

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF KANSAS

LAYNE CHRISTENSEN COMPANY and )  
DR. ARUP K. SENGUPTA )

Plaintiffs, )

v. )

Case No. 09-2381-JWL

BRO-TECH CORPORATION, )  
d/b/a THE PUROLITE COMPANY, )

Defendant. )

\_\_\_\_\_ )

**MEMORANDUM AND ORDER**

Over four days beginning on January 24, 2012, the Court conducted a jury trial of the claim by plaintiffs Layne Christensen Company (“Layne”) and Arup SenGupta against defendant Bro-Tech Corporation, d/b/a The Purolite Company (“Purolite”) for infringement of Claims 1, 7, 10, 11, 12, and 13 of U.S. Patent No. 7,291,578 (“the Patent”). All other claims in the case had been resolved by stipulation or by ruling of the Court. At the close of plaintiffs’ case, Purolite moved for judgment as a matter of law on the issues of infringement and willfulness and moved to strike certain testimony of Dennis Clifford, plaintiffs’ expert, and the Court took the motion under advisement and allowed the trial to proceed. On January 30, 2012, the jury returned its verdict, by which it found that Purolite had infringed those claims of the Patent; that those claims were not invalid for lack of enablement; that plaintiffs sustained \$229,171.42 in damages; and that

Purolite's infringement had been willful. The Court deferred entry of judgment until its ruling on the issue of the enhancement of damages.

The matter now comes before the Court for ruling on Purolite's posttrial motion, by which it renews its previous motion for judgment as a matter of law with respect to the issues of infringement and willfulness and to strike testimony of Dr. Clifford, and, alternatively, seeks a new trial (Doc. # 698). For the reasons set forth below, that motion is **denied in part and granted in part**. The motion to strike testimony is denied. The motion for judgment as a matter of law is denied with respect to the issue of infringement. The motion for judgment as a matter of law is granted with respect to the issue of willfulness, and judgment is awarded to Purolite on that claim. The alternative motion for a new trial is denied, except that if the Court's judgment in favor of Purolite on the issue of willfulness were overturned, it would order a new trial on that issue on the basis that the jury's verdict was against the great weight of the evidence. Purolite's motion filed at the close of plaintiffs' case (Doc. # 666) is **denied as moot**.

The matter also comes before the Court on plaintiffs' motion for a permanent injunction against Purolite's further infringement of the Patent (Doc. # 710). For the reasons set forth below, that motion is **granted**, and the requested injunction is hereby issued by the Court. Purolite's motion to strike a portion of a supporting affidavit by Dr. SenGupta (Doc. # 717) is **denied**.

Finally, the matter comes before the Court for ruling on plaintiffs' motion for enhanced damages and attorney fees (Doc. # 680). That motion is **denied**. Purolite's

motion to strike plaintiffs' reply brief in support of this motion for enhanced damages and fees (Doc. # 701) is **denied**.

**I. Purolite's Motion for Judgment as a Matter of Law<sup>1</sup>**

*A. Governing Standard*

Judgment as a matter of law under Fed. R. Civ. P. 50(b) is improper "unless the proof is all one way or so overwhelmingly preponderant in favor of the movant as to permit no other rational conclusion." *Crumpacker v. Kansas Dept. of Human Resources*, 474 F.3d 747, 751 (10th Cir. 2007). In determining whether judgment as a matter of law is proper, a court may not weigh the evidence, consider the credibility of witnesses, or substitute its judgment for that of the jury. *Sims v. Great American Life Ins. Co.*, 469 F.3d 870, 891 (10th Cir. 2006).

In essence, the court must affirm the jury verdict if, viewing the record in the light most favorable to the nonmoving party, it contains evidence upon which the jury could properly return a verdict for the nonmoving party. *See Bartee v. Michelin North*

---

<sup>1</sup>Plaintiffs argue that Layne's posttrial motion should be denied because, although the certificate of service for the motion included a place for local counsel's electronic signature, a signature block for local counsel was not included, before the certificate of service, with the signatures of counsel admitted *pro hac vice*. Plaintiffs argue that the motion therefore violates the local rule requiring local counsel to sign all documents filed. *See* D. Kan. Rule 5.4.2(c)(3), 83.5.4(c). The Court rejects this argument, which borders on frivolous. The motion was electronically filed by local counsel, and the local rules provide that the use of the electronic filing system's login and password serve as the signature of the attorney for all purposes. *See* D. Kan. Rule 5.4.8(a).

*America, Inc.*, 374 F.3d 906, 914 (10th Cir. 2004). Conversely, the court must enter judgment as a matter of law in favor of the moving party only if “there is no legally sufficient evidentiary basis for a reasonable jury to find for the issue against that party.” *Sims*, 469 F.3d at 891.

*B. Infringement*

With respect to the sole remaining infringement issue for trial, the Court instructed the jury as follows:

In this case, only one issue relating to infringement remains for your consideration. One limitation of Claim 1 requires the dispersion of a “salt of said metal” “throughout” the intermediate. The Court has already determined, as a matter of law, that FerrIX does contain iron dispersed “throughout” the beads. The issue in this case is whether Plaintiffs have shown that the oxygen-containing compound of iron that is found in FerrIX (the “salt of said metal” from Claim 1) has in fact been dispersed “throughout” the beads, as required by Claim 1.

Plaintiffs are not required to prove that all particles of iron contained in the beads are part of an oxygen-containing compound of iron, such as iron oxide or iron hydroxide. Instead, Plaintiffs must show that there is iron oxide or iron hydroxide dispersed “throughout” the beads, as that term is defined in these instructions.

The Court has already determined that all other limitations in Claims 1, 7, 10, 11, 12, and 13 are covered by the FerrIX product. Accordingly, if you find that Plaintiffs have shown that FerrIX contains an oxygen-containing compound of iron dispersed throughout the beads, you must find that Purolite has infringed Claims 1, 7, 10, 11, 12, and 13 of the patent. Conversely, if you find that Plaintiffs have not shown that FerrIX contains an oxygen-containing compound of iron dispersed throughout the beads, you must find that Purolite has not infringed Claims 1, 7, 10, 11, 12, and 13 of the patent.

The jury was further instructed:

*Dispersion “throughout the intermediate” in Claim 1 means dispersion all the way through the intermediate, or through the whole of it, or in or to every part of it, or everywhere in it. Dispersion “throughout” the intermediate is not achieved merely by having some particles reach the interior or go beyond the periphery of the intermediate. On the other hand, dispersion “throughout” the intermediate does not require that a stoichiometric amount was used or that every possible exchange site was reached.*

At trial, Purolite did not dispute that the outermost portions of the beads of its product, FerrIX, do contain iron oxide, the compound that allows the product to remove arsenic from water as intended. Moreover, as stated in the jury instructions, the Court ruled as a matter of law (based on experiments by Purolite’s expert, Daniel Stack) that the beads contain at least iron “throughout”. Purolite took the position, however, that the beads have a core-shell structure and that the core portions of the beads do not contain iron oxide.

The Court makes one note about the proof required for infringement here. Purolite has generally described plaintiffs’ burden with respect to their infringement claim as a requirement to show that the iron in the core of the beads is iron oxide. As the instructions made clear, however, plaintiffs’ burden was not so limited, because not all particles of iron needed to be iron oxide for a finding of infringement; rather, for infringement, the jury only needed to find that iron oxide had been dispersed “throughout” the beads.

The Court concludes that the evidence, viewed in the light most favorable to

plaintiffs, is sufficient to support a finding of infringement here. In particular, plaintiffs' expert, Dr. Clifford, testified that, in his opinion, Purolite's process for manufacturing FerrIX infringed the Patent. In supporting that opinion, Dr. Clifford noted that in that process permanganate soaked into the beads for a period of four hours and that the permanganate would have reached all parts of the beads in that time. Thus, Dr. Clifford opined that the iron in the centermost portions of the beads would have been transformed by the permanganate into iron oxide, just as the iron in the outermost portions were so transformed. That expert opinion that the iron in all parts of the beads was iron oxide was sufficient to support the jury's verdict of infringement.

Moreover, plaintiffs' evidence of infringement was not limited to Dr. Clifford's opinion. Dr. Clifford's opinion was supported by the testimony of a Purolite employee, Joe D'Alessandro, who confirmed that the permanganate would indeed flow through the entirety of the beads with a sufficient amount of permanganate and sufficient time. In addition, the mere fact that iron was dispersed throughout the beads, when viewed in plaintiffs' favor, provides evidence that iron oxide was dispersed throughout the beads. As noted above, Dr. Stack's experiments determined that some species of iron was found at each measured radial point within the beads. Although the concentration of that iron was much less in the centermost portions of the beads, the Court declined to interpret "throughout" to require uniformity or some minimum concentration, and it ruled that the beads did at least contain iron throughout the beads. The Court then ruled, viewing the evidence in the light most favorable to Purolite, that a question of fact remained

concerning whether the smaller concentrations of iron included iron oxide. Viewing that same evidence in plaintiffs' favor, however, gives rise to an inference that there was iron oxide dispersed throughout the beads, as the evidence showed that the sole reason for the insertion of iron into the beads was to have it transformed to iron oxide, which would then effect the removal of arsenic from water (the product's *sine qua non*). Mr. D'Alessandro testified that the product would be more effective in removing arsenic if a greater number of sites in the beads had iron oxide. Several Purolite employees testified by deposition that the product was "impregnated" with iron oxide,<sup>2</sup> and plaintiffs submitted evidence that Purolite marked the product as "impregnated" with iron oxide in such a way as to maximize its ability to remove arsenic. Purolite's decision not to use its shallow-shell type of bead that lacked a functionalized center in making FerrIX suggests that it did not intend to leave the center of beads without iron oxide. Thus, the jury could reasonably have believed that Purolite had an incentive to make sure that all of the iron in the beads was transformed to iron oxide, which incentive supports

---

<sup>2</sup>At the summary judgment stage, the Court noted that these witnesses did not testify that iron oxide could be found in both the core and the shell of the beads, or that some other species of iron was not also contained in the beads; thus, the Court ruled that plaintiffs' had not established that iron oxide had been dispersed throughout the beads as a matter of law *if the evidence were viewed the light most favorable to Purolite*. Here, when viewed *in the light most favorable to plaintiffs*, this testimony supports the inference that iron oxide was present throughout the beads, especially in light of the fact that the witnesses did not qualify their description by noting that there was any significant portion of the beads that did *not* contain iron oxide.

plaintiffs' position that the iron in the centermost portions of the beads was iron oxide.<sup>3</sup>

Purolite does not argue that Dr. Clifford's testimony was insufficient to support the jury's verdict of infringement; instead, Purolite argues that the Court should strike and disregard that testimony. Purolite's argument runs as follows: Dr. Clifford admitted in his testimony that there would be no infringement if permanganate did not penetrate to the center of the beads (assuming fully functionalized beads, with exchange sites throughout). Dr. Stack conducted an experiment that showed that permanganate does not reach the center of the beads, but instead leaves a core-shell structure. Joe D'Alessandro (Purolite's employee) and Owen Boyd (Layne's employee) confirmed that the beads have a core-shell structure after the permanganate is applied. Dr. Clifford did not conduct any tests to support his opinion that permanganate must have penetrated to the center of the beads. Thus, Dr. Clifford's opinion is purely speculative, *ipse dixit* testimony, and that testimony should be disregarded.

In seeking to strike Dr. Clifford's expert testimony, Purolite has not conducted any analysis under *Daubert* or Rule 702. Rather, Purolite relies on cases indicating that a district court may exclude *ipse dixit* testimony by an expert. *See, e.g., General Elec.*

---

<sup>3</sup>Jacob Brodie, Purolite's executive, testified that there is "a very low level of iron impurity in this bead due to the way it's manufactured." The jury was free to discount that testimony, however. Mr. Brodie did not elaborate or explain the nature of that impurity. He certainly did not testify that the impurity resulted in the presence of iron at the core of the beads. Moreover, Purolite's expert did not offer any opinion that the iron that he detected in the centermost portions of the bead related to any "impurity" or to the manufacturing process generally.



*Co. v. Joiner*, 522 U.S. 136, 146 (1997) (“But nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.”); accord *United States v. Nacchio*, 555 F.3d 1234, 1258 (10th Cir. 2009) (quoting *Joiner*).

The Court denies Purolite’s motion to strike Dr. Clifford’s testimony on this basis. First, the motion is untimely. Purolite’s pretrial *Daubert* motion did not address this issue of the presence of permanganate, and Purolite failed to assert any such objection during Dr. Clifford’s testimony. Rule 103 requires a timely motion to strike, see Fed. R. Evid. 103(a)(1), and Purolite did not file its original motion to strike Dr. Clifford’s testimony until after another witness had been examined and plaintiffs were resting their case, at which time Purolite filed its motion for judgment as a matter of law. The Tenth Circuit has indicated that a motion to exclude expert testimony asserted at the close of the plaintiff’s case is not timely. See, e.g., *Alfred v. Caterpillar, Inc.*, 262 F.3d 1083, 1086-87 (10th Cir. 2001) (“[c]ounsel should not ‘sandbag’ *Daubert* concerns until the close of an opponent’s case, thereby placing opposing counsel and the trial court at a severe disadvantage;” “*Daubert* generally contemplates a ‘gatekeeping’ function, not a ‘gotcha’ function”) (citing *Macsenti v. Becker*, 237 F.3d 1223, 1230-34 (10th Cir. 2001)); see also *Vallejos v. C.E. Glass Co.*, 583 F.2d 507, 511 (10th Cir. 1978) (close of plaintiff’s case is not the proper time to object to the admission of evidence); *United States v. Pflum*, 150 F. App’x 840, 845 (10th Cir. 2005) (same). The Court therefore

deems this objection to Dr. Clifford's testimony to have been waived by Purolite.

The Court also rejects Purolite's motion to strike on its merits. The Court does not agree that Dr. Clifford's opinion constitutes unsupported *ipse dixit* testimony. Dr. Clifford's infringement opinion was supported by other evidence, as set forth above. Moreover, Purolite's own expert, Dr. Stack, supported the soundness of Dr. Clifford's scientific opinion by testifying that he too expected the permanganate to run through to the center of the beads. Similarly, as noted above, Mr. D'Alessandro testified that the permanganate would run to the center of the beads with a sufficient quantity of permanganate and sufficient time.

Purolite relies heavily on Dr. Stack's testimony about the core-shell structure that was revealed after he soaked the beads with permanganate. First, the jury was free to reject this experiment and any conclusions drawn therefrom based on Dr. Stack's admission that his experiment did not exactly replicate the manufacturing process for FerrIX. Furthermore, Dr. Stack based his conclusion on the existence of a core-shell structure, with the core portion retaining its color while the shell turned purple from the permanganate. Dr. Stack did not appear to conduct any further test, however, to confirm that trace amounts of permanganate could not be found in center of the beads where small amounts of iron awaited. (Dr. Stack's analysis of the beads amounted to no more than a visual inspection—and thus was no more “scientific” than Dr. Clifford's analysis that Purolite attacks.) Moreover, Dr. Stack did not attempt to offer any explanation, scientific or otherwise, for the outcome that differed from his expectation that the

permanganate would run through to the center of the beads.

Other evidence belies Purolite's argument that every bead produced by Purolite's manufacturing process must have had a distinct, significant core that lacked permanganate and iron oxide. Dr. Stack testified, for instance, that the beads had a shell-core structure "on average". Francis Boodoo, Purolite's employee, testified in his deposition that "in general" the innermost portions of the beads did not contain iron oxide; but he stated that he was *not* testifying that iron oxide would never be found in the centermost portions of the beads, and he conceded the possibility that some beads in the FerrIX product did have iron oxide at the center. Purolite points to the deposition testimony of Dr. Sylvester, but that testimony was equivocal at best. Dr. Sylvester was referring to other types of beads when he testified that a white center would indicate that permanganate did not seem to have reached the center of the bead, and he clarified that the white center indicated only a non-uniform distribution and that there still could be small amounts of permanganate or iron at the center. Dr. Clifford only conceded that *some* beads had a shell-core structure.<sup>4</sup>

Perhaps most damning for Purolite is the photograph taken by Mr. D'Alessandro of cleaved beads that Purolite offered into evidence (Exhibit 698). At trial, Purolite meant for this exhibit to show the beads' shell-core structure, with a brown shell and a

---

<sup>4</sup>Purolite insists that plaintiffs conceded in their summary judgment brief, as an undisputed fact, that the beads had a shell-core structure. Purolite's motion for summary judgment, however, was based on a view of the evidence in the light most favorable to Purolite. Plaintiffs did not concede that fact for all purposes.

whitish core. One of the five cleaved beads, however, has a much smaller core than three of its fellows, and another bead appears to have no distinct white core at all, with the color merely fading to a lighter shade of brown at the center. Thus, Purolite's own evidence suggests that not all beads have a substantial whitish core. Purolite did not offer any evidence establishing that every bead must have a substantial core, or any evidence relating to the relative size of the cores. Moreover, the Court has never ruled that the presence of a shell-core structure precludes the presence of at least some amount of iron oxide within the core portion.

Accordingly, the Court concludes that Dr. Clifford's opinion is not necessarily contrary to science, as Purolite argues. Purolite did not establish as a matter of science that no bead could have iron oxide at the center even though iron was found at the center. Because Dr. Clifford's opinion is supported by evidence other than his own expertise and experience, there is no basis to exclude his opinion as improper *ipse dixit* testimony.

The Court therefore concludes, based on Dr. Clifford's testimony and the other evidence discussed herein, that the jury's verdict of infringement had a legally-sufficient evidentiary basis. The Court thus denies Purolite's motion for judgment as a matter of law with respect to the issue of infringement.

### C. *Willfulness*

Purolite also seeks judgment as a matter of law on plaintiffs' claim that Purolite's infringement was willful. The Federal Circuit has set forth the following two-pronged

standard for showing the requisite objective recklessness for willful infringement:

[T]o establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. The state of mind of the accused infringer is not relevant to this objective inquiry. If this threshold objective standard is satisfied, the patentee must also demonstrate that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer.

*In re Seagate Technology, LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (citation omitted).

Purolite first argues that plaintiffs failed to show, by clear and convincing evidence, an objectively high likelihood that it infringed these claims of the Patent and that the claims were valid. Purolite argues that, despite the verdict of infringement, it asserted strong and reasonable arguments, including its arguments that there was no iron oxide at the center of the beads, that “throughout” should be interpreted by the Court to require the use of a stoichiometric amount of iron oxide (which, if adopted by the Court, would have doomed any infringement claim), that these claims were invalid for lack of enablement, and that another claim of the Patent, Claim 15, was invalid as anticipated by prior art (on which issue Purolite prevailed). Plaintiffs argue in response that the Court rejected Purolite’s proposed claim construction as unsupported, that the fact that Purolite prevailed on one claim of the Patent is not dispositive, and that the case presented at trial was not a close one, as evidenced by the jury’s quick verdict in plaintiffs’ favor on the issues of infringement and invalidity.

In multiple cases in the last three years, the Federal Circuit has overturned or

upheld the overturning of a jury’s verdict of willful infringement, based on the plaintiff’s failure to satisfy the objective prong of the *Seagate* test. *See, e.g., Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1310-11 (Fed. Cir. 2011); *Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319-1320 (Fed. Cir. 2010); *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1335-37 (Fed. Cir. 2009). In *DePuy*, the court agreed with the district court and the defendant that “there was no legally sufficient evidentiary basis to find an objectively high likelihood under *Seagate*’s first prong” because the defendant “presented a substantial question of noninfringement under the doctrine of equivalents.” *DePuy*, 567 F.3d at 1336. The court concluded as follows:

The jury could have reasonably found for either party on the question of equivalence. While the fact that an issue was submitted to a jury does not automatically immunize an accused infringer from a finding of willful infringement, the record developed in the infringement proceeding in this case, viewed objectively, indisputably shows that the question of equivalence was a close one, particularly insofar as equivalence requires an intensely factual inquiry. The mere fact that the jury ultimately found equivalence does not diminish the difficulty of their task, which must be viewed objectively. Accordingly, the district court was correct to rule on JMOL that an objectively high likelihood of infringement could not have been found under *Seagate*’s first prong.

*Id.* at 1337 (internal quotation and citation omitted).

In *Spine Solutions*, the Federal Circuit reversed a district court’s denial of a defendant’s motion for judgment as a matter of law on the issue of willfulness. *See* 620 F.3d at 1320. The court cited *DePuy* in noting that the “‘objective’ prong of *Seagate* tends not to be met where an accused infringer relies on a reasonable defense to a charge

of infringement.” *See id.* at 1319 (citing *DePuy*, 567 F.3d at 1336-37). The court held that even though sufficient evidence supported the jury’s finding against the defendant on the issue of obviousness, the defendant had not been objectively reckless in relying on that defense, as the defendant had “raised a substantial question as to the obviousness” of the patent. *See id.* The court further noted that the district court had expressly stated that the defendant’s obviousness arguments had been “reasonable”. *See id.* at 1319-20. Thus, the court concluded that substantial evidence did not support the jury’s finding that the defendant had “acted despite an objectively high likelihood that its actions constituted infringement of a valid patent.” *See id.* at 1320.

Finally, in *Uniloc*, the court affirmed the district court’s judgment as a matter of law in favor of the defendant, despite the jury’s verdict in favor of the plaintiff on the issue of willfulness. *See* 632 F.3d at 1310. The court applied the following standard: “If the accused infringer’s position is susceptible to a reasonable conclusion of no infringement, the first prong of *Seagate* cannot be met.” *Id.* (citation omitted).

Applying the standards and reasoning from these cases, the Court concludes that there was no objectively high likelihood here that Purolite infringed valid claims of the Patent, and thus that *Seagate*’s first prong for willfulness has not been satisfied in this case. The Court agrees with plaintiffs that Purolite’s construction of the term “throughout” proved unsupported. The Court concludes, however, that although Purolite did not ultimately prevail in the jury room, it did present strong and reasonable arguments concerning the issue of infringement, based on a well-qualified expert’s

opinion and testing that permanganate did not reach the center of the beads and thus could not have formed iron oxide there, as well as on other evidence that the use of a substoichiometric solution generally produced beads with a distinct whitish core. Purolite also succeeded in invalidating one independent claim of the Patent, and it presented credible arguments to the jury, again based on expert testimony, that the other independent claim and its dependent claims were not enabled and thus were invalid. The case presented a true battle of well-qualified experts, the issues were intensely factual, and the jury could reasonably have found in favor of Purolite on either infringement or invalidity. Viewing the matter objectively, Purolite raised a substantial question as to its liability. Accordingly, under the Federal Circuit's standards, *Seagate's* objective prong is not satisfied in this case.<sup>5</sup>

In light of this ruling, the Court need not consider the application of *Seagate's* subjective prong. See *Uniloc*, 632 F.3d at 1311; *DePuy*, 567 F.3d at 1337. The Court

---

<sup>5</sup>Plaintiffs cite *i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831 (Fed. Cir. 2010), in which the Federal Circuit refused to overturn a jury's verdict of willfulness. In that case, the court stated that "[t]he fact that Microsoft presented several defenses at trial, including noninfringement and invalidity, does not mean the jury's willfulness finding lacks a sufficient evidentiary basis," and that "[b]ased on its own assessment of the evidence and Microsoft's defenses, the jury was free to decide for itself whether Microsoft reasonably believed there were any substantial defenses to a claim of infringement." See *id.* at 860. The Court does not find *i4i* to be as helpful or persuasive as the other cases cited above, however. In *i4i*, the court did not indicate that the defendant's positions were objectively reasonable or strong, and its analysis generally focused on the defendant's state of mind, which may not be considered for purposes of applying *Seagate's* objective prong. Thus, *i4i* is distinguishable from the present case, in which Purolite's strong and reasonable and credible arguments precluded a reasonable finding of an objectively high likelihood of infringement of a valid patent.



grants Purolite's motion for judgment as a matter of law to this extent, and Purolite is awarded judgment on plaintiffs' claim of willful infringement.<sup>6</sup>

*D. Alternative Motion for a New Trial*

In its renewed motion, in the alternative to its motion for judgment as a matter of law, Purolite moves for a new trial on the issues of noninfringement and willfulness. *See* Fed. R. Civ. P. 50(c)(1) (if the court grants a renewed motion for judgment as a matter of law, it must also conditionally rule on any motion for a new trial).

Purolite first seeks a new trial based on its argument that the jury's verdicts are against the great weight of the evidence, for the same reasons argued with respect to its motion for judgment as a matter of law. A motion for a new trial made on the ground that the jury's verdict is against the weight of the evidence is committed to the sound discretion of the trial court. *Veile v. Martinson*, 258 F.3d 1180, 1188 (10th Cir. 2001) (citing *Getter v. Wal-Mart Stores, Inc.*, 66 F.3d 1119, 1125 (10th Cir. 1995)). The evidence is viewed in the light most favorable to the plaintiff. *Macsenti v. Becker*, 237 F.3d 1223, 1235 (10th Cir. 2001). The "inquiry focuses on whether the verdict is clearly, decidedly or overwhelmingly against the weight of the evidence." *Veile*, 258 F.3d at 1188 (citing *Getter*, 66 F.3d at 1125). In assessing the propriety of granting a new trial, the court must bear in mind that "determining the weight to be given to the testimony,

---

<sup>6</sup>Because the Court has addressed the same issues in ruling on Purolite's renewed motion, the Court denies as moot Purolite's original motion for judgment as a matter of law and to strike testimony, which Purolite filed at the close of plaintiffs' case.

drawing inferences from the facts established, resolving conflicts in the evidence, and reaching ultimate conclusions of fact” are functions within the sole province of the jury. *Id.* at 1190-91 (quoting *Thunder Basin Coal Co. v. Southwestern Pub. Serv. Co.*, 104 F.3d 1205, 1212 (10th Cir. 1997)).

With respect to the issue of infringement, the Court denies a new trial on this basis, for the same reasons set forth above. With respect to the issue of willfulness, the Court concludes that the jury’s verdict was against the great weight of the evidence with respect to the objective prong of the analysis. Accordingly, the Court conditionally grants a new trial on that issue, in the event that the Court’s judgment in Purolite’s favor on that issue is ultimately overturned.

Purolite also seeks a new trial based on the following allegations of trial error by the Court: “denial of the motion for bifurcation; denial of the motion in limine to exclude evidence at trial relating to the Agreement; refusal to instruct the jury that Purolite’s former licensee status is irrelevant to infringement; and admittance of Layne’s arguments regarding the ‘name change’ from ArsenX to FerrIX.” The Court rejects each of those bases for a new trial.

The Court denied Purolite’s motion for bifurcation of the trial into infringement and willfulness/damages phases, which Purolite filed only a few days before trial. Purolite has not shown how the Court erred and abused its broad discretion in ruling that a single trial would not be unfair to Purolite. *See York v. American Tel. & Tel. Co.*, 95 F.3d 948, 957 (10th Cir. 1996) (district court possesses broad discretion in deciding

whether to bifurcate). Purolite’s only argument consists of its post-hoc reasoning that in deciding infringement the jury was confused by plaintiffs’ focus on Purolite’s deceptive acts, which bore only on the issue of willfulness. The Court still believes, however, that the jury could easily separate the issues of infringement (which turned on the makeup of the beads) and willfulness, and that a single trial did not unfairly prejudice Purolite. Thus, the Court denies this basis for a new trial.

In its second basis for a new trial based on trial error, Purolite claims that the Court erred in “[denying] the motion in limine to exclude evidence at trial relating to the Agreement.” Purolite made no such motion in limine, however. Purolite sought to exclude the characterization of Purolite as a “licensee of the patent.” The Court *granted* that motion and instructed that the relationship be accurately described at trial. Purolite has not cited to any specific point in the trial at which that instruction was violated. Purolite also sought to exclude evidence of its breaches of the Agreement, its use of “confidential information,” or the injunction ordered by the Court based on Purolite’s breach of the Agreement between the parties. The Court denied the motion with respect to “confidential information” and the fact of Purolite’s breaches (as relevant to the issue of contract damages), but it *granted* the motion with respect to the injunction and details about the breaches. Again, Purolite has not cited any instance at trial in which that order was not followed. Nor has Purolite pointed to any evidence about “confidential information” or the fact of its breaches that should have been excluded. Again, Purolite has not shown that the Court committed prejudicial error with respect to any particular

evidence or argument, including any evidence or argument to which Purolite objected at trial.

Purolite did propose the following jury instruction: “Purolite’s prior authorization under an agreement to use the patented technology is irrelevant to proving patent infringement.” The Court concluded that there was no danger of the jury’s confusion on that issue, and it rejected that proposed instruction as unnecessary. The Court now concludes that it did not commit prejudicial error in so concluding. Purolite has not cited any authority requiring such an instruction, nor has Purolite explained why the instruction was necessary for an accurate statement of the law to govern the jury’s deliberations. Purolite was certainly free to argue to the jury the point asserted in its proposed instruction.

Finally, Purolite asserts that the Court erred in admitting plaintiffs’ “arguments regarding the ‘name change’ from ArsenX to FerrIX.” Purolite argues that such arguments were inflammatory and impugned its character. Such evidence was clearly relevant to the issue of willfulness, however, and Purolite has again failed to cite to specific evidence or argument from the trial that the Court admitted over Purolite’s objection. Accordingly, Purolite has failed to show that the Court committed prejudicial error entitling it to a new trial.

## **II. Plaintiffs’ Motion for a Permanent Injunction**

In light of its success in showing infringement of their patent, plaintiffs move for

a permanent injunction against Purolite as follows:

restricting Purolite from using any process that infringes claims 1, 7, 10, 11, 12, or 13 of U.S. Patent No. 7,291,578 (the “’578 patent”), including, but not limited to the process Purolite used to make FerrIX A33E, and from making, using, offering to sell, or selling any product made by the processes described in claims 1, 7, 10, 11, 12, and 13 of the ’578 patent, including, but not limited to, the product previously sold under the name FerrIX A33E.

In considering this motion, the Court applies the four *eBay* factors, recently stated by the Federal Circuit as follows:

Consistent with traditional equitable principles, a patentee seeking a permanent injunction must make a four-part showing:

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

*Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1148 (Fed. Cir. 2011) (quoting *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006)). In *Robert Bosch*, the court confirmed that in *eBay* the Supreme Court rejected the Federal Circuit’s prior presumption of irreparable harm arising from a finding of infringement. *See id.* at 1149.

The court cautioned, however, that the lack of such a presumption did not mean that a patentee should not be entitled to an injunction:

Although *eBay* abolishes our general rule that an injunction normally will issue when a patent is found to have been valid and infringed, it does not swing the pendulum in the opposite direction. In other words, even though a successful patent infringement plaintiff can no longer rely on presumptions or other short-cuts to support a request for a permanent injunction, it does not follow that courts should entirely ignore

the fundamental nature of patents as property rights granting the owner the right to exclude. Indeed, this right has its roots in the Constitution, as the Intellectual Property Clause of the Constitution itself refers to inventors' "exclusive Right to their respective . . . Discoveries." Although the Supreme Court disapproved of this court's absolute reliance on the patentee's right to exclude as a basis for our prior rule favoring injunctions, that does not mean that the nature of patent rights has no place in the appropriate equitable analysis. While the patentee's right to exclude alone cannot justify an injunction, it should not be ignored either.

The abolition of categorical rules and the district court's inherent discretion to fashion equitable relief, moreover, also do not mandate that district courts must act on a clean slate. Discretion is not whim, and limiting discretion according to legal standards helps promote the basic principle of justice that like cases should be decided alike. In this area, as others, a page of history is worth a volume of logic when it comes to discerning and applying those standards. This wisdom is particularly apt in traditional cases, such as this, where the patentee and adjudged infringer both practice the patented technology.

*See id.* at 1149-50 (citations and internal quotations omitted).

Thus, the Court first considers whether plaintiffs suffered an irreparable injury that cannot be adequately compensated by remedies at law such as monetary damages.<sup>7</sup> Owen Boyd, Layne's general manager, testified at trial (outside the presence of the jury) that monetary damages would not fully compensate Layne for the harm it has suffered from Purolite's infringement; that such harm would increase without an injunction; that

---

<sup>7</sup>Plaintiffs argue that Purolite has conceded these elements by failing to oppose at the summary judgment stage plaintiffs' request for an injunction for breach of the parties' agreement. The Court rejects this argument. In its summary judgment order, the Court noted that Purolite had not addressed the remedy of the injunction in opposing summary judgment on plaintiffs' claim for breach of contract. The Court does not deem Purolite to have waived the right to oppose entry of a different injunction later in the case.

Layne had lost business from customers that purchased Purolite's product, FerrIX, instead of ArsenX and Layne's other products; and that Purolite's infringement had caused confusion within a close-knit market and among regulators.

Purolite argues that Mr. Boyd failed to state specifically that Layne practiced the Patent, and it argues that plaintiffs therefore failed to provide any evidence that Layne had commercialized the Patent. Purolite cites to *MercExchange, L.L.C. v. eBay, Inc.*, 500 F. Supp. 2d 556 (E.D. Va. 2007) (on remand from Supreme Court's *eBay* decision), in which the court held that irreparable harm had not been shown in part because the patentee had consistently licensed the patent instead of engaging in commercial activity in practicing the patent. *See id.* at 570-71; *see also High Tech Medical Instrumentation, Inc. v. New Image Indus., Inc.*, 49 F.3d 1551, 1556 (Fed. Cir. 1995) ("Although a patentee's failure to practice an invention does not necessarily defeat the patentee's claim of irreparable harm, the lack of commercial activity by the patentee is a significant factor in the calculus.") (cited in *MercExchange*). *MercExchange* is inapposite, however, as the Court finds, based on the testimony of Mr. Boyd, that Layne does engage in commercial activity with which Purolite's infringing product would directly compete, and for which Layne pays royalties to Dr. SenGupta, the owner of the Patent. Thus there is no similar evidence in this case that Layne has consistently chosen to license the patent instead of engaging in commercial activity itself.

Purolite next argues a lack of evidence, based on Mr. Boyd's concession that he did not have any "evidence" on hand to support his testimony. Clearly, however, Mr.

Boyd was referring to documents and other *supporting* evidence; his own testimony constitutes evidence in support of a finding of irreparable harm. The Court also rejects Purolite's argument that Mr. Boyd provided evidence only of monetary damages, as Mr. Boyd also testified to lost business generally (including regeneration business) and confusion in the market and with regulators. Purolite also argues that plaintiffs refused to provide discovery concerning Layne's own sales of competing products, and that plaintiffs therefore should not be permitted to offer evidence of harm to Layne's business. The time to complain about a refusal to provide discovery has long since passed, however, and Purolite failed to object to Mr. Boyd's testimony at trial. Accordingly, the Court will consider that testimony.

Purolite also takes issue with a declaration by Dr. SenGupta submitted by plaintiffs in support of their motion, in which Dr. SenGupta stated that he would suffer irreparable harm from continued infringement by Purolite; that his royalties from owning the Patent fund his research and his efforts to bring clean water to impoverished areas in India; and that money damages alone would not be sufficient to remedy the harm from Purolite's infringement. Purolite questions whether Dr. SenGupta has standing to weigh in on this issue because only Layne has the right to enforce the Patent. Dr. SenGupta was added as a party to this case at the request of Purolite, however, and he retains rights relating to the Patent. Thus, harm to him would be relevant to the Court's consideration.

Purolite also seeks to strike Dr. SenGupta's statements concerning irreparable harm and the inadequacy of money damages, on the basis that such conclusory



statements lack any factual support. Dr. SenGupta did offer the factual statement concerning his use of royalties, and Mr. Boyd testified that Layne pays Dr. SenGupta royalties on its sales; thus, the Court recognizes plaintiffs' argument that a loss of business for Layne resulting from Purolite's infringement also affects Dr. SenGupta. For that reason, the Court denies the motion to strike the portions of Dr. SenGupta's declaration. The Court does agree with Purolite, however, that the sparse declaration is not especially helpful to the Court's analysis.

Finally, Purolite argues that any infringement could be adequately remedied by money damages in the form of royalties, as plaintiffs have demonstrated a willingness to license the patent. As noted above, however, Layne does sell its own products with which any infringing products would compete, and it also provided unrebutted evidence from Mr. Boyd, whom the Court found credible, that Layne suffered harm in the form of confusion in the market and with regulators.

Thus, the Court concludes, based on Mr. Boyd's testimony, that plaintiffs have shown that they have suffered an irreparable injury from Purolite's infringing activity that cannot be adequately compensated by remedies at law such as monetary damages. *See Robert Bosch*, 659 F.3d at 1155 (concluding that the patentee would continue to suffer irreparable harm from lost market share, lost business opportunities, and price erosion without an injunction, and that there was no reason to believe that the defendant would stop infringing or that those irreparable harms would otherwise cease).

With respect to the third *eBay* factor, the Court concludes that the balance of

hardships between the parties weighs in favor of an injunction. The Court noted above the importance of a patentee's right to exclude that the Federal Circuit emphasized in *Robert Bosch*. Plaintiffs also point out that Purolite is the world's second-largest producer of ion exchange resins, and Purolite concedes that FerrIX generated only a small percentage of its overall revenue. Purolite points to its \$1,500,000 investment in this product, and it argues that "it would be an unfair hardship to lose its entire investment simply because one day Layne decided that it did not want to license Purolite any longer." Purolite did realize a return on that investment through its sales of FerrIX for a number of years, however, and Layne had the right to terminate the license. The Court weighs this factor in favor of plaintiffs.

Finally, Purolite argues that, based on Dr. SenGupta's declaration, the public interest in clean water in India is best served by allowing any infringement to be remedied by the payment of royalties and not by an injunction. The Court rejects that argument, as Dr. SenGupta would lose royalties from Layne if an infringing product were allowed to compete, and at any rate, Dr. SenGupta has obviously decided that his work for clean water in India would be furthered and not be hindered by an injunction. On the other hand, the public has an interest in furthering a patentee's right to exclude. Accordingly, the Court concludes that the public interest would not be disserved by a permanent injunction.

Plaintiffs' request for an injunction is not supported only by the infringement verdict, but is also properly supported by credible evidence presented to the Court. The

four *eBay* factors weigh in favor of a permanent injunction in this case, especially in light of the Federal Circuit's view that an injunction remains appropriate in a traditional case in which both parties practice the patented technology, such as the present case. *See Robert Bosch*, 659 F.3d at 1150. Purolite has not taken issue with the particular terms or language of the injunction requested by plaintiffs. Accordingly, the Court grants plaintiffs' motion, and it hereby issues a permanent injunction against Purolite as requested by plaintiffs.

### **III. Plaintiffs' Motion for Enhanced Damages and Attorney Fees**<sup>8</sup>

#### *A. Enhanced Damages*

Plaintiffs seek enhanced damages of three times the damages found by the jury, pursuant to 35 U.S.C. § 284. Willful infringement is a prerequisite for an award of enhanced damages, however, and because the Court has awarded judgment to Purolite on plaintiffs' claim of willful infringement, plaintiffs may not recover enhanced damages. *See DePuy*, 567 F.3d at 1337. Accordingly, plaintiffs' motion for enhanced

---

<sup>8</sup>At the close of trial, the Court set specific deadlines for plaintiffs' motion for enhanced damages and for Purolite's response to that motion. Purolite has now moved to strike plaintiffs' reply brief in support of their motion for enhanced damages and attorney fees, on the basis that the Court did not expressly authorize a reply brief. The Court denies this motion. First, the Court's deadlines applied only to a motion for enhanced damages; thus, there is no basis to strike the portion of plaintiffs' reply addressed to attorney fees. Second, the local rules expressly provide that the moving party may file and serve a reply brief, *see* D. Kan. Rule 7.1(c), and the Court did not intend to override that rule and prohibit a reply brief in this instance.

damages is denied.

*B. Attorney Fees*

Plaintiffs also seek an award of their attorney fees in the amount of \$2,587,701.20 and their expenses in the amount of \$149,415.26, pursuant to 35 U.S.C. § 285. Section 285 provides: “The court in exceptional cases may award reasonable attorney fees to the prevailing party.” *Id.*

When deciding whether to award attorney fees under § 285, a district court engages in a two-step inquiry. First, the court must determine whether the prevailing party has proved by clear and convincing evidence that the case is exceptional. . . . If the district court finds that the case is exceptional, it must then determine whether an award of attorney fees is justified.

*MarcTec, LLC v. Johnson & Johnson*, 664 F.3d 907, 915-16 (Fed. Cir. 2012) (citations omitted). “A case may be deemed exceptional under § 285 where there has been willful infringement, fraud or inequitable conduct in procuring the patent, misconduct during litigation, vexatious or unjustified litigation, conduct that violates Federal Rule of Civil Procedure 11, or like infractions.” *Id.* at 916 (internal quotation and citation omitted).

Plaintiffs first argue that the present case is exceptional for purposes of Section 285 because of Purolite’s willful infringement. The Court’s judgment in Purolite’s favor on plaintiffs’ claim of willful infringement disposes of that argument.

Plaintiffs also argue that the case is exceptional because of Purolite’s vexatious and unjustified conduct throughout the litigation. Plaintiffs have listed 28 acts by Purolite that plaintiffs argue constitute vexatious litigation conduct. Purolite responds that its conduct amounts merely to a vigorous defense of the patent claims and did not

rise to the level of vexatious conduct.

The Court expressed its concern and dismay on more than one occasion during the course of this case that *each* side's counsel were not acting with the civility and cooperation that the Court would hope to see, and the conduct of *both* sides and their counsel no doubt contributed in some manner to the protracted and contentious nature of the litigation between the parties. The Court cannot conclude, however, that the conduct by either side rose to the level of vexatious and unjustified litigation for purposes of applying Section 285. Accordingly, the Court concludes that plaintiffs have failed to show by clear and convincing evidence that Purolite's conduct in litigation made this case exceptional as required for an award of fees and expenses.

With respect to the particular conduct alleged by plaintiffs, the Court generally agrees with Purolite's responses to plaintiffs' 28 examples. The Court addresses those examples as follows (the numbers correspond to the order in which the examples were listed by plaintiffs):

Item 1. Plaintiffs complain that Purolite should have admitted earlier in the litigation, as it did at trial, that the first version of Purolite's product FerrIX was identical to Purolite's last version of ArsenX. Plaintiffs point to a number of their factual statements at the summary judgment stage that Purolite attempted to controvert. In its summary judgment briefs, however, Purolite conceded that only a name change occurred when FerrIX was first introduced, and the Court relied on that concession in granting plaintiffs summary judgment on one contract claim. Moreover, although plaintiffs

complain about increased costs from this alleged refusal to make such an admission, plaintiffs already had accumulated their evidence on the issue at the time of the summary judgment briefing. Plaintiffs have not provided any examples of a specious denial of this fact by Purolite prior to summary judgment. Thus, the Court cannot conclude that Purolite improperly increased the amount of litigation by its statements on this issue.

Items Relating to Discovery. Plaintiffs complain about various conduct by Purolite during the course of discovery, but plaintiffs have failed to show that Purolite vexatiously increased litigation by those acts. The number of document requests ( items 2 and 3) or requests for admission (4) or third-party subpoenas (5) does not show misconduct by itself, and in fact the Court denied plaintiffs’ motion for a protective order based on the number of requests for admission (4). The fact that Purolite used only one produced document at trial does not mean that the requests were improper. (For instance, only a few of the total issues in the case were tried, and plaintiffs had already introduced a number of exhibits.) Any objections to Purolite’s discovery responses or requests—including complaints about the method of production of e-mails (8), the failure to produce invoices (14), Purolite’s objections to requests for admission (15), and allegedly identical requests by Purolite after entry of a protective order (17)—should have been made by motion to compel or motion for protective order at the time of the request.<sup>9</sup> Plaintiffs complain about Purolite’s refusal to admit certain facts upon requests

---

<sup>9</sup>The fact that plaintiffs did not seek relief from the Court at the time does not  
(continued...)

for admission (4), but Purolite's denials were based on their objections, which, again, should have been challenged by motion at that time. The fact that Purolite requested sanctions against plaintiffs eleven times (6) does not show misconduct, as those requests generally accompanied arguments on discovery motions, and such requests are not atypical in a complex civil case. *See, e.g.*, Fed. R. Civ. P. 37(a)(5) (providing for award of expenses relating to discovery motions). The parties dispute whether Purolite interfered with compliance with a third-party subpoena (18), and the Court is not persuaded that Purolite engaged in misconduct or filed a false declaration. The Court does not find the service of deposition notices without conferral (20) necessarily to constitute misconduct without a showing that Purolite actually refused to confer on the dates that the depositions were conducted. Service of a third-party deposition subpoena without notice to plaintiff on a single occasion (21) (Purolite insists that the mistake was inadvertent) does not constitute vexatious litigation. Finally, the Court does not find deposition testimony by Jacob Brodie, in which Mr. Brodie stated that he could not state that certain sales figures were accurate without checking them against the computer data even though he had compiled those figures (13), to represent vexatious conduct;

---

<sup>9</sup>(...continued)

necessarily preclude a finding that Purolite's requests or responses were improper. Nevertheless, plaintiffs are required to show an exceptional case by clear and convincing evidence, and the fact that plaintiffs did not seek relief (especially since neither party has been shy about fully litigating every dispute) at least raises the reasonable inference either that Purolite's positions were justified or that plaintiffs suffered little or no prejudice from those positions.



moreover, any challenge to such testimony should have been made at that time.

Item 7. Plaintiffs’ overreaching is best demonstrated by its listing of Purolite’s five motions for leave to file a sur-reply as an example of vexatious conduct. The mere fact that Purolite filed such motions certainly does not show misconduct—as plaintiffs would have to agree, as plaintiffs filed at least three such motions themselves.<sup>10</sup> Indeed, as Purolite points out, the filing of so many motions for leave to file a sur-reply gives rise perhaps to a stronger inference that plaintiffs consistently included new material in their reply briefs.

Item 9. Similarly, the Court is not impressed by the fact that Purolite’s summary judgment briefs totaled more than 400 pages. Lengthy briefs, by themselves, do not rise to the level of misconduct. Purolite filed only one summary judgment motion while responding to three such motions from plaintiffs (whose briefs exceeded 300 pages in total), and the motions raised a large number of issues, some of them complex. Moreover, plaintiffs have misrepresented the Court’s rulings in stating that Purolite was “wholly unsuccessful [at summary judgment] save for one limited issue.” In fact, as Purolite points out, it prevailed on a number of issues. Purolite was awarded summary judgment on its own claim for the invalidity of Claim 15 of the Patent; and on plaintiffs’

---

<sup>10</sup>No doubt in an attempt to insulate themselves from a comparison of their conduct with that of Purolite, plaintiffs argue that their own litigation conduct is irrelevant to this inquiry. Plaintiffs have argued, however, that Purolite’s conduct has unnecessarily increased the amount of litigation, and the Court must examine plaintiffs’ own litigation conduct in order to evaluate whether the protracted nature of these proceedings is more appropriately attributed to Purolite’s conduct.

claims based on one theory for breach of the parties' agreement, on marking estoppel, on indirect infringement, and on the doctrine of equivalents. Purolite also succeeded in preventing summary judgment on the issue of damages on Layne's claim for unpaid royalties, on plaintiff's claim for infringement of Claim 1, and on Purolite's invalidity defenses with respect to Claim 1. The Court does not find Purolite's summary judgment briefs to have been improperly excessive.

Items Relating to Purolite's Claims and Motion to Dismiss. The Court finds that Purolite did not engage in misconduct by asserting its counterclaims (10, 11, 12). Plaintiffs have not persuaded the Court that those claims were frivolous. Purolite withdrew its unfair competition claim at the summary judgment stage, and plaintiffs have not demonstrated that they suffered any significant additional costs from the assertion of that claim. The Court also finds that Purolite's motion to dismiss based on standing (22) was not frivolous. The Court did not "summarily den[y]" this motion, as plaintiffs have stated; rather, the Court issued a summary written order reflecting its denial of the motion, which denial it had fully explained on the record of a hearing conducted on the motion. Moreover, as Purolite notes, the document produced by plaintiffs in opposing the motion ultimately supported Purolite's successful argument at summary judgment that plaintiffs lacked standing to assert a claim for breach of the parties' agreement based on breach of a second agreement.

Items Relating to Conduct at Trial. The Court is not persuaded that Purolite's conduct at trial, including with respect to notifying plaintiffs about whether witnesses

would appear live (23), rose to the level of vexatious misconduct. The Court was not offended by Purolite's use of the Stack declaration at trial (26), and the Court is not convinced that Purolite suborned perjury from Mr. Begg or Ms. Riddle (27).

Item 25. The Court is not persuaded that Purolite engaged in misconduct in refusing to admit liability for unpaid royalties. At summary judgment Purolite asserted a defense of prior material breach, and plaintiffs have not shown that they suffered any real prejudice in Purolite's delay in agreeing to the amount of those damages. The Court also notes that Purolite was forced to assert a similar claim against plaintiffs for failure to pay for shipments of product.

Item 28. Purolite's notice of appeal from the Court's summary judgment order may or may not prove premature, but the fact that Purolite intends to continue litigation of this case in the Tenth Circuit does not necessarily constitute conduct that exceeds a properly vigorous litigation strategy.

Items Relating to Improper Conduct by Purolite. The Court does agree that Purolite did act improperly in at least a few instances during the litigation of this case. For example, Purolite improperly instructed its witness not to answer questions about certain criminal convictions (16), took a deposition without providing proper notice to plaintiffs (19), and filed a motion to alter or amend the Court's summary judgment order on the eve of trial that the Court viewed as a delay tactic (24). The Court has already considered the appropriate sanctions in the first two examples, however, and plaintiffs suffered no prejudice from the motion to alter or amend, as the Court denied that motion

the next day. The Court does not find these instances to rise to the level of vexatious conduct in the course of this litigation for purposes of Section 285.

In summary, the Court is not persuaded that Purolite's conduct was intended solely to increase plaintiffs' burden in litigating this case, as plaintiffs contend. In the Court's view, the "scorched-earth" tactics were not limited solely to Purolite, as *each* side made it a consistent practice to challenge fully every action and position taken by the other side. The Court does not find that Purolite's conduct as a whole exceeded a vigorous litigation of the parties' claims and defenses. Accordingly, the Court finds that Purolite has not engaged in misconduct or in vexatious or unjustified litigation, and the Court concludes that plaintiffs have not shown by clear and convincing evidence that this case is exceptional for purposes of Section 285.

The Court denies plaintiffs' request for fees and expenses on other grounds as well. For instance, plaintiffs have utterly failed to support their claim for reasonable fees and expenses incurred in litigating the patent claims. In support of this claim, plaintiffs have provided only a declaration from Layne's general counsel stating that plaintiffs incurred \$2,587,701.20 in attorney fees and \$149,415.26 in costs in this case; that supporting documentation is available upon request; that attorneys worked 7,422.4 hours on this case at an average rate of \$328 per hour; that support staff worked 1,055.3 hours on this case at an average rate of \$145.49 per hour; and that the time spent, hourly rates, and total fees and expenses incurred were reasonable. Plaintiffs did not provide copies of the billing statements, or even a breakdown of the attorneys and support personnel

with their qualifications and hourly rates. Thus, the Court cannot calculate an appropriate lodestar figure, or otherwise analyze the reasonableness of plaintiffs' claim, as it is wholly unable to judge whether the hours worked or the hourly rates charged were reasonable. In addition, and most significantly, this case involved substantial litigation of claims other than the parties' patent claims, and plaintiffs have made no attempt to determine the reasonable fees and expenses incurred with respect to the patent claims only, for which Section 285 provides a basis for recovery. *See Gjerlov v. Schuyler Labs., Inc.*, 131 F.3d 1016, 1025 (Fed. Cir. 1997) ("When an action embraces both patent and non-patent claims, no fees under section 285 can be awarded for time incurred in litigation of non-patent issues.") (quoting *Machinery Corp. of Am. v. Gullfiber AB*, 774 F.2d 467, 475 (Fed. Cir. 1985)).

In their reply brief, plaintiffs address this deficiency by stating as follows:

At this stage, plaintiffs have asked this Court for a *determination* that the Court *will* award fees and Plaintiffs have provided preliminary evidence of those fees. If the Court determines that it will award fees, but needs more evidence to determine the amount of fees, plaintiffs are happy to submit whatever further evidence and follow any additional process the Court would like.

It is clear, however, that plaintiffs sought more than a mere determination of liability for fees in its initial motion and memorandum. For instance, plaintiffs sought awards of their fees and expenses in specific amounts, representing the full amount of their fees and expenses incurred; they submitted a declaration stating that those fees and expenses were reasonable; they argued that the Court should award them the full amount of fees and

expenses in undertaking the second step in the two-step analysis set forth above; and they argued that such an award would not be an abuse of discretion and would be consistent with controlling precedent. With respect to the amount requested, plaintiffs argued that Purolite must have spent even more than plaintiffs and thus should not be in a position to question plaintiffs' costs. Thus, the Court cannot agree that plaintiffs intended all along to address the amount of its request in a subsequent proceeding.<sup>11</sup> In seeking and arguing for a specific award, plaintiffs were obliged to support that request with proper and sufficient evidence. Plaintiffs' failure to do so provides another basis for denying plaintiffs' request for fees and expenses.

Finally, plaintiffs have failed to comply with the required procedure set out in D. Kan. Rule 54.2. That rule provides for a motion for statutory attorney fees, then promptly-initiated consultation with the opposing party, and then the filing of a memorandum with the factual basis for the motion. *See id.* The rule expressly provides that the court may not consider a motion for fees until the moving party has filed a statement of compliance with the consultation requirement. In this case, plaintiffs filed their motion and supporting memorandum simultaneously, without a statement or any other suggestion of a consultation with Purolite. Indeed, even after Purolite pointed out this defect in its response brief, plaintiffs refused to cure that defect or even to address

---

<sup>11</sup>Plaintiffs' arguments that Purolite engaged in conduct that increased the amount and costs of litigation and that Purolite should therefore be punished for that conduct are undermined by this disingenuous explanation that it intended a protracted, two-phase proceeding all along.

the local rule in their reply brief. Therefore, plaintiffs' motion is properly denied for that reason as well.

Accordingly, the Court denies plaintiffs' motion for an award of attorney and fees and expenses.

IT IS THEREFORE ORDERED BY THE COURT THAT defendant Purolite's renewed motion for judgment as a matter of law and to strike testimony (Doc. # 698) is **denied in part and granted in part**. The motion to strike testimony is denied. The motion for judgment as a matter of law is denied with respect to the issue of infringement. The motion for judgment as a matter of law is granted with respect to the issue of willfulness, and judgment is awarded to Purolite on that claim. The alternative motion for a new trial is denied, except that if the Court's judgment in favor of Purolite on the issue of willfulness were overturned, it would order a new trial on that issue on the basis that the jury's verdict was against the great weight of the evidence.

IT IS FURTHER ORDERED BY THE COURT THAT Purolite's original motion for judgment as a matter of law and to strike testimony (Doc. # 666) is **denied as moot**.

IT IS FURTHER ORDERED THAT plaintiffs' motion for a permanent injunction (Doc. # 710) is **granted**. Purolite is hereby permanently enjoined from using its process for the manufacture of its product FerrIX A33E or any other process that infringes

Claims 1, 7, 10, 11, 12, or 13 of U.S. Patent No. 7,291,578, and from making, using, offering to sell, or selling FerrIX A33E or any other product made by the processes described in those Claims of the Patent.

IT IS FURTHER ORDERED THAT Purolite's motion to strike a portion of a supporting affidavit by Dr. SenGupta (Doc. # 717) is **denied**.

IT IS FURTHER ORDERED THAT plaintiffs' motion for enhanced damages and attorney fees (Doc. # 680) is **denied**.

IT IS FURTHER ORDERED THAT Purolite's motion to strike plaintiffs' reply brief (Doc. # 701) is **denied**.

IT IS SO ORDERED.

Dated this 16th day of May, 2012, in Kansas City, Kansas.

s/ John W. Lungstrum \_\_\_\_\_  
John W. Lungstrum  
United States District Judge