

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

TC TECHNOLOGY LLC,

Plaintiff,

v.

SPRINT CORPORATION and SPRINT
SPECTRUM L.P.,

Defendants.

No. 16-cv-153-RGA

MEMORANDUM OPINION

Kelly E. Farnan, Katharine L. Mowery, RICHARDS, LAYTON & FINGER, P.A., Wilmington, DE; Lawrence J. Gotts, Saswat Misra, LATHAM & WATKINS LLP, Washington, D.C.; Kevin L. Mallen, LATHAM & WATKINS LLP, New York, NY; Gabriel S. Gross, LATHAM & WATKINS LLP, Menlo Park, CA; Stephanie N. Solomon (argued), QUINN EMANUEL URQUHART & SULLIVAN, LLP, New York, NY; David S. Benyacar, Daniel L. Reisner, ARNOLD & PORTER KAYE SCHOLER LLP, New York, NY.

Attorneys for Plaintiff.

Shanti M. Katona, Christina M. Belitz, POLSINELLI PC, Wilmington, DE; Robert Reckers, David Morehan, SHOOK, HARDY & BACON LLP, Houston, TX; Christine A. Guastello, Jordan T. Bergsten (argued), Colman D. McCarthy, Thomas M. Patton, SHOOK, HARDY & BACON LLP, Kansas City, MO.

Attorneys for Defendants.

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ANDREWS, U.S. DISTRICT JUDGE:

Presently before the Court are Defendants' motion to exclude expert testimony of Mr. Brett Reed and Mr. Regis Bates (D.I. 260), and Plaintiff's motion to exclude expert testimony of Dr. Alan Cox (D.I. 263). I have reviewed the parties' briefing and related papers. (D.I. 261, 264, 286, 291, 305, 308, 334, 336). I heard oral argument on March 7, 2019.¹

I. BACKGROUND

Plaintiff TC Technology LLC ("TC Tech") filed this action on March 10, 2016, alleging that Defendants Sprint Corporation and Sprint Spectrum, L.P. (collectively, "Sprint") infringed U.S. Patent No. 5,815,488 ("the '488 patent") with certain wireless services on its LTE network. (D.I. 1).

TC Tech was established by cable companies Time Warner Cable LLC ("TWC") and Cox Communications, Inc. ("Cox"). (D.I. 317 ¶ 6). In December 2011, Sprint sued TWC and Cox, among others, for infringement of its Voice over Internet Protocol ("VoIP") patents. (D.I. 162 at 2; D.I. 172 at 2). In March 2012, TWC and Cox formed TC Tech. (D.I. 317 ¶ 6). TC Tech then purchased the '488 patent from CableLabs, a consortium of U.S. cable companies. (*Id.* ¶¶ 5-6). In March 2017, Sprint won a jury verdict against TWC. *Sprint Commc'ns Co. L.P. v. Time Warner Cable, Inc.*, 2017 WL 978107, at *1 (D. Kan. Mar. 14, 2017). Sprint later settled its suit against Cox and Cox sold its 50% ownership interest in TC Tech to TWC. (D.I. 265, Ex. D ¶ 103 & n.216).

II. LEGAL STANDARD

Federal Rule of Evidence 702 sets out the requirements for expert witness testimony:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other

¹ I cite to the transcript as "Oral Argument."

specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. The trial court has “the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Daubert v. Merrell Dow Pharms. Inc.*, 509 U.S. 579, 594, 597 (1993).

The Third Circuit has explained:

Rule 702 embodies a trilogy of restrictions on expert testimony: qualification, reliability and fit. Qualification refers to the requirement that the witness possess specialized expertise. We have interpreted this requirement liberally, holding that “a broad range of knowledge, skills, and training qualify an expert.” Secondly, the testimony must be reliable; it “must be based on the ‘methods and procedures of science’ rather than on ‘subjective belief or unsupported speculation’; the expert must have ‘good grounds’ for his o[r] her belief. In sum, *Daubert* holds that an inquiry into the reliability of scientific evidence under Rule 702 requires a determination as to its scientific validity.” Finally, Rule 702 requires that the expert testimony must fit the issues in the case. In other words, the expert’s testimony must be relevant for the purposes of the case and must assist the trier of fact. The Supreme Court explained in *Daubert* that “Rule 702’s ‘helpfulness’ standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility.”

By means of a so-called “*Daubert* hearing,” the district court acts as a gatekeeper, preventing opinion testimony that does not meet the requirements of qualification, reliability and fit from reaching the jury.

Schneider ex rel. Estate of Schneider v. Fried, 320 F.3d 396, 404-05 (3d Cir. 2003) (footnote and internal citations omitted).¹ At base, “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.*

¹ The Third Circuit wrote under an earlier version of Rule 702, but the later amendments were not intended to make any substantive change.

Samsung Elecs. Co., Ltd., 802 F.3d 1283, 1296 (Fed. Cir. 2015). Indeed, “[v]igorous 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.” *Daubert*, 509 U.S. at 596.

III. MR. REED’S DAMAGES TESTIMONY

Mr. Reed, TC Tech’s damages expert, takes three separate approaches to estimating a reasonable royalty. The first approach (“Approach One”) is based on the cost savings to Sprint of using LTE versus 3G. The second approach (“Approach Two”) is based on Sprint’s demands in its prior litigation against TWC (“*Sprint v. TWC*”). The third approach (“Approach Three”) is based on “announced” industry royalty rates. (D.I. 262, Ex. A). Sprint moves to exclude Mr. Reed’s testimony under each of the three approaches. In addition, Sprint argues that none of Mr. Reed’s estimated royalties are admissible in view of the ’488 patent’s acquisition price of \$300,000. (D.I. 260, 261). For the following reasons, Sprint’s motion is **GRANTED** with respect to Approaches Two and Three. The rest of the motion is **DENIED**.

A. Approach One—Cost Savings

For the following reasons, Sprint’s motion is **DENIED** with respect to Approach One.

Approach One “addresses a reasonable royalty based on how much money Sprint would have lost if it was not able to launch LTE until the [’488] patent expired in September 2015, and how the parties would have agreed to split the anticipated gains.” (D.I. 262, Ex. A at 96). In other words, Approach One “is a comparative analysis of Sprint’s costs and revenues in a hypothetical world in which Sprint did not have the ability to do LTE (and so offered primarily a 3G service) to the real world events in which Sprint offered LTE beginning in July 2012.” (*Id.*, Ex. I at 119-20). Mr. Reed uses that framework to obtain an initial cost savings range from \$7.99 billion to \$8.46 billion. (*Id.*, Ex. A at 114). He then excludes two-thirds as attributable to

“downlink” functionality on the assumption that the ’488 patent only relates to “uplink” functionality. (*Id.* at 115-20). He excludes 22% of the remaining one-third as being attributable to the unpatented aspects of uplink. (*Id.* at 120-21). Lastly, he allocates 64% to 74% of what remains to Sprint, based on how the parties to the hypothetical negotiation would have split the cost savings. (*Id.* at 121-32). The net result is a reasonable royalty range of \$540 million² to \$792 million.³ (*Id.* at 130-32).

Sprint argues that Approach One is inadmissible for failing to apportion damages. Where the accused service has patented and unpatented features, “[t]he essential requirement is that the ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end [service].” *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014). In Sprint’s view, Mr. Reed fails to apportion in two ways. First, Mr. Reed fails to exclude the value of LTE as an industry-wide standard. (D.I. 261 at 7-9). Second, Mr. Reed fails to exclude the value of LTE attributable to unpatented technologies. (*Id.* at 9-14).

1. Value of LTE as an Industry-Wide Standard

Sprint asserts, “By following the industry-wide trend of adopting LTE, Sprint benefited from a global LTE ecosystem. But any value to Sprint of adopting the *de facto* industry-wide standard must be separated from the value of any technological contribution of the ’488 patent to the standard.” (D.I. 261 at 8 (internal citation and emphasis omitted)). Sprint thus argues that Mr. Reed fails to apportion because he never considers the value contributed by the patented technology to the LTE standard. Rather, Mr. Reed begins his analysis by calculating the total cost savings to Sprint of implementing LTE. (*Id.* at 8-9).

² \$7.99 billion x 1/3 x 78% x 26% = \$540 million.

³ \$8.46 billion x 1/3 x 78% x 36% = \$792 million.

TC Tech argues that apportionment is inherently included in Mr. Reed's cost savings analysis. (D.I. 291 at 7-8). TC Tech relies on *Prism Technologies LLC v. Sprint Spectrum L.P.*, 849 F.3d 1360 (Fed. Cir. 2017). In *Prism*, the Federal Circuit found the district court properly admitted damages evidence based on Sprint's cost savings. Specifically, the costs Sprint "would have incurred if it had chosen not to infringe." *Prism*, 849 F.3d at 1375. The Federal Circuit rejected Sprint's argument that "Prism's approach was insufficiently tied to the 'footprint' of the invention." *Id.* at 1375-76.

Although a patentee must carefully tie proof of damages to the claimed invention's footprint in the market place, that requirement for valuing the patented technology can be met if the patentee adequately shows that the defendant's infringement allowed it to avoid taking a different, more costly course of action. A price for a hypothetical license may appropriately be based on consideration of the costs and availability of non-infringing alternatives and the potential infringer's cost-savings.

Id. at 1376 (internal citations and quotation marks omitted); *see also Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1240 (Fed. Cir. 2011) ("Reliance upon estimated cost savings from use of the infringing product is a well settled method of determining a reasonable royalty." (quoting *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1090-81 (Fed. Cir. 1983))). Notably, argument at trial was limited to one specific noninfringing alternative, which was the basis of Prism's cost savings analysis. *Id.*

Prism makes clear that damages may be based on cost savings from a defendant's infringement without an independent analysis of the claimed invention's "footprint in the market place." *See* 849 F.3d at 1375-76. As such, I see no problem with Mr. Reed's reliance on cost savings generally. His analysis, however, also assumes that without infringement, "Sprint did not have the ability to do LTE (and so offered primarily a 3G service)." (D.I. 262, Ex. I at 119-20). Thus, the key issue is whether Mr. Reed properly concludes that Sprint's infringement "allowed it to avoid taking [the] different, more costly course of action" of offering 3G rather

than LTE. *See Prism*, 849 at F.3d at 1376. In other words, does Mr. Reed have a reliable basis for finding that Sprint had no noninfringing alternative to implement LTE?

Mr. Reed relies on testimony from TC Tech's technical expert, Mr. Bates. Mr. Reed states, "Based on my conversations with . . . Mr. Bates, . . . I understand that the '488 patent was a critical technology for achieving uplink with the LTE network during the damages period, and uplink technology is a necessary element of Sprint's entire LTE network." (D.I. 262, Ex. A at 14). In his expert report, Mr. Bates explains why he believes the '488 patent claims the uplink functionality of Sprint's LTE network, and why he found there was no noninfringing alternative for that functionality. (D.I. 262, Ex. P ¶¶ 205-208). He also provides substantial testimony rebutting the two noninfringing alternatives proposed by Sprint's experts. (*Id.* ¶¶ 209-274). Thus, I believe Mr. Bates provides a reliable basis for Mr. Reed to assume that Sprint had no noninfringing alternative to implement LTE at the time of the hypothetical negotiation. Therefore, I find Mr. Reed's cost savings analysis is not excludable for failure to apportion damages.

2. Value of LTE Attributable to Unpatented Technologies

Sprint makes two arguments related to Mr. Reed's alleged failure to apportion out the value of unpatented technologies. First, Sprint argues that Mr. Reed improperly calculates the cost savings from implementing the entire LTE standard as opposed to its patented features. (D.I. 2671 at 9-10). Second, Sprint argues that Mr. Reed improperly calculates the portion of uplink value attributable to the '488 patent. (*Id.* at 11-14).

Sprint's first argument is unavailing. It is simply a different way of making the same argument as in the preceding section. By using the cost savings analysis to calculate the incremental value of LTE over 3G, Mr. Reed presumably excludes the value of features common

to both. (See D.I. 291 at 8). Sprint argues that Mr. Reed fails to identify and quantify a “particular technological contribution of the ’488 patent” to the LTE standard. But, as discussed, an expert may apply a cost savings analysis without independently tying “proof of damages to the claimed invention’s footprint in the market place.” *Prism*, 849 F.3d at 1376.

Sprint’s second argument addresses Mr. Reed’s efforts to further apportion the cost savings to the value of the ’488 patent. Mr. Reed “first apportion[s] the entire cost savings to a portion of LTE reasonably associated with uplink capabilities, and then apportion[s] [the remainder] to the specific contribution of the ’488 Patent within the upload functionality.” (D.I. 262, Ex. A at 115). In the first step, Mr. Reed divides the total cost savings between the value attributable to uplink and downlink, finding 33% attributable to uplink. (*Id.* at 118-20). In the second step, Mr. Reed divides the remaining 33% between the value attributable to patented features and “certain aspects of uplink that do not involve the transfer of data,” finding 78% attributable to the ’488 patent’s claimed invention. (*Id.* at 121).

Sprint first argues that Mr. Reed fails to apportion for unpatented LTE components such as “routers, signaling gateways, and things that happen in an IP network,” because he assumes uplink and downlink are the only two features of an LTE network. (D.I. 261 at 10-11). Again, Mr. Reed excludes the value of such features by determining the incremental cost savings between LTE and 3G. (See D.I. 291 at 8 (citing D.I. 262, Ex. I at 119-20 (“In such an analysis, general features of a data or cell phone service that are common to both 3G and 4G [LTE] . . . would all already be accounted for since I am examining only the incremental benefit of offering an LTE network.”))).

Sprint next argues that Mr. Reed relies on insufficient evidence to determine the portion of uplink associated with the patented technology. (D.I. 261 at 11). Mr. Reed bases his apportionment on Mr. Bates' technical expert opinion:

I understand that there is an important aspect of uplink capability associated with LTE overhead, which should also be viewed as independent of the capabilities associated with the '488 patent. I understand from my discussion with Mr. Bates that LTE overhead refers to certain aspects of uplink that do not involve the transfer of data, such as aspects of the physical uplink control channel ("PUCCH") which conveys control information such as a channel quality indication and uplink scheduling requests. Based on technical input from Mr. Bates, I understand that it is appropriate to further allocate approximately 21% to 23% of LTE uplink capability to LTE overhead, leaving 78% of uplink LTE apportioned to technology associated with the '488 patent.

(D.I. 262, Ex. A at 120). In his reply report, Mr. Reed clarifies that he relies on specific portions of Mr. Bates' infringement report. (*Id.*, Ex. I at 126-27 & n.314 (citing *id.*, Ex. I ¶¶ 352-354)).

Sprint argues that Mr. Bates provides insufficient support for Mr. Reed's opinion, because he did not conduct "any analysis to quantify how much of LTE's improved uplink capability resulted from the '488 patent's claimed invention." (D.I. 261 at 11 (citing D.I. 262, Ex. J at 226:6-10, 226:14-19, 228:12-16)).

I do not find Sprint's argument persuasive. Sprint cites to Mr. Bates' deposition testimony, which merely shows that he did not measure certain particular improvements identified by Sprint. (*E.g.*, D.I. 262, Ex. J at 226:14-19 ("Q: And you didn't quantify to what extent the methods of the '488 [patent] might improve the spectral efficiency of an LTE network versus other types of networks. . . . [A:] No.")). I believe Mr. Bates provides sufficient explanation in his infringement report and Mr. Reed properly relies on Mr. Bates' opinions to apportion the uplink value attributable to the '488 patent. Mr. Bates' alleged failure to conduct specific measurements goes towards the weight of Mr. Reed's testimony, which can be addressed on cross-examination.

Sprint's last argument returns to Mr. Reed's apportionment between uplink and downlink. Mr. Reed relies in part on an article in PCMag magazine. The article ranked network providers such that the overall rating was weighted by 40% download speed, 20% upload speed, and 40% other factors related to network reliability. (D.I. 262, Ex. A at 118-19, Tab M16). Sprint argues that Mr. Reed's reliance on PCMag is unreliable because (1) there is no evidence that PCMag measured the value of "upload [uplink] data services" as opposed to uplink speed, (2) there is no evidence that PCMag relied on "sound economic or technical analysis rather than the arbitrary decision of a magazine author or editor," and (3) Mr. Reed ignored the 40% weighted to other factors. (D.I. 261 at 12-14).

Sprint's first argument is unpersuasive. This step of Mr. Reed's analysis apportions for the value of uplink generally. Mr. Reed's second step then apportions for the value of uplink "data services." Further, TC Tech argues, "The whole objective of the PCMag analysis is to provide an overall ranking to consumers of the best wireless data networks, based on a weighting of the features they care most about." (D.I. 291 at 13 & n.13). The focus on speed reflected that "speed [was] the key feature that consumers demanded in a wireless network in the applicable timeframe" and a "key benefit" of the patented technology. (*Id.*). Mr. Reed appears to rely on the speed tests to estimate how consumers valued uplink versus downlink functionality. (D.I. 262, Ex. A at 116-19). I think that is a permissible use of the PCMag article.

Sprint's second argument is directly contrary to Mr. Reed's testimony. Mr. Reed explains why he chose to rely on the PCMag tests, as well the tests' underlying methodology:

First, the PCMag tests are rigorous. The PCMag testers travel to 30 major cities along U.S. and Interstate highways, stopping at smaller cities along the way. In doing so, they take more than 80,000-90,000 individual tests of the speed and reliability of mobile networks. Second, PCMag is a neutral, third party industry observer, which has conducted tests over many years and [publicly] disclosed its weighting methodology for its rankings of cellular

carriers. Importantly, Sprint monitored the PCMag tests, considered PCMag's findings, and responded to PCMag's results.

(D.I. 262, Ex. I at 123-24). Mr. Reed sufficiently justifies his reliance on PCMag. There is no factual basis for Sprint's suggestion that PCMag relied on "the arbitrary decision of a magazine author or editor."

Sprint's third argument also fails. As discussed, Mr. Reed already apportioned out general network features in his incremental cost savings analysis. (D.I. 291 at 14).

Therefore, I find that there is no basis to exclude Mr. Reed's opinion for failing to apportion out the value of unpatented technologies.

B. Approach Two—*Sprint v. TWC*

For the following reasons, Sprint's motion is **GRANTED** with respect to Approach Two.

Sprint argues that Approach Two improperly adopts the \$1.37 per-subscriber per-month royalty rate Sprint obtained against TWC for infringing its VoIP patents.⁴ (D.I. 261 at 15-18). Sprint assumes that Mr. Reed relies on the *TWC* verdict and considers it to be a prior license, which must be comparable to the hypothetical license. (*Id.*); *see also ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 873 (Fed. Cir. 2010) (reliance on a prior license requires "account[ing] for the technological and economic differences between those licenses and the [claimed invention]). In TC Tech's view, however, Mr. Reed only relies on *TWC* as evidence of "Sprint's contemporaneous requests for \$1.37 per subscriber per month, or an approximately 5% royalty" at the time of the July 2012 hypothetical negotiation. (D.I. 291 at 16). TC Tech argues that those facts are independently relevant to the parties' states of mind during the hypothetical

⁴ Sprint's motion appears to be limited to the first subsection of Approach Two. (D.I. 261 at 15-18; D.I. 262, Ex. A at 132-34). In the second subsection, Mr. Reed "independently considered the more general 5% royalty rate, which Sprint had internally considered reasonable for telecommunications patents, including the VoIP patents, and determined how that figure would relate to Sprint's LTE-related service revenue." (D.I. 262, Ex. A at 135-40).

negotiation. (*Id.* at 17-18). Although Sprint did not obtain the *TWC* jury verdict until 2017, the VoIP litigation began in December 2011. (D.I. 162 at 2; D.I. 172 at 2). Thus, Mr. Reed opines that in July 2012, “TWC and Cox could and would have demanded the same 5% from Sprint that Sprint was asking of them.” (*Id.*).

As a preliminary matter, Sprint argues that Approach Two is inadmissible under *Acceleration Bay LLC v. Activision Blizzard, Inc.*, 324 F. Supp. 3d 470, 489 (D. Del. 2018). (D.I. 261 at 15).⁵ In *Acceleration Bay*, the Court found, “A jury verdict does not represent evidence from which a hypothetical negotiation can be reliably determined,” because “[n]o economist would consider a jury verdict as to a hypothetical negotiation about one patent as a reliable basis for determining what the results of an actual arm’s-length negotiation about a second patent would be.” 324 F. Supp. 3d at 489.

Acceleration Bay is distinguishable. Mr. Reed does not rely on the *TWC* jury verdict. (D.I. 291 at 17 n.10, 18 n.11). Instead, he opines:

TC Tech, through its owners TWC and Cox, would know that Sprint had (a) demanded a \$1.37 per subscriber month royalty rate for its VoIP patents, and (b) claimed that the \$1.37 per subscriber month royalty rate was reasonable for a blocking patent that enabled a telecommunications technology platform. . . . Thus, it would be natural that TC Tech would assert right back at Sprint a royalty approach based on the \$1.37 per subscriber month royalty rate advocated by Sprint against the cable industry, including TWC and Cox. Just as Sprint had alleged that its VoIP patents were blocking architecture patents enabling a technology platform (VoIP), TC Tech would also be alleging that the ’488 patent is at minimum a blocking architecture patent enabling a telecommunications technology platform (LTE). Both the VoIP patents and the ’488 patent relate to telecommunications. Moreover, the relative economic importance of the rights to the technology, the similar revenue structure for relevant monthly services, the relationship between the parties (with ongoing

⁵ Sprint also relies on *AVM Technologies, LLC v. Intel Corp.*, which held, “[A] patentee may not argue that prior licenses granting rights to entire portfolios of patents are comparable to a license that the parties would have negotiated for a single asserted patent.” 2013 WL 126233, at *3 (D. Del. Jan. 4, 2013) (citing *Lucent*, 580 F.3d at 1328). However, the parties’ experts agree that in *TWC*, Sprint sought the \$1.37 rate irrespective of how many of its five asserted patents were found infringed. (D.I. 262, Ex. F at 25:14-20; D.I. 292, Ex. 2 at 221: 7-21). Therefore, *AVM* is inapposite.

patent disputes), and the overlapping timing of this activity all point to a strong economic basis for the parties to evaluate and apply Sprint's advocated royalty rate structure during the hypothetical negotiation over a license to the '488 patent.

(D.I. 262, Ex. A at 132-34). Mr. Reed's theory appears to be that since Sprint was demanding a \$1.37 rate for its VoIP patents in *TWC*, it would agree to pay the same rate for the '488 patent in the contemporaneous hypothetical negotiation.

Mr. Reed effectively relies on Sprint's *TWC* demand as a comparable license. Although he purports to be assessing the parties' states of mind, he wholesale adopts the \$1.37 rate as a reasonable royalty in this case. "When relying on licenses to prove a reasonable royalty, alleging a loose or vague comparability between different technologies or licenses does not suffice." *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 79 (Fed. Cir. 2012) (finding a reasonable royalty opinion unreliable and inadmissible under Rule 702). Mr. Reed cannot sidestep the comparability requirement simply by asserting that the \$1.37 rate relates to the parties' states of mind during the hypothetical negotiation.

TC Tech relies on *Applied Medical Resources Corp. v. U.S. Surgical Corp.*, 434 F.3d 1356 (Fed. Cir. 2006) ("*Applied I*"). (D.I. 291 at 17). In *Applied II*, the court found a prior litigation ("*Applied I*") relevant to the reasonable royalty analysis because the hypothetical negotiation "took place on the heels of the *Applied I* jury verdict." *Applied II*, 434 F.3d at 1365-66 (applying Ninth Circuit evidentiary law).⁶ Notably, *Applied II* was almost factually identical to *Applied I*—the same plaintiff sued the same defendant and asserted the same patent against a later version of the same accused product. *Id.* at 1358-59. This case is clearly distinguishable

⁶ Although the court also stated that *Applied I* "was clearly relevant to [the defendant's] state of mind," it appears to have been addressing the plaintiff's willful infringement theory. *Applied II*, 434 F.3d at 1366 (noting the defendant admitted that the *Applied I* verdict caused it to "redouble its efforts to avoid willful infringement").

from *Applied II*. There is no overlap between the asserted patents and accused services in *TWC* and this case.

Mr. Reed has not shown sufficient comparability between Sprint's *TWC* demand and the hypothetical license. It is well established that licenses arising out of litigation may be unsuitable to prove a reasonable royalty, as the hypothetical negotiation is assumed to be between a willing licensor and a willing licensee. See *LaserDynamics*, 694 F.3d at 77. A demand arising out of litigation would be even more suspect as it is one-sided—Mr. Reed considers the rate that Sprint requested in *TWC* without acknowledging the opposing and surely lower rate that *TWC* requested. (See D.I. 262, Ex. A at 132-34). Therefore, I find Mr. Reed's opinions based on the \$1.37 rate in Approach Two unreliable and inadmissible under *Daubert*.

C. Approach Three—"Announced" Royalty Rates

For the following reasons, Sprint's motion is **GRANTED** with respect to Approach Three.

Approach Three relies on "announced" royalty rates, which are "[publicly] disclosed royalty rates for patent licenses related to LTE technology in LTE-enabled consumer devices (such as smartphone handsets)." (D.I. 262, Ex. A at 140-41). Specifically, Mr. Reed considers "the declared royalty rates of Alcatel-Lucent and Motorola for standard essential LTE patents, as well as the average declared royalty rates published in a *les Nouvelles* (a licensing industry trade journal) article." (*Id.*, Ex. I at 136). Sprint allegedly monitored these rates during the relevant time period. (*Id.*, Ex. A at 141-43).

First, Sprint argues that it is improper for Mr. Reed to rely on the announced rates because they are equivalent to prior licenses and thus insufficiently comparable. (D.I. 261 at 18-19). Second, Sprint alleges that Mr. Reed arbitrarily selects from, and improperly averages, the

announced rates to inflate his damages estimate. (*Id.* at 19-20). Because I agree with Sprint on the first issue, I do not reach the second.

TC Tech argues, “[T]he announced royalty rates . . . are relevant to Sprint’s state of mind at the hypothetical negotiation, and so are not required to meet a separate comparability test.” (D.I. 291 at 20-21). TC Tech cites to *Interactive Pictures Corp. v. Infinite Pictures, Inc.*, 274 F.3d 1371 (Fed. Cir. 2001) and *Finjan Inc. v. Blue Coat Systems, Inc.*, 2015 WL 4129193 (N.D. Cal. July 8, 2015). In *Interactive Pictures*, the Federal Circuit held that damages testimony based on sales projections prepared by the defendant two months prior to the time of the hypothetical negotiation was not speculative. 274 F.3d at 1384-85. In doing so, the court inferred that the projections were relevant to the defendant’s state of mind at the time of the hypothetical negotiation. *Id.* at 1385 (“The fact that [the defendant] did not subsequently meet those projections is irrelevant to [the defendant’s] state of mind at the time of the hypothetical negotiation.”). In *Finjan*, the court found, under the *Georgia-Pacific* factors, “Particularly to the extent that [the d]efendant was aware of [a prior] litigation at the time, the outcome from that litigation is relevant to [the d]efendant’s state of mind entering the hypothetical negotiation and the parties’ relative bargaining strength.” 2015 WL 4129193, at *8.

I agree that, under a hypothetical negotiation analysis, the announced rates do not necessarily have to be considered equivalent to prior licenses. *Interactive Pictures* and *Finjan* generally support allowing a damages expert to rely on evidence of a defendant’s state of mind at the hypothetical negotiation. That does not mean, however, just because Sprint was aware of the announced rates at the time of the hypothetical negotiation, that Mr. Reed can adopt the rates without further analysis. Expert testimony must be sufficiently tied to the facts of the case.

Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1315 (Fed. Cir. 2011) (quoting *Daubert*, 509 U.S. at 591).

The trade journal article that Mr. Reed relies on states:

It is necessary at this point to clarify that an “announced” royalty rate may be significantly different than the “actual” royalty rate resulting from a bi-lateral negotiation. Having made a public announcement, a potential licensee might reasonably expect this to be the opening offer in a negotiation. That is all that should be assumed from these announcements.

(D.I. 262, Ex. A at 143 & n.487, Ex. K at 116-17). Citing *Plastic Omnium v. Donghee American, Inc.*, 2018 WL 2316637 (D. Del. May 22, 2018), TC Tech argues that an expert may consider an offer to license in a reasonable royalty analysis. (D.I. 291 at 21). While that may be true, again, the expert’s testimony must still be sufficiently tied to the facts of the case. See *Uniloc*, 632 F.3d at 1315. In *Plastic Omnium*, there were no actual prior licenses, the offer at issue was from the plaintiff’s predecessor, and the offer was made while the parties were “discussing a cooperation agreement.” 2018 WL 2316637, at *3. Thus, in view of those facts, the Court found the testimony based on the offer admissible. *Id.*

Here, Mr. Reed never addresses why, if the announced rates are merely “the opening offer in a negotiation,” they are a reliable measure of a rate *resulting* from the hypothetical negotiation. (See D.I. 262, Ex. A at 140-46, Ex. I at 136-38; see also D.I. 291 at 21-22). Mr. Reed only addresses the fact that the announced rates covered multiple patents (D.I. 262, Ex. A at 144-46) and might be “artificially high” as compared to FRAND rates (*id.*, Ex. I at 136-37). That is not sufficient to tie the announced rates to the facts of this case. (D.I. 262, Ex. K at 116-17).⁷

⁷ Mr. Reed purports to rely on the announced rates as a “reasonableness check.” (D.I. 262, Ex. A at 140). I do not think that excuses Mr. Reed from meeting *Daubert* standards. I also note that if the announced rates are unrealistically high, a “reasonableness check” based on those rates proves very little while exposing the jury to misleading numbers. Thus, if I were not excluding Mr. Reed’s testimony under *Daubert*, I would surely exclude it

In the alternative, TC Tech argues that Mr. Reed should be able to testify about his consideration of the announced rates “to rebut Sprint’s repeated, generalized claims that there are thousands of patents on wireless networks and that the pooled rates for LTE patents is as low as 0.0041%.” (D.I. 291 at 23). TC Tech cites to Dr. Cox’s testimony based on the rates from *TCL v. Ericsson*, 2018 WL 4488286 (C.D. Cal. Sept. 14, 2018). (D.I. 292, Ex. 4 ¶¶ 114-116, 138-149). As I find that portion of Dr. Cox’s testimony inadmissible, *see infra* § V.D, TC Tech’s argument is moot.

D. Royalties in View of the ’488 Patent Acquisition Price

For the following reasons, Sprint’s motion is **DENIED** with respect to the royalties in view of the ’488 patent acquisition price.

Sprint argues that all three of Mr. Reed’s reasonable royalty approaches should be excluded as “unbalanced in view of the overall acquisition price” of the ’488 patent. (D.I. 261 at 20-21 (quoting *Integra LifeSciences I, Ltd. v. Merck KGaA*, 331 F.3d 860 (Fed. Cir. 2003), *vacated and remanded on other grounds*, 545 U.S. 193 (2005))). TC Tech purchased the ’488 patent on March 30, 2012 from CableLabs for \$300,000. (D.I. 262, Ex. A at 12). Mr. Reed’s estimated damages based on his three damages theories range from \$540 to \$949 million. (*Id.* at 4).

In *Integra*, the Federal Circuit found a \$15 million damages award not adequately supported by the evidence. 331 F.3d at 870-72. The court’s primary concern seemed to be that, based on the record, there existed two possible dates of the hypothetical negotiation. *Id.* at 870. The court also noted, however, that the award “[did] not appear to take into account numerous factors that would considerably reduce the value of a hypothetical license.” *Id.* at 871. For

under Rule 403, as its probative value is substantially outweighed by the risk of unfair prejudice to Sprint of putting the announced rates into evidence. *See* Fed. R. Evid. 403.

example, the plaintiff had purchased the prior owner of the asserted patent, including “all of its products, patents and know-how,” for \$20 million, after either possible date of the hypothetical negotiation. *Id.* The court observed, “A \$15,000,000 award figure to compensate for infringement of only some of [the prior owner’s] patents before [the plaintiff’s] acquisition seems unbalanced in view of the overall acquisition price.” *Id.* (emphasis added).

I do not think *Integra* stands for a hard rule that damages for patent infringement may never be significantly higher than the purchase price of the patent. See *Spectralytics, Inc. v. Cordis Corp.*, 650 F. Supp. 2d 900, 914 (D. Minn. 2009), *aff’d in part, vacated in part*, 649 F.3d 1336 (Fed. Cir. 2011) (finding the relevant passage in *Integra* “pure dictum,” and that it “would make no sense” to bar, as a matter of law, a reasonable royalty exceeding what someone paid for a patent portfolio including the asserted patent). I especially do not think *Integra* applies to prevent a plaintiff from presenting evidence of such damages—*Integra* did not address admissibility, but the sufficiency of the evidence presented at trial. See 331 F.3d at 870-72. Most importantly, here, the jury will know the purchase price of the ’488 patent and be able to take that into account in reaching a reasonable royalty determination. Therefore, Sprint’s argument for exclusion based on *Integra* is unavailing.

IV. MR. BATES’ DOCTRINE OF EQUIVALENTS TESTIMONY

For the following reasons, Sprint’s motion to exclude Mr. Bates’ doctrine of equivalents testimony is **GRANTED**.

Sprint asserts that Mr. Bates provides some variation of the same doctrine of equivalents opinion for each element of each claim of the ’488 patent. (D.I. 261 at 23-24). Mr. Bates opines:

A person having ordinary skill in the art would have considered any differences between the language of [the claim element] and the [accused

features], as described in the LTE standard and, *e.g.*, Myung [textbook], to be insubstantial and would have found that the two perform substantially the same function and work in substantially the same way to achieve substantially the same result as required by [the claim element].

(D.I. 262, Ex. O ¶¶ 153, 169, 188-89, 201, 213, 221, 237, 248, 268, 282 (addressing claim 1, elements B-K); *id.* ¶¶ 287, 289, 291, 293, 295, 297, 299, 323, 328 (addressing claim 2, elements B-J)).⁸ For elements B, C, and E through G of both claims, Mr. Bates adds:

If this were not true, the SC-FDMA receiver present at eNodeBs in Sprint's LTE network would not be able to properly decode signals received from Consumer Wireless Devices in the network. This is because such a receiver signal attempts to decode received signals by reversing operations under an assumption that the received signal had been encoded using the operations of an SC-FDMA transmitter. Thus, Sprint's LTE network would not be capable of effective uplink communications.

(*Id.*, ¶¶ 153, 169, 201, 213, 221, 287, 289, 293, 295, 297). For claim 1, elements H through K, and claim 2, elements H through J, Mr. Bates adds:

If this were not true, the SC-FDMA receiver present at eNodeBs in Sprint's LTE network would not be able to properly decode signals received from Consumer Wireless Devices in the network. This is because signals generated by Consumer Wireless Devices in Sprint's LTE network are generated based on SC-FDMA and, for these signals to be intelligible at the eNodeB, they must be decoded by a SC-Case FDMA receiver, or its equivalent, which reverses the steps of the transmitter. Without this, Sprint's LTE network would not be capable of effective uplink communications.

(*Id.*, ¶¶ 237, 248, 268, 282, 299, 323, 328).

TC Tech states that it does not intend to offer doctrine of equivalents testimony concerning the operation of the accused SC-FDMA transmitters. (D.I. 291 at 26). Otherwise, TC Tech argues that Sprint's motion fails to address Mr. Bates' remaining doctrine of equivalents opinions. (*Id.*). TC Tech's only example, however, is Mr. Bates' opinion in his reply report regarding frequencies on the PUCCH and the "mutually exclusive" limitation. (*Id.*

⁸ Mr. Bates makes a slight variation in his opinion for claim 1, element D (D.I. 262, Ex. A ¶¶ 188-189), and claim 2, elements D and I (*id.*, ¶¶ 291, 323). The variation is substantively identical to Mr. Bates' other opinions.

(citing D.I. 262, Ex. P ¶ 169)). I found that portion of Mr. Bates' testimony insufficient to support a finding of equivalence on summary judgment. (D.I. 354 at 10-11).

Although Mr. Bates "addresses" each claimed element of the '488 patent, his opinions are wholly conclusory. TC Tech fails to show that those conclusions are based on sufficient facts or data. Thus, Mr. Bates' doctrine of equivalents opinions are inadmissible under Rule 702.⁹ See *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) ("[N]othing 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").

V. DR. COX'S DAMAGES TESTIMONY

TC Tech moves to exclude Dr. Cox's testimony regarding (1) the date of the hypothetical negotiation, (2) Sprint's prior settlement agreements, (3) Comcast's prior jury verdicts against Sprint, (4) "top-down" royalties based on *TCL v. Ericsson*, 2018 WL 4488286 (C.D. Cal. Sept. 14, 2018), (5) Cox's agreement to redeem proceeds of this litigation from TWC ("the Cox Redemption Agreement"), and (6) the parties to the hypothetical negotiation. (D.I. 263, 264).

For the following reasons, TC Tech's motion is **GRANTED** with respect to the settlement agreements, the *TCL* "top-down" royalties, and the Cox Redemption Agreement. The motion is **DISMISSED AS MOOT** with respect to the *Comcast* verdicts and the parties to the hypothetical negotiation. The rest of the motion is **DENIED**.

A. Date of the Hypothetical Negotiation

For the following reasons, TC Tech's motion is **DENIED** with respect to the date of the hypothetical negotiation.

⁹ Specifically, paragraphs 153, 169, 188-89, 201, 213, 221, 237, 248, 268, 282, 287, 289, 291, 293, 295, 297, 299, 323, and 328 of Mr. Bates' infringement report (D.I. 262, Ex. O).

Dr. Cox asserts that the hypothetical negotiation would take place in November 2011. (D.I. 265, Ex. D ¶ 57). TC Tech asserts that the correct date is July 2012, when Sprint launched its commercial LTE network. TC Tech argues that Dr. Cox's testimony is thus inadmissible for lack of legal and factual support. (D.I. 264 at 2-5). The relevant portion of Dr. Cox's testimony provides:

[The July 2012] date reflects when the [accused] technology was commercially announced, not when it was first used or tested. Testimony from former Sprint personnel indicates that by November, 2011, the technology was already in use. Mr. Harley Ball, formerly the Vice President of Intellectual Property and Technology at Sprint, confirmed in deposition that the first group of LTE towers was deployed on November 12, 2011. Additionally, Mr. Robert Azzi, the former Chief Network Officer at Sprint, noted that the "[f]irst sites in the field trials of LTE were probably late 2011, and then the deployment started to ramp in 2012. While Mr. Reed points to vague testimony that there were "most likely" some changes to Sprint's LTE network during this time, there is no evidence of any particular change that would be meaningful to TC Tech's infringement contentions as TC Tech contends the '488 patent is foundational to any network operating in accordance with the LTE standard. Accordingly, the hypothetical negotiation would have taken place around November 2011

(D.I. 265, Ex. D ¶ 57).

First, TC Tech argues that Dr. Cox is wrong as a matter of law, because the date of the hypothetical negotiation is "the start of the activity actually accused of infringement," and TC Tech has only accused Sprint's commercial LTE services, not its pre-commercial testing. (*Id.* at 3-4). TC Tech relies on *Fujifilm Corp. v. Motorola Mobility LLC*, 2015 WL 1265009 (N.D. Cal. 2015). In that case, Fujifilm only asserted infringement against some of Motorola's products. *Id.* at *3. The court held that the hypothetical negotiation "should be set just before the start of infringement by the Motorola products actually accused of infringement, not just before the start of infringement by any Motorola product that incorporates allegedly infringing features." *Id.* TC Tech argues that, like Fujifilm, it only asserts infringement against some services—Sprint's use of its commercial, not pre-commercial, LTE network. Thus, the hypothetical negotiation

should be set just before the start of infringement by Sprint's commercial, not pre-commercial, use. (D.I. 264 at 3-4; D.I. 308 at 2-3).

Sprint argues that TC Tech's infringement contentions do not distinguish between commercial and pre-commercial use. Rather, they assert that infringement occurred when "any of the Accused Services was used on the Sprint LTE network," broadly defining the "the Sprint LTE network" as "any and all telecommunications systems currently or previously located at least partially in the United States that are or were (1) built, owned, operated, or maintained, in whole or in part by Sprint at any time prior to expiration of the '488 Patent, or that (2) Sprint uses or used to provide LTE service at any time prior to expiration of the '488 Patent." (D.I. 286 at 6).

I do not think *Fujifilm* supports exclusion. In *Fujifilm*, the parties agreed on which Motorola products were and were not accused of infringement. The court held, as a matter of law, that the date of the hypothetical negotiation could not be based on infringement by unaccused products. 2015 WL 1265009, at *3. In contrast, the parties here disagree over what services TC Tech accuses of infringement. (See D.I. 264 at 2-4; D.I. 286 at 6). Thus, the portion of *Fujifilm* that TC Tech relies on is inapposite.

More relevantly, and contrary to TC Tech's argument, the court in *Fujifilm* went on to indicate that infringement does not require commercialization—"Where an accused product is developed and tested here in the United States, . . . 'use' and therefore infringement will almost always begin well before the first sale." *Id.* at *4 (quoting *Oracle Am., Inc. v. Google Inc.*, 789 F. Supp. 2d 1111, 1116 (N.D. Cal. 2011)). The court concluded, "in light of [that] principle and the conflicting evidence of earlier development and testing in the United States," the fact that Motorola began selling the accused product on a certain date did not establish the date of the

hypothetical negotiation as a matter of law. *Id.* at *5. Here, the correct date of the hypothetical negotiation is even less clear. The parties present conflicting evidence of not only when the accused services were first used, but also which services are accused. (*See* D.I. 265, Ex. D ¶ 57; D.I. 264 at 2-4; D.I. 286 at 6). Therefore, TC Tech fails to show that a November 2011 hypothetical negotiation date is wrong as a matter of law.

Second, TC Tech argues that Dr. Cox lacks sufficient factual support for his opinion, because he relies solely on the assumption that Sprint must have tested its commercial LTE network some time before its July 2012 launch. (D.I. 264 at 4-5). Specifically, TC Tech argues that the '488 patent requires multiple user devices to be connected and transmitting data on the LTE network and Sprint has failed to provide evidence that such devices were on its pre-commercial LTE network. (D.I. 308 at 1-2).¹⁰

TC Tech is wrong. Dr. Cox relies on statements by Mr. Ball, Sprint's former VP of Intellectual Property and Technology, and Mr. Azzi, Sprint's former Chief Network Officer. (D.I. 265, Ex. D ¶ 57 & nn.118-19). Mr. Ball testified that Sprint's first use of its LTE network was November 12, 2011, when "the first [cell] site was turned on," meaning the cell site "was on air on that date, and so it could be used for testing and otherwise." (D.I. 287, Ex. B at 62:14-63:11). He also indicated that there were devices accessing the cell site at that time, although he wasn't sure what devices those were. (*Id.* at 63:16-21). Mr. Azzi described a gradual deployment process—Sprint would announce a geographic region as an "LTE market" when it felt the region had "big enough network coverage and all the bells and whistles were done." (*Id.*, Ex. D at 202:3-21). Thus, "there were periods of time where if a customer had an LTE-capable

¹⁰ TC Tech also argues that Sprint is judicially estopped from presenting Dr. Cox's testimony and failed to disclose information about its preliminary network. (D.I. 308 at 3-4). Because TC Tech raises these arguments for the first time in its reply brief, I will not consider them. *United States v. Cruz*, 757 F.3d 372, 387-88 (3d Cir. 2014).

phone in their hand and were in a market that [Sprint] hadn't said was LTE ready, they could potentially get LTE service.” (*Id.*, Ex. D at 201:22-203:2). Mr. Azzi also estimated that the first device would have been able to access and use Sprint's LTE network “in the field trials of LTE” in “late 2011”. (*Id.* at 204:20-24, 206:10-14). I think those statements provide sufficient factual support for Dr. Cox's testimony. TC Tech's arguments can be adequately addressed through cross-examination and the presentation of contrary evidence.

B. Settlement Agreements

For the following reasons, TC Tech's motion is **GRANTED** with respect to the prior settlement agreements.

Dr. Cox relies on nine of Sprint's prior agreements. (D.I. 265, Ex. D ¶ 112, Ex. 5). All nine are settlement agreements. (*Id.*, Ex. D, Ex. 5). Dr. Cox makes no effort to address that fact.

The entirety of his analysis states:

Out of all the licenses I have reviewed, I have identified nine licenses that are particularly relevant to this case. These agreements have mobile service providers as licensees and include patents that are technologically similar to the '488 patent.¹¹ All nine relevant licenses consisted of a lump-sum payment ranging from \$14,000 to \$6 million. The mean payment is \$804,056, while the median is \$100,000. Seven of the nine licenses are for multiple-patent portfolios. The two licenses consisting of a single patent have lump-sum payments of \$14,000 and \$100,000. On a per patent basis, for these nine licenses the mean lump-sum per U.S. granted patent is \$54,432, while the median is \$30,000. I note however that the distribution of patent value is known to be highly right-skewed. But even assuming that the '488 patent is ten or even 100 times more valuable than the median patent in these agreements, I find an implied valuation consistent with my [reasonable royalty] analysis. For example, increasing the median value of \$30,000 by one or two orders of magnitude yields a valuation ranging from roughly \$300,000 to \$3,000,000 for the patent at issue.

¹¹ Dr. Cox's sole basis for finding technological comparability is that, for each of the prior agreements, “at least one of the licensed patents shared a four-digit [International Patent Classification] code with the '488 patent.” (D.I. 265, Ex. D ¶ 112 n.227). Although I do not reach the issue of technological comparability, I am dubious that Dr. Cox has met the *Daubert* standard.

(*Id.*, Ex. D ¶ 112). TC Tech argues that Dr. Cox’s testimony is inadmissible as he fails to show that any of the nine settlement agreements are comparable to the hypothetical license.

Courts are generally skeptical of allowing settlement agreements to prove a reasonable royalty. “The notion that license fees that are tainted by the coercive environment of patent litigation are unsuitable to prove a reasonable royalty is a logical extension of *Georgia-Pacific*,” which assumes a voluntary agreement between a willing licensor and a willing licensee. *LaserDynamics*, 694 F.3d at 77 (citing *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1164 n.11 (6th Cir. 1978)). Thus, a settlement agreement should be “consider[ed] in its proper context within the hypothetical negotiation framework to ensure that the reasonable royalty reflects ‘the economic demand for the claimed technology.’” *Id.* (quoting *ResQNet*, 594 F.3d at 872).

Sprint argues that because Dr. Cox relies on the agreements to “show a range of royalties paid,” his analysis is subject to a lower comparability standard than if he had used the agreements as “direct evidence of a royalty rate.” (D.I. 286 at 11). Sprint relies on *Uniloc USA, Inc. v. Microsoft Corp.*, which distinguishes between *Georgia-Pacific* factors 1 and 2, “looking at royalties paid or received in licenses for the patent in suit or in comparable licenses,” and factor 12, “looking at the portion of profit that may be customarily allowed in the particular business for use of the invention or similar inventions.” 632 F.3d 1292, 1318 (Fed. Cir. 2011). Sprint implies that Dr. Cox addresses the agreements under factor 12, and thus the comparability inquiry should focus on the businesses and the inventions. (D.I. 286 at 11).¹² Further, where there is no customary royalty rate, as in this case, under *Boston Scientific Corp. v. Johnson &*

¹² This does not appear to be supported by the record. In his report, Dr. Cox finds no evidence relevant to factor 12 and concludes that the factor “would have no impact” on a reasonable royalty. (D.I. 265, Ex. D ¶ 129).

Johnson, 2009 WL 075424 (N.D. Cal. Apr. 9, 2009), “courts may consider evidence of the parties’ licenses for related technologies to show a range of royalty rates actually paid.” (*Id.*).

Uniloc and *Boston Scientific* are inapposite. In *Uniloc*, the Federal Circuit merely acknowledged that *Georgia-Pacific* factors 1, 2, and 12 are “valid and important factors” in determining a reasonable royalty. 632 F.3d at 1317-18. In *Boston Scientific*, the court found “licenses for related technologies” relevant under factor 12. 2009 WL 075424, at *6. Neither case addresses the settlement agreement issue. Moreover, the court in *Uniloc* cautioned, “evidence purporting to apply to [factors 1, 2, or 12], and any other factors, must be tied to the relevant facts and circumstances of the particular case at issue and the hypothetical negotiations that would have taken place in light of those facts and circumstances at the relevant time.” *Id.* at 1318. That is wholly consistent with the requirement that prior settlement agreements be properly considered within the context of the hypothetical negotiation. *See LaserDynamics*, 694 F.3d at 77.

Here, Dr. Cox does not even acknowledge the fact that the prior licenses are settlement agreements, let alone address how that should be considered within the context of the hypothetical negotiation. (*See* D.I. 265, Ex. D ¶ 112). Thus, Dr. Cox falls far short of showing that the prior agreements are within “the limited scope of circumstances” under which settlement agreements have been found admissible. *See LaserDynamics*, 694 F.3d at 78 (distinguishing the inadmissible settlement agreement in that case from the admissible settlement agreement in *ResQNet*).

C. Comcast Verdicts

For the following reasons, TC Tech’s motion is **DISMISSED AS MOOT** with respect to the *Comcast* verdicts.

As discussed, TC Tech's damages expert, Mr. Reed, relies on the royalty rate Sprint asserted for infringement of its VoIP patents in *TWC*. I found Mr. Reed's testimony inadmissible under Rules 402 and 403. *See supra* § III.B. Sprint's damages expert, Mr. Cox, rebuts Mr. Reed's opinion in part by relying on two jury verdicts obtained by Comcast against Sprint. (D.I. 265, Ex. D, App. A ¶ 23). TC Tech argues that Dr. Cox's testimony should be excluded under Rules 702 and 403. (D.I. 264 at 8). Sprint makes clear that it does not intend to offer the *Comcast* testimony if the Court excludes Mr. Reed's *TWC* testimony, which I have done. (D.I. 286 at 14). Therefore, TC Tech's motion is moot.

D. *TCL v. Ericsson*—"Top-Down" Royalties

For the following reasons, TC Tech's motion is **GRANTED** with respect to the *TCL* "top-down" royalties.

At the March 7, 2019 hearing, I ordered Dr. Cox to submit a supplemental report rewriting his original opinions based on *TCL*. (Oral Argument at 59:2-3). The aim was to provide "an independent basis for reaching more or less the same conclusions" without relying on the court's analysis in *TCL*. (*Id.* at 60:2-5, 60:25-61:15). The parties later submitted letters regarding the supplemental report. (D.I. 334, 336). First, TC Tech argues that the supplemental report advances new opinions and thus violates the Court's order. (D.I. 334 at 1-2). Second, TC Tech renews various arguments raised in its briefing regarding Dr. Cox's original report. (*Id.* at 2-5). I do not address TC Tech's first argument, because I find Dr. Cox's supplemental report inadmissible under *Daubert*.

Dr. Cox relies on a "top-down" approach, which determines a reasonable royalty based on an aggregate royalty for the end-products associated with a standard (*e.g.*, LTE devices).

Dr. Cox opines that a reasonable aggregate royalty “for the industry-wide set of LTE patents,” including the ’488 patent, is between 6 and 10 percent. (*Id.* ¶¶ 8-10). Dr. Cox relies on two public statements—one from Ericsson, and one jointly from Ericsson, Alcatel-Lucent, NEC, NextWave Wireless, Nokia, Nokia Siemens Networks, and Sony Ericsson. Ericsson stated that it believed a reasonable aggregate rate would be six to eight percent. The joint statement suggested it would be “a single-digit percentage.” (*Id.* ¶ 8 & nn. 7-8).

Dr. Cox’s testimony mirrors the analysis from *TCL*. The court in *TCL* relied on the same two public statements to determine the appropriate maximum aggregate royalty in that case. 2018 WL 4488286, at *12. The court explained that Ericsson was part of a standards setting organization, European Telecommunications Standards Institute (“ETSI”), which selected patents to accept into a LTE standard. The accepted patents are referred to as “standard essential patents.” “[I]n exchange for acceptance of a patent as part of a [ETSI] standard, the patent holder must agree to license that technology on fair reasonable and non-discriminatory terms, or ‘FRAND’ terms.” *TCL*, 2018 WL 4488286, at *1. Ericsson was thus subject to a FRAND obligation. *Id.*

In contrast, it is undisputed that this case does not involve FRAND. (Oral Argument at 44:2-4). The ’488 patent has not been accepted by any standards setting organization. Therefore, TC Tech has neither agreed to license the ’488 patent on FRAND terms, nor reaped the associated benefits—participating in setting a maximum aggregate royalty and obtaining reciprocal cross-licenses for other standard essential patents. (*See* D.I. 264 at 10).

I do not think Dr. Cox has sufficiently tied his “top-down” testimony to the facts of this case. The relevant portion of his supplemental report provides:

There are several economic reasons why a top-down calculation, which has been applied in the context of determining FRAND royalties, is appropriate in

this case. Among the advantages of the top-down approach is the prevention of royalty stacking, which would result in licensees paying an unreasonable aggregate royalty, and the possibility of also preventing hold-up. Most importantly, contrary to Mr. Reed's contentions, and as I discussed extensively in my Initial Report, Sprint would have been able to implement the non-infringing alternative relatively quickly. FRAND royalty rates are appropriately estimated on an *ex ante* basis. Manufacturers and other implementers of a new standard, such as LTE, would be able to avoid any attempted exercise of monopoly power by an owner of standard essential patents. Put concisely, the top-down methodology is based on exactly the sort of information and paradigm that Sprint would have considered at the time of the hypothetical negotiation.

(D.I. 334, Ex. A ¶ 5). At best, Dr. Cox states a general rationale for using the "top-down" approach in the FRAND context. Dr. Cox fails to explain why that approach applies here, where the '488 patent is not subject to a FRAND obligation. Even more problematic, Dr. Cox never addresses why the specific rate associated with the ETSI standard essential patents should apply here, where the '488 patent was never accepted into the ETSI standard. (See D.I. 334, Ex. A ¶¶ 8-10).

Sprint argues that it is irrelevant that TC Tech was not actually part of a standards setting organization, because TC Tech alleges that the '488 patent is essential to the LTE standard. (D.I. 286 at 15). Sprint cites to *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201 (Fed. Cir. 2014), which Sprint argues "identified 'special apportionment issues' that arise any time a 'standard *requires* that devices utilize specific technology' such that 'compliant devices *necessarily* infringe certain claims in patents that cover technology incorporated into the standard.'" (D.I. 286 at 15 (citing *D-Link*, 773 F.3d at 1209, 1232)).

Sprint reads *D-Link* out of context. The patents at issue were Ericsson's standard essential patents, as defined by the Institute of Electrical and Electronics Engineers ("IEEE"), a standards setting organization. Analogous to the situation in *TCL*, Ericsson had agreed to "grant a license under reasonable rates to an unrestricted number of applicants on a worldwide basis

with reasonable terms and conditions that are demonstrably free of unfair discrimination.” *D-Link*, 773 F.3d at 1208-09. In other words, Ericsson was subject to a FRAND obligation.

Therefore, *D-Link* is inapposite for the same reasons as *TCL*.

A “standard essential patent,” as described in *TCL* and *D-Link*, is not merely a patent that is essential to practice a standard. It is a formal designation made by a standard setting organization that subjects the patent holder to a FRAND obligation in exchange for a defined set of benefits. It is undisputed that the ’488 patent is not such a “standard essential patent.” Because Dr. Cox fails to explain why the ETSI rates should apply to a non-standard essential patent, his “top-down” testimony is inadmissible as insufficiently tied to the facts of this case. *See* Fed. R. Evid. 702.

E. Cox Redemption Agreement

For the following reasons, TC Tech’s motion is **GRANTED** with respect to the Cox Redemption Agreement.

In December 2017, Cox entered into a settlement agreement with Sprint relating to the VoIP litigation. (D.I. 265, Ex. D ¶ 104, Ex. F). As part of the settlement, Cox, which shared joint ownership of TC Tech with TWC, agreed to end its involvement in this case. (*Id.*, Ex. F § IV.3(a)). In March 2018, Cox agreed to sell its 50% ownership interest in TC Tech to TWC in exchange for a 25% share of the proceeds of this litigation (“the Cox Redemption Agreement”). (*Id.*, Ex. D ¶ 103). Dr. Cox relies on the Cox Redemption Agreement to calculate “an upper bound on Cox’s implied valuation of the damages” from this case. (*Id.*, ¶¶ 103-107). His theory is that if Cox deliberately chose to enter the Redemption Agreement and forgo its payoffs as a partner in TC Tech—50% of the litigation proceeds—the value of accepting the Redemption Agreement must be greater than or equal to the value of maintaining ownership in TC Tech. (*Id.*,

¶ 106). Based on that premise, he estimates that Cox expected a maximum of \$3.89 million in damages, which he suggests should correspond to the actual damages in this case. (*Id.*, ¶ 107).

TC Tech argues that Dr. Cox's opinions should be excluded as unreliable and lacking connection to the facts of this case. (D.I. 264 at 14-17).

Dr. Cox's formula assumes that Cox would recover from this litigation as a partner in TC Tech. That is contrary to the plain language of the Redemption Agreement. (D.I. 308 at 12).

The Redemption Agreement states:

[P]ursuant to Section 3 of the [*Sprint v. Cox*] Settlement and License Agreement . . . if Cox remains a partner of TC Tech as of ninety (90) days following the effective date of the Settlement and License Agreement (the "Settlement Effective Date"), Cox will pay to Sprint (as defined in the Settlement and License Agreement) all damages, enhanced damages, and/or attorney's fees agreed upon or awarded to TC Tech from Sprint in settlement or final judgment of [this litigation] in an amount equal to Cox's percentage ownership interest in TC Tech as of the Settlement Effective Date, net of all Post-Effective Date Expenses (as defined in the Settlement and License Agreement)[.]

(D.I. 309, Ex. O at 2). Cox had already agreed to pay Sprint any proceeds from this litigation gained through its ownership in TC Tech. (*Id.*). Therefore, Cox's 50% ownership in TC Tech had no value with respect to this litigation. The Redemption Agreement was a means for TWC and Cox to put the Nash Bargaining Solution into practice. By giving up its ownership in TC Tech, Cox was no longer bound to pay Sprint its 50% of the litigation proceeds. Instead, TWC and Cox would split that 50%, each gaining an additional 25%. As a result, the total value of this litigation would be split 25% to Cox and 75% to TWC (25% plus its original 50%). Therefore, Cox gained an interest in this litigation by entering into the Redemption Agreement—Cox went from having 0% interest, because all its proceeds would go to Sprint, to having a 25% interest. Dr. Cox assumes the opposite—that Cox lost an interest in this litigation by entering into the Redemption Agreement. Dr. Cox's opinion is based on the erroneous assumption that, prior to

entering the Agreement, Cox had a 50% interest in this litigation through its ownership in TC Tech. (D.I. 265, Ex. D ¶ 106 & n.220. Therefore, I find Dr. Cox's opinions based on the Cox Redemption Agreement inadmissible as insufficiently tied to the facts of this case. *See* Fed. R. Evid. 702.

F. Parties to the Hypothetical Negotiation

TC Tech moves to exclude Dr. Cox's testimony that Sprint would not be a party to the hypothetical negotiation. (D.I. 264 at 17-18). Sprint states that it does not intend to present such testimony. (D.I. 286 at 25). Therefore, this portion of TC Tech's motion is **DISMISSED AS MOOT**.

VI. CONCLUSION

A separate order will be entered.