

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ERICSSON INC.,	§	
TELEFONAKTIEBOLAGET LM	§	
ERICSSON,	§	Case No. 2:15-cv-00011-RSP
	§	
<i>Plaintiffs,</i>	§	
	§	
v.	§	
	§	
TCL COMMUNICATION TECHNOLOGY	§	
HOLDINGS, LTD., TCT MOBILE	§	
LIMITED, TCT MOBILE (US) INC.,	§	
	§	
<i>Defendants.</i>	§	

MEMORANDUM OPINION AND ORDER

After a four-day trial, the jury unanimously found that TCL willfully infringed claims 1 and 5 of United States Patent No. 7,149,510 by selling phones and devices equipped with the Google Android operating system, and the jury awarded \$75 million as a lump sum royalty.¹ The court previously ordered a new trial on damages after finding Ericsson’s damages theory unreliable, *see* ECF No. 456, but the court now reconsiders that order, reinstates the jury’s verdict in full, and resolves all other remaining disputes.

DISCUSSION

TCL’s motions for judgment as a matter of law and for a new trial raise procedural issues not unique to patent law and are therefore evaluated under regional circuit law. *Promega Corp. v. Life Techs. Corp.*, 875 F.3d 651, 659 (Fed. Cir. 2017). The Fifth Circuit is “especially deferential” to a jury verdict. *Olibas v. Barclay*, 838 F.3d 442, 448 (5th Cir. 2016) (quoting *Evans v. Ford Motor Co.*, 484 F.3d 329, 334 (5th Cir. 2007)) (internal quotation marks omitted). A party is only

¹ Additional background can be found in a prior order. *See* ECF No. 359.

entitled to judgment as a matter of law on an issue where no reasonable jury would have had a legally sufficient evidentiary basis to find otherwise. Fed. R. Civ. P. 50(a); *Bear Ranch, L.L.C. v. Heartbrand Beef, Inc.*, 885 F.3d 794, 801 (5th Cir. 2018). The evidence must be reviewed “in the light most favorable to the non-movant.” *Id.* (quoting *Omnitech Int’l, Inc. v. Clorox Co.*, 11 F.3d 1316, 1323 (5th Cir. 1994)). The Fifth Circuit will reverse the denial of a motion for judgment as a matter of law “only if the jury’s factual findings are not supported by substantial evidence or if the legal conclusions implied from the jury’s verdict cannot in law be supported by those findings.” *MM Steel, L.P. v. JSW Steel (USA) Inc.*, 806 F.3d 835, 843 (5th Cir. 2015) (citation omitted).

A decision to grant a new trial must also overcome significant deference to the jury’s verdict. “A trial court should not grant a new trial on evidentiary grounds unless the verdict is against the great weight of the evidence.” *Seibert v. Jackson Cty., Mississippi*, 851 F.3d 430, 439 (5th Cir. 2017) (quoting *Whitehead v. Food Max of Miss., Inc.*, 163 F.3d 265, 269 (5th Cir. 1998)). This requires the movant to show “an absolute absence of evidence to support the jury’s verdict.” *Id.* (quoting *Whitehead*, 163 F.3d at 269).

I. Infringement

TCL makes two arguments in support of judgment as a matter of law that TCL has not infringed. ECF No. 427 at 3-8. Both arguments relate to the phrase “interception module,” which appears in claim 1 of the ’510 patent:

A system for controlling access to a platform, the system comprising:

a platform having a software services component and an interface component, the interface component having at least one interface for providing access to the software services component for enabling application domain software to be installed, loaded, and run in the platform;

an access controller for controlling access to the software services component by a requesting application domain software via the at least one interface, the access controller comprising:

an interception module for receiving a request from the requesting application domain software to access the software services component;

and a decision entity for determining if the request should be granted wherein the decision entity is a security access manager, the security access manager holding access and permission policies; and

wherein the requesting application domain software is granted access to the software services component via the at one least interface if the request is granted.

'510 Patent col.11 ll.1-23 (emphasis added). TCL's first argument is that the Android operating system does not include an "interception module" because the segments of code responsible for interception are not in the same place. ECF No. 427 at 3-6. TCL's second argument, as best as the court can understand it, is that the claims require the "interception module" to be separate from the "software services component," yet there was no evidence for the jury to conclude that these two components are separate in the Android operating system. *Id.* at 6-8. Neither argument is persuasive.

TCL's first argument was raised in a pretrial motion—TCL asked the court to construe "interception module" as a self-contained segment of source code, as opposed to code that is dispersed throughout an operating system. *See* ECF No. 359 at 19-20. TCL did not timely raise this claim construction argument, however, and the court found the argument waived. *Id.* Nevertheless, because it was not clear that TCL's argument was a matter for claim construction, the court permitted TCL's expert, Dr. Malek, to explain his understanding of the plain and ordinary meaning of the term "module" at trial. *Id.* (citing *Verizon Servs. Corp. v. Cox Fibernet Va., Inc.*, 602 F.3d 1325, 1330-41 (Fed. Cir. 2010) (distinguishing infringement from claim construction)); *see also Nobelbiz, Inc. v. Glob. Connect, LLC*, 876 F.3d 1326, 1330 (Fed. Cir. 2017) (O'Malley,

J., dissenting from denial of petition for rehearing en banc) (“The fact that parties’ experts might proffer differing definitions of a term’s plain and ordinary meaning to a jury should not be enough to justify removing that question from the jury’s consideration.”).

Ericsson’s expert, Dr. Jones, offered a competing understanding, explaining that the Android operating system included an interception “module” because it had code that is “a logically separable part of the program that has an identifiable functionality.” Trial Tr. vol. 2 (afternoon), 56:12-57:7, Dec. 6, 2017, ECF No. 404. In other words, Dr. Jones’s opinion was that regardless of where in the operating system the source code resided, segments of source code could work together in the Android operating system to perform the interception function, and such segments would be considered a “module” because they are logically distinct (in terms of function) from other portions of source code. *See id.*

Dr. Jones discredited Dr. Malek’s testimony by highlighting that Dr. Malek’s understanding of the term has not been consistent. In a claim construction declaration, Dr. Malek explained that “interception module” would be understood as software responsible for receiving a request to access the software services component from the application domain software and passing the request to the decision entity. *Id.* 58:3-8. Dr. Jones explained that this definition is consistent with his understanding, i.e., a segment of code that performs the interception function. *Id.* 58:4-24. Dr. Malek repeated essentially the same definition during his deposition. *Id.* 59:4-7. Yet at trial, Dr. Malek defined the term as a “program unit that is discrete and identifiable with respect to compiling, combining with other units, and loading.” *Id.* 60:6-8. Dr. Jones not only highlighted the inconsistency, but also explained how the Android operating system would satisfy each one of Dr. Malek’s definitions. *Id.* 58:4-60:24.

The real difference between the experts, according to Dr. Jones, had to do with the fact that the portions of code alleged by Ericsson to satisfy the “interception module” limitation were scattered in different places and in different files. *Id.* 60:25-61:9. Dr. Jones explained that in terms of computer science, it did not matter where the source code was located as long as the code segments were linked together in a way that made them logically discrete. *Id.* 61:10-25. Thus, “from the phone’s perspective, they’re executed right in a row.” *Id.* 61:21-22.

Not surprisingly, the jury discredited Dr. Malek’s testimony, and substantial evidence supports this finding. First, the jury could have credited Dr. Jones’s understanding that the Android system has an “interception module” because it includes logically distinct segments of code that interact together to perform the interception function. TCL’s argument to the contrary, that “[t]he only clear definition of the term ‘module’ was presented by TCL,” ECF No. 427 at 3, is meritless. Dr. Jones’s understanding of the term was not only clear, but it made sense in terms of computer science. Second, the jury could have credited Dr. Malek’s own prior definitions of the phrase, which were consistent with Dr. Jones’s definition. Third, the jury could have concluded that the Android system satisfies the definition Dr. Malek offered at trial inasmuch as the Android code segments are *logically* discrete and identifiable with respect to compiling and loading.

TCL’s second argument appears to be that Ericsson unwittingly limited the scope of the claims during trial by stating that the claims require a “layered” architecture. *See* ECF No. 427 at 6-7. According to TCL, this means that the “interception module” and “software services component” must be in separate places, yet there is no evidence to support that finding. *Id.* at 7. The testimony TCL cites as supporting a disclaimer of claim scope, however, has nothing to do with the claim requirements. The testimony related to the fact that the Android system contains the interception module and software services component in the same file. Trial Tr. vol. 1

(morning), 37:25-38:9, Dec. 5, 2017, ECF No. 399. Even so, according to Dr. Jones, the interception module and software services component are logically “separate and distinct things,” and indeed, in “[d]ifferent layers.” *Id.* 38:4-9. Thus, even if the claims require the interception module to be in a different “layer” than the software services component, the jury heard substantial evidence to support the finding that this requirement is satisfied.

To be clear, TCL’s infringement arguments are not about the jury improperly deciding a claim construction issue. This court has commented on the so-called “*O2 Micro* trap,” which can doom a jury verdict on appeal. *See Huawei Techs. Co. v. T-Mobile US, Inc.*, No. 2:16-cv-00052-JRG-RSP, 2017 WL 4070592, at *1 (E.D. Tex. Aug. 29, 2017), *adopted*, 2017 WL 4049251 (E.D. Tex. Sept. 13, 2017); *see also Nobelbiz*, 876 F.3d at 1330 (O’Malley, J., dissenting from denial of petition for rehearing en banc). There has not been a post-trial argument from TCL that it was improper to let the jury evaluate the experts’ competing understandings of the plain and ordinary meaning of the phrase “interception module.” Any such argument has been waived. *See Sage Products, Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1426 (Fed. Cir. 1997). Furthermore, Dr. Malek did not claim to be relying on a special meaning of the term “module” arising from the intrinsic record of the ’510 patent. The dispute simply related to the ordinary understanding of the term within the art.

II. Damages

The parties’ damages theories have been discussed in a prior opinion. *See* ECF No. 456; ECF No. 460 (redacted). Briefly, Ericsson contended on the basis of a consumer survey that about 28% of consumers would not have purchased an accused TCL device without the ability to grant or deny access to native functionality. *See* ECF No. 456 at 3-5. This 28% number was then applied directly to TCL’s at-risk profit to arrive at a \$3.41 royalty rate, which was factored into Ericsson’s lump sum royalty analysis, providing for a total damages estimate of \$245 million. *See id.* TCL

contended, on the basis of Ericsson's past licensing practices, that damages should be no more than \$2,465,000. *See id.* at 5-9. The jury credited Ericsson's theory and awarded \$75 million, which reflects a deduction attributable at least in part to unaccused products, as discussed more below. *See* ECF No. 390 at 1.

The court vacated the jury's damages verdict, concluding that (1) Ericsson's damages theory was unreliable; and (2) Ericsson's pursuit of unaccused products made a new trial on damages necessary. *See* ECF No. 456 at 9-15. As for Ericsson's damages theory, the court concluded that Mr. Mills' opinion was unreliable because it failed to account for patented features on a device that a consumer would consider just as essential as the accused security feature. *See id.* at 10-12. Extrapolating Ericsson's theory, in other words, would quickly result in the erosion of all of TCL's profit. *See id.*

Ericsson asks the court to reconsider this decision. *See* ECF No. 464. First, Ericsson contends that the court's decision conflicts with other courts' approval of damages theories such as the one Mr. Mills presented at trial. *See id.* at 1. Second, Ericsson contends that the court's order raises a flavor of a "royalty stacking" concern, but Ericsson emphasizes that an accused infringer's profit is not a cap on damages and that TCL never presented evidence regarding patents that covered other features a consumer would find essential. *See id.* at 7-9. The court agrees.

Two principles are at the heart of the court's reconsideration of the damages issue. First, "[a] jury's decision with respect to an award of damages 'must be upheld unless the amount is grossly excessive or monstrous, clearly not supported by the evidence, or based only on speculation or guesswork.'" *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1310 (Fed. Cir. 2009) (quotation and citations omitted). Second, "[e]stimating a reasonable royalty is not an exact science," and "the question of whether the expert is credible or the opinion is correct is generally

a question for the fact finder, not the court.” *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015).

It is often difficult to draw the line between a credibility issue and a *Daubert* issue in patent cases, but the flaw in Ericsson’s damages theory should have gone to the weight of the evidence, not its admissibility. “The primary purpose of the *Daubert* filter is to protect juries from being bamboozled by technical evidence of dubious merit, as is implicit in the courts’ insistence that the *Daubert* inquiry performs a ‘gatekeeper’ function.” *SmithKline Beecham Corp. v. Apotex Corp.*, 247 F. Supp. 2d 1011, 1042 (N.D. Ill. 2003), *vacated on other grounds*, 403 F.3d 1331 (Fed. Cir. 2005) (Posner, J., sitting by designation). Effective cross-examination and the presentation of contrary evidence should have been adequate to prevent the jury from being misled by Ericsson’s damages theory. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 596 (1993) (“Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.”). Indeed, any juror can understand that if one infringing feature on a device demands nearly a third of the device’s profit, it may become impossible to sell a profitable device. TCL made this point to the jury, but much less effectively than the court expected, and the point was clouded by other unpersuasive arguments. Thus, to the extent Mr. Mills overlooked that consumers considered other features essential, and that these features would demand additional royalties, the flaw went to the weight of Mr. Mills’ testimony.

Other courts have come to the same conclusion. *See* ECF No. 464 at 4-7. Mr. Mills presented his damages theory in *Sentius International, LLC v. Microsoft Corporation*, and the court declined to find it inadmissible under *Daubert*. *See* No. 5:13-CV-00825-PSG, 2015 WL 451950, at *9 (N.D. Cal. Jan. 27, 2015). Specifically, “Mills used Wecker’s survey to calculate

the revenue and profit that Microsoft would have allegedly lost if it had not included the accused spell and grammar check features in its accused products.” *Id.* Rejecting the same argument TCL made in its post-trial motion, the court concluded that “Mills’ income approach theory is not a hidden attempt to avoid the entire market value rule because Mills did not derive damages using Microsoft’s revenue and profit from all sales of the accused products.” *Id.* at *11. Two other decisions are consistent with the result in *Sentius*. See *Lucent Techs., Inc. v. Microsoft Corp.*, 837 F. Supp. 2d 1107, 1117 (S.D. Cal. 2011); *Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 794328, at *15 (N.D. Cal. Feb. 25, 2014).

A review of these cases also reveals that the court’s previous order gave more credit to TCL’s post-trial damages motion than was due. TCL made arguments identical to the ones rejected in *Sentius*, namely that Dr. Wecker’s survey was unreliable and that “Ericsson’s damages model violates the entire market value rule.” ECF No. 427 at 13-14. The survey itself was not unreliable, however, as the court has already explained, see ECF No. 456 at 11-12, and TCL’s entire market value argument did not clearly highlight the flaw in Mr. Mills’ opinion, see *id.* at 12. The problem identified by the court—that Mr. Mills directly applied the 28% survey result to the at-risk profit—is at best another way of framing TCL’s more convoluted argument, but a common sense articulation of the court’s point is nowhere to be found in TCL’s motion, see ECF No. 427, and was therefore not squarely addressed by Ericsson until its motion for reconsideration.

Even if TCL preserved the essence of the court’s point about Mr. Mills overlooking facts of the case, namely other features a consumer might consider essential, Ericsson is correct that TCL fell short of producing evidence to establish these facts. See ECF No. 464 at 7-9. The lack of evidence highlighting the flaw in Mr. Mills’ opinion is an important reason why the flaw should have gone to the weight of the evidence, not its admissibility. First, the jury did not hear evidence

about Mr. Mills' opinion regarding the other patents-in-suit, which the court relied on to illustrate how TCL's profit would quickly vanish. *See* ECF No. 456 at 10. Second, while there was evidence that consumers would consider a few other features essential to their purchase, including ability to make a call, text messaging, and Wi-Fi, *see* Trial Tr. vol. 1 (morning), 90:3-9:98:17, Dec. 5, 2017, ECF No. 398, the jury was not presented evidence that any one of these features was covered by another patent. At most, the jury heard evidence that the '510 patent was "one of many thousands of patents *potentially* that read on that phone." Trial Tr. vol. 2 (afternoon), 9:1-4, Dec. 6, 2017, ECF No. 404 (emphasis added). Although there are many patents that likely read on the accused devices, as far as the jury was concerned, this was only a possibility. *See id.*

Ericsson persuasively argues that the evidence presented at trial would not have been enough to warrant an instruction on royalty stacking. *See* ECF No. 464 at 8-9. The Federal Circuit has explained that "[t]he district court need not instruct the jury on hold-up or stacking unless the accused infringer presents actual evidence of hold-up or stacking." *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1234 (Fed. Cir. 2014). "The mere fact that thousands of patents are declared to be essential to a standard does not mean that a standard-compliant company will necessarily have to pay a royalty to each SEP holder." *Id.* Though this case did not deal with a patent declared essential to an industry standard, the Federal Circuit's point applies equally to testimony about unidentified patents that potentially cover the accused devices and the royalties those patents might demand. Indeed, Federal Circuit precedent suggests that TCL's theory about features covered by other unidentified patents would be unreliable opinion without actual evidence of royalty stacking. *See Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., Inc.*, 809 F.3d 1295, 1302 (Fed. Cir. 2015) ("[A]bstract recitations of royalty stacking theory . . . are insufficiently reliable.").

The concern that Ericsson's theory would erode all of TCL's profit should also have gone to the weight of the evidence. The law is clear that an accused infringer's profit is not a cap on a reasonable royalty. *See Powell v. Home Depot USA Inc.*, 663 F.3d 1221, 1238 (Fed. Cir. 2011) (“[I]t is settled law that an infringer's net profit margin is not the ceiling by which a reasonable royalty is capped.”). More important, while an accused infringer's profit is relevant to the analysis, *see id.*, TCL opened the door to evidence that TCL underestimated its profit. *See* Trial Tr. vol. 2 (afternoon), 63:1-3, Dec. 5, 2017, ECF No. 400 (Q. “Do you have any reason to doubt that [profit] figure?” A. “Yes.” Q. “What's that?”). The profit figure the parties referenced at trial, according to Mr. Mills, was the figure used in TCL's “financial reporting accounting,” which did not correlate to TCL's actual profit. *See id.* 63:5-25. Mr. Mills explained, for example, that TCL kept a war chest for patent royalties that were included in the financial reporting accounting as “costs,” even though royalties were never paid. *See id.* 64:1-19. These unpaid royalties, according to Mr. Mills, inflated costs “to the tune of more than \$50 million for some years.” *Id.* 64:1-5.

Ericsson also persuasively argues that references to unaccused products should not have necessitated a new trial on damages. *Cf.* ECF No. 456 at 12-15. TCL argues otherwise, but not because the discussion of unaccused products was prejudicial under Rule 403. *See* ECF No. 427 at 13. Rather, TCL's complaint is that the damages model “is flawed” and “contrary to law” inasmuch as a patentee “can only receive infringement damages on those devices that actually performed the patented method during the relevant infringement period.” *Id.* (quoting *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 576 F.3d 1348, 1358-59 (Fed. Cir. 2009)). Yet TCL was not assessed damages on unaccused products because the jury was instructed that lump sum damages are available only for “products Ericsson has accused in this case.” Trial Tr. 25:21-26:4,

Dec. 7, 2017, ECF No. 406; *See Weeks v. Angelone*, 528 U.S. 225, 234 (2000) (“A jury is presumed to follow its instructions.”).

The problem the court identified with Ericsson’s reference to unaccused products was that Ericsson’s damages theory looked identical to a running royalty analysis, yet both sides agreed that damages would be in the form of a lump sum. *See* ECF No. 456 at 12-15. It simply did not make sense for TCL to have willingly agreed to pay what was in effect a running royalty all at once in 2014 as a lump sum. *See id.* TCL’s post-trial damages motion, however, did not squarely raise this point. *See* ECF No. 427. TCL agreed that the parties would have entered into a lump sum license. *See, e.g.*, Trial Tr. vol. 1 (morning), 145:21-146:2, Dec. 6, 2017, ECF No. 402. Ericsson simply populated the “book of wisdom,” *see Lucent*, 580 F.3d at 1333, with information about projected sales of both accused and unaccused products. TCL did not counter Ericsson’s theory with evidence or argument that it would have been unusual for a sophisticated company like TCL to have graciously agreed to fully pay a lump sum royalty based on forecasts and projections, when it could have chosen to pay running royalties after accounting for actual sales. *See id.* Ordinarily, a running royalty analysis is not probative of a lump-sum agreement, *see Lucent*, 580 F.3d at 1327, but TCL’s concession renders this point moot.

TCL’s remaining arguments for judgment as a matter of law or a new trial on damages are not persuasive. The court has already explained that Dr. Wecker’s survey was not unreliable and that Mr. Mills’ opinion did not run afoul of the entire market value rule. *See* ECF No. 456 at 11-12. Mr. Mills’ royalty rate was not arbitrary, contrary to TCL’s suggestion, because Mr. Mills adequately grounded the split in at-risk profit by evaluating the parties’ respective bargaining positions at the hypothetical negotiation. *See* Trial Tr. vol. 2 (afternoon) 15:10-24:6, Dec. 5, 2017, ECF No. 400. TCL makes an argument about § 287’s limitation on damages that is difficult to

comprehend, *see* ECF No. 427 at 16-17, but suffice it to say that TCL did not object to Mr. Mills' testimony regarding notice of infringement before or during trial. The argument is therefore waived. *See, e.g., Montano v. Orange Cty., Texas*, 842 F.3d 865, 874 (5th Cir. 2016). Moreover, the argument is hard to square with TCL's position that payment would have been made four years early, which would have resulted in an exorbitant prejudgment interest award if the court applied the 11.4% discount rate assumed by both experts. *See infra* § V.

Although Ericsson presented the jury with damages estimates that accounted for future sales of unaccused products, the jury's \$75 million assessment is consistent with the court's instruction to award damages only for accused products. *See* Trial Tr. 25:21-26:4, Dec. 7, 2017, ECF No. 406; *Weeks*, 528 U.S. at 234 ("A jury is presumed to follow its instructions."). The undisputed royalty base of accused devices sold prior to trial was 21,415,223. Trial Tr. vol. 2 (afternoon), 26:3-14, Dec. 5, 2017, ECF No. 400. Applying Mr. Mills' upper-end royalty rate and present value calculation to this royalty base results in \$61.2 million in damages for devices sold up to trial. *Id.* 26:3-27:16, 45:1-7. The remaining \$13.8 million in damages conservatively accounts for future sales of accused products based on forecasts and inferences drawn from TCL's past sales. *See* Trial Tr. vol. 2 (afternoon), 15:22-16:6, 27:3-29:14, Dec. 6, 2017, ECF No. 404 (Mr. Martinez's projections); Trial Tr. vol. 2 (afternoon), 31:9-24, Dec. 5, 2017, ECF No. 400; *id.* 31:9-24 (discussion of TCL's accelerating sales). In addition, there are other ways they jury could have accounted only for accused products and arrived at the \$75 million assessment, as Ericsson explains. *See* ECF No. 441 at 8-9. Thus, while the jury's assessment includes damages for future sales of accused products, which by definition is what a lump sum payment reflects, the award did not necessarily include damages for future sales of unaccused products.

According to TCL, “[o]ther errors further tainted the jury’s damages award,” ECF No. 429 at 1, but the court is not persuaded. TCL contends that Ericsson’s initial request for \$245 million in damages was prejudicial, *id.* at 4-5, but the court fails to see why given that Ericsson’s reference should have been fertile ground for TCL to explore on cross-examination, and in fact, should have worked to TCL’s advantage in discrediting Mr. Mills’ theory. TCL failed to seize on the opportunity, and in any event, the reduced \$75 million assessment is an indication the jury was not swayed by Ericsson’s initial high demand. TCL makes a meritless accusation about Ericsson’s “repeated references to TCL as Chinese,” ECF No. 429 at 5, yet TCL cites only one instance in which Ericsson’s counsel referred to “Chinese executives,” which was simply a statement of fact. *See* Trial Tr. vol. 2 (afternoon), 73:9-11, Dec. 5, 2017, ECF No. 400. Similarly, TCL complains that Ericsson told the jury about TCL’s war chest full of unpaid patent royalties and referred to TCL’s “two sets of books,” but TCL opened the door to this evidence by asking Mr. Mills if he had any reason to doubt TCL’s stated profit margin. *See* Trial Tr. vol. 2 (afternoon), 63:1-3, Dec. 5, 2017, ECF No. 400 (Q. “Do you have any reason to doubt that [profit] figure?” A. “Yes.” Q. “What’s that?”). Finally, TCL complains about references to the Samsung agreement, ECF No. 429 at 7-8, but TCL stipulated to its admission and put the details at issue, as the court explained at the pretrial conference. *See* Hearing Tr. 74:20-77:5, 81:4-19, Nov. 11, 2017, ECF No. 366. For these reasons, the jury’s damages assessment is supported by substantial evidence, and a new trial on damages is unnecessary.

III. Willfulness and Enhanced Damages

The Patent Act provides that “the court may increase the damages up to three times the amount found or assessed.” 35 U.S.C. § 284. The Supreme Court’s decision in *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 136 S. Ct. 1923, 1933 (2016), clarified that “[t]he subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without

regard to whether his infringement was objectively reckless.” Yet “enhanced damages . . . are not to be meted out in a typical infringement case, but are instead designed as a ‘punitive’ or ‘vindictive’ sanction for egregious infringement behavior.” *Id.* at 1932. The Supreme Court described the requisite conduct as “willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate,” emphasizing that enhanced damages “are generally reserved for egregious cases of culpable behavior.” *Id.*

At the time of trial, there was uncertainty regarding how to implement *Halo*. An unanswered question was what role, if any, the jury must play. *See* ECF No. 359 at 10-11. One reading of *Halo* suggests that the factual inquiry is not merely whether the accused infringer knew of the patent and knew it was infringing, but rather whether the conduct has been “egregious.” *See WesternGeco L.L.C. v. ION Geophysical Corp.*, 837 F.3d 1358, 1364 (Fed. Cir. 2016) (“The district court, on remand, should consider whether ION’s infringement constituted an ‘egregious case[] of misconduct beyond typical infringement’ meriting enhanced damages under § 284 and, if so, the appropriate extent of the enhancement.”), *cert. granted on other grounds in WesternGeco LLC v. ION Geophysical Corp.*, 138 S. Ct. 734 (2018). Another reading of *Halo* suggests that the factual inquiry is simply whether the infringement is intentional, and it is then for the court to decide whether the conduct has been egregious enough to warrant enhancing damages. *See Halo*, 136 S. Ct. at 1933.

The latter reading, as the court saw it at the time, takes a portion of a traditionally fact intensive question away from the jury. In other contexts, juries decide not only whether a party acted intentionally, but also whether the culpable conduct is “malicious, gross, or oppressive,” for example. *See Pac. Mut. Life Ins. Co. v. Haslip*, 499 U.S. 1, 23 (1991). It is clear from § 284 that any damages enhancement is a matter for the court, but it is not clear from the statute or *Halo* that

the court, as opposed to the jury, should be deciding whether the culpable behavior goes beyond mere intentional conduct and becomes “wanton, malicious, bad-faith, . . . consciously wrongful, [or] flagrant,” for example. *See Halo*, 136 S. Ct. at 1932. Typically, when the legal standard includes adjectives such as “malicious” or “flagrant,” the Seventh Amendment right to have the matter decided by a jury is most evident. *See Worldwide Equip. of TN, Inc. v. United States*, No. CV 14-108-ART, 2016 WL 3574395, at *1 (E.D. Ky. June 23, 2016) (Thapar, J.) (“It’s difficult to win summary judgment when the legal question presented uses nebulous adjectives like ‘specialty’ and ‘substantially.’”). One juror’s “malicious” conduct might be another’s benign, competitive business activity. *See id.*

For that reason, the court gave a robust instruction to the jury, the goal being to let the jury decide not only whether the infringement was intentional, but also whether it was egregious. The instruction stated in relevant part:

Willful infringement does not mean merely that the accused infringer knew of the patent and knew that it was infringing. It requires something more.

A finding of willful infringement is reserved for the most egregious or shocking cases of intentional or culpable patent infringement. By culpable or intentional, I mean that the accused infringer must have known about the patent, must have known that the patent was valid, and must have known that its behavior was infringing the patent.

In addition, the infringer’s culpable or intentional infringement behavior must have been egregious or shocking—in other words, malicious, consciously wrongful, or done in bad faith.

The reason you are asked to decide whether any infringement was willful is because your finding may factor into my decision whether to enhance any damages that you award, or, in other words, to award punitive damages. This is because the law says that it’s my role to award any punitive damages for willful infringement.

Trial Tr. 27:23-28:16, Dec. 7, 2017, ECF No. 406. Thus, by finding that TCL willfully infringed, the jury not only determined that TCL’s infringement was intentional, but also that the conduct

was egregious or shocking. *See Weeks*, 528 U.S. at 234 (“A jury is presumed to follow its instructions.”).

The Federal Circuit has since offered helpful guidance. First, “the entire willfulness determination is to be decided by the jury.” *Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prod. Grp., LLC*, 879 F.3d 1332, 1353 (Fed. Cir. 2018). Second, this court’s willfulness instruction may have been more robust than it needed to be.² On the last day of trial, the Federal Circuit released its decision in *Arctic Cat Inc. v. Bombardier Recreational Products Inc.*, 876 F.3d 1350 (Fed. Cir. 2017), which approved a more modest instruction: “Arctic Cat must prove . . . that BRP actually knew or should have known that its actions constituted an unjustifiably high risk of infringement of a valid and enforceable patent,” *id.* at 1371 (quoting jury instruction).³ *Arctic Cat* clarified that “subjective willfulness alone—i.e., proof that the defendant acted despite a risk of infringement that was either known or so obvious that it should have been known to the accused infringer,—can support an award of enhanced damages.” *Id.* (internal quotation marks and citations omitted). The implication from *Exmark* and *Arctic Cat* is that the jury must decide whether the infringement was intentional, and then the court must decide whether the intentional conduct was egregious enough to justify enhanced damages.

Thus, TCL’s motion for judgment as a matter of law on willfulness only requires the court to evaluate whether substantial evidence supports the jury’s finding that TCL’s infringement was willful. TCL emphasizes that the conduct was not egregious enough, and those arguments are

² Neither party objected to the instruction. *See* Trial Tr. 2:23-11:9, Dec. 7, 2017, ECF No. 406.

³ The *Arctic Cat* instruction was given prior to *Halo* and thus imposed a clear and convincing evidence burden, but that aspect of the instruction was not challenged on appeal, nor did the Federal Circuit approve that part of the instruction. *See Halo*, 136 S. Ct. at 1934 (enhanced damages governed by preponderance of the evidence standard).

relevant to the court's enhancement decision. *See* ECF No. 427 at 8-12. But TCL's assumption that a jury's willfulness finding cannot stand without egregious or shocking infringement behavior is inconsistent with the Federal Circuit's decision in *Artic Cat*. The jury found TCL's infringement intentional *and* egregious, but TCL's Rule 50(b) motion implicates only the intent finding.

The jury's finding could have only been predicated on willful infringement that occurred after Ericsson sued TCL, but the timing of the willfulness is not at issue. The parties agreed that TCL did not receive notice of Ericsson's infringement allegations until October 21, 2014, the date Ericsson filed its lawsuit. *See* J. Trial Ex. 1 at 5. There is uncertainty regarding whether post-lawsuit conduct can support a willfulness finding by itself, *see, e.g., Cont'l Circuits LLC v. Intel Corp.*, No. CV16-2026 PHX DGC, 2017 WL 2651709, at *8 n.11 (D. Ariz. June 19, 2017), but TCL does not argue that willfulness is categorically unavailable when it occurs only after a lawsuit is filed. *See* ECF No. 427 at 11. At most, TCL argues that its conduct was not egregious enough because "there was not even a pre-suit notice of infringement." *Id.* The assumption that willfulness may exist based solely on post-lawsuit conduct, however, has not been challenged.

Substantial evidence supports the jury's willfulness finding. Central to the willfulness inquiry is an accused infringer's subjective beliefs. *See Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 240 F. Supp. 3d 605, 618 (E.D. Tex. 2017) (Bryson, J., sitting by designation). While there was no evidence regarding TCL's subjective beliefs about the '510 patent, the jury could have inferred intent from circumstantial evidence. *See Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1245 (Fed. Cir. 2017). First, the jury heard that TCL knew of the '510 patent and the infringement allegations once the lawsuit was filed. *See* J. Trial Ex. 1 at 5. Second, not a single TCL decision maker testified that TCL subjectively believed the '510 patent was invalid or not infringed. Rather, Ericsson presented deposition testimony from TCL employees who all

pleaded ignorance, indicating that they had not read the '510 patent. *See* Trial Tr. vol. 1 (morning) 43:17-20, 45:5-20, 50:15-17, 60:14-20, 62:19-63:3, Dec. 5, 2017, ECF No. 400. In light of the parties' agreement concerning knowledge of the '510 patent and the infringement allegations, and the lack of any testimony about TCL's subjective beliefs, the jury could have concluded, more likely than not, that TCL knew it was infringing a valid patent.

TCL argues that "evidence of its subjective good faith belief in non-infringement refutes a finding of willful infringement." ECF No. 427 at 11. But there was no evidence of any TCL belief about whether the '510 patent was invalid or infringed. TCL appears to assume that a jury must infer a subjective belief of noninfringement when a party presents a reasonable defense at trial, but equally possible is the inference that a defense is unreasonable, and hence circumstantial evidence of willful infringement. The jury was under no obligation to credit TCL's defense as reasonable or infer that the defense was evidence of TCL's good-faith belief, particularly when there was no evidence about that belief. *See Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, No. CV 04-1371-LPS, 2017 WL 6206382, at *12 (D. Del. Dec. 8, 2017) (reasonableness of an accused infringer's defense "only one factor among the totality of the circumstances") (citation omitted).

According to TCL, "the question of infringement was a close call," ECF No. 427 at 12, but the court disagrees. TCL's primary noninfringement argument was that the Android system does not include an "interception module" because the code responsible for interception is scattered throughout the operating system in different files. The weakness of this position could have been enough by itself to influence the jury's willfulness finding. The argument simply did not make sense in terms of computer science, and Dr. Jones made this point clear. In any case, it is not the court's role to decide whether a defense was reasonable. *See Exmark*, 879 at 1353. The jury must

have concluded that the defense was not reasonable enough to permit an inference that TCL did not willfully infringe the patent.⁴ Substantial evidence supports the jury's finding.

That leaves only the question of whether damages should be enhanced. Enhancement is within the court's discretion, but "[d]iscretion is not whim." *Halo*, 136 S. Ct. at 1931 (quoting *Martin v. Franklin Capital Corp.*, 546 U.S. 132, 139 (2005)). "Through nearly two centuries of discretionary awards and review by appellate tribunals, 'the channel of discretion ha[s] narrowed,' so that such damages are generally reserved for egregious cases of culpable behavior." *Id.* at 1932 (quoting *Friendly, Indiscretion About Discretion*, 31 *Emory L.J.* 747, 772 (1982)).

Prior to *Halo*, the factors articulated in *Read Corp. v. Portec, Inc.*, 970 F.2d 816 (Fed. Cir. 1992), guided the analysis. The *Halo* standard, by contrast, "merely requires the district court to consider the particular circumstances of the case to determine whether it is egregious." *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1383 (Fed. Cir. 2017). The court is no longer required to rely on *Read*, *see id.* at 1382-83, and the Federal Circuit has emphasized that the *Read* factors were always "non-exclusive," *Georgetown Rail*, 867 F.3d at 1244. Even after *Halo*, however, courts continue to look to the *Read* factors, and there is nothing obviously wrong with that approach given that the factors are designed to measure how culpable infringement has been, while considering mitigating factors. *See Green Mountain Glass LLC v. Saint-Gobain Containers, Inc.*, No. CV 14-392-GMS, 2018 WL 1202638, at *10-*13 (D. Del. Mar. 8, 2018).

⁴ The Patent Office instituted *inter partes* review of the '510 patent after concluding that TCL established a "reasonable likelihood" that claims of the '510 patent are invalid, though the Patent Office ultimately found the claims not invalid. *See* ECF No. 359 at 7; *see also* 35 U.S.C. § 314(a). Ordinarily, the Patent Office's institution decision would be evidence of the reasonableness of an accused infringer's good faith belief of invalidity, and the court permitted TCL to present such evidence at trial, *see* ECF No. 359 at 7, but TCL declined to do so.

Five of the nine *Read* factors favor enhancement. The second factor is “whether the infringer, when he knew of the other’s patent, investigated the patent and formed a good faith belief that it was invalid or that it was not infringed.” *Read*, 970 F.2d at 826-27. The jury’s finding that TCL’s infringement was both culpable and egregious necessarily means that the jury did not credit TCL with a good faith belief about the ’510 patent. This was not a surprising result given the lack of evidence about the subjective beliefs of TCL’s decision makers.

The noninfringement defense TCL presented at trial does not indicate anything about TCL’s beliefs. The defense was based on Dr. Malek’s understanding of the plain and ordinary meaning of the phrase “interception module,” but this understanding surfaced only at the end of the lawsuit. There is no indication that TCL developed a good faith belief that the Android system did not include an “interception module” near the time TCL learned of the infringement allegations. Every indication is to the contrary. After TCL learned of the allegations, Dr. Malek, on behalf of TCL, offered a definition of “interception module” that had nothing to do with the location of the source code responsible for interception, and in fact, was entirely consistent with infringement. *See* Trial Tr. vol. 2 (afternoon), 58:3-60:24, Dec. 6, 2017, ECF No. 404.

Dr. Malek’s earlier, broader understanding of “interception module” may seem consistent with the notion that TCL believed the ’510 patent to be invalid. TCL’s success in convincing the Patent Office to institute *inter partes* review of the ’510 patent would ordinarily be evidence of the reasonableness of such a belief. What is missing, however, is any evidence from TCL regarding its actual, subjective beliefs. The TCL employees called by deposition at trial indicated only that they did not read the patent. *See* Trial Tr. vol. 1 (morning) 43:17-20, 45:5-20, 50:15-17, 60:14-20, 62:19-63:3, Dec. 5, 2017, ECF No. 400. It would be impossible to conclude that these employees

reasonably believed the patent was invalid when the employees admitted they had no beliefs at all about the matter.

The fourth *Read* factor, “the infringer’s size and financial condition,” 970 F.2d at 826-27, also favors enhancement. TCL’s website touts TCL’s seventh-place ranking among global handset and tablet manufacturers. *See* http://www.tclcom.com/?page=company_profile (last visited April 27, 2018). The company sells products in over 160 countries, has more than 12,000 employees, nine research and development facilities, and a factory in China capable of manufacturing 120 million devices per year. *See id.* In 2016, TCL sold more than 68 million handsets. *See id.* TCL is also well on its way to completing a global “step-up” strategy, entering the phone and tablet market with lower-end products, with the goal of later introducing upper-end products and eventually competing alongside Apple and Samsung as one of the top three handheld device manufacturers. *See* Trial Tr. vol. 2 (afternoon), 30:15-37:11, Dec. 5, 2017, ECF No. 400.

The “closeness of the case,” or the fifth *Read* factor, 970 F.2d at 826-27, similarly favors enhancement. Although the case as a whole may have been close of light of TCL’s success in convincing the Patent Office that all but one of Ericsson’s asserted patents are invalid, *see* ECF No. 359 at 4, the case presented at trial concerning the ’510 patent was not close. TCL did not present an invalidity defense, and the noninfringement position was weak. Contrary to TCL’s arguments, *see* ECF No. 425, the fact that the jury requested certain exhibits during deliberation at most reflects thorough consideration and is not an indication that the case was close.

Finally, the sixth and seventh *Read* factors, “the duration of the misconduct,” and “the remedial action by the infringer,” 970 F.2d at 826-27, favor enhancement. There is no indication that TCL did anything differently after learning of the infringement allegations in 2014. Rather, TCL’s sales of accused products have increased since it learned of the infringement allegations.

See Trial Tr. vol. 2 (afternoon), 30:15-37:11, Dec. 5, 2017, ECF No. 400. TCL's infringement has persisted, indeed worsened, over the nearly three-year period between notice of infringement and trial. See *Intra Corp. v. Hamar Laser Instruments, Inc.*, 662 F. Supp. 1420, 1439 (E.D. Mich. 1987) (doubling instead of trebling damages because the defendant "voluntarily ceased manufacture and sale of infringing systems during the pendency of this litigation"), *aff'd without opinion*, 862 F.2d 320 (Fed. Cir. 1988), *cert. denied*, 490 U.S. 1021 (1989).

Ericsson contends that two additional *Read* factors favor enhancement—"the infringer's behavior in the litigation," and "the infringer's motivation for harm," see 970 F.2d at 826-27; ECF No. 413 at 5, 8, but the court disagrees. As for TCL's behavior in the litigation, Ericsson emphasizes TCL's alleged discovery misconduct, that TCL advanced then withdrew allegedly meritless patent infringement counterclaims, and that TCL's defenses were weak. ECF No. 413 at 10-14. A case of this size is difficult to manage, however, particularly during discovery, and the conduct Ericsson points to as justifying an enhancement does not stand out as unusual in a complex patent case. This is not to say that litigation misconduct in a patent case cannot rise to a level that would warrant enhanced damages, but this case does not justify that conclusion.

TCL's motivation for harm weighs against or at least does not favor enhancement, contrary to Ericsson's position. As other courts have recognized, the Federal Circuit has "been relatively quiet regarding the interpretation of this factor." *Century Wrecker Corp. v. E.R. Buske Mfg. Co.*, 913 F. Supp. 1256, 1290 (N.D. Iowa 1996). What is clear enough, however, is that if an accused infringer's motivation for infringement—even if deliberate—resulted from economic reasons unrelated to harming the patentee, then the infringer's motivation for harm should not weigh in favor of enhancement. *Read*, 970 F.2d at 827 ("[D]efendants infringing acts, although deliberate and with knowledge of plaintiff's rights, could not be termed pernicious due to prevailing

‘economic pressure in the form of customer dissatisfaction.’”) (quoting *American Safety Table Co. v. Schreiber*, 415 F.2d 373, 379 (2d Cir. 1969)). TCL did not know about Ericsson’s patents before it began selling devices with the accused Android operating system, TCL does not compete with Ericsson in the relevant market, and TCL’s motive is profit-driven. *See* Trial Tr. vol. 2 (afternoon), 30:15-37:11, Dec. 5, 2017, ECF No. 400. There was no evidence that TCL intended to harm Ericsson.

Two other circumstances weigh against enhancement. First, notwithstanding the question of whether enhanced damages are available based solely on post-lawsuit conduct (which is not in dispute), the parties agree that when TCL began infringing the ’510 patent, the infringement was not willful. *See* J. Trial Ex. 1 at 5. “[I]ndependent invention or attempts to design around and avoid the patent or any other factors tending to show good faith, should be taken into account and given appropriate weight.” *SRI Int’l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1465 (Fed. Cir. 1997); *see also Gustafson, Inc. v. Intersystems Indus. Prod., Inc.*, 897 F.2d 508, 510 (Fed. Cir. 1990) (discussing cases in which an infringing product had been manufactured before an asserted patent issued). TCL began infringing before it knew about the ’510 patent, much like an infringer who develops an accused device independently. *See* J. Trial Ex. 1 at 5. This circumstance makes TCL less culpable than a party whose infringement was intentional from the outset.

Second, it was Google, not TCL, who developed the Android operating system. *See* Trial Tr. vol. 2 (afternoon), 6:16-7:14, Dec. 5, 2017, ECF No. 400. Google’s contract with TCL requires TCL to shoulder any resulting liability, but the law has traditionally regarded one who receives stolen property as less culpable than the thief. *See* Stuart P. Green, *Thieving and Receiving: Overcriminalizing the Possession of Stolen Property*, 14 *New Crim. L. Rev.* 35, 35 (2011). This is not to analogize Google’s development of Android and TCL’s subsequent use of it to criminal

theft, but rather to recognize that TCL's lack of involvement in the design and development of Android mitigates TCL's culpability. *See SRI*, 127 F.3d at 1465.

Ericsson requests a 67% enhancement of the jury's damages assessment, or \$50 million. *See* ECF No. 413 at 3. This request incorrectly assumes, however, that TCL's litigation behavior and motivation for harm favor enhancement, and the request fails to consider other mitigating factors. A one-third enhancement, or \$25 million, is a sufficient deterrent.

IV. Attorney's Fees

The Patent Act permits the court to award attorney's fees to the prevailing party in "exceptional cases." 35 U.S.C. § 285. "[A]n 'exceptional' case is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014) (quoting § 285). While Ericsson is correct that TCL's noninfringement defense was weak, TCL succeeded in convincing the Patent Office that all but one of Ericsson's asserted patents are invalid, *see* ECF No. 359 at 4, and the damages question was particularly close—so much so that the court originally thought the award would not stand on appeal. *See* ECF No. 456. Moreover, TCL's litigation behavior was not unusual for a case of this size and complexity. Finally, a finding of willfulness does not make a case exceptional. *See Stryker Corp. v. Zimmer, Inc.*, 837 F.3d 1268, 1279 (Fed. Cir. 2016). For these reasons, Ericsson is not entitled to attorney's fees.

V. Interest and Costs

Upon a finding of infringement, the patent owner is entitled to damages adequate to compensate for the infringement, "together with interest and costs as fixed by the court." 35 U.S.C. § 284. "When a patentee asserts a patent claim that is held to be valid and infringed, prejudgment interest is generally awarded." *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1353 (Fed. Cir. 2009),

amended on reh'g in part, 366 F. App'x 154 (Fed. Cir. 2009). Some circumstances, such as a patentee's undue delay in prosecuting the lawsuit, may justify limiting or withholding prejudgment interest, but "prejudgment interest should be awarded under § 284 absent some justification for withholding such an award." *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657 (1983).

The rate of prejudgment interest and whether it should be compounded "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). "[T]he 'standard practice' in the Eastern District of Texas is to award prejudgment interest at the prime rate, compounded quarterly." *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, No. 2:15-cv-1202-WCB, 2017 WL 2190055, at *8 (E.D. Tex. May 18, 2017) (Bryson, J., sitting by designation) (collecting cases).

Ericsson argues that the standard prejudgment interest award is not adequate to compensate for TCL's infringement because "both experts used a [higher] discount rate of 11.4%." ECF No. 408 at 2. Ericsson determined the historical value of its damages estimate as of October 21, 2014, or the date TCL received notice of the infringement allegations, by applying an 11.4% discount rate. *Id.* at 2. TCL applied the same discount rate but discounted its damages estimate to April 1, 2010, the date of the hypothetical negotiation. *See id.*; *see also* Trial Tr. vol. 2 (afternoon), 44:9-22, Dec. 5, 2017, ECF No. 400. Consequently, Ericsson contends that the jury's damages award was discounted by either \$30 million, assuming Ericsson's date of payment, or \$97 million, assuming TCL's date of payment. *See* ECF No. 408 at 2; ECF No. 415 at 1.

The nature of the parties' respective damages theories, however, does not entitle Ericsson to a prejudgment interest rate of 11.4%. The jury did not give Ericsson the damages it requested. *See* Trial Tr. 67:17-18, Dec. 7, 2017, ECF No. 406 ("The answer that we think you should fill in there is \$125 million."). Moreover, the jury's award does not deprive Ericsson of the time value

of money. Ericsson has not presented evidence that it had to borrow funds during the infringement period at an 11.4% interest rate. *See Erfindergemeinschaft UroPep*, 2017 WL 2190055, at *9. Viewing TCL's denial of a timely royalty payment as a compulsory loan from Ericsson, the prime rate compounded quarterly is adequate to make Ericsson whole.⁵ *See id.*

TCL argues that prejudgment interest should not be awarded at all because the verdict form asked the jury "what sum of money, *if paid today in cash* . . . would compensate Ericsson for TCL's infringement"? ECF No. 390 (emphasis added). Thus, according to TCL, the jury awarded prejudgment interest. *See* ECF No. 415 at 2-4. The court disagrees. Neither party told the jury what "paid today in cash" means, and there was no instruction on prejudgment interest. Other courts have explained that "paid now in cash" does not imply prejudgment interest, but rather is typically included in a jury question to negate speculation about postjudgment interest on future damages, such as lost wages. *See Pressey v. City of Houston*, 701 F. Supp. 594, 596 (S.D. Tex. 1988), *rev'd on other grounds in Pressey v. Patterson*, 898 F.2d 1018 (5th Cir. 1990). Courts in patent cases routinely award prejudgment interest despite the phrase "paid now in cash" or an equivalent phrase in a damages question. *See* ECF No. 422 at 1 n.2 (collecting cases).

The only remaining issue concerning prejudgment interest is the date from which it should be calculated. Ericsson agrees that it is not entitled to damages prior to October 21, 2014, the date TCL received notice of Ericsson's infringement allegations. J. Trial Ex. 1 at 5. Ironically, because the parties both relied on such a high discount rate of 11.4%, TCL contended at trial that even though damages would not accrue until October 21, 2014, TCL would have paid for the lump sum license more than four years earlier at the hypothetical negotiation on April 1, 2010. *See* Trial Tr. vol. 2 (afternoon), 44:9-22, Dec. 5, 2017, ECF No. 400. TCL's position thus resulted in a more

⁵ For this reason, TCL's suggestion to use the T-Bill or commercial paper rate is not persuasive.

discounted number, but the position obviously ignored the effect of prejudgment interest—which, if based on the parties 11.4% discount rate, would have amounted to a nearly \$100 million oversight. Ericsson would now prefer TCL suffer the consequence of their position. *See* ECF No. 422 at 5 (referring to calculations compounded from “the time of the hypothetical negotiation”).

Such a large prejudgment interest award is not warranted, however. Ericsson agreed that compensatory damages could not accrue prior to October 21, 2014. J. Trial Ex. 1 at 5. Thus, Ericsson will not be left less than whole without interest prior to that date. *See Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655 (1983) (purpose of prejudgment interest is “to ensure that the patent owner is placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement”). It is true that the parties disagreed about when the lump sum royalty would have been paid. *See* Trial Tr. vol. 2 (afternoon), 44:9-22, Dec. 5, 2017, ECF No. 400. To the extent this was a factual dispute the jury should have resolved, the court would have precluded prejudgment interest prior to when damages could legally accrue even if the jury had agreed that TCL would have decided to pay the lump sum royalty four years early. For these reasons, Ericsson is entitled to prejudgment interest at the prime rate, compounded quarterly from October 21, 2014, on the \$75 million damages award. *See Underwater Devices Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389 (Fed. Cir. 1983), *overruled on other grounds by 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).⁶

⁶ Based on Mr. Mills’ methods, *see* ECF No. 422-4, prejudgment interest will be approximately \$10.2 million through May 10, 2018.

“TCL does not oppose postjudgment interest as calculated pursuant to 28 U.S.C. § 1961.” ECF No. 425 at 15. Postjudgment interest is required by the statute. *See* § 1961(a) (“Interest shall be allowed . . .”). Postjudgment interest is calculated on all elements of the money judgment, including a district court’s award of prejudgment interest and enhanced damages. *See Caffey v. Unum Life Ins. Co.*, 302 F.3d 576, 586 (6th Cir. 2002); *Bancamerica Commercial Corp. v. Mosher Steel of Kans., Inc.*, 103 F.3d 80, 82 (10th Cir.1996); *Air Separation, Inc. v. Underwriters at Lloyd’s of London*, 45 F.3d 288, 291 (9th Cir.1995); *Quesinberry v. Life Ins. Co. of N. Am.*, 987 F.2d 1017, 1031 (4th Cir.1993) (en banc); *Ins. Co. of N. Am. v. Lexow*, 937 F.2d 569, 572 n. 4 (11th Cir.1991). Accordingly, Ericsson is entitled to postjudgment interest on the entire amount of the money judgment until the judgment is paid.⁷ Finally, TCL does not dispute that Ericsson is entitled to costs pursuant to 28 U.S.C. § 1920. *See* ECF No. 425 at 15.

VI. Claims and Products Not Encompassed by the Jury Verdict

Ericsson originally alleged that TCL infringed five patents. Compl. ¶¶ 11-17, ECF No. 1. Ericsson dismissed claims related to one of the patents (the ’815 patent) in late 2015, ECF No. 185 at 2-3, and due to ongoing *inter partes* review of the other patents, the only claims that proceeded to trial were based on the ’510 patent, *see* ECF No. 359 at 3-7. *Inter partes* review is now complete—the Patent Office found the asserted claims of the ’052, ’310, and RE ’931 patents invalid. *See* ECF No. 359 at 4. Ericsson has not appealed from the decisions concerning the ’310 and RE ’931 patents, and as a result, the Patent Office canceled the claims in February of this year. *See* ’052 and RE ’931 Patents at *Inter Partes* Review Certificate; 35 U.S.C. § 318(b).

⁷ Under the statutory formula, postjudgment interest is calculated based on the weekly average 1-year constant maturity Treasury yield for the calendar week preceding the date of judgment. Interest runs from the day judgment is entered and is compounded annually until payment. *See Erfindergemeinschaft UroPep*, 2017 WL 2190055, at *10.

TCL therefore moves to dismiss claims based on the '310 and RE '931 patents. ECF No. 424 at 2. Ericsson originally opposed this request, arguing instead for a severance and stay pending the Supreme Court's decision in *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*. See ECF No. 412 at 4. Ericsson's reply, however, no longer requests severance. See ECF No. 437. Moreover, the Supreme Court recently issued its decision in *Oil States*, holding that *inter partes* review violates neither Article III nor the Seventh Amendment. See No. 16-712, 2018 WL 1914662, at *3 (U.S. Apr. 24, 2018). Accordingly, because claims canceled by the Patent Office no longer have any legal effect, see *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 721 F.3d 1330, 1345-46 (Fed. Cir. 2013), Ericsson's claims based on the '310 and RE '931 patents should be dismissed with prejudice.

Although the Patent Office also found claims of the '052 patent invalid, see ECF No. 359 at 4, Ericsson has appealed from this decision, see ECF No. 437 at 1. Consequently, the Patent Office has not formally canceled the claims as required by § 318(b). TCL nevertheless requests that claims based on the '052 patent be dismissed, apparently without prejudice. See ECF No. 424 at 7. As support for this request, TCL cites *C-Cation Technologies, LLC v. Time Warner Cable Inc.* for the proposition that a complaint based on claims found invalid by the Patent Office should be dismissed. See No. 2:14-CV-00059-JRG-RSP, 2017 WL 6498072, at *1 (E.D. Tex. Dec. 19, 2017), *report and recommendation adopted*, No. 214CV00059JRGRSP, 2018 WL 295360 (E.D. Tex. Jan. 4, 2018). TCL misunderstands *C-Cation*, however, which dealt with collateral estoppel arguments TCL has not made. See *id.* at *1-*2. A canceled patent claim has no legal effect, see *Fresenius*, 721 F.3d at 1345-46, but the Patent Office has not yet canceled the '052 patent claims. Consequently, claims based on the '052 patent should be severed into a new cause of action and stayed pending Ericsson's appeal.

The remaining issue concerns Ericsson's request to sever and stay adjudication of products not encompassed by the jury's verdict. *See* ECF No. 412 at 1-2. While Ericsson presented evidence concerning unaccused and unreleased products at trial, the only products the jury found to be covered by the '510 patent are those that were accused in the case. *See* J. Trial Ex. 1 at 1-3 (table of accused products). The jury was instructed that lump sum damages are available only for "products Ericsson has accused in this case." Trial Tr. 25:21-26:4, Dec. 7, 2017, ECF No. 406; *See Weeks*, 528 U.S. at 234 ("A jury is presumed to follow its instructions."). Because the infringement theory for each of the accused products was identical, the jury's verdict represents a determination that each accused product is covered by the '510 patent; any contrary result would be inconsistent with the evidence presented at trial.

As for accused products, the jury's lump sum damages assessment represents full compensation for all past and future sales of these products. *See* Trial Tr. 25:21-25, Dec. 7, 2017, ECF No. 406; *Summit 6*, 802 F.3d at 1300-01 ("In this case, the district court properly denied Summit's request for an ongoing royalty because the jury award compensated Summit for both past and future infringement through the life of the patent."). TCL is therefore correct that "the jury's lump-sum damages award gave TCL a license to practice the '510 patent in future products through the life of the '510 patent," *see* ECF No. 424 at 1, but this is only true for accused products. Thus, to the extent Ericsson is seeking a "future compulsory royalty" for accused products, *see* ECF No. 412 at 1, there is no basis for such a royalty, *see Summit 6*, 802 F.3d at 1300-01.

Unaccused products are another matter. The jury neither found such products to be covered by the '510 patent, nor did the jury award damages for such products. Ericsson requests that these products be severed into a new cause of action so that Ericsson can "address the procedure for requesting a compulsory forward-looking royalty with respect to newly-released TCL products

‘not colorably different’ from the products covered by the jury’s lump-sum damages award.” ECF No. 412 at 3. There is no basis to do so, however.

Courts often sever and stay the adjudication of products not encompassed by a jury verdict, but typically as to accused products that have not yet been sold. *See, e.g., Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1314-16 (Fed. Cir. 2007). When a patentee requests running royalty damages, and the jury awards damages through trial, district courts have authority to craft a compulsory ongoing royalty for future sales of products the jury found to infringe. *See id.* This is not at all like the situation presented by this case. The jury adjudicated issues only as they related to accused products, and the jury awarded a lump sum royalty, not a running royalty. As for the accused products, the case is over.

Contrary to Ericsson’s assumption, the resolution of liability and damages with respect to accused products does not automatically give rise to a remedy with respect to unaccused products. “Victory in an infringement suit requires a finding that the patent claim covers the alleged infringer’s product or process” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 374 (1996) (quotation and citation omitted). As for unaccused products, this determination has not been made. In a new lawsuit, Ericsson may argue that the judgment in this case has a preclusive effect with respect to products that are not “colorably different” from those already found to infringe, but that dispute is for another day. *See Hallco Mfg. Co. v. Foster*, 256 F.3d 1290, 1297-98 (Fed. Cir. 2001). To have this case swallow all products Ericsson contends are not “colorably different” from the infringing products would be to ignore procedure a patent owner must ordinarily meet in a patent infringement case.

Even if it were procedurally permissible to sever unaccused products into a new cause of action for a “colorably different” determination, there is another reason why Ericsson’s request

should be denied. As courts in this district have recognized, when a patent owner presents the court with “an elusive target,” encompassing some unknown variety and number of unaccused products, a new cause of action is the proper vehicle for resolving the dispute. *See Fractus, S.A. v. Samsung Elecs. Co.*, No. 6:09-CV-203, 2013 WL 1136964, at *2 (E.D. Tex. Mar. 15, 2013). An accused infringer such as TCL may “continue to release new [products],” which the patent owner “will invariably argue are not ‘colorably different’ from the adjudicated models.” *See id.* Ericsson identifies only one product it contends is not “colorably different” from adjudicated models, *see* ECF No. 412 at 3 n.2, yet Ericsson acknowledges that “[d]ue to the speed with which TCL releases new phone models, there are already several TCL Android smartphones—previously unaccused and not covered by the lump sum verdict—that Ericsson will request to be subject to a compulsory future royalty,” *id.* at 3. Thus, for the same reasons the court gave in *Fractus*, Ericsson’s request should be denied without prejudice to Ericsson filing a new action involving unaccused products.

CONCLUSION

Eight jurors unanimously found that TCL willfully infringed claims 1 and 5 of the ’510 patent, and awarded \$75 million in damages. While the court previously found Ericsson’s damages theory unreliable under *Daubert*, the flaw in the theory should have gone to the weight of evidence, not its admissibility. TCL had every opportunity to illuminate the flaw, but the jury agreed with Ericsson, and it was the jury’s province to make that decision. “That it is violative of the Seventh Amendment to the Constitution of the United States for a court to so invade the province of a jury is so fundamental that it need not be supported by citation.” *Korbut v. Keystone Shipping Co.*, 380 F.2d 352 (5th Cir. 1967). *Daubert* should not be used as camouflage to invade the jury’s province, and it is upon that basis the court reconsiders its prior order.

Accordingly,

It is **ORDERED** and **ADJUDGED**:

(1) TCL's renewed motion for judgment as a matter of law and motion for a new trial, ECF Nos. 427 and 429, are denied.

(2) Ericsson's motion for reconsideration of the court's order granting TCL's motion for a new trial, ECF No. 464, is granted. The court's order for a new trial, ECF No. 456 at 16-17, is vacated, and the jury's damages verdict, ECF No. 390, is reinstated in its entirety.

(3) Ericsson's motion for enhanced damages, ECF No. 413, is granted in part and denied in part. The jury's damages award is enhanced by one-third, or \$25 million.

(4) Ericsson's motion for attorney's fees, ECF No. 413, is denied.

(5) Ericsson's motion for prejudgment interest, ECF No. 413, is granted in part and denied in part. Ericsson is awarded prejudgment interest on the \$75 million damages award at the prime rate, compounded quarterly from October 21, 2014, until but not including the date of judgment.

(6) Ericsson's motions for postjudgment interest pursuant to 28 U.S.C. § 1961 and costs pursuant to 28 U.S.C. § 1920, ECF No. 413, are granted. Postjudgment interest will accrue on the entire money judgment, including prejudgment interest and enhanced damages, from the date judgment is entered until payment.

(7) Ericsson's motion to sever claims and products not encompassed by the jury verdict, ECF No. 412, is granted in part and denied in part. Claims based on the '052 patent will be severed into a new cause of action and stayed pending Ericsson's appeal of the Patent Office's decision finding claims of the '052 patent invalid. As for the '310 and RE '931 patents, Ericsson's

request is denied. Ericsson's request to sever unaccused products into a new cause of action is denied without prejudice to Ericsson filing a new action involving these products.

(8) TCL's cross-motion to dismiss stayed claims based on patents subject to *inter partes* review, ECF No. 424, is granted in part and denied in part. Claims based on the '310 and RE '931 patents will be dismissed with prejudice. Claims based on the '052 patent will be severed into a new cause of action and stayed pending Ericsson's appeal.

(9) The joint motion for a docket control order, ECF No. 461, Ericsson's motion for leave to serve a supplemental consumer survey report, ECF No. 462, and TCL's motion to stay the new damages trial pending an appeal on liability, ECF No. 471, are denied as moot.