5; ECF No. 241 at n.5. Plaintiffs posited then, as they do now, that the “DELAY and AVOID” email contradicts Mr. Jiang’s testimony—that Plaintiffs caught Jack Jiang “lying on the witness stand.” ECF No. 233 at 5; ECF No. 255 at 1. That is a step too far.

⁹ Indeed, the U.S. Court of Appeals for the Federal Circuit has recently reinvigorated 28 U.S.C. § 1404(a), all but encouraging accused infringers to seek transfer to venues some perceive to be more favorable.

First, Super Lighting’s briefing does not accurately characterize Mr. Jiang’s testimony. Neither counsel’s question nor Mr. Jiang’s answer are directed to “dodging” service or delay. Super Lighting’s counsel asked Mr. Jiang whether Defendants “have a strategy of – of avoiding being forced to litigate in Texas after you were sued.” ECF No. 238 at 148:13–16. Mr. Jiang replied: “That is not the case at all.” *Id.* at 148:22. Mr. Jiang could not be caught lying on the stand about dodging service or delaying this Action because he did not testify to either issue.

Second, the “DELAY and AVOID” email is not evidence that CH had a strategy of avoiding litigating this Action in Texas, making Mr. Jiang a liar. The “DELAY and AVOID” email merely reflects that Radulescu was “evaluating potential options” to avoid Texas. *See* ECF No. 233 at 5. That is not evidence of Radulescu’s ultimate recommendation on the issue—and even if it was, there is no evidence that CH or Jack Jiang adopted that recommendation. To the contrary, CH did not move to dismiss this Action on jurisdictional or *forum non conveniens* grounds or seek transfer to a more convenient forum. *See* ECF No. 279 at 90:20–91:10 (explaining that by “avoid,” Mr. Radulescu meant contemplating the propriety of this Court’s jurisdiction over CH). If Defendants’ strategy was to avoid litigating in Texas, the Court cannot discern what steps they took to implement it. For the foregoing reasons, the Court is not convinced that this email or Mr. Jiang’s subsequent testimony amounts to misconduct.¹⁰

¹⁰ Which is not to say that this email does not present other concerns, most notably that CH did not retain litigation counsel for this Action until November 2020, when they retained Radulescu. *See* ECF No. 279 at 10:10–11:10; ECF No. 248 at 135 (“[A]fter we became aware of the – litigation or the situation, it took some time for us to find a trustworthy law firm here in the U.S.”). The “DELAY and AVOID” email chain from early 2020 suggests that Radulescu was advising CH on this Action months earlier.

c. *Trial Conduct*

Plaintiffs next point to CH's attempts to use documents related to CH's withdrawn inequitable conduct claims. ECF No. 233 at 13–14; ECF No. 241 at 12–13. The Court excluded reference to those documents several times during trial but finds no malice of bad faith in Defendants' attempts to divine whether those documents could be used to support claims or defenses unrelated to inequitable conduct. Plaintiffs also identified in CH's exhibit list an exhibit that the Court had excluded—but CH quickly rectified that issue. ECF No. 233 at 13; ECF No. 241 at 12–13. Again, the Court will not attribute this mistake to malice.

3. Conclusion

Considering the totality of the circumstances, the Court finds that this case is not exceptional. Defendants committed missteps but they did not “present false testimony, or destroy documents like the cases reviewed and deemed to be exceptional by the Federal Circuit.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, No. 2:14-CV-00912-JRG, 2020 WL 1478396, at *3 (E.D. Tex. Mar. 26, 2020) (citing *SFA Sys., LLC v. Newegg Inc.*, 793 F.3d 1344, 1350–52 (Fed. Cir. 2015)). “What constitutes an exceptional case should not become part and parcel of losing a hard-fought and contentious trial.” *Id.* at *4 (citing *Checkpoint Sys., Inc. v. All-Tag Sec. S.A.*, 858 F.3d 1371, 1376 (Fed. Cir. 2017)). The Court will not award Plaintiffs fees just because this Action was unnecessarily contentious and Defendants ultimately lost on all issues. And while Defendants may have conducted themselves in an unreasonable manner on certain issues and approached exceptional territory, the Court does not conclude this rendered the “overall” case exceptional. *See Intellectual Ventures I LLC v. Trend Micro Inc.*, 944 F.3d 1380, 1384 (Fed. Cir. 2019). For similar reasons, the Court denies Plaintiffs' request as to § 1927.

IV. PERMANENT INJUNCTION

Plaintiffs' Motion for a Permanent Injunction, ECF No. 234, is **DENIED**. Plaintiffs have failed to satisfy the irreparable injury factor, among others.

A. Legal Standard

District Courts may enter a permanent injunction to restrain a party from patent infringement “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. There are four findings the Court must make when deciding to issue an injunction: (1) that the plaintiff has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for the injury; (3) that, considering the balance of hardships between the parties, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006). “The movant must prove that it meets all four equitable factors[,] [a]nd it must do so on the merits of its particular case.” *Nichia Corp. v. Everlight Ams., Inc.*, 855 F.3d 1328, 1341 (Fed. Cir. 2017) (citations omitted).

B. Discussion

To make a showing of irreparable injury supporting a permanent injunction, Super Lighting must show both that (1) it will suffer irreparable harm absent an injunction, and (2) a sufficiently strong causal nexus relates the alleged harm to the alleged infringement. *Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1359–60 (Fed. Cir. 2013) (hereinafter *Apple III*). “[T]he causal nexus requirement is simply a way of distinguishing between irreparable harm caused by patent infringement and irreparable harm caused by otherwise lawful competition.” *Id.* at 1361. Defendants take little issue with the proposition that Plaintiffs have suffered harm through

competing with CH. Rather, Defendants claim there is no causal nexus relating that harm to patent infringement. The Court agrees.

1. Irreparable Harm Absent an Injunction

Plaintiffs' threshold premise is that Super Lighting and CH are direct competitors, which "weighs heavily in favor of a finding of irreparable injury." ECF No. 234 at 8 (first quoting *i4i Ltd. P'ship v. Microsoft Corp.*, 670 F. Supp. 2d 568, 599 (E.D. Tex. 2009); then citing *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1345 (Fed. Cir. 2013); then citing *Broadcom Corp. v. Emulex Corp.*, 732 F.3d 1325, 1338 (Fed. Cir. 2013); and then citing *Novozymes A/S v. Genencor Int'l, Inc.*, 474 F. Supp. 2d 592, 612-13 (D. Del. 2007)). Defendants do not deny Plaintiffs' characterization of Super Lighting and CH as direct competitors. Plaintiffs go further, however, in describing CH as an "archrival" to Super Lighting, citing CH's hiring Jack Jiang away from Super Lighting, and Jack Jiang's subsequent hiring of Jun Yang away from Super Lighting. *Id.* at 9. Plaintiffs portray this activity, along with, for example, CH's possession of Super Lighting's confidential internal testing reports, as evidence of a "scheme to usurp Super Lighting's technology and take down Super Lighting's business." *Id.* They go as far as to allege that CH stole Super Lighting's technology and implemented it in its infringing products. *Id.* at 9-10.

Plaintiffs name the specific economic harms CH's infringement has inflicted upon Super Lighting: lost sales, lost profit margins, and lost market share. First, Super Lighting argues that it lost sales to CH, citing testimony from Super Lighting's own witnesses. ECF No. 234 at 10. Plaintiffs adduced evidence that Super Lighting made 84% its sales during the damages period to existing CH customers and CH made 89% its sales during that period to Super Lighting's existing customers. *Id.* At trial, CH's damages expert agreed that the parties "sell to the same types of customers and the same categories of customers over the entire damages period." *Id.* Super Lighting and CH initially agreed that Super Lighting's witnesses attributed those lost sales to CH's

ability to undercut Super Lighting. *Id.* at 7 (“Multiple Super Lighting witnesses confirmed that they had lost sales to CH due to CH’s predatory pricing. . . . And the reason CH could charge so little was plain: because CH was improperly using Super Lighting’s inventions without being burdened by Super Lighting’s cost for research and development.”); *id.* at 10 (“CH was able to undercut Super Lighting’s sales with lower prices.”); ECF No. 246 at 3–4. Plaintiffs argued that CH had the pricing flexibility because it was not burdened with the cost of research and development (R&D). ECF No. 234 at 10. In opposition, CH contends that Plaintiffs have not provided any substantive analysis that “Defendants’ prices are lower *because* their products incorporate the patented features.” ECF No. 246 at 4. On that point, the Court agrees with Defendants.

In reply, Plaintiffs reversed position and argued that “CH and Super Lighting’s products are comparably priced over the damages period.” ECF No. 253 at 2. Plaintiffs further averred that because customers purchased comparably priced products from both Super Lighting and CH, “pricing is not the only demand drivers for customers.” *Id.* at 2–3. The reply then retreated to Plaintiff’s opening position: if CH’s prices are lower, it is only because CH was not burdened with R&D costs. *Id.* at 3. This inconsistency regarding this predatory pricing point certainly does not help Plaintiffs surmount their burden further undermines Plaintiffs’ “causal nexus” position. *See* ECF No. 279 at 58:19–59:23.

Second, Super Lighting argues that CH’s pricing scheme resulted in a decline of Super Lighting’s gross margins over time—from \$0.61 per unit during the damages period to \$0.41 per unit in 2021. ECF No. 234 at 10. Defendants contend that Plaintiffs offered no evidence that the presence of infringing features in the infringing products caused the margin erosion. ECF No. 246

at 5. Defendants cited testimony from its damages expert that he saw no evidence that the decrease in profit margin was attributable to CH's infringement. *Id.*

Third, Super Lighting also asserts that its market share decreased from 19% in 2018 to 11.7% in 2020. ECF No. 234 at 10. Plaintiffs contend that the loss (or potential loss) of sales and market share is "the very essence of irreparable harm." *Id.* (first citing *TEK Glob., S.R.L. v. Sealant Sys. Int'l*, 920 F.3d 777, 793 (Fed. Cir. 2019); then citing *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1151 (Fed. Cir. 2011); then citing *Purdue Pharma L.P. v. Boehringer Ingelheim GmbH*, 237 F.3d 1359, 1368 (Fed. Cir. 2001); and then citing *i4i*, 670 F. Supp. 2d at 600). Defendants assert that this reduction may be merely attributable to Defendants' lower prices. ECF No. 246 at 5. Yet, as the Court notes above, Plaintiffs credit those lower prices to CH's freeriding on Plaintiffs' innovation.

This Court follows *Apple IV* in holding "that competition between the patentee and the infringer, particularly direct competition, strongly militates toward a finding of irreparable harm." *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 653 (Fed. Cir. 2015) (hereinafter *Apple IV*). Plaintiffs and Defendants are clearly direct competitors and, as Plaintiffs suggest, maybe even archrivals. Given that, and the evidence of lost sales, lost profit margins, and lost market share, the Court is satisfied that competition with CH caused Plaintiffs irreparable harm. The Court must satisfy itself, however, that CH's infringing conduct, and not lawful competition, caused that harm. *Apple III*, 735 F.3d at 1361.

2. Causal Nexus

To show a causal nexus between the harm that Super Lighting has suffered and CH's infringement, Super Lighting must show "some connection between the patented feature and demand for [the infringer's] products." *Id.* at 1364. "The purpose of the causal nexus requirement is to establish the link between the infringement and the harm, to ensure that there is 'some

connection’ between the harm alleged and the infringing acts.” *Apple IV*, 809 F.3d at 640. Super Lighting has failed to illuminate the causal nexus here.

Plaintiffs characterize the patented features as follows:

- The ’140 patent’s claimed feature is “shock protection circuitry.” *See* ECF No. 234 at 4, 9. Tao Jiang, Super Lighting’s CEO, and Aiming Xiong, head of R&D at Super Lighting, testified that this “prevents installers of LED tube lamps from being electrically shock[ed] and therefore improves product safety.” *Id.* at 13 (first citing ECF No. 237 at 77:9–14 (testimony of Tao Jiang), then citing ECF No. 237 at 118:2–7 (testimony of Aiming Xiong)).
- The ’125 patent’s claimed feature is a “new concept of affixing the flexibility printed circuit (‘FPC’) on the inside surface of the lamp tube.” *Id.* (citing ECF No. 237 at 69:2–3 (testimony of Tao Jiang)). Plaintiffs contend that this new design “enables wider light emission angles, offers sleeker appearance, and prevents electric shock.” *Id.* (citing ECF No. 237 at 71:6–21 (testimony of Tao Jiang)).
- The ’540 patent’s claimed feature is an expansion upon “‘the ’125 invention based upon the improved relationship between the components, including the glass and glueable FPC’ to produce better workmanship and more beautiful products.” *Id.* (quoting ECF No. 237 at 76:3–9 (testimony of Tao Jiang)).

Plaintiffs then argue that there is “some connection” between these features and consumer demand sufficient to evidence a causal nexus. ECF No. 253 at 4 (quoting *Apple III*, 735 F.3d at 1364); ECF No. 234 at 13–14. In doing so, Plaintiffs almost exclusively refer to trial testimony discussing consumers’ interest in safety features:

- Obert’s CEO, Ryan Lu, testified, in response to a question about why customers prefer Obert tubes, that “it definitely may help the user a lot by take [sic] advantage of the safety feature.” ECF No. 237 at 152:21–153:5. He continued, “It save [sic] a lot of the installation time, and it keep [sic] the installer safe at all costs.” *Id.*
- Super Lighting’s sales director, Barry Qin, testified that Plaintiffs’ lamp product is “the safest one in the market currently.” ECF No. 238 at 172:25–173:5.
- Jun Yang testified that customers “care” about the safety of LED lamps to the extent that CH Lighting “would need to obtain certifications related to safety, for example, the UL certification.” ECF No. 237 at 205:19–23. And those certifications seemingly implicate measures to deal with electrical shocks. *Id.* at 205:24–206:3. (But, as CH Lighting notes, “Plaintiffs have never argued, and cannot argue, that practicing the ’140 patent is necessary to obtain UL certification.” ECF No. 246 at 8 n.3.)
- Jack Jiang testified that it was “absolutely correct” that the safety of LED tube lamps is an “important thing that customers care about.” ECF No. 237 at 225:4–7.

The parties debate whether this evidence establishes a sufficient connection between the patented features and consumer demand, CH Lighting relying on *Apple III* and Plaintiffs relying on *Apple IV*. See ECF No. 246 at 7; ECF No. 253 at 4. In the former opinion, the plaintiff submitted evidence that ease-of-use was important to smartphone consumers but the lower court deemed that evidence “too general” where the patented feature—tap-to-zoom—was “very specific.” *Apple, Inc. v. Samsung Elecs. Co.*, 909 F. Supp. 2d 1147, 1155 (N.D. Cal. 2012).

A consumer may want a phone that is easy to use, but this does not establish that a tap-to-zoom feature, for example, or any given type of gesture, is a driver of consumer demand. Thus, Apple’s evidence of a survey showing the importance of ease of use as a general matter . . . does not establish that infringement of any of Apple’s *patents* caused any harm that Apple has experienced. To establish

the required nexus, Apple must make a showing specific to each patented feature. Many factors go into making a product easy to use, but the features for which Apple is asserting patent protection are very specific.

Id. The Federal Circuit agreed. *See Apple III*, 735 F.3d at 1367 (“The district court was thus correct in concluding that Apple’s evidence of ease of use, although relevant, was too general, standing alone, to establish a causal nexus.”). The evidence that consumers care about shock protection is, in CH’s opinion, too general here where the ’140 patent, for example, is directed to a specific shock protection circuit. *See* ECF No. 246 at 7–8.

In reply, Plaintiffs cling to *Apple IV*’s statement that the “causal nexus” inquiry is a “flexible one.” ECF No. 253 at 1; ECF No. 279 at 33:3–6. The *Apple IV* court held that a plaintiff could make out a causal nexus with “evidence that a patented feature is one of several features that cause consumers to make their purchasing decisions.” *Apple IV*, 809 F.3d at 642 (quoting *Apple III*, 735 F.3d at 1364). Plaintiffs allege the “the prevention of electric shocks” is just such a feature. ECF No. 253 at 4. Yet that identifies the patented feature at a higher level of generality than Plaintiffs characterize it elsewhere. *See, e.g.*, ECF No. 234 at 4 (describing how circuitry embodies the ’140 patent).

Apple III cautions against such overgeneralizations. Again, the *Apple III* opinion affirmed that a plaintiff must show that the patented feature *in particular* drives demand for the accused product. The *Apple IV* opinion, on the other hand, merely clarified that establishing a causal nexus does not require the plaintiff to prove that the patented feature is the exclusive driver of demand for the accused product; a showing that the patented feature “impacts customers’ purchasing decisions” will suffice. 809 F.3d at 641. That customers care about safety and shock protection generally is, as CH Lighting concedes, “uncontroversial.” *See* ECF No. 246 at 8 & n.3. CH Lighting’s challenge, rather, turns on the absence of record evidence showing that customers care

about shock protection *particular to the patented features*. The Court finds this argument persuasive. Just as the *Apple III* plaintiffs failed to adduce evidence specific to the tap-to-zoom feature, Plaintiffs have not cited evidence of customer demand specific to that degree or category of shock protection attributable to the '140 patent's claimed circuit.¹¹

Plaintiffs, of course, disagree. Their most compelling evidence is Mr. Lu's testimony, elicited in response to a question about why customers prefer Obert lamp tubes, that it "may help the end user a lot by take advantage of the safety feature and the double-ended Type B tubes." ECF No. 253 at 4–5. Unless the Court construes Mr. Lu's recitation of "the safety feature" as a reference to the claimed circuitry of the '140 patent, this testimony is too general. Plaintiffs' counsel did not seek to clarify what Mr. Lu meant by "safety feature." And immediate context offers little support; this answer was not elicited amidst a conversation about shock protection circuitry. Adopting such a construction would treat Plaintiffs, the side bearing the burden here, too generously. Even if it ventured to accept the construction, the Court is dubious of the reliability of this testimony because it is self-serving—Mr. Lu is Obert's CEO—and unsupported by other admitted evidence. *See Rest. Law Ctr. v. United States DOL*, No. 1:21-CV-1106-RP, 2022 U.S. Dist. LEXIS 30368, at *12 (W.D. Tex. Feb. 22, 2022) ("The Court declines to rely on such speculative and self-serving testimony to make a finding of irreparable harm."); *see* ECF No. 279 at 60:25–61:6 (criticizing the testimony Plaintiffs rely on because it comes from self-interested, non-expert witnesses).

¹¹ As opposed to shock protection from a noninfringing component. For example, Plaintiffs' technical expert testified that prior art LED tube lamps with UL certification would likely have had shock protection features. ECF No. 237 at 195:1–7.

Plaintiffs focused on the '140 patented feature, preserving little space to elaborate on the causal nexus relevant to the '125 and '540 patented features. What evidence Plaintiffs offer fails show a casual nexus.

For the foregoing reasons, the Court concludes that Plaintiffs have not established a causal nexus or, it follows, any irreparable injury justifying a permanent injunction. In addition, Plaintiffs have tied the next two *eBay* factors to the existence of an irreparable injury, so Plaintiffs have likewise failed to satisfy those factors. *See* ECF No. 234 at 15 (“The inadequacy of remedies at law is closely related to irreparable harm, and the two can be analyzed together.”); *id.* at 16 (relying on the harm to Super Lighting). Failing these, Plaintiffs have not shown their entitlement to a permanent injunction.

V. PRE- AND POST-JUDGMENT INTERESTS AND BILL OF COSTS

Briefing on Plaintiffs’ Motion for Entry of Judgment, ECF No. 242, included requests for prejudgment and post-judgment. *See* ECF No. 242 at 4. The Court will grant both.

A damages award should provide “complete compensation,” *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655 (1983), including “a reasonable royalty for the use made of the invention by the infringer, together with interest and costs.” 35 U.S.C. § 284. “The purpose of prejudgment interest is to place the patentee in as good a position as he would have been had the infringer paid a reasonable royalty rather than infringe.” *SSL Servs., LLC v. Citrix Sys., Inc.*, 769 F.3d 1073, 1094 (Fed. Cir. 2014). “The award of pre-judgment interest is the rule, not the exception.” *Energy Transp. Grp., Inc. v. William Demant Holding A/S*, 697 F.3d 1342, 1358 (Fed. Cir. 2012). But Section 284 does not “requir[e] the award of prejudgment interest whenever infringement is found.” *Devex*, 461 U.S. at 655–56. The Court sees no reason to deviate from the rule here—and Defendants give it none. But, to be clear, prejudgment interest should only be awarded on the Jury’s damages award—not on any enhancement thereto. *See Underwater Devices Inc. v.*

Morrison-Knudsen Co., 717 F.2d 1380, 1389 (Fed. Cir. 1983), *overruled on other grounds*, *In re Seagate Tech., LLC*, 497 F.3d 1360 (Fed. Cir. 2007) (“[W]e hold that prejudgment interest can only be applied to the primary or actual damage portion and not to the punitive or enhanced portion.”); *see also Beatrice Foods Co. v. New England Printing & Lithographing Co.*, 923 F.2d 1576, 1580 (Fed. Cir. 1991) (discussing *Underwater Devices* holding).

The parties also vigorously dispute what interest rate should be applied. “The rate of prejudgment interest and whether it should be compounded or uncompounded are matters left largely to the discretion of the district court.” *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 969 (Fed. Cir. 1986). When exercising that discretion, the Court recognizes the purpose of prejudgment interest is to compensate the patent owner for infringement. *Imperium IP Holdings (Cayman), Ltd. v. Samsung Elecs. Co.*, 757 Fed. Appx. 974, 2017 WL 1716589, at *4 (E.D. Tex. 2017). The Court will not adopt of the prime rate, finding that “[t]he T-Bill rate is well-accepted in federal courts and is a reasonable method of placing [Plaintiffs] in a position of where [they] would have been had there been no infringement by [Defendants].” *VLSI Tech. LLC v. Intel Corp.*, No. 6:21-CV-57-ADA, 2022 U.S. Dist. LEXIS 83985, at *7 (W.D. Tex. Apr. 21, 2022). “It is well within the Court's discretion to apply the T-Bill rate.” *Id.* (citing *Verinata Health, Inc. v. Ariosa Diagnostics, Inc.*, 809 F. App’x 965, 977 (Fed. Cir. 2020)). So, the rate applied should be the average T-Bill rate, compounded annually, from the issue date of the ’140 patent, which the Jury heard was the date of the hypothetical negotiation, to the date of the Court’s forthcoming final judgment. *See* ECF No. 226 at 28.

The parties do not dispute that 28 U.S.C. § 1961 controls what interest rate should be applied for post-judgment interest. *Compare* ECF No. 249 at 7, *with* ECF No. 260 at 2. Accordingly, the Court awards post-judgment interest at the statutory rate, compounded annually,

starting from the date of the Court's forthcoming final judgment until the date of payment. Post-judgment interest will apply to the total award including damages found by the jury, prejudgment interest applied to that award, and the enhanced damages award. *See Ericsson Inc. v. TCL Comm'n Tech. Holdings, Ltd.*, No. 2:15-CV-00011-RSP, 2018 WL 2149736, at *14 (E.D. Tex. May 10, 2018), *vacated on other grounds*, 955 F.3d 1317 (Fed. Cir. 2020).

As a final matter, the briefing on the Motion for Entry of Judgment also included disputes as to Plaintiffs' Bill of Costs. *See* ECF No. 268. The parties subsequently came to an agreement on that Bill, ECF No. 278, and the Court will enter that agreed Bill of Costs promptly after entering judgment.


VI. CONCLUSION

It is therefore **ORDERED**

- Plaintiffs' Motion for Enhancement of Damages Under 35 U.S.C. § 284, ECF No. 233, is **GRANTED-IN-PART**;
- Plaintiffs' Motion for Exceptional Case and Attorney Fees, ECF No. 241, is **DENIED**;
- Plaintiffs' Motion for Permanent Injunction, ECF No. 234, is **DENIED**.

It is further **ORDERED** that Plaintiffs' Motion for Entry of Judgment, ECF No. 242, is **HELD IN ABEYANCE** pending the parties' resolution of the precise dollar amount of enhancement the Court has ordered. The parties are instructed to: meet and confer regarding the dollar amount of enhancement the Court ordered above; and jointly draft a proposed order of judgment consistent with the rulings above, to be sent to the Court by July 28, 2022, on which date the Court will enter judgment.

SIGNED this 16th day of August, 2022.


ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

**JIAXING SUPER LIGHTING ELECTRIC
APPLIANCE CO., LTD. AND OBERT, INC.,**

Plaintiffs,

v.

**CH LIGHTING TECHNOLOGY CO., LTD.,
ELLIOTT ELECTRIC SUPPLY INC. AND
SHAOXING RUISING LIGHTING CO.,
LTD.,**

Defendants.

CASE NO. 6:20-CV-00018-ADA

JURY TRIAL DEMANDED



AMENDED MEMORANDUM OPINION & ORDER

Came on for consideration this date are Plaintiffs’ Motion for Supplemental Damages, Ongoing Royalty and Enhancement of Post-Verdict Damages, ECF No. 287; Defendants’ Motion for Judgment as a Matter of Law, ECF No. 291; and Defendants’ Motion for New Trial, ECF No. 292. The Court presided over a four-day jury trial from November 1, 2021 to November 4, 2021. *See* ECF Nos. 237–40. At the end, the Jury found Defendants CH Lighting Technology Co., Ltd. (“CH Lighting” or “CH”), Elliott Electric Supply Inc. (“Elliott”), and Shaoxing Ruising Lighting Co. Ltd. (“Ruising”) (collectively, “Defendants”) to have willfully infringed claims of three patents of Plaintiffs Jiaxing Super Lighting Electric Appliance Co., Ltd. (“Super Lighting”) and Obert, Inc. (“Obert”) (collectively, “Plaintiffs” or “Super Lighting”). ECF No. 230.

For the reasons set forth below, the Court will deny Defendants’ motions for judgment as a matter of law and new trial, and grant-in-part Plaintiffs’ motion for supplemental damages, ongoing royalty and enhancement of post-verdict damages.

I. BACKGROUND

On January 10, 2020, Plaintiffs initiated this Action by filing a complaint alleging that Defendants infringe certain U.S. patents. ECF No. 1 (the “Complaint”). On March 16, 2020, Plaintiffs filed an amended complaint alleging infringement of U.S. Patent Nos. 10,295,125 (the “’125 patent”), 10,342,078, 10,352,540 (the “’540 patent”), and 10,426,003, 9,939,140 (the “’140 patent”), 10,378,700, 10,448,479, and 10,560,989. ECF No. 21 (the “FAC”). CH answered on December 3, 2020. ECF No. 67. The Plaintiffs’ patents and Defendants’ accused products are directed to light-emitting diode (LED) tube lamps and features thereof. Super Lighting is a Chinese corporation and Obert is its North American affiliate. ECF No. 21 ¶¶ 1, 2. CH and Ruising are also Chinese corporations and Elliott is a customer of some sort based out of Texas. *See, e.g.*, ECF No. 237 at 40:12–20, 46:18–22, 78:9–79:10. Ruising is the subsidiary of CH charged with selling CH products.¹ *See id.* at 78:9–79:10. Super Lighting and CH are rivals in the tube lamp space. Ruising is owned at least by Caiying Gan, CEO of CH, and Qingbo “Jack” Jiang, who also runs Ruising. *See id.* at 78:9–79:10. Before he was at Ruising, Jack Jiang was a Super Lighting employee. He left in 2014 to join Ruising and later convinced Jun Yang, technical assistant and secretary to Super Lighting’s CEO and founder, to join him there. *See id.* at 82:15–83:7. According to Super Lighting’s CEO, Mr. Yang had access to Super Lighting’s most confidential, technical documents. *Id.* at 82:24–83:5. Mr. Yang is now a product manager at Ruising. *See id.* at 204:1–9.

On October 6, 2021, the Court held a pretrial conference in this Action. *See* ECF Nos. 190, 191. Trial commenced on November 1, 2021. *See* ECF No. 216. At trial, Plaintiffs had narrowed their case such that they only asserted infringement of claim 1 of the ’125 patent, claims 1, 4, 5, 24, 28, and 31 of the ’140 patent, and claims 13 and 14 of the ’540 patent. Shortly before trial,

¹ When the Court refers to CH it is oftentimes referring to CH and Ruising collectively.

Defendants stipulated to infringement for all but one accused product—Defendants argued to the Jury that the LT2600 integrated circuit did not infringe the asserted claims of the '140 patent. Defendants also presented an invalidity case against the '125, '140, and '540 patents (the “Asserted Patents”) to the Jury. *Id.* at 8–9.

On the third day of trial, the Court granted a pre-verdict motion for judgment as a matter of law (JMOL) under Federal Rule of Civil Procedure 50(a) on the issue of the invalidity relating to the '125 patent and the '540 patents. ECF No. 239 at 47:8–53:11. The Court held that there was not a legally sufficient evidentiary basis upon which a reasonable jury could have concluded that: claim 1 of the '125 patent was invalid based on any of Defendants’ three prior-art grounds against that patent; or the asserted claims of the '540 patent were invalid based on one of Defendants’ two prior-art grounds against that patent. *Id.* Defendants based these deficient prior-art grounds on system prior art—physical lighting tubes—that Defendants failed to introduce into evidence before evidence closed. *See id.*

On November 4, 2021, the Jury rendered a unanimous verdict, finding that Defendants infringed all Asserted Claims and that Defendants failed to prove that any Asserted Claim was invalid. ECF No. 230. The Jury awarded damages in the amount of \$13,872,872 from CH and Ruising and \$298,454 from Elliott and further found that CH and Ruising willfully infringed.

On November 24, 2021, Plaintiffs moved for enhanced damages and a permanent injunction. ECF Nos. 233, 234. On December 2, 2021, Plaintiffs moved for attorneys’ fees and entry of judgment. ECF Nos. 241, 242. On July 21, 2022, the Court granted-in-part Plaintiff’s Motion for Enhancement of Damages under 35 U.S.C. § 284 and denied Plaintiffs’ Motion for exceptional case, attorney fees and for a permanent injunction. ECF No. 281.

On August 19, 2022, Plaintiffs filed a motion for supplemental damages, ongoing royalty and enhancement of post-verdict damages. ECF No. 287. And on August 26, 2022, Defendants filed a motion for judgment as a matter of law and a motion for a new trial. ECF Nos. 291–92. The parties briefing on these post-trial motions was completed on September 16, 2022. *See* ECF Nos. 303, 305, 306. These motions are now ripe for judgment.

II. MOTION FOR JUDGMENT AS A MATTER OF LAW

A. Legal Standard

A court may grant JMOL against a prevailing party only if a reasonable jury would not have a legally sufficient evidentiary basis to find for the non-moving party on that issue. Fed. R. Civ. P. 50(a)(1). In deciding a renewed JMOL motion, a “court must draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence.” *Taylor-Travis v. Jackson State Univ.*, 984 F.3d 1107, 1112 (5th Cir. 2021). The court must disregard all evidence favorable to the moving party that the jury is not required to believe. *Id.* This is because “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Wellogix, Inc. v. Accenture, L.L.P.*, 716 F.3d 867, 874 (5th Cir. 2013).

Courts grant JMOL for the party bearing the burden of proof only in extreme cases, when the party bearing the burden of proof has established its case by evidence that the jury would not be at liberty to disbelieve, and the only reasonable conclusion is in its favor. *Mentor H/S, Inc. v. Medical Device All., Inc.*, 244 F.3d 1365, 1375 (Fed. Cir. 2001). JMOL is inappropriate if the record evidence is such that reasonable and fair-minded men in the exercise of impartial judgment might reach different conclusions. *Laxton v. Gap Inc.*, 333 F.3d 572, 579 (5th Cir. 2003).

A jury verdict must stand unless there is a lack of substantial evidence, in the light most favorable to the successful party, to support the verdict. *Am. Home Assur. Co. v. United Space All., LLC*, 378 F.3d 482, 487 (5th Cir. 2004). Substantial evidence is more than a scintilla, but less than a preponderance. *Nichols v. Reliance Standard Life Ins. Co.*, 924 F.3d 802, 808 (5th Cir. 2019). Thus, JMOL must be denied if a jury's verdict is supported by legally sufficient evidence that amounts to more than a mere scintilla. *Laxton*, 333 F.3d at 585.

B. Discussion

Defendants move for judgment as a matter of law under Rule 50(b) for three reasons: (1) that there is not substantial evidence to support the Jury's validity findings; (2) that there is not substantial evidence to support the Jury's infringement findings; and (3) and that there is not substantial evidence to support a finding of willfulness. *See, generally*, ECF No. 291. The Court will address each of these in turn below. As a preliminary matter, however, the Court will address the Plaintiffs' arguments that because this is a renewed motion for judgment as a matter of law under Rule 50(b), the Defendants are strictly limited to those arguments that presented under their original Rule 50(a) motion.

Although Defendants cite only the language of Rule 50(a), their motion is actually a **renewed** motion for JMOL under Rule 50(b). A party forfeits the right to move under Rule 50(b) by failing to move first under Rule 50(a), and issues raised for the first time in a Rule 50(b) motion cannot be considered. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 845 (Fed. Cir. 2010), *aff'd*, 564 U.S. 91 (2011); *see also VLSI Tech. LLC v. Intel Corp.*, No. 6:21-CV-057-ADA, 2022 WL 1477725, at *7 (W.D. Tex. May 10, 2022).

Plaintiffs primarily raise two issues of the impropriety of Defendants' **renewed** motion for JMOL under Rule 50(b).

First, Plaintiffs argue that as to infringement and willful infringement, “Defendants failed to cite any specific basis why it was entitled to JMOL in their Rule 50(a) motion . . . [n]or did Defendants raise any of the specific arguments in their Rule 50(a) motion that they are now making.” ECF No. 299 at 4. According to Plaintiffs, “[t]he transcript portions cited by Defendants in their brief did not form any basis to request a Rule 50(b) motion on issues such as infringement and willfulness.” *Id.* (citing ECF No. 291 at 3, which cites “Trial Tr. Day 3” at 67:22–71:10 (requesting JMOL on invalidity and damages)). Moreover, according to Plaintiffs, “regarding non-infringement, Defendants now rely ([ECF No. 291] at 15-17) almost entirely on Dr. Zane’s testimony. But Defendants did not raise any argument in any pre-verdict JMOL based on the purportedly missing elements identified by Dr. Zane.” *Id.* In their response brief, Plaintiffs preemptively respond to Defendants’ reliance on the liberal interpretation of rule 50(a) in the Fifth Circuit. *Id.* Plaintiffs argue that even under the liberal Fifth Circuit standard, Defendants have not placed Plaintiffs or the Court on notice of any specific claim element that Plaintiffs supposedly failed to prove.

In reply, Defendants contend that “CH specifically moved for JMOL of non-infringement, citing ‘insufficient evidence to establish . . . that Defendants infringe any claim of the ’140 patent.’” ECF No. 305 at 9 (citing Day 2 Tr. 100:14–24). According to Defendants, [t]hat motion preserves CH’s arguments.” *Id.* Defendants rely on *Navigant Consulting, Inc. v. Wilkinson*, 508 F.3d 277, 288 (5th Cir. 2007), which held that “Rule 50(b) is construed liberally, and [courts] may excuse ‘technical noncompliance’ when the purposes of the rule are satisfied.” *Id.* Defendants also rebut Plaintiffs’ allegation that Defendants failed to preserve its Rule 50(b) motion because Defendants argue that “CH specifically moved for JMOL because the evidence

was ‘insufficient . . . to establish that Defendants willfully infringed any asserted claim of any asserted patent.’” *Id.* at 10 (citing Day 2 Tr. 100:25–101:11).

The Court will address any alleged new non-infringement or willfulness argument as it comes up below.

Second, Plaintiffs argue that “at least with respect to the product prior art, Defendants’ motion for JMOL of invalidity is nonsensical because the Court granted Plaintiffs’ JMOL on that issue before Plaintiffs’ rebuttal case.” *Id.* The Plaintiffs rely on Rule 50, which states that that JMOL may be granted only “if a party has been fully heard on an issue during a jury trial.” Because the Court had already granted JMOL, Plaintiffs’ validity expert, Dr. Phinney, did not address the ’125 Patent or the product prior art. *Id.* (citing Trial Tr. Day 2 at 64:3–19, 82:14–25).

In reply, Defendants argue only even though Plaintiffs did not have the opportunity to present their case regarding the ’125 Patent, “they admit that their proof would have mirrored the insufficient evidence they offered on ‘the same element’ of the ’540 patent.” ECF No. 305 at 4. According to Defendants. “[a] vague promise of ‘more of the same’ should not defeat JMOL.” *Id.* The defendants do not address the product prior art arguments.

The Court agrees with the Plaintiffs and finds that the Defendants have waived these arguments regarding the ’125 Patent or the product prior art. *VLSI*, 2022 WL 1477725, at *7 (new argument waived by failure to raise in pretrial JMOL even though sufficiency of proof of element was raised). Accordingly, Defendants’ motion for JMOL as to the validity of the ’125 Patent or the product prior art is hereby denied.

i. Substantial Evidence Supports the Jury’s Validity Findings for the ’140 and ’540 Patents

At trial, Defendants asserted that Claims 13 and 14 of the ’540 patent and Claims 1, 4, and 24, and dependent claims 4, 28, and 31 of the ’140 patent were invalid. The Jury found that

Defendants did not prove by clear and convincing evidence that those claims of the '540 patent '140 patent were invalid. ECF No. 230. Defendants argue, however, that this Court should enter JMOL of invalidity because “CH’s proof on invalidity showed how every purported advance was apparent in the prior art . . . [and] Plaintiffs failed to identify any inventive insight and repeatedly contradicted the plain language of both the patents and prior art.” ECF No. 305 at 8.

1. Substantial evidence supports the Jury’s Validity Findings for the '540 Patent

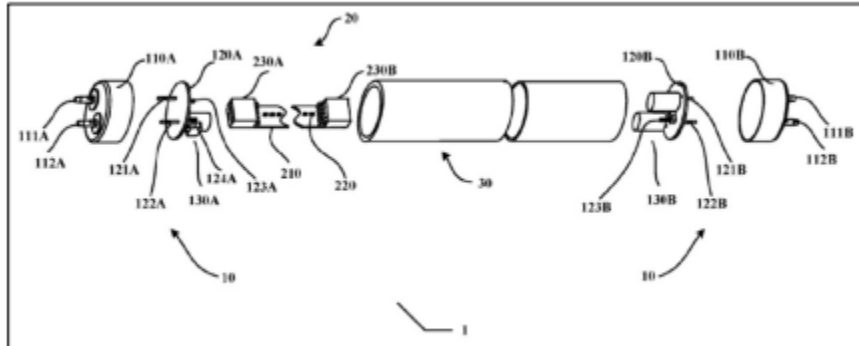
Defendants argue that the prior art renders the asserted claims of the '540 Patent invalid because “[t]wo separate sets of prior art references make that clear: (1) U.S. Patent Nos. 9,970,640 B2 (“Zhao”) and 8,360,599 B2 (“Ivey II”); and (2) the MaxLite G Series L18T8DF440-G.” ECF No. 291 at 4.

a. Zhao and Ivey do not render Claim 13 obvious

Substantial evidence supported the Jury’s finding that Defendants failed to prove invalidity of claims 13 and 14 of the '540 Patent by clear and convincing evidence. Defendants argue that Plaintiffs identified only two putative departures from prior-art, conventional LEDs: (1) an LED strip disposed on the “inner circumferential surface” of the tube; and (2) a “diffusion film” “disposed on” the lamp tube. ECF No. 291 at 6. Defendants contend that Zhao and Ivey render claim 13 obvious because they disclose, teach, or suggest these very same two differences that Plaintiffs allegedly identified as the difference between the claimed invention and the prior art. *See id.*

The Court disagrees with the Defendants. First, the Jury could have reasonably credited Dr. Phinney’s testimony and found that Defendants failed to prove an LED strip disposed on the “inner circumferential surface” of a lamp tube. *MobileMedia Ideas LLC v. Apple Inc.*, 780 F.3d 1159, 1168 (Fed. Cir. 2015) (citing *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d

1342, 1362 (Fed. Cir. 2012) (“In light of the jury’s determination that [Defendant] failed to prove obviousness, we must infer that the jury found [Plaintiff’s] experts to be credible and persuasive on this point”). For this element, Defendants relied on a single figure (Fig. 4, below) from the Zhao reference (ECF No. 296-25, DTX-60), and the corresponding text:



Day 2 Tr. at 303:3–9. As Dr. Phinney explained, the figure does not show how the parts fit together, and therefore does not teach a person of ordinary skill in the art that the LED strip is “disposed on the inner circumferential surface” as claimed. Day 3 Tr. at 11:4–10. Likewise, the corresponding text in Zhao merely indicates that the light strip is “inside” the tube. *Id.* at 11:13–24; ECF No. 296-25 at 4:16–17, 8:35–41.) Defendants do not explain why a reasonable Jury could have not credited it.

Moreover, at trial, Defendants failed to present a credible case of their own on this element. Defendants’ expert offered only six lines of testimony on the issue. (Day 2 Tr. at 303:4–9.) Nothing in his testimony explained why a skilled artisan would infer that the light strip was disposed on an inner circumferential surface either from the figure or the cited portions of the specification teaching that the light strip was merely “inside” the tube. The Jury certainly was not required to credit Dr. Lebbly’s testimony over the more detailed explanation from Dr. Phinney.

In a possible attempt to reconcile the Jury’s recognition of the apparent inadequacy of Dr. Lebbby’s trial testimony, Defendants raise two, completely new arguments in their motion: (1) that Zhao “shows nothing between the LED strip and the tube’s ‘inner circumferential surface,’” and (2) that “common sense would inform skilled artisans that disposing the strip directly on the tube was one option.” ECF No. 291 at 5. Raised for the first time post-trial, both arguments are procedurally improper. *See Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 276 F. Supp. 3d 629, 653 (E.D. Tex. 2017), *aff’d*, 739 F. App’x 643 (Fed. Cir. 2018).

b. MaxLite G Series does not render claim 13 obvious

Defendants asserted the same MaxLite tube against the ’540 Patent as they did against the ’125 Patent, and their case failed on pre-verdict JMOL for the same reasons. Trial Tr. Day 3 at 52:23–53:9. For the ’540 Patent, Defendants have nothing but the same conclusory assertions that the MaxLite tube was prior art, ECF No. 291 at 6 (citing Trial Tr. Day 2 at 291:10–14)), and that it satisfied the requirement of a light strip disposed on the tube’s “inner circumferential surface.” ECF No. 291 at 6 (citing Trial Tr. Day 2 at 296:7–19). The Court agrees with Plaintiffs that Defendants’ JMOL motion as to the MaxLite tube fails for the same reasons with respect to the ’540 Patent that it does for the ’125 Patent and that substantial evidence supported the Jury’s determination that the MaxLite G Series does not render claim 13 obvious.

c. Neither the MaxLite lamp nor the Zhao reference render Claim 14 obvious

Defendants contend that dependent Claim 14 is rendered obvious in view of the MaxLite lamp or in view of the Zaho reference. ECF No. 291 at 7. Because the Court finds that substantial evidence supports the Jury’s verdict that Claim 13 is not rendered obvious, the Court finds that substantial evidence also supports the Jury’s verdict that Claim 14 is not obvious.

2. Substantial evidence supports the Jury’s Validity Findings for the ’140 Patent

Defendants assert that—contrary to the Jury’s verdict—all asserted claims of the ’140 Patent are rendered obvious in view of prior art references. ECF No. 291 at 10–15. Plaintiffs respond that “[a] reasonable jury could, and did, conclude that none of Defendants’ references contained the claimed ‘pulse generating circuit’ that controls the switch that keeps the lights on, or turns them off.” ECF No. 299 at 17. The Court will address each of their arguments in turn below.

a. Substantial evidence supports the Jury’s finding that Claim 1 is not invalid in view of Ono

Defendants first argue that Claim 1 was anticipated by International Patent Application WO 2012/066822 (“Ono”). ECF No. 291 at 10. Claims 1 and 4 both recite a circuit that attempts to avoid unintended shocks by engaging the main circuit only when the LED lamp is properly installed. At trial, Plaintiffs’ expert conceded that Ono uses pulses to detect whether installation is proper and, if it is, to turn on the light. Day 3 Tr. 90:23–91:2. But he argued that Claim 1 requires the opposite order of operations: It “goes right ahead and turns on the light first and then determines if there’s a proper installation.” *Id.* at 91:1–5. Defendants contend that Plaintiffs’ expert “cited no language in the ’140 Patent for that conclusion.” ECF No. 291 at 11. According to Defendants, “[n]othing in the claim requires turning the lamp on before detecting proper installation.” *Id.*

Plaintiffs argue that Ono does not anticipate Claim 1 because Ono operated in what Dr. Phinney explained was the “old way,” by checking the power line to see if the light switch could be turned on in the first place. ECF 299 at 17. According to Plaintiffs, “[t]hat way was different from the claimed invention, which turns the light on before deciding whether it should stay on or be turned off.” *Id.* The Court agrees with the Plaintiffs. At trial, Dr. Zane tried to equate Ono

with the '140 Patent by arguing that (1) the “pulse generating circuit generates a pulse and injects a signal ... into the power loop,” (Day 2 Tr. at 197:4–5), and (2) “the detection determining circuit” then makes a “decision [that] goes directly to turn the switch on or off.” (*Id.* at 197:9–21.) But the Jury was free to weigh the credibility of the two experts and adopt Dr. Phinney’s description of Ono over Dr. Zane’s and find that Ono did not anticipate. *MobileMedia Ideas*, 780 F.3d at 1168. There is substantial evidence to support the Jury’s verdict here. *See* JTX-1 at 59:5–7 (stating the pulse generator controls the LEDs to turn on and off); *see also id.* at 59:18–20 (stating the detection circuit controls the switch to keep the LEDs on).

b. Substantial Evidence Supports the Jury’s finding that Claims 1, 4, 5, 24, 28, And 31 Are Not obvious Over Ivey I

Defendants also argue that the Jury lacked substantial evidence to find that claims 1, 4, 5, 24, 28, and 31 are not obvious over Ivey I. ECF No. 291 at 10. Yet because Defendants failed to move for JMOL on Ivey I against '140 Patent claim 1, their renewed JMOL as to that claim has been forfeited. *See* Trial Tr. Day 3 at 68:1–70:11.

As to the remaining claims, the Court finds that Ivey 1 lacks two critical elements that a reasonable Jury could have found did not render these claims obvious.

First, it has the same defect as Ono—it lacks the required “pulse generating circuit” that controls the same switch that turns the lights on and off and represents the “old way” of doing things. Dr. Phinney explained that Ivey I’s alleged “pulse generator” did not control the switch for the LEDs but was instead an oscillator to switch a different element (test load). Trial Tr. Day 3 at 94:17–25. This switch for the test load ECF No. 296-21, DTX-65, FIG. 3, Element 135 does not control the switch that turns the LEDs on and off. Trial Tr. Day 3 at 94:17–95:12. Instead,

Ivey I's light switch is elsewhere (DTX-65, FIG. 3, Element 175), and relied on different circuitry and control logic. Trial Tr. Day 3 at 95:17–21.

Second, and more simply, Ivey I is not even a “tube lamp.” Ivey I taught only “an ‘LED-based light’ with a ‘first connection point’ and a ‘second connection point.’” ECF No. 291 at 12 (citing DTX-65 ¶ 37) Defendants’ expert did not argue that Ivey I taught a tube, just that a skilled artisan would “think of” a tube as an “example.” Trial Tr. Day 2 at 213:13–15. And a reasonable Jury could have agreed with Dr. Phinney, who explained that Ivey itself did not teach or suggest a tube. Trial Tr. Day 3 at 92:23–93:1. Because the Jury could have reasonably sided with Dr. Phinney on either missing element, JMOL is unwarranted.

But Defendants and Dr. Zane further failed to demonstrate that Ivey I contains the required “detection result latching circuit” of Claims 4, 5, 24, 28, and 31. As argued by the Plaintiffs, Defendants have not provided sufficient evidence that “the alleged latching circuit outputs a ‘high logic value when either the stored detected result or the pulse signal output terminal ... has a high logic values’ required by the claims.” ECF No. 299 at 18–19.

In short, the Court finds that substantial evidence supports the Jury’s finding that claims 1, 4, 5, 24, 28, and 31 are not obvious over Ivey I.

c. Substantial Evidence Supports the Jury’s Finding That Claims 1, 4, 5, 24, 28, and 31 Are Not Obvious Over Ivey I In View of Sadwick

Similarly, the Court also finds that Defendants’ arguments that the asserted claims are obvious over Ivey I in view of international patent application No. WO 2015/066566 (“Sadwick”) to be unconvincing. Defendants attempt to fix Ivey I’s shortcomings by combining it with Sadwick, a reference cited by the Examiner during prosecution. ECF No. 291 at 13. Specifically, Defendants argue that Sadwick makes up for any deficiency of Ivey I “[b]ecause

Sadwick discloses using a pulse to turn on the load switch, *id.* ¶ 83, skilled artisans would have understood pulses were one method for ensuring that the latch circuit turned power back on when “the hazard fault condition had cleared.” *Id.* at 14.

As a preliminary matter, the Court finds that because Defendants failed to move for JMOL on Ivey I against ’140 Patent claim 1, their renewed JMOL as to that claim has been forfeited. *See* Trial Tr. Day 3 at 68:1–70:11. Therefore, the Court considers the Defendants’ arguments regarding combining the Ivey I and Sadwick references for the remaining asserted claims.

In the primary, Plaintiffs argue that Defendants’ conclusory modification to combine Ivey I and Sadwick was presented to the Jury and Defendants failed to convince the Jury that a POSITA would have had any motivation or reasoning to modify Ivey I’s circuit to do so. ECF No. 299 at 19 (citing *Arctic Cat Inc. v. Bombardier Recreational Prod. Inc.*, 876 F.3d 1350, 1359 (Fed. Cir. 2017) (it is a “fact question [] [regarding] whether one of ordinary skill in the art had a motivation to combine the prior art to achieve the claimed combination”)).

The Court agrees. At trial, Dr. Phinney explained that Dr. Zane’s modifications to Ivey I’s structure were significant, and that the art itself presented no motivation to make those modifications. Trial Tr. Day 3 at 100:1–102:15, 104:13–106:20. A reasonable Jury could have concluded that Defendants had not met their burden on motivation to combine in light of the expert testimony.

d. Secondary considerations

Because the Court finds that substantial evidence supports the Jury’s verdict that none of the asserted claims are invalid, the Court need not reach the Defendants arguments regarding secondary considerations.

ii. Substantial Evidence Supports the Jury’s Infringement Findings for the ’140 Patent

The Jury found that the accused devices using the LT2600 and the LT2600G chips infringe the ’140 patent.² Defendants seek a JMOL on these findings. Defendants argue two reasons why this JMOL on noninfringement should be granted.³ *First*, Defendants argue that the LT2600’s “patented grid impedance monitoring algorithm” is different from the ’140 Patent because it “detect[s] proper installation [of a tube lamp] based on grid impedance, rather than voltage alone.” ECF No. 291 at 16. Plaintiffs respond that “the claims say nothing about what electrical property needs to be measured to provide the ‘sampling signal’ to determine proper installation.” ECF No. 299 at 14.

The ’140 Patent itself explains that the detection circuitry may detect when one end of a tube lamp is connected to a “high impedance, such as a person.” *Id.* Critically, Plaintiffs argue that Dr. Zane admitted that the LT2600’s “algorithm” measured impedance via voltage and current. *Id.* Accordingly, a reasonable Jury could have found that the LT2600’s “patented grid impedance monitoring algorithm” infringes on the ’140 Patent.

Second, Defendants argue that the LT2600 lacks a pulse generator or pulses. Defendants argue that Plaintiffs’ own experimental measurements confirmed the difference between the LT2600 and the patented invention. ECF No. 291 at 16. According to Defendants, “[f]or the patented invention, voltage measurements showed ‘relatively large spikes and smaller spikes,’

² The parties agreed that the LT2600 and LT2600G chips were identical for purposes of infringement. Day 1 Tr. 177:7–11.

³ Plaintiffs argue that both of these noninfringement arguments are waived because they were not presented in the Defendants first JMOL. Defendants respond that “CH specifically moved for JMOL of non-infringement citing ‘insufficient evidence to establish . . . that Defendants infringe any claim of ‘the ’140 patent.’” ECF No. 305 at 9. While the Court is sympathetic to the Plaintiff’s arguments here, the Court is not convinced that this amounts to the level of waiver required under Rule 50. *See Navigant*, 508 F.3d at 288.

‘somewhat random in their nature.’” *Id.* (citing Day 2 Tr. 239:20–22; Zane DX at 80). For the LT2600 chip, however, measurements did not show “any of those spikes,” reflecting a “dramatic difference” in operation. *Id.* (citing Day 2 Tr. 240:7–9; Zane DX at 80). Defendants argue that Plaintiffs do not dispute this evidence and that their “infringement expert testified that the ’140 patent’s pulses are ‘quick changes in voltage,’ not in current or impedance, ‘that turn on and off a semiconductor switch.” Day 1 Tr. 180:25–181:3 (emphasis added); *see id.* at 184:23–24 (“pulse is just a quick voltage on and off”).

In response, Plaintiffs contend that their expert “confirmed experimentally that the LT2600 had a pulse generator that generated pulses to control switch CP2.” ECF No. 299 at 16 (citing Trial Tr. Day 1 at 180:17–181:3; 180:19–24). Plaintiffs contend that he also “testified that the switch is turned on via the pulse, and also when the light is determined to be properly installed.” *Id.* (citing Trial Tr. Day 1 at 188:15–22.) Plaintiffs also contend that the Defendants’ reliance on the spikes in the data in order to distinguish between the LT2600 and the patented invention comes down to the level of resolution that was shown. *Id.* Specifically, Plaintiffs contend that Defendants’ expert Dr. Zane’s “spikes” are just zoomed out views of the pulses that makes it look more random and sporadic. *Id.* However, Plaintiffs argue that their expert showed the Jury these pulses and spikes at different levels of resolution, and the zoomed in view of the graph shows fewer spikes. *See id.* (presenting two graphs of differing levels of resolution).

The Court finds Defendants’ arguments here to be unconvincing. A reasonable Jury could have found that the LT2600 does not lack a pulse generator or pulses and that the pulses of the patented invention are not different from the LT2600.

In sum, the Court finds that there is substantial evidence to support the Jury’s infringement verdict.

iii. Substantial Evidence Supports the Jury's Finding of Willfulness

A determination of willfulness requires a finding of “deliberate or intentional” infringement. *SRI Int’l, Inc. v. Cisco Sys., Inc.*, 14 F.4th 1323, 1330 (Fed. Cir. 2021). “To state a claim for willful infringement, ‘a plaintiff must allege facts plausibly showing that as of the time of the claim’s filing, the accused infringer: (1) knew of the patent-in-suit; (2) after acquiring that knowledge, it infringed the patent; and (3) in doing so, it knew, or should have known, that its conduct amounted to infringement of the patent.’” *Parity Networks, LLC v. Cisco Sys., Inc.*, No. 6:19-cv-00207-ADA, 2019 WL 3940952, at *3 (W.D. Tex. July 26, 2019) “Willfulness largely turns on intent, which is an issue reserved to the jury.” *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016). The Jury found that Defendant CH willfully infringed all of the asserted patents. ECF No. 230 at 5. Defendants ask the Court to grant a JMOL on willfulness. ECF No. 291 at 17–18.

As a preliminary matter, the Defendants recognize that given that the Court “granted enhanced damages, CH recognizes JMOL on willfulness is unlikely.” *Id.* (citing ECF No. 286 at 4–20). Defendants thus throw the kitchen sink at trying to attack Jury’s verdict finding that CH willfully infringed the asserted patents in order to “preserve their arguments for appeal.” *Id.* According to Defendants, “Plaintiffs based their willfulness case on arguments that CH ignored emails alleging infringement, copied Plaintiffs’ products, raised no infringement defenses, never redesigned products, and were advised by a subsequently terminated attorney to avoid and delay merits litigation.” *Id.* (citing Day 4 Tr. 43:3–22).

First, Defendants argue that Plaintiffs based their willfulness case on arguments that CH ignored emails alleging infringement, but Defendants contend that “[u]nrebutted evidence at trial showed that Ms. Gan rarely paid attention to emails, had never seen the emails from Super

Lighting, and ‘would not be able to read them and understand them’ because they were in English.” *Id.* Plaintiffs respond that “it was certainly reasonable for the jury to reject the myriad inconsistent stories Defendants presented at trial. CH’s president, Caiying Gan, variously testified that: (1) she does not check email (despite having an email address prominently displayed on her business card) (Trial Tr. Day 1 at 211:5–11, 214:6–11); (2) she did not receive the emails, (*id.* at 213:13–17, 215:5–25); (3) she received the emails but did not open them, (*id.* at 214:14–18, 214:19–215:4); (4) she did not read the emails because they were written in English, (*id.* at 213:13–17, 214:14–18); and (5) she does not know how to work her laptop, (*id.* at 216:10–16).” ECF No. 299 at 6. The Court agrees. The Jury was certainly free to find that neither Ms. Gan nor Defendants were credible—this is supported by substantial evidence.

Second, Defendants argue that the alleged copying was rejected by this Court. ECF No. 291 at 18 (citing ECF No. 286 at 7). The Plaintiffs do not respond to this, and the Court agrees with the Defendants. However, the allegations of copying that were introduced at trial are insufficient to support a JMOL of no willfulness.

Third, Defendants contend that CH never admitted infringement, and that the agreement that led CH to drop non-infringement in part was not admissible under the Federal Rules of Evidence. ECF No. 291 at 18. Plaintiffs respond that CH’s admission “was clear, unambiguous, and repeated multiple times.” ECF No. 299 at 5. Plaintiffs cite “15 times” that this infringement admission was repeated before the Court. *Id.* The Court agrees with the Plaintiffs and finds that this does not support a JMOL of no willfulness.

Fourth, Defendants contend that the Plaintiffs’ argument at trial that CH never redesigned products fails for similar reasons. ECF No. 291 at 19. Defendants contend that Defendants believed—and continue to believe—that their invalidity defenses obviate the need

for redesign and that their lack of redesign is not evidence of “malicious” or “bad-faith” conduct. *Id.* The Plaintiffs do not respond to this, and the Court agrees with the Defendants. However, the Court finds that the allegations that the defendants failed to redesign that were introduced at trial are insufficient to support a JMOL of no willfulness.

Fifth, Defendants contend that Plaintiffs’ arguments about an email from counsel that CH terminated during trial supports a JMOL of no willfulness because it was privileged and lacks probative value. ECF No. 291 at 19. Plaintiffs respond that the Defendants waiver argument “flies in the face of this Court’s July 12, 2021 rulings holding that Mr. Jiang and Defendants’ counsel waived any privilege over the purported opinions of counsel and ordering documents like PX 326 to be produced.” ECF No. 299 at 7 n.5. The Court agrees with Plaintiffs and finds that its rulings finding privilege to be waived do not support a finding of JMOL of no willfulness.

In sum, for similar reasons that this Court found in granting enhancement of damages (ECF No. 281), the Court finds that there is substantial evidence to support the Jury’s finding of willful infringement of the asserted patents. The Court does not find the Defendants’ arguments to the contrary to be convincing.

In conclusion, the Court having considered all of the arguments in the Defendants’ brief and the applicable law, finds that Defendants have not met their burden to grant JMOL on any of their identified grounds. Thus, the Court DENIES their motion for JMOL.

III. MOTION FOR NEW TRIAL

A. Legal Standard

The Court has discretion to grant a new trial “based on its appraisal of the fairness of the trial and the reliability of the jury’s verdict.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610,

612– 13 (5th Cir. 1985). “A new trial will not be granted based on trial error unless, after considering the record as a whole, the court concludes that manifest injustice will result from letting the verdict stand.” *Foradori v. Harris*, 523 F.3d 477, 506 (5th Cir. 2008). “To justify a reversal based on improper comments of counsel, the conduct must be such as to gravely impair the calm and dispassionate consideration of the case by the jury.” *Dixon v. Int’l Harvester Co.*, 754 F.2d 573, 585 (5th Cir. 1985). The moving party must timely object and show that the conduct went “far beyond the bounds of accepted advocacy before [the] court must grant a new trial.” *Geoffrion v. Nationstar Mortg. LLC*, 182 F. Supp. 3d 648, 673 (E.D. Tex. 2016) (citing *Edwards v. Sears, Roebuck & Co.*, 512 F.2d 276, 284 (5th Cir. 1975)); *see also Baisden v. I’m Ready Prods., Inc.*, 693 F.3d 491, 509 (5th Cir. 2012). The burden is on the moving party to show a new trial is warranted. *Sibley v. Lemaire*, 184 F.3d 481, 487 (5th Cir. 1999).

B. Discussion

Defendants move for a new trial for three primary reasons. ECF No. 292 at 1. First, Defendants request a new trial in light of the allegedly “erroneous grant of JMOL and evidentiary errors regarding invalidity.” *Id.* Second, Defendants request a new trial in light of the alleged “failure of Plaintiffs’ damages expert to apportion the value of the asserted patents.” *Id.* Third, Defendants request a new trial in light of the other alleged “evidentiary error as well as inflammatory statements by Plaintiffs’ counsel.” *Id.* As explained below, the Court finds that none of these alleged errors warrant granting Defendants a new trial.

i. The Court properly granted JMOL on invalidity of the ’125 and ’540 Patents and excluded evidence

Defendants move for a new trial based on the Court’s grant of partial JMOL for Plaintiffs on invalidity of the ’125 and ’540 Patents. *Id.* at 2. At trial, CH’s expert, Dr. Michael Lebby, testified that claim 1 of the ’125 patent and claims 13 and 14 of the ’540 patent were invalid in

light of three LED tube lamp products, the Cree LED T84821L40K tube (the “Cree tube”), the MaxLite G Series L18T8DF440-G tube (the “MaxLite tube”), and the Philips InstantFit LED T816.5W/48-3500 tube (the “Philips tube”). ECF No. 238 (“Day 2 Tr.”) 282:25–300:3. As part of his opinion, Dr. Leppy explained that the Cree, MaxLite, and Philips tubes were prior art because they were on sale in 2014, before the ’125 and ’540 patents’ February 12, 2015 priority date. Day 2 Tr. 291:10–14. The Court, however, ordered partial JMOL for Plaintiffs on invalidity. It reasoned that Dr. Leppy’s testimony that the Cree, MaxLite, and Philips tubes were prior art available in 2014 could not constitute sufficient evidence to send the issue to the Jury because the evidence on which he based his opinion was not “in the record” at trial. ECF No. 239 (“Day 3 Tr.”) 76:11–18; *see id.* 48:24–53:9, 73:18–82:1.

Defendants contend that “Rule 703 and precedent make clear that expert testimony is itself evidence; the evidence on which an expert relies need not even be admissible, much less actually admitted.” ECF No. 292 at 2. Defendants argue that Dr. Leppy’s testimony that the Cree, MaxLite, and Philips tubes were “on sale in 2014,” Day 2 Tr. 282:12–23 (Cree), 285:22–24 (MaxLite), 289:18–25 (Philips), was itself sufficient evidence to support a Jury finding that those products were prior art. *Id.* at 3.

Defendants’ argument here—that Dr. Leppy’s testimony alone, without personal knowledge, the purported prior art products themselves, or any documents about them—can invalidate a patent flouts law Defendants cite in their concomitant JMOL motion. ECF No. 291 at 3 (“[C]onclusory, unsupported assertions,’ even by an expert, cannot defeat JMOL.”). Without the physical tubes, specification sheets, or photographs in evidence, Defendants asked Dr. Leppy whether the tubes were on sale in time to qualify as prior art. Although he agreed, his opinion had no foundation. He admitted he had no personal experience with the tubes. ECF No.

281 at 24. He had not spoken to anyone about them, or heard a witness testify about them. (*See, e.g.*, Trial Tr. Day 2 at 276:10–277:8; 317:13–319:6.) And he could not point to a document in evidence that established they were on sale. *See generally id.* at 271:25–309:15.

Defendants’ own JMOL motion explains that “conclusory, unsupported assertions,” even by an expert, cannot create issues of fact. ECF No. 291 at 3 (citing *Kampen v. Am. Isuzu Motors, Inc.*, 157 F.3d 306, 318 (5th Cir. 1998) (en banc)). This is unsurprising, given that Rule 702(b) dictates opinion testimony must be “based on sufficient facts or data.” It is well-settled that there must be substantial evidence in the record for a matter to go to the Jury. *Wechsler v. Macke Int’l Trade Inc.*, 486 F.3d 1286, 1294 (Fed. Cir. 2007) (denying JMOL was error where “expert presented little more than conclusory evidence”).

Parties may contest expert testimony at trial and seek JMOL where no reasonable jury could find that the other side carried its burden of proof. Here, Dr. Leiby did so little—he did not take the photographs, direct taking the photographs, know who took the photographs, or follow up on the physical items in the photographs—that no reasonable jury could credit his invalidity theory. Defendants are not entitled to a new trial when they failed to “get critical system art into evidence before [they] closed their case.” ECF No. 281 at 12.

Defendants further argue that a new trial is required based on the Court’s exclusion of a litany of various invalidity evidence. ECF No. 292 at 6–12. *First*, Defendants contend that the prior art light tubes were erroneously excluded. *Id.* They argue these warrant a new trial based on when the Court granted JMOL on CH’s invalidity defenses based on the Cree, MaxLite, and Philips tubes, the Court indicated it would not have done so if CH had admitted into evidence the tubes themselves. *Id.* They argue two reasons why the Court allegedly erred in excluding this evidence. The Defendants first argue that the Court erred in excluding the tubes because the

tubes had in fact been produced. *Id.* They argue that the tubes were produced during discovery and available for inspection by Plaintiffs no later than June 2020. The Court, however, gave Defendants' counsel multiple opportunities to explain why they should be allowed to go the Jury. Trial Tr. Day 2 at 9:13–17:7. Ultimately, the Court ruled that because Dr. Leby did not physically examine the tubes himself prior to issuing his report, (*Id.* at 14:20–23), because he did not examine them physically prior to his deposition, (*Id.* at 15:3–5), and because the tubes were not physically present at his deposition, (*Id.* at 14:17–19), Dr. Leby had made “a choice” that he “was prepared to give his report based on only photos and he felt it wasn't necessary to look at the bulbs themselves.” *Id.* at 16:6–11. Defendants abandoned using the tubes and blamed prior counsel for relying exclusively on the photographs. *Id.* at 16:12.

Defendants also argue that the tubes should have been admitted because of the “trade inscriptions” on them. ECF No. 292 at 6–12. Yet Defendants failed to make their “trade inscription” argument when the Court was considering these issues on Day 2; they only raised that contention during their Day 3 offer of proof, well after Dr. Leby had testified. *Id.* (citing Day 3 Tr. at 45:20–22 for trade inscription argument); *see also generally* Trial Tr. Day 2 at 9:13–17:7.) Thus, the “trade inscription” argument was waived.

Second, Defendants argue that the Court erroneously excluded the MaxLite documents because the Court excluded them for a lack of a sponsoring witness. *Id.* According to Defendants, CH timely identified two MaxLite witnesses: Umesh Baheti or another “MaxLite Representative.” *Id.* In an order entered on October 27, 2021, the Court found the following:

“Defendants conceded on October 27, 2021, that they failed to provide notice to Plaintiffs during discovery that Mr. Umesh Baheti would be authenticating MaxLite documents. The Court therefore ORDERS that Eric Marsh, Mr. Baheti's belatedly identified replacement, is excluded as a witness.”

Defendants argue that disclosing a corporate representative is sufficient to the notice requirements, and that even if it were not proper, a late-disclosed witness should not be excluded if the late disclosure is “substantially justified or is harmless.” *Id.* (citing Fed. R. Civ. P. 37(c)(1)). Upon consideration of the parties’ arguments, the applicable law, the Court finds Defendants’ arguments unpersuasive and not sufficient to warrant a new trial.

Third, Defendants complain that the Court erroneously excluded two internal documents relevant to invalidity: (1) DX41 and (2) DX98. First, Defendants argue that DX41 was a presentation from August 2014 showing Super Lighting’s in-house teardowns of the Cree and Philips tubes—confirming that those products were publicly available in 2014 and therefore prior art. At trial, the Court acknowledged the presentation “may invalidate the patent,” but excluded it as “only dealing with inequitable conduct.” Day 1 Tr. 5:15–19, 7:12–16. Defendants now argue that DX41 was relevant to invalidity (apart from inequitable conduct) because it showed that Super possessed the Cree and Philips tubes in August 2014. Second, Defendants argue that DX98 was minutes from a Super Lighting strategy meeting, stating that Super’s patent strategy was to “[t]urn[] . . . what is typically considered to be unpatentable into patents.” ECF No. 292 at 12. Defendants contend that “it was highly relevant: It tended to make it more probable that, in accord with its aggressive patent strategy, Super sought and obtained patents that are in fact ‘unpatentable.’” *Id.*

Plaintiffs respond that Defendants attempt to justify DX 41 by glossing over which tubes it addresses. ECF No. 297 at 17. They contend that Dr. Leiby’s invalidity opinions involved the Philips T816.5T8/48-3500, the Cree LED T8-48-21L-40K, and the MaxLite Direct Fit Model L18T8DF440-G. *Id.* (citing Trial Tr. Day 2 at 315:24–316:13, 317:13–20.) Yet DX 41 does not mention any of those models. All it shows is that Plaintiffs knew about other tubes from Philips,

Cree, and MaxLite. While that might matter for inequitable conduct, it is irrelevant to invalidity. The content of DTX-41 has not changed, and Defendants make no better showing about it than they did before, so the Court holds that DTX-41 does not merit a new trial.

In regard to DX98, Plaintiffs respond that Defendants’ “own motion confirms it was an inequitable conduct document.” ECF No. 287 at 17. The Court agrees. As the Court recognized, that is an inequitable conduct theory. Trial Tr. Day 1 at 94:3–15. DTX-98 never mentions the patents-in-suit or any of Defendants’ purported prior art. *See generally* DTX-98, ECF No. 296-10. Accordingly, it has nothing to do with invalidity, and its proper exclusion cannot justify a new trial.

ii. **The Court properly found that Plaintiffs’ damages evidence was admissible and sufficient**

Defendants next move for a new trial based on the Court’s admission of the Plaintiffs’ damages evidence. ECF No. 292 at 12. Specifically, Defendants argue that “[t]he testimony of Plaintiffs’ damages expert, Ms. Kindler, should have been excluded and was legally insufficient to prove damages regardless.” *Id.* Defendants contend that in order for the Plaintiffs to properly apportion their damages, they “had to prove the value of affixing the LED strip to the tube lamp’s ‘inner circumferential surface’; for ’540 patent, the value of disposing diffusion film directly on the tube lamp; and for the ’140 patent, the value of its pulse-based shock-protection system.” *Id.* at 13. Defendants contend they did not do so.

As a preliminary matter, Plaintiffs contend that Defendants have improperly included these arguments regarding excluding Plaintiffs’ damages evidence in their Motion for a New trial because Defendants are in essence renewing their damages JMOL in their Motion for New Trial instead of their renewed JMOL. ECF No. 297 at 18. Plaintiffs contend that Defendants did not move for JMOL under Rule 50(a) on all damages issues; rather, their request was limited only to

Ms. Kindler’s royalty calculation based on the Lunera agreement. *Id.* (citing Trial Tr. Day 3 at 101:12–102:1.)

Accordingly, the Court finds that the Defendants forfeited all other damages grounds for JMOL. *See, e.g., i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 845 (Fed. Cir. 2010), *aff’d*, 564 U.S. 91 (2011). To the extent Defendants now object to the admissibility of Ms. Kindler’s testimony where they failed to object at trial, a new trial motion is an improper vehicle for their objections. *Navigant Consulting, Inc. v. Wilkinson*, No. 3:02-CV-2186-B, 2006 WL 2422868 (N.D. Tex. Aug. 22, 2006) (citing *Johnson v. Michelin Tire Corp.*, 812 F.2d 200, 210 n.8 (5th Cir. 1987)) (denying new trial motion after failure to object to allegedly inadmissible testimony)).

The Court finds Defendants’ arguments here unpersuasive. Defendants essentially re-urge to the Court the very same arguments that they made in their JMOL on excluding Plaintiffs damages evidence based on the Lunera agreement. ECF No. 292 at 12–17. They contend that Ms. Kindler proposed a per-unit royalty of \$0.30–\$0.45. *Id.* (citing Day 2 Tr. 76:24–77:8). According to Defendants, “[s]he derived that figure from past licenses with (1) Technical Consumer Products (“TCP”) . . . and (2) Lunera Lighting.” *Id.* Defendants argue that both licenses, however, covered “all” of Super’s intellectual property, including over 260 patents. *Id.* Defendants thus contend that “[r]ather than apportion down to the patents here, Ms. Kindler applied the royalty rates for over 260 patents to just three patents—indeed, she inflated those rates.” *Id.*

Plaintiffs respond that their “expert Ms. Kindler explained to the Jury how, when considering the Lunera license’s impact on the hypothetical negotiation, upward influences like the direct competition between Super Lighting and CH Lighting would counterbalance

downward factors like the wider breadth of the IP rights being granted to Lunera. ECF No. 297 at 19 (citing Trial Tr. Day 2 at 57:23–61:9). Thus, Plaintiffs contend that, “[w]hile Defendants may disagree with Ms. Kindler’s conclusion, her methodology is consistent with *Georgia-Pacific*, and the Jury was free to credit her opinions over those of Defendants’ expert.” *Id.*

Defendants primarily rely on *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 973–74 (Fed. Cir. 2022), to support its argument that Ms. Kindler’s royalty calculation should have been excluded and thus a new trial is warranted. Because Plaintiffs did not initially address this intervening precedential Federal Circuit opinion in their briefing on Defendants’ motion for a new trial, the Court asked the parties for supplemental briefing on this point. *See* ECF Nos. 319–21.

In *Wi-LAN*, the Federal Circuit vacated a damages award and ordered a new trial on damages. *See* 25 F.4th at 972–74. To estimate a reasonable royalty in that case, the patentee’s expert culled more than 150 Wi-LAN license agreements down to three comparable agreements. *Id.* The patentee’s expert then reduced the rate because unlike the three comparable agreements, a hypothetical negotiation would have resulted in a license to only the asserted patents. *Id.* However, the expert also determined that the two asserted patents were the “key patents” in the three licenses. *Id.* The Federal Circuit disagreed with the district court and ordered a new trial on damages. *Id.* The Federal Circuit found that the expert’s opinion that the “the asserted patents were key patents is untethered to the facts of this case.” *Id.* According to the Federal Circuit, “[m]ost importantly, those licenses treated the asserted patents as chaff, not wheat.” *Id.* The Court found significant that the “there is no evidence that the ’757 patent was discussed during negotiations for any of the comparable licenses.” *Id.* For both of the asserted patents, the Federal Circuit found that none of the comparable licenses treated them as the key patents. *Id.*

Here, Ms. Kindler’s testimony was more than sufficiently reliable and does not require a new trial under *Wi-LAN*. *Wi-LAN* represents one paradigm of patent litigation: an assertion entity (Wi-LAN) suing one of the world’s largest operating companies (Apple) for a royalty on every unit of its flagship product (the iPhone). Because Wi-LAN’s only business is licensing, the two sides’ experts had access to at least 150 potential benchmarks for the hypothetical negotiation. 25 F.4th at 971. Not surprisingly, the experts in that case selected very different licenses as “comparable” agreements for their respective damages models. Thus, Wi-LAN was essentially a dispute about which licenses should be considered in the first instance, not how to apply relevant, agreed-upon licenses.

Apple’s expert focused on Wi-LAN’s licenses with multinational cellphone companies—LG, Kyocera, Motorola—and giant chipmaker Intel, whose businesses, legal sophistication, and market strength are comparable to Apple’s. ECF No. 321-2 at 72, 74. All their licenses were structured as lump sums. *Id.* at 72–74. And an internal Wi-LAN business plan admitted it was “finding it challenging to convince companies to pay license amounts...above single digit millions.” *Id.* at 72–73. Apple’s expert accordingly estimated damages in a range of \$5–\$10 million. *Id.* at 68–69.

Wi-LAN’s expert took a radically different approach. Eschewing Wi-LAN’s licenses with large cellphone makers like Apple, he cherry-picked running royalty licenses Wi-LAN had granted to three niche cellphone providers, Unnecto, Vertu, and Doro.¹ *Id.* at 73–74. Wi-LAN’s expert conceded that those licenses were not comparable. ECF No. 321-2 at 322:3–9. Nevertheless, he relied on them and concluded that the two patents-in-suit were “key patents” responsible for the bulk of their value, with thousands of other patents in various technology

fields included for a “marginal upcharge.” 25 F.4th at 972. To account for that, the expert reduced the royalty by 25%. *Id.* at 973.

But the two “adjustments” were as cherry-picked as the licenses. Wi-LAN defended the patents-in-suit as its “crown jewels,” *id.* at 972, yet its CEO admitted that negotiations focused on particular patents not because of their inherent value, but because Wi-LAN chose to introduce them into the licensing discussions. ECF No. 321-4 at 30–31. Wi-LAN’s expert was thus forced to concede that any subset of patents could be “key.” ECF No. 321-2 at 56, 59–60; ECF No. 321-3 at 29–30. Moreover, one of the two patents-in-suit was omitted in two licenses and listed as “Non-Asserted” in the third, while the second patent was omitted in one license and listed as “Non-Asserted” in another. 25 F.4th at 973. Only one patent’s inclusion in the Vertu agreement justified Wi-LAN’s rate. *Id.*

Wi-LAN’s 25% reduction was equally arbitrary. The Federal Circuit assumed the number came from Wi-LAN’s CEO, *id.* at 973, but the briefs and testimony below show that the CEO testified such adjustments for additional patents “might” happen “sometimes.” ECF No. 321-2 at 62; ECF No. 321-5 at 158:1–10.) No one identified a single license where such a markup occurred. ECF No. 321-2 at 62. Most important, there was no evidence that the Unnecto, Vertu, and Doro licenses had been adjusted in this way. *Id.* at 61–62. Wi-LAN was left with no support for the 25% reduction except its expert’s “experience” generally. *Id.* at 59. And, because he admitted he would have applied the reduction to any subset of patents, ECF No. 321-2 at 59–60, ECF No. 321-4 at 30–31, his 25% figure was arbitrary.

This case is completely different. The litigants here are not a massive non-practicing entity and the world’s largest electronics manufacturer, but “archrivals” in the LED lightbulb business. As operating companies in a narrow market, they have engaged in limited patent

licensing; there was no ready pile of 150 licenses to “cull through” here. Instead, the licenses available were real-world licenses from the relevant industry. Accordingly, unlike in *Wi-LAN*, the experts here agreed that the licenses Kindler addressed were technologically comparable. *See, e.g.*, Day 2 Tr. at 62:1–9; Day 3 Tr. at 28:13–16. They also agreed on the format of the license, i.e., a per-unit running royalty (Day 2 Tr. at 45:13–46:13, 335:1–18), and on the royalty base (Day 3 Tr. at 25:11–20, 28:10–12).

CH’s expert Mooney formulated his running royalty from the same agreements as Kindler. *Compare* Day 3 Tr. at 18:17–25:15, *with* Day 2 Tr. at 53:1–62:7. The Court finds that this resolves any question whether Kindler’s reliance on the licenses merits a new trial. *See, e.g.*, *Pavo Sols. LLC v. Kingston Tech. Co.*, 35 F.4th 1367, 1378–80 (Fed. Cir. 2022) (denying JMOL where parties agreed a license was comparable); *Bio-Rad Lab’ys., Inc. v. 10X Genomics Inc.*, 967 F.3d 1353, 1374 (Fed. Cir. 2020) (affirming denial of new trial where district court concluded licenses had “baseline comparability” and remaining “degree of comparability” was for the jury). CH “cannot legitimately challenge the comparability of its own comparable.” *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1268 (Fed. Cir. 2013).

The parties’ experts did disagree on how to apply the licenses they both deemed comparable, and Mooney calculated a per-unit rate while Kindler calculated a dollar amount. Day 2 Tr. at 69:11–23, 335:1–18. But such differences are to be expected because comparable licenses are almost never identical to the hypothetical negotiation. *See, e.g.*, *Ericsson Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201 (Fed. Cir. 2014) (“[T]he fact that a license is not perfectly analogous generally goes to the weight of the evidence, not its admissibility.”); *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1330 (Fed. Cir. 2014). “[A]ny reasonable royalty analysis ‘necessarily involves an element of approximation and uncertainty.’” *Lucent Techs., Inc. v.*

Gateway, Inc., 580 F.3d 1301, 1325 (Fed. Cir. 2009) (quoting *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995)). CH’s suggestion that Kindler did “nothing” to adjust the agreed-upon licenses is as wrong now after trial as it was at the Daubert stage. CH wrongly assumes that because Kindler’s ultimate estimate was close to the terms of the actual agreements, she must have made no adjustments. But as to the TCP license, Kindler laid out her adjustments over five pages of trial testimony. Day 2 Tr. at 53:1–57:21, 58:20–61:12. All this testimony was presented without objection. Moreover, Ms. Kindler did not apply an arbitrary reduction factor, like Wi-LAN’s expert did, but rather accounted for the actual economic relationships between Super Lighting, TCP, and CH.

Ultimately, the Court finds that *Wi-LAN* does not require overturning the Jury’s verdict here because of the many fundamental differences between the two cases. The Court also bears in mind that CH is arguing for a new trial, which should be granted only when “prejudicial error has crept into the record or ... substantial justice has not been done.” *Jordan v. Maxfield & Oberton Holdings, L.L.C.*, 977 F.3d 412, 417 (5th Cir. 2020). Here, Kindler’s comparable-license analysis was just one factor in her complete 15-factor Georgia-Pacific analysis. She specifically testified about factors 5, 8, 11, and 13 in addition to factor 1. *See, e.g.*, Day 2 Tr. at 49:13–50:11. *Wi-LAN* has no bearing on the other Georgia-Pacific factors, including factor 5’s focus on competition between the parties. The Court finds that it made no prejudicial error, and substantial justice was done. Thus, Defendants’ motion for a new trial on damages is DENIED.

iii. **The alleged inflammatory statements do not warrant a new trial**

Defendants next move for a new trial based on this Court’s alleged evidentiary errors and alleged inflammatory argument. The Court rejects each of these arguments in turn.

First, Defendants argue that the Court should have not admitted an email between CH and its prior counsel because it was privileged. ECF No. 292 at 17. Defendants contend that it was erroneous for the Court to find that Jack Jiang “opened the door” to admission of privileged communications by testifying that it took CH many months to find counsel. *Id.* (citing Day 2 Tr. 147:7–151:15). Defendants further contend that Plaintiff’s Counsel relied on the admission of this email to make “inflammatory representations about CH’s litigation conduct” that was “deeply prejudicial and require a new trial.” *Id.* at 19. Specifically, Defendants contend that they were prejudiced by counsel’s repeated assertion that CH was “looking to avoid and delay the lawsuit because they didn’t want to respond on the merits,” “because they have no legitimate defenses.” *Id.* at 18 (citing Day 4 Tr. 35:9–14). Defendants further contend that the Plaintiffs improperly “inflamed” the Jury by reiterating Defendants’ concession of infringement. ECF No. 292 at 18–19.

In response, Plaintiffs first argue that nothing about its trial presentation was inflammatory. ECF No. 297 at 3. Plaintiffs demonstrate how the jury instructions told the jury that Defendants had stipulated to infringement. *See id.* According to the Plaintiffs, “[i]f there was no ‘admission,’ as Defendants now claim, why did they not object to these jury instructions?” *Id.* at 4. Plaintiffs also contend that the Defendants failed to object all the other times the infringement admission was raised, and therefore, “Defendants agreed to this as a factual matter.” *Id.* As for the so-called delay and avoid email, Plaintiffs assert that “any privilege attached to the DELAY and AVOID email was vitiated months earlier through Mr. Jiang’s and counsel’s own behavior.” *Id.* at 5. Specifically, Plaintiffs explained that after Mr. Jiang brought up the communications during a deposition, Plaintiffs sought to compel and asked for a finding of waiver—and the Court agreed. *Id.* at 6. The Court ruled that the communications from counsel

“now ha[ve] become information that could be used to impeach Mr. Jiang.” *Id.* at 6. At trial, Plaintiffs argue that “[g]iven [a] pattern of inconsistent testimony and the direct falsehoods Mr. Jiang provided the jury, Plaintiffs had no choice but to impeach him with PTX-326. That document shows that Mr. Jiang did know of the lawsuit in January 2020, he had retained counsel at that point, and Defendants were pursuing a strategy of delaying or avoiding the lawsuit.” *Id.* at 7. Plaintiffs conclude by arguing that “PTX-326 hardly had the outsized impact that Defendants suggest.” *Id.* at 8. According to Plaintiffs, “Defendants cannot show that this single document tipped the balance of the verdict.” *Id.*

In reply, Defendants first contend that “CH did not ‘waive’ privilege by producing the document pursuant to a court order.” ECF No. 306 at 9. Defendants further contend that privilege was not waived by Mr. Jiang’s deposition testimony about opinions of counsel on “infringement and invalidity.” *Id.* Defendants argue that the Court rejected the Plaintiffs’ claim that the “email contradicts Mr. Jiang’s testimony,” declaring it not to be “evidence that CH had a strategy of avoiding litigating this Action in Texas.” *Id.* (quoting ECF No. 286 at 28–29). Defendants argue that “even if the email were relevant to show when CH retained counsel, that was not grounds to admit the email’s substance.” *Id.* Defendants argue that the Plaintiffs used the email to inflame the Jury throughout the trial and raised the email with CH’s invalidity and damages expert. *Id.* at 9–10.

The Court finds that the Defendants’ alleged evidentiary errors regarding the delay and avoid email and corresponding alleged inflammatory argument are unpersuasive and do not warrant a new trial. The Court finds that it properly admitted the delay and avoid email. Any privilege regarding the email was waived. Moreover, the Plaintiffs’ use of the email at trial did not inflame the Jury. The Court finds that this one document, regardless of its admissibility, was

not enough to sway the verdict in this case. Accordingly, the Court rejects granting a new trial based on this email alone.

The Court further finds that Plaintiffs' arguments regarding Defendants' concession of infringement are not prejudicial and do not require a new trial. It is clear from the record that Defendants conceded infringement and the Defendants failed to object to such a concession. Clear and express, that admission was a stipulated fact that Plaintiffs had every right to cite, and the Jury had every right to rely upon. Nothing about Plaintiffs' behavior was improper or inflaming.

Second, Defendants argue that the Court's exclusion of Super Lighting's analysis (DX41) warrants a new trial because it "was admissible on willfulness as well as invalidity" and "[i]ts exclusion unfairly prejudiced CH by giving the jury a one-sided view." ECF No. 292 at 19. According to Defendants, Plaintiffs had introduced CH's internal analysis of Plaintiffs' products as supposed evidence of willful copying. *Id* (citing Day 4 Tr. 32:15–19). To rebut that claim, CH sought to introduce Plaintiffs' analysis of other competitors' products to show it was "common practice" in the industry "to review competitor products." *Id*.

The Court finds, as it did above, that DX41 was properly excluded. Any purported relevance that DX41 has on willfulness is insufficient to warrant a new trial.

Third, Defendants assert that the Court's exclusion of the Lumixess documents warrants a new trial. *Id*. According to Defendants, "[t]hose documents show that CH was not willful because it relied on Lumixess to analyze whether the LT2600 chip practiced the Super Lighting's shock-protection system, and thus lacked the "specific intent to infringe" required for willfulness." *Id*. Defendants contend that the Court erred by excluding the documents as hearsay because "CH did not offer the Lumixess documents for their truth (i.e., to show the LT2600 chip

did not infringe), but for the non-hearsay purpose of showing the state of mind they induced— i.e., CH’s knowledge of and reliance on Lumixess’s analysis.” *Id.*

In response, Plaintiffs argue that the Court properly excluded these documents because of Defendants’ own procedural errors. ECF No. 297 at 15–16. According to Plaintiffs, Defendants ignored this Court’s rule that documentary exhibits require a sponsoring witness. Rather than taking a timely deposition testimony or obtaining a custodial affidavit, Defendants did nothing to meet the sponsoring witness requirement until pressed by the Court at the motion in limine hearing. In reply, Defendants again reiterate that a new trial is warranted because the Court allegedly erred by excluding the Lumixess documents because it was admissible for a non-hearsay purpose. ECF No. 306 at 10.

The Court agrees with Plaintiffs and find that the Court’s exclusion of the Lumixess documents does not warrant a new trial. The documents could not be admitted without a sponsoring witness, irrespective of hearsay. Fed. R. Civ. P. 901. When pressed at the motion in limine hearing, Defendants attempted to explain why the Lumixess documents were not hearsay without addressing Rule 901. ECF No. 190 at 5:20–8:5. Mr. Jiang, through whom Defendants hoped to introduce the documents, had no personal knowledge and was thus unqualified to authenticate them. *Id.* at 6:4–7:2. Defendants’ motion merely repeats their failed hearsay arguments and continues to ignore authentication. Defendants have once again failed to address the shortcoming of the Lumixess documents, and no new trial is warranted on the basis of their exclusion.

IV. MOTION FOR SUPPLEMENTAL DAMAGES, ONGOING ROYALTY, AND ENHANCEMENT OF POST-VERDICT DAMAGES

A. Legal Standard

i. Supplemental Damages

Under 35 U.S.C. §284, upon a finding of infringement, a prevailing “patentee is entitled to damages for the entire period of infringement and should therefore be awarded supplemental damages for any periods of infringement not covered by the jury verdict.” *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, No. 2:10CV248, 2011 WL 4899922, at *2, *4 (E.D. Va. Oct. 14, 2011) (citing *TiVo, Inc. v. Echostar Commc’ns Corp.*, 2006 U.S. Dist. LEXIS at *6 (E.D. Tex. Aug. 17, 2006)). “[S]upplemental damages are compensatory in nature” and “calculated in accordance with the damages awarded in the jury verdict.” *Id.* at *2 (citations omitted). The Court has “discretion to award damages for periods of infringement not considered by the jury.” *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 38 (Fed. Cir. 2012).

ii. Ongoing Royalty

It is within the Court’s equitable discretion to determine whether an ongoing royalty need be imposed. *See Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1314–15 (Fed. Cir. 2007). Although an ongoing royalty is not automatic, “the Federal Circuit has indicated that a prevailing patentee should receive compensation for any continuing infringement.” *Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 6687122, at *7 (N.D. Cal. Nov. 25, 2014) (citing *Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1379 (Fed. Cir. 2010)).

In determining the ongoing royalty rate, the Court must consider: (i) the “change in the parties’ bargaining positions, and the resulting change in economic circumstances, resulting from the determination of liability,”; (ii) “changed economic circumstances, such as changes related to the market for the patented products,”; and (iii) any other “post-verdict factor” that would impact

“what a hypothetical negotiation would look like after the prior infringement verdict.” *XY, LLC v. Trans Ova Genetics, L.C.*, 890 F.3d 1282, 1297 (Fed. Cir. 2018). “Generally, the jury’s damages award is a starting point for evaluating ongoing royalties.” *Apple, Inc.*, 2014 WL 6687122, at *14 (citing *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 670 F.3d 1171, 1193 (Fed. Cir. 2012), *vacated on other grounds*, 467 F. App’x 747. In addition, the Court may consider the Georgia-Pacific factors. *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1370 (Fed. Cir. 2017).

iii. Enhanced Damages

Section 284 of Title 35 provides that, in a patent infringement case, “the court may increase the damages up to three times the amount found or assessed.” 35 U.S.C. § 284. As the Supreme Court has remarked in the seminal *Halo* decision, “That language contains no explicit limit or condition, and we have emphasized that the word ‘may’ clearly connotes discretion.” *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 579 U.S. 93, 103 (2016) (cleaned up). That discretion is not boundless and instead must be exercised “in light of considerations underlying the grant of that discretion.” *Id.* (cleaned up). In interpreting those considerations, the Supreme Court appealed to the judiciary’s 180-year history of awarding enhanced damages, in which courts have “generally reserved” enhancement for “egregious cases of culpable behavior.” *Id.* at 104. Egregious cases typically involve, in the Court’s opinion, conduct that is “willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate.” *Id.* at 103–04; *id.* at 107 (“[S]uch punishment should generally be reserved for egregious cases typified by willful misconduct.”).

“Willfulness largely turns on intent, which is an issue reserved to the jury.” *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016). Once the jury finds that the

defendant's infringement was willful, the Court must consider whether that alone justifies enhancement. According to the Federal Circuit, "Halo emphasized that subjective willfulness alone . . . can support an award of enhanced damages." *WesternGeco L.L.C. v. ION Geophysical Corp.*, 837 F.3d 1358, 1362 (Fed. Cir. 2016), *rev'd on other grounds*, 138 S. Ct. 2129, 201 L. Ed. 2d 584 (2018); *Halo*, 579 U.S. at 105 ("The subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless."). Yet courts are vested with discretion to forbear enhancement under § 284 even in egregious cases, if that is what "the particular circumstances of" the case demand. *Id.* at 106; cf. *id.* at 111 (Breyer, J., dissenting) ("[W]hile the Court explains that 'intentional or knowing' infringement 'may' warrant a punitive sanction, the word it uses is may, not must It is 'circumstanc[e]' that transforms simple knowledge into such egregious behavior, and that makes all the difference."). The Federal Circuit has endorsed consideration of the *Read* factors to "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 Indus., Inc. v. IPS Corp.*, 721 F. App'x 959, 972 (Fed. Cir. 2018). As to burdens, the "party seeking enhanced damages under § 284 bears the burden of proof by a preponderance of the evidence." *WBIP*, 829 F.3d at 1339.

B. Discussion

Now that judgment has been entered, Super Lighting asks the Court to impose each of the following remedies:

- \$0.45 per unit for each of the Undisclosed Pretrial Sales, a total of \$531,559.80.

- \$0.45 per unit for each of the sales representing the Supplemental Damages, a total of \$3,872,688.30.
- Prejudgment interest of \$18,774.39 on these amounts.
- An ongoing royalty of \$0.45 per unit for all infringing products and products not colorably different sold after the entry of judgment
- An additional \$0.45 per unit of enhancement on each of the Supplemental Damages sales and Ongoing Sales.

ECF No. 287 at 2. Since its original Motion was filed, Plaintiff filed a notice with the Court updating the above amounts as listed below.

- Additional supplemental damages of \$442,771 from CH Lighting since the last sales update, totaling \$4,274,812 (on 9,499,583 total infringing sales) since the Jury verdict.
- Additional supplemental damages of \$5,781 from Elliott since the last sales update, totaling \$44,949 (on 87,039 total infringing sales) since the Jury verdict.
- Additional enhanced damages of \$441,292 from CH Lighting since the last sales update, totaling \$4,274,812 since the Jury verdict.
- Post-judgment interest of \$777 per day for CH Lighting and \$4.51 per day for Elliott.

ECF No. 317 at 1–2.

The Court will address each of these requested remedies below.

i. Undisclosed Pretrial Sales

Super Lighting argues that Defendants should not be spared from paying damages for its 1.2 million units of undisclosed pretrial sales. ECF No. 287 at 10. According to Super Lighting,

the only reason those sales were not presented to the Jury is because Defendants did not produce them. *Id.* To be clear, Super Lighting is not saying this withholding of unit numbers was nefarious; the parties agreed to a pretrial financial update as presenting real-time information during trial would have been impractical and burdensome. *Id.* But Super Lighting argues that is exactly why the parties expressly agreed in the Joint Pretrial Order that “the amount adequate to compensate Plaintiffs for... past and ongoing infringement” was still at issue. *Id.* (citing ECF No. 173 at 11). Nor did Defendants object to the verdict form, which explicitly asked the Jury to decide only the amount of damages that Super Lighting had proven for Defendants’ “past infringement.” *See id.* (citing ECF No. 230 at 4). Super Lighting contends that Defendants cannot now backtrack on its agreements to obtain a windfall, particularly one that would result only because Defendants’ data was withheld from Super Lighting and the Jury. *Id.*

In response, Defendants argue that despite receiving CH’s sales data months before judgment entered—and mere days after they asked—Plaintiffs never moved for supplemental damages or an ongoing royalty. ECF No. 300 at 9. According to Defendants, although Plaintiffs filed extensive motions seeking entry of a judgment awarding many kinds of relief (ECF Nos. 233, 234, 241, 242), they never asked to be awarded those pretrial sales they now demand before judgment. *Id.* Thus, Defendants argue that Plaintiffs ignore Rule 59(e)’s limits because this evidence of “Undisclosed Pretrial Sales” is not newly discovered. *Id.*

In reply, Super Lighting asserts that its motion was timely. ECF No. 303 at 4. Even if its motion were solely based on Rule 59(e), Super Lighting argues that Rule says such motions must be brought within 28 days of a judgment: the exact same timing as a new trial motion under Rule 59(b). *Id.* Judgment here was entered on July 29; 28 days after July 29 was August 26. As such, Super Lighting contends that its August 19 motion was inside the 28-day window. *Id.* According

to Super Lighting, despite all of Defendants' arguments about the time that passed between the verdict and entry of judgment, ECF No. 300 at 11, "during that period Plaintiffs made absolutely no secret that they were pursuing supplemental and ongoing damages." *Id.* Thus, Super Lighting contends that there was no waiver.

Courts have routinely awarded damages in circumstances such as these, and there is no good reason to proceed otherwise here. *See, e.g., Genband US LLC v. Metaswitch Networks Corp.*, No. 2:14-CV-00033-JRG, 2018 WL 11357619, at *10–14 (E.D. Tex. Mar. 22, 2018); *PCT Int'l Inc. v. Holland Elecs. LLC*, 2016 WL 1241875, at *18–19 (D. Ariz. 2016); *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, No. 2:10CV248, 2011 WL 4899922, at *4–5 (E.D. Va. Oct. 14, 2011); *Hynix Semiconductor Inc. v. Rambus Inc.*, 609 F. Supp. 2d 951, 960–61 (N.D. Cal. 2009); *Mondis Tech. Ltd. v. Chimei InnoLux Corp.*, 822 F. Supp. 2d 639, 642 (E.D. Tex. 2011) ("[w]hen the jury awarded damages in this case, it did not have before it the sales data for the first and second quarter of 2011... [plaintiff] is entitled to supplemental damages for those two quarters"), *aff'd sub nom., Mondis Tech. Ltd. v. Innolux Corp.*, 530 F. App'x 959 (Fed. Cir. 2013).

The Court agrees with Super Lighting that it should be awarded for the 1.2 million units of undisclosed pretrial sales. Because the Court has "discretion to award damages for periods of infringement not considered by the jury," *Whitserve*, 694 F.3d at 38, the 1.2 million units sold between CH Lighting's final pretrial production of sales data and the November 4, 2021 verdict yields \$523,871 in damages at the Jury-approved \$0.45 royalty rate. Likewise, the 17,086 units sold between Elliott's final pretrial production of sales data and the November 4, 2021 verdict yields \$7,688.70 in damages at the Jury-approved \$0.45 royalty rate. Accordingly, the Court finds that such an amount should be added to the existing Judgment under the Court's inherent

accounting authority and Rule 59(e). Similarly, the Court is also persuaded that Super Lighting's motion was timely and there was no waiver by Super Lighting.

ii. Supplemental Damages

Super Lighting next moves to include supplemental damages on the 8.6 million units Defendants sold after the Jury's willful infringement verdict but before the Court entered judgment.⁴ ECF No. 287 at 12–13. Like the above finding that Super Lighting should be awarded supplemental damages on the Undisclosed Pretrial Sales, the Court finds that Super Lighting is also entitled to damages on the units Defendants sold after the Jury's willful infringement verdict but before the Court entered judgment. As it did above, the Court rejects the Defendants' arguments here against awarding these supplemental damages to Super Lighting for similar reasoning.

The Court finds that supplemental damages are necessary and appropriate here to fully compensate Super Lighting for Defendants' infringement. Accordingly, the Court finds that Defendants must pay the \$4,319,761 in supplemental damages (\$4,274,812 from CH Lighting and \$44,949 from Elliott) by adding that amount to the existing judgment under the Court's inherent accounting authority. Similarly, the Court is also persuaded that Super Lighting's motion was timely and there was no waiver by Super Lighting.

iii. Pre-Judgment Interest

⁴ On December 2, 2022, Super Lighting provided an update on the sales amount requested for their motion for supplemental damages. ECF No. 317. In it, Super Lighting notes that Defendants have since provided updated sales data for the third quarter of 2022, indicating that CH Lighting sold 994,328 additional units of infringing products, earning \$3,346,998 in revenue, while Elliott sold 16,132 units of infringing products. *Id.* at 1. Based on Defendants' latest sales figures, there have been additional supplemental damages of \$442,771 from CH Lighting since the last sales update, totaling \$4,274,812 (on 9,499,583 total infringing sales) since the Jury verdict, and additional supplemental damages of \$5,781 from Elliott since the last sales update, totaling \$44,949 (on 87,039 total infringing sales) since the Jury verdict.

A prevailing plaintiff in a patent infringement action is entitled to compensation that is “in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.” 35 U.S.C. § 284. Therefore “complete compensation” for the defendant’s infringement includes prejudgment interest awarded from the date of infringement to the date of judgment. *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655 (1983); *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 800 (Fed. Cir. 1988). As this Court has recognized, “[t]he purpose of prejudgment interest is to place the patentee in as good a position as he would have been had the infringer paid a reasonable royalty rather than infringe.” *VLSI Tech. LLC v. Intel Corp.*, No. 6:21-CV-57-ADA, 2022 WL 1477728, at *1 (W.D. Tex. May 10, 2022) (quoting *SSL Servs., LLC v. Citrix Sys., Inc.*, 769 F.3d 1073, 1094 (Fed. Cir. 2014) (internal quotation marks omitted)). “Accordingly, prejudgment interest on a damages award “is the rule, not the exception.” *Id.* (quoting *Energy Transp. Grp., Inc. v. William Demant Holding A/S*, 697 F.3d 1342, 1358 (Fed. Cir. 2012) (internal quotation marks omitted)).

Super Lighting contends that it should also be awarded prejudgment interest on the Undisclosed Pretrial Sales and Supplemental Damages awarded by the Court. ECF No. 287 at 19. The Court agrees. The Court’s Order previously resolved several disputes between the parties concerning the application of prejudgment and post-judgment interest to the damages award, including the applicable interest rates and what portions of the damages award accrue interest. ECF No. 286 at 39–40. As those issues have been resolved, the Court will apply the same treatment of these issues to the amended judgment and to the supplemental damages awarded above.

iv. Post-Judgment Interest

Pursuant to 28 U.S.C. §1961, post-judgment “[i]nterest shall be allowed on any money judgment in a civil case recovered in a district court.” 28 U.S.C. §1961(a). The interest is calculated at the Federal statutory rate of the weekly average 1-year constant maturity Treasury yield, computed daily and compounded annually. *Id.* § 1961(a)–(b); *VLSI*, 2022 WL 1477728, at *4 (holding prevailing patentee “is entitled to an award of post-judgment interest at the federal statutory rate”). Post-judgment interest on a money judgment begins to accrue “from the date of the Court’s final judgment until the date of payment.” *VLSI*, 2022 WL 1477728, at *4.

Super Lighting contends that it should also be awarded post-judgment interest on the Undisclosed Pretrial Sales and Supplemental Damages awarded by the Court. ECF No. 287 at 19. The Court agrees. The Court’s Order previously resolved several disputes between the parties concerning the application of prejudgment and post-judgment interest to the damages award, including the applicable interest rates and what portions of the damages award accrue interest. ECF No. 286 at 39–40. As those issues have been resolved, the Court will apply the same treatment of these issues to the amended judgment and to the supplemental damages awarded above.

v. Ongoing Royalty

Super Lighting moves for the Court to award ongoing royalties for the Defendants’ continuing infringement post-judgment. ECF No. 287 at 14. Defendants respond that Super Lighting has not justified an ongoing royalty because such royalties must be “based on a post-judgment hypothetical negotiation using the *Georgia-Pacific* factors” and “it allegedly failed to “consider ‘additional evidence of changes in the parties’ bargaining positions and other economic circumstances that may be of value.” ECF No. 300 at 14–15 (citing *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1343 (Fed. Cir. 2012)). According to

Defendants, Ms. Kindler’s declaration offers no opinion on a hypothetical post-judgment negotiation, and she mechanically applies “a royalty rate of \$0.45, consistent with the jury’s verdict.” *Id.*

Super Lighting replies that Defendants’ arguments are unfounded because no authority requires that Plaintiffs get nothing because they did not present a new Georgia-Pacific analysis on the ongoing royalty. ECF No. 303 at 7. Super Lighting also contends that to the extent any “change[] in the parties’ bargaining positions and other economic circumstances” is relevant here, those factors favor Plaintiffs and an increased rate now that willful infringement, validity, and infringement have been conclusively determined. *Id.* at 8 (citing *XY, LLC v. Trans Ova Genetics*, 890 F.3d 1282, 1298 (Fed. Cir. 2018) (reversing district court for lowering the jury-awarded royalty rate without justification); *Amado v. Microsoft Corp.*, 517 F.3d 1353, 1361–62 (Fed. Cir. 2008)).

The Court finds that, consistent with the Jury’s verdict in this case, Super Lighting is entitled to an award of an ongoing royalty for post-judgment infringement in the amount of \$0.45 per unit. Defendants’ only evidence that the rate determined by the Jury and by Ms. Kindler should be adjusted downward is Ms. Kindler’s evidence about falling LED prices. ECF No. 300 at 15–17. Yet Ms. Kindler testified that decline was due to Defendants’ infringement. ECF No. 238, Trial Tr. Day 2 at 55:18–56:13. Nevertheless, any “change[] in the parties’ bargaining positions and other economic circumstances” is relevant here, those factors favor Super Lighting and an increased rate now that willful infringement, validity, and infringement have been conclusively determined. *See XY, LLC v. Trans Ova Genetics*, 890 F.3d 1282, 1298 (Fed. Cir. 2018). Although Defendants also complain that Super Lighting’s motion for ongoing royalty was untimely and waived, the Court finds—like it did above—that Super Lighting’s motion was not

untimely and not waived. Thus, the Court awards Super Lighting an ongoing royalty for post-judgment infringement in the amount of \$0.45 per unit.

vi. Enhanced Damages

Super Lighting finally moves to be awarded enhanced damages for CH Lighting's continued willful infringement after the Jury verdict. ECF No. 287 at 16. According to Super Lighting, the Court's ability to enhance damages under 35 U.S.C. § 284 applies with equal force "[i]n either event" whether the damages are found by the jury or assessed by the Court, and therefore the Court may enhance post-verdict supplemental damages and ongoing royalties. *See SynQor*, 709 F.3d at 1385

CH Lighting responds that "[e]ven if the Court were to award supplemental damages, it should not enhance those damages." ECF No. 300 at 19. CH Lighting contends that because the "Court previously declined to enhance parts of the damages award, based on its determination that 'Defendants developed a good-faith belief that they were not infringing by the time they filed an answer to Plaintiffs' complaint,'" the supplemental damages should not be enhanced because CH Lighting continues to believe in good faith that the Asserted Patents are invalid.

Here, the Jury has already found that CH Lighting's infringement was willful, and the Court has already found that this case is egregious and that enhancement is warranted. For example, the Court previously recognized CH Lighting's disregard of the risk from Super Lighting's patent portfolio (ECF No. 286 at 8–10), the Jury's "quick and lopsided decision" (*id.* at 15), the duration of CH Lighting's misconduct (*id.* at 16), the lack of remedial actions (*id.* at 16–17), CH Lighting's motivation to harm Super Lighting including its decision to "poach" Jack Jiang with "unusually large benefits" as well as its "reckless disregard" for the harm to Super Lighting (*id.* at 17–18), and its misrepresentation of the Court's orders and withholding of

information relevant to willfulness during litigation (*id.* at 18–19). These reasons for enhancement continue to apply to CH Lighting’s post-verdict infringement with at least the same force.

None of the *Read* factors have changed in a way that weighs against enhancement, and several factors now weigh even more heavily in favor of enhancement. 970 F.2d 816, 826–27 (Fed. Cir. 1992); ECF No. 286 at 6. Regarding *Read* factors 2 (good-faith belief regarding defenses) and 5 (closeness of the case), the Court finds that CH Lighting can no longer maintain a good-faith belief that it either does not infringe or that the patents are invalid, after CH Lighting either withdrew such defenses or the Jury quickly rejected them. *Read* factor 6 (duration of misconduct), now weighs more heavily in favor of enhancement since CH Lighting has continued to infringe for another nine months and counting after the Jury found it to willfully infringe. Continuing to infringe even after the Court admonished CH Lighting for its “egregious” conduct in its Order weighs even more heavily in favor of enhancement. *Read* factor 7 (remedial actions) weighs more heavily in favor of enhancement now that CH Lighting has shown that it has no intention to take any remedial action whatsoever for its continued infringement and the harm caused to Super Lighting. As to *Read* factor 8 (Defendant’s motivation), the Court has previously noted the tight competition between Super Lighting and CH Lighting in a small market and that CH Lighting’s continued infringement shows at least “reckless disregard for the harm it has and continues to cause to a rival.” ECF No. 286 at 18. CH Lighting’s continued sales of infringing products illustrate that its motivation to take and maintain its market share at Super Lighting’s expense outweighed any concern about Super Lighting’s patent rights, the Jury’s verdict, and this Court’s orders. While CH Lighting’s ongoing decision to keep infringing post-verdict and even after the Court’s enhancement order could support an increase in enhancement,

the Court finds that applying the Court's previously decided doubling of damages to post-verdict sales (including ongoing royalties) is entirely fair and reasonable. Indeed, because the evidence at trial shows that CH Lighting makes a profit of \$1.08 per unit on the infringing tubes (ECF No. 238 at 70:17–71:2), doubling the Jury's \$0.45 award to \$0.90 per unit would still allow CH Lighting to turn a profit, even for sales made in the face of admitted infringement, a Jury verdict, and enhancement by this Court. Accordingly, the Court grants Super Lighting's Motion to enhance damages on CH Lighting's post-verdict sales by the same factor of two that the Court found in its previous Order (ECF No. 286). The Court, however, declines Super Lighting's invitation to enhance ongoing royalties.

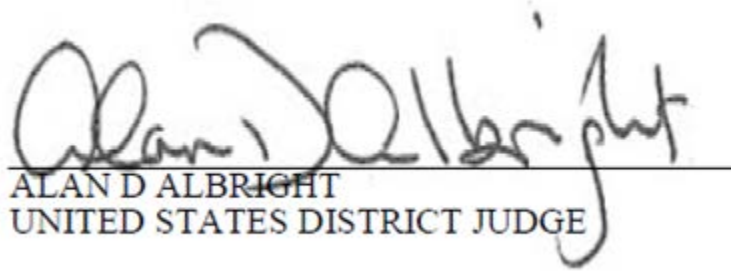
V. CONCLUSION

It is therefore **ORDERED** that

- Defendants' Motion for Judgment as a Matter of Law, ECF No. 291, is **DENIED**;
- Defendants' Motion for New Trial, ECF No. 292, is **DENIED**;
- Plaintiffs' Motion for Supplemental Damages, Ongoing Royalty and Enhancement of Post-Verdict Damage, ECF No. 287, is **GRANTED-IN-PART**.
- The Court's previous **ORDER** (ECF No. 322) is hereby **VACATED** and **SUPERSEDED**

It is **FURTHER ORDERED** that entry of final judgment is **HELD IN ABEYANCE** pending the parties' resolution of the precise dollar amount of enhancement and supplemental damages the Court has ordered. The parties are hereby instructed to do the following: meet and confer regarding the dollar amount of enhancement and supplemental damages the Court ordered above; and jointly draft a proposed order of final judgment consistent with the rulings above, to be sent to the Court by March 15, 2023, on which date the Court will enter final judgment.

SIGNED this 8th day of March, 2023.



ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE