

**UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
ORLANDO DIVISION**

PARKERVISION, INC.,

Plaintiff,

v.

Case No: 6:14-cv-687-PGB-LHP

**QUALCOMM INCORPORATED
and QUALCOMM ATHEROS,
INC.,**

Defendants.

_____ /

SEALED ORDER

This cause is before the Court on Defendants' Motion to Strike and Exclude Opinions Regarding Alleged Infringement and Validity Issues. (Docs. 491, 540 (the "**Motion**"). Plaintiff submitted a Response in Opposition. (Doc. 527). The Court heard Oral Argument on January 24, 2022, and upon due consideration, Defendants' Motion is granted.

I. BACKGROUND

Defendants' Motion consists of four parts in which it seeks the following: (1) to exclude a new "impedance translation" infringement theory, a new Tau_{off}/T theory, and a new theory regarding the alleged reference potential; (2) to strike opinions that have been estopped by *ParkerVision I* and by the Federal Circuit's affirmance of the PTAB; (3) to strike pursuant to *Daubert* unreliable opinions due to the lack of testing and simulation; and (4) to strike '372 Patent infringement

opinions. (Doc. 540). Plaintiff has abandoned the '177 Patent and claim 107 of the '372 Patent, rendering moot the dispute over the allegedly new "impedance translation" infringement theory and the reference potential. (Docs. 670, 677, 14:13–17).

II. DISCUSSION

A. $\text{Tau}_{\text{off}}/T$

Defendants move the Court to Strike Plaintiff's $\text{Tau}_{\text{off}}/T$ theory, because the calculation is an infringement theory disclosed for the first time in Plaintiff's expert rebuttal report and because it lacks a sufficient scientific foundation. (Doc. 540, pp. 3–7).

1. *Undisclosed Theories*

Defendants argue that Plaintiff cannot rely on theories disclosed for the first time in expert reports. Fed. R. Civ. P. 37(c); *Finjan v. Cisco Sys.*, No 17-72, 2020 WL 2322923, at *3 (N.D. Cal. May 11, 2020) ("It is well settled that expert reports may not introduce theories not set forth in contentions." (internal quotations, brackets, citation omitted)). The prejudicial effect of asserting a new infringement theory after discovery has closed is beyond dispute. *See KlausTech v. Google*, No. 10-5899, 2018 WL 5109383, at *8 (N.D. Cal. Sept. 14, 2018). This is because the purpose of infringement contentions is to place Defendants on notice of Plaintiff's infringement theories. *Auburn Univ. v. Int'l Bus. Machs., Corp.*, 864 F. Supp. 2d 1222, 1227 (M.D. Ala. 2012). Plaintiff contends the $\text{Tau}_{\text{off}}/T$ theory is not an infringement theory and is offered to rebut the Defendants' validity contentions.

(Doc. 677, 30:17–19, 32:23–33:2, 33:4–7). Therefore, Plaintiff does not seek to excuse the late disclosure of new theories. *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, No. 1:05-CV-02482, 2008 WL 11337316, at *2 (N.D. Ga. Aug. 26, 2008) (party seeking to amend infringement contentions after discovery of new evidence must be diligent). And it is undisputed that the calculation did not appear in Plaintiff’s expert’s initial report on its infringement contentions. (Doc. 527, p. 3). As a result, the issue of timeliness concerns whether the $\text{Tau}_{\text{off}}/T$ theory disclosed in the rebuttal report of Plaintiff’s expert serves as an infringement theory or simply as a response to Defendants’ prior art references.

Defendants’ counsel described the $\text{Tau}_{\text{off}}/T$ calculation at oral argument as taking Tau-off and dividing it by T, then the relative value is used to decide whether something is a voltage sampler or an energy sampler. (Doc. 677, 15:8–11). Defendants argued that “according to ParkerVision . . . if something is an energy sampler . . . it falls within the claim [and infringes], and if something is a voltage sampler . . . it falls outside the claims.” (*Id.* 15:11–16). And so, Plaintiff is using “this Tau-off over T theory to tell us what falls within what we’ve now defined as their receiver claims or what falls outside what we’ve defined as the receiver claims.” (*Id.* 15:17–20).

Plaintiff agrees that the $\text{Tau}_{\text{off}}/T$ theory was not disclosed in their expert’s infringement report, and it does not intend to offer $\text{Tau}_{\text{off}}/T$ for infringement. (*Id.* 30:16–19, 31:11–13). Rather, Plaintiff contends the theory is offered to distinguish Defendants’ prior art references because $\text{Tau}_{\text{off}}/T$ will be used to show the prior art

does not “show, teach, or disclose sufficient discharged in the capacitor to the load.” (*Id.* 33:5–11). This is important because one of the claim limitations “is whether the capacitor discharges energy to a load, and that has to occur between samples.” (*Id.* 32:4–6). Plaintiff claims “Tau measures the rate of discharge of the capacitor. If we compare it to the time between samples, then we know how much energy would be discharged compared to other, you know, types of circuits, and so it's directly responsive to arguments about that limitation.” (*Id.* 32:23–33:2). Therefore, $\text{Tau}_{\text{off}}/T$ is offered to prove that Defendants’ prior “art fails because it doesn’t discharge from the capacitor to the load.” (*Id.* 47:7–9).

Defendants assert that Plaintiff is using $\text{Tau}_{\text{off}}/T$ as an infringement theory and as a validity theory. (*Id.* 19:17–18). This prompted the Court to ask Plaintiff’s counsel if he was willing to stipulate $\text{Tau}_{\text{off}}/T$ will not be used to prove an accused product or device infringes. (*Id.* 31:9–10). Plaintiff provided this response:

But, Your Honor, just to be clear, to the extent QUALCOMM's expert testifies to the extent the accused products satisfy this limitation, then [the prior art reference] Sevenhans satisfies this limitation. I think it's fair for ParkerVision to be able to use commonly understood principles of circuit components to show, well, in fact, if you do the math, the prior art behaves different from the accused products, and that would be directly responsive to QUALCOMM's expert's arguments on invalidity in that case.

(*Id.* 31:14–21).

Simply put, Plaintiff reserves the right to use the $\text{Tau}_{\text{off}}/T$ calculation to show the prior art is a voltage sampler that does not teach the invention, including by first applying the calculation to prove the accused product is an energy sampler, which

happens to also prove infringement. Defendants object to the calculation, first disclosed in a rebuttal expert report, from being used to prove an accused product infringes. (*Id.* 54:17–21). The prejudice to allowing a new infringement theory after the close of discovery and the creation of expert reports is obvious.¹

To the extent Plaintiff's expert would use $\text{Tau}_{\text{off}}/T$ to offer an opinion on whether an accused product is an energy sampler or a voltage sampler, and thus infringes a patent-in-suit, the theory should have been disclosed in Plaintiff's infringement contentions and initial expert disclosure. It is of little comfort to Defendants that the infringement theory is cloaked in an argument that also attacks the Defendants' validity contention.² As discussed in the following section, the Court finds the $\text{Tau}_{\text{off}}/T$ theory does not satisfy *Daubert* and should be excluded both on the failure to disclose the theory in a timely manner and due to its lack of reliability.

2. *Daubert*

Federal Rule of Evidence 702 permits “[a] witness who is qualified as an expert by knowledge, skill, experience, training, or education” to testify in the form of an opinion. Rule 702 imposes an obligation on district courts to act as

¹ Plaintiff submits that its response to Defendants' Interrogatory Number 7, which asks Plaintiff how it distinguishes prior art, provided notice of the $\text{Tau}_{\text{off}}/T$ theory. (Doc. 677, 33:4–14). The Court disagrees that the general assertion that “the prior art doesn't . . . teach . . . sufficient discharge in the capacitor to the load” provided notice of the $\text{Tau}_{\text{off}}/T$ theory or how it would be applied to the accused products.

² The Court notes that in his rebuttal report Plaintiff's expert, Dr. Allen, calculated the $\text{Tau}_{\text{off}}/T$ values for prior art circuits, two of the Plaintiff's products, and one of the accused products. (Doc. 542, ¶ 16).

gatekeepers “to ensure that speculative, unreliable expert testimony does not reach the jury” under the mantle of reliability that accompanies “expert testimony.” *McCorvey v. Baxter Healthcare Corp.*, 298 F.3d 1253, 1256 (11th Cir. 2002); see *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993). This gatekeeping role applies “not only to testimony based on ‘scientific’ knowledge, but also to testimony based on ‘technical’ and ‘otherwise specialized’ knowledge.” *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 141, 147–48 (1999).

The party offering an expert opinion has the burden of establishing three criteria by a preponderance of the evidence: qualification, reliability, and helpfulness. See *McClain v. Metabolife Int’l, Inc.*, 401 F.3d 1233, 1238 (11th Cir. 2005); *Rink v. Cheminova, Inc.*, 400 F.3d 1286, 1292 (11th Cir. 2005). First, the witness must be “qualified to testify competently regarding the matters [s]he intends to address.” *Rink*, 400 F.3d at 1291. Indicia of an expert’s qualifications may be evidenced by education, training, work experience, publication in the pertinent field, and membership in professional societies. See *Am. Tech. Res. v. United States*, 893 F.2d 651, 656 (3d Cir. 1990).

Second, the expert witness must employ “sufficiently reliable” scientific methods or principles to form her opinions. *Rink*, 400 F.3d at 1291. The reliability of an expert’s methodology can be evaluated by considering a wide range of factors, including: (1) whether the expert bases her opinion on sufficient facts or data; (2) whether the expert unjustifiably extrapolates her research to reach an unfounded conclusion; (3) whether the expert considers or accounts for contradictory studies

or data; (4) the extent to which the methods used rely on the expert's subjective interpretations; and (5) whether the expert is being as careful as an expert in the same field would be in conducting professional work outside the context of paid litigation. *See Daubert*, 509 U.S. at 593–94; FED. R. EVID. 702 advisory committee notes to 2000 amendments.

Third, the expert's testimony must "assist the trier of fact to understand the evidence or to determine a fact in issue." *Daubert*, 509 U.S. at 591. Expert testimony helps where it concerns matters beyond the ken of the average juror and will allow the jury to understand the evidence or to resolve a factual dispute. *See Kumho Tire*, 526 U.S. at 148–49. Conversely, there will be no need for an expert's opinion where the jury can decide a disputed issue through the application of common sense or simple logic considering the evidence and testimony presented at trial. *See Dhillon v. Crown Controls Corp.*, 269 F.3d 865, 871 (7th Cir. 2001). Further, like all evidence and testimony, an expert's opinion must be relevant to an issue in the case and must hold probative value that outweighs the concerns listed in Rule 403. *Daubert*, 509 U.S. at 591.

Defendants challenge the scientific basis behind the $\text{Tau}_{\text{off}}/T$ calculation. (Doc. 540, p. 5). They argue Plaintiff "offers no scientific support for the contention that a person of ordinary skill in the art can differentiate between 'energy sampler' circuits and 'voltage sampler' circuits by calculating what ParkerVision's expert calls " $\text{Tau}_{\text{off}}/T$ " calculations." (*Id.*). Defendants assert that Plaintiff fails to cite "a single journal article, book, or other piece of scientific literature supporting the use

of “ $\text{Tau}_{\text{off}}/T$ ” calculations.” (*Id.* at p. 6). Moreover, Defendants note the patents-in-suit do not discuss the $\text{Tau}_{\text{off}}/T$ calculations. (*Id.*).

Defendants explain that Dr. Allen developed the theory using $\text{Tau}_{\text{off}}/T$ calculations to determine whether a circuit is an energy sampler or a voltage sampler. (Doc. 677, 22:19–23:1). Applying *Daubert* to this opinion, Defendants argue the Plaintiff has failed to demonstrate the theory has been subject to peer review or publication, does not provide the potential rate of error, and fails to “link Tau_{off} over T as a calculation to whether or not something is a voltage sampler or an energy sampler.”³ (*Id.* 23:2–11, 23:21–24:1). And Defendants submit Plaintiff failed to perform simulations in support of its theory. *See Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1257 (Fed. Cir. 2010) (holding plaintiff failed to prove literal infringement by not producing test data or a live demonstration).

Defendants further contend the theory lacks reliability, because Plaintiff’s experts disagree over whether one should use a 75% off period or a 25% off period when performing the calculation. (Doc. 540, p. 6). Dr. Allen, who first devised $\text{Tau}_{\text{off}}/T$ as a calculation for discerning circuits as either voltage sampler from energy sampler, used a 25% off time in his calculation and admitted at deposition that he should have used a 75% off time. (Doc. 677, 25:13–23).⁴ Dr. Allen was

³ Defendants admit that the “RC time constant Tau was known” and “that time was known.” (Doc. 677, 23:14–15). However, Defendants aver there is no evidence showing the calculation written as Tau over T . (*Id.* 23:15–17).

⁴ Allen Deposition (Doc. 527-13, 360:2–10).

replaced by Dr. Steer who disagreed with Dr. Allen and opined the correct Tau-off time is 25%.⁵ (*Id.* 26:1–11). Defendants note that when $\text{Tau}_{\text{off}}/T$ is applied to circuits which Plaintiff has previously characterized as energy samplers, (Doc. 327, pp. 15–16), the calculation shows them to be voltage circuits, further calling the reliability of the theory into question.⁶ (*Id.* 18:14–19:5).

Plaintiff tries to salvage the $\text{Tau}_{\text{off}}/T$ theory by arguing that the calculation is “textbook.” (Doc. 527, pp. 4–5). Plaintiff submits that the “RC time constant Tau is expressed in seconds and relates to the time required to charge or discharge the capacitor through the resistance.” (*Id.* at p. 5). Plaintiff further argues that Defendants’ expert, Dr. Razavi, states in his report that “accurate mathematical models can be created for all common circuit components,” including “resistors, capacitors, and transistors.” (Doc. 677, 29:17–20). Dr. Razavi’s report, however, is discussing the computer simulations he performed of circuits disclosed in the prior art, described in the patents, and the accused products. (Doc. 533, ¶ 39). In that context, Dr. Razavi describes how mathematical models of a component in a circuit simulation can describe performance characteristics of the component. (*Id.*).

⁵ Plaintiff claims the disagreement between Dr. Allen and Dr. Steer is not about methodology or reliability, but the Court disagrees, especially where the calculation as applied contradicts the embodiments disclosed in the patent.

⁶ Figure 126A, 127A, and 129A have a $\text{Tau}_{\text{off}}/T$ value of 4040.00, well over the threshold set by Dr. Allen for voltage sampler circuits. (*See* Slide 25, Qualcomm Presentation; Razavi Decl. Doc. 542, ¶¶ 32–34, 37–39). A value over 200 and the circuit does not qualify as an energy sampler. (Doc. 540, p. 7).

Dr. Razavi does not opine that $\text{Tau}_{\text{off}}/T$ calculations reliably create a value above which a circuit is a voltage sampler and below which it is an energy sampler. As Defendants correctly observe, Plaintiff fails to offer a single scientific publication, test, or simulation that shows its $\text{Tau}_{\text{off}}/T$ calculation reliably differentiates between an energy sampler and a voltage sampler.⁷ The jury will be left with a credentialed expert offering the opinion that a calculation over 200 is a voltage sampler circuit without independent data supporting the reliability of the opinion.

Simply put, the issue is not whether $\text{Tau}_{\text{off}}/T$ is a recognized equation. Rather, the dispute is over the application of the calculation to distinguish circuits as energy samplers or voltage samplers. As Dr. Razavi states in his declaration, the numerical value proposed by Dr. Allen and Dr. Steer is arbitrary and is not supported by intrinsic or extrinsic evidence. (Doc. 542, ¶ 24). *See MidAmerica C2L Inc. v. Siemens Energy, Inc.*, No. 20-11266, 2022 WL 456830, at *9 (11th Cir. 2020) (“Something [does not] become ‘scientific knowledge’ just because [it is] uttered by a scientist; nor can an expert’s self-serving assertion that his conclusions were derived by the scientific method be deemed conclusive.” (citations omitted)). Accordingly, Plaintiff has failed to provide a reliable basis for its $\text{Tau}_{\text{off}}/T$ theory, and Defendants’ Motion to exclude the $\text{Tau}_{\text{off}}/T$ theory is granted.

⁷ See Declaration of Dr. Razavi (Doc. 542, ¶ 21).

B. Collateral Estoppel

1. *Preclusive Effect of Factual Findings at the Board and Affirmed by the Federal Circuit*

The issue before the Court is whether factual findings regarding the teachings of prior art that were necessary to the judgement entered by the PTAB on the IPR petitions and affirmed by the Federal Circuit have preclusive effect such that Plaintiff's expert witnesses are prohibited from offering opinions that contradict the factual findings. The issue is complicated by the fact that the IPR petitions brought by Qualcomm challenge the validity of apparatus and method claims of the '940 patent. *See ParkerVision, Inc. v. Qualcomm Inc.*, 903 F.3d 1354, 1357–58 (Fed. Cir. 2018). The Board found certain apparatus claims of the '940 patent were obvious and therefore unpatentable, and the judgment was affirmed by the Federal Circuit. *Id.* at 1359. There is no dispute over the preclusive effect of the Board's invalidity determinations that were affirmed by the Federal Circuit.

The Board, however, found Qualcomm failed to prove invalidity of certain method claims of the '940 patent, because they “d[id] not speak to whether a person of ordinary skill in the art would have any reason” to combine the teachings of the prior art referenced to achieve the claimed invention. *Id.* at 1363. The Federal Circuit explained the distinction between proving invalidity when challenging an apparatus claim as opposed to a method claim, as follows:

While Qualcomm was only required to identify a prior art reference that discloses an apparatus “capable of” performing the recited functions to prove that the apparatus claims would have been obvious, more was required with respect to the method claims. Specifically, Qualcomm needed to present

evidence and argument that a person of ordinary skill would have been motivated to operate Nozawa [the prior art reference] in a manner that satisfied the . . . [claim] limitation.

Id.

Therefore, the Board made factual findings regarding what Qualcomm's prior art references disclose or teach, finding fault only with Qualcomm's failure to demonstrate that a person having ordinary skill in the art ("**PHOSITA**") would have any reason to operate or combine the prior art in a manner that satisfied the limitation. *Id.*

Defendants submit the Federal Circuit's factual findings regarding what the prior art is "capable of" performing has preclusive effect such that Plaintiff's experts should be prevented from offering opinions contrary to those findings. (Doc. 677, 85:9–86:8). Defendants concede that Plaintiff's expert should be permitted to offer opinions on whether a PHOSITA would be motivated to use the prior art to accomplish that which it is "capable of" doing without relitigating factual findings regarding what the prior art teaches. (*Id.*). Plaintiff counters that collateral estoppel or preclusion of an issue or fact does not apply because a different burden of proof applies before the Board than at trial. (Doc. 527, p. 9; Doc. 677, 83:10–19). Moreover, Plaintiff submits the factual findings by the Board, affirmed by the Federal Circuit, should not extend to the '372 patent, because the claim limitations are different.⁸ (Doc. 677, 79:10–80:3).

⁸ Plaintiff's argument distinguishing the claim terms in the '940 and '372 patents were not raised in their brief and was presented for the first time at the hearing.

2. *Standard of Review*

To apply collateral estoppel or issue preclusion to an issue or fact, the proponent must demonstrate the following:

- (1) the issue or fact is identical to the one previously litigated;
- (2) the issue or fact was actually resolved in the prior proceeding;
- (3) the issue or fact was critical and necessary to the judgment in the prior proceeding;
- (4) the judgment in the prior proceeding is final and valid; and
- (5) the party to be foreclosed by the prior resolution of the issue or fact had a full and fair opportunity to litigate the issue or fact in the prior proceeding.

See In re Microsoft Corp. Antitrust Litig., 355 F.3d 322, 326 (4th Cir. 2004).

As the Fourth Circuit explained, the doctrine of “collateral estoppel” or “issue preclusion” is a subset of the *res judicata* genre. Applying collateral estoppel “forecloses the relitigation of issues of fact or law that are identical to issues which have been actually determined and necessarily decided in prior litigation in which the party against whom [collateral estoppel] is asserted had a full and fair opportunity to litigate.” *Id.* at 326 (citing *Sedlack v. Braswell Servs. Group, Inc.*, 134 F.3d 219, 224 (4th Cir. 1998) (internal quotation marks and citation omitted)). To foreclose relitigation of a factual finding it must have been “‘essential to the judgment,’ meaning that the judgment must be ‘dependent upon the determinations.’” *Id.* (citing RESTATEMENT (SECOND) OF JUDGMENTS § 27 & cmt. h (1982)).

Narrowing the focus of issue preclusion and collateral estoppel to patent litigation, the Federal Circuit held in *XY v. Trans Ova Genetics*, 890 F.3d 1282, 1294 (Fed. Cir. 2018) that “an affirmance of an invalidity finding, whether from the

district court or the PTAB has a collateral estoppel effect on all pending or co-pending actions.” This is because “a patentee, having been afforded the opportunity to exhaust his remedy of appeal from a holding of invalidity, has had his ‘day in court,’ and a defendant should not have to continue ‘defend[ing] a suit of infringement of [an] adjudged invalid patent.’” *Id.* (citations omitted); *cf. Papst Licensing GMGH & Co. v. Samsung*, 403 F. Supp. 3d 571, 601-602 (E.D. Tex. 2019) (declining to give preclusive effect to a finding of invalidity by the PTAB where finding was not appealed to the Federal Circuit).

In *B & B Hardware, Inc. v. Hargis Indus., Inc.*, 575 U.S. 138 (2015), the Supreme Court addressed the preclusive effect of the Trademark Trial and Appeal Board’s (“**TTAB**”) conclusion that a mark should not be registered because the likelihood of confusion.⁹ The Court held that its cases and the Restatement (Second) of Judgments “make clear that issue preclusion is not limited to those situations in which the same issue is before two *courts*. Rather, where a single issue is before a court and an administrative agency, preclusion also often applies.” *Id.* at 148. The Court concluded it “does not matter that the TTAB and the Eighth Circuit use different factors to assess likelihood of confusion,” because “[m]inor variations in the application of what is in essence the same legal standard do not defeat preclusion.” *Id.* at 154.

⁹ The decision of the TTAB was not appealed to the Federal Circuit.

3. Discussion

In the instant case, Defendants asserted prior art reference to invalidate certain method claims of the '940 patent. The Board made factual findings concerning the teachings of the prior art, and those findings were critical and necessary to the Board's judgment that Qualcomm failed to carry the burden of proving invalidity.¹⁰ The Board's judgment was appealed and was affirmed by the Federal Circuit, and Plaintiff had a full and fair opportunity to dispute Defendants' contentions regarding what the prior art was capable of doing; that is, what the prior art teaches. Accordingly, Plaintiff's expert may not offer opinions at trial that contradict the Board's factual findings on what the prior art teaches. *See In re Microsoft Corp.*, 355 F.3d at 326. Nor may Plaintiff's experts contest at trial the Board's findings of invalidity which were affirmed on appeal. *See Trans Ova Genetics*, 890 F.3d at 1294. Plaintiff's expert, however, may offer opinions that a PHOSITA would not be motivated to use the prior art to accomplish that which it is "capable of" doing when discussing claims that were not invalidated by the Board and the Federal Circuit.¹¹ For these reasons, Defendants' Motion is granted.

¹⁰ For example, the Federal Circuit affirmed the Board's factual finding that Nozawa discloses a plurality of integer-multiple harmonics, and Krauss and Ariie disclose a "first oscillating signal." *Qualcomm Inc.*, 903 F.3d at 1360–61, 1364.

¹¹ The Court recognizes the burden of proof before the PTAB is lower than the burden Defendants carry at trial proving invalidity. As to claims invalidated by the PTAB and affirmed on appeal, the judgment has preclusive effect for the reasons discussed in this Order. As for factual findings regarding the teachings of prior art references where the Board found Qualcomm failed to prove invalidity, the Court finds there is no rational basis for disregarding the Board's determination, affirmed on appeal, simply because the finding is as to an element of the defense.

The parties shall meet and confer in an attempt to reach agreement on the Board's factual findings regarding what the prior art teaches and the impact on Plaintiff's experts' testimony. If agreement cannot be reached, the parties may submit briefs on the issue no later than May 2, 2022, with responses due by May 16, 2022.

C. PARKERVISION I

The issue is whether factual findings by the Federal Circuit in *ParkerVision, Inc. v. Qualcomm Inc.*, 621 F. App'x 1009 (Fed. Cir. 2015) (hereafter "*ParkerVision I*"), following a trial in the Middle District of Florida concerning how the accused devices function and interpreting two prior art references, are entitled to preclusive effect. Defendants move the Court for an Order preventing Plaintiff's new expert, Dr. Steer, from offering opinions inconsistent with positions taken by Plaintiff's former expert, Dr. Prucnal, and contrary to the factual findings articulated by the Federal Circuit.¹² (Doc. 540, pp. 13–15). Plaintiff argues the factual findings are not entitled to preclusive effect because different claims and different patents are at issue here, such that the issues of law or fact were not actually litigated in *ParkerVision I*. (Doc. 527, pp. 9–12). The Court disagrees that the issue of fact preclusion as it relates to the accused devices or products and the Federal Circuit's interpretation of the prior art is inapplicable simply because

¹² Plaintiff does not deny that Dr. Steer intends to offer, if permitted, opinions regarding the manner in which the accused devices function that contradicts the factual findings made by the Federal Circuit. (Doc. 527, p. 9). Similarly, Plaintiff acknowledges its expert will take issue with the teachings of DeMaw and Weisskopf (the prior art). (*Id.* at pp. 10–11).

different patents and additional claim limitations are present. If Defendants were asking this Court to give preclusive effect to the Federal Circuit's factual findings as to the scope of claims at issue in *ParkerVision I*, Plaintiff's point may be well-taken, assuming the claims at issue here are materially different. But that is not the case.¹³

1. *The Accused Devices*

In *ParkerVision I*, "Dr. Prucnal's testimony focused on Qualcomm's Magellan product, but he testified that his opinion regarding the Magellan product applied to each of Qualcomm's accused products." *ParkerVision I*, 621 F. App'x at 1012. Plaintiff stipulated at oral argument that the accused products involved here are same as those involved in *ParkerVision I*. (Doc. 677, 98:3-6, 98:19-99:2). On appeal, the Federal Circuit discussed in depth the expert testimony adduced at trial regarding how the accused devices function in reviewing the district court's decision to grant Qualcomm's motion for judgment as a matter of law ("JMOL") of non-infringement and its denial of JMOL on invalidity. *Id.* The Federal Circuit affirmed the trial court's finding of non-infringement and reversed the denial of JMOL on invalidity. *Id.* at 1012, 1024.

¹³ The standard of review is the same as set forth in section II B of this Order. *See In re Microsoft Corp. Antitrust Litig.*, 355 F.3d 322, 326 (4th Cir. 2004); *see also Harris Trust and Sav. Bank v. Ellis*, 810 F.2d 700, 705 (7th Cir. 1987) ("When one party introduces evidence on a dispositive issue of fact, and an adverse party with opportunity and motive to contest the presentation chooses not to, the ensuing finding is entitled to the same respect as one litigated to the hilt.").

The Federal Circuit made the following findings of fact each of which was critical and necessary to the judgment rendered: (1) “ParkerVision’s infringement expert conceded that in the accused produces the baseband signal was created before, or ‘upstream from,’ the storage capacitor”; (2) “Dr. Prucnal testified that the accused products . . . [use] a specific type of circuitry called a ‘double-balanced mixer”; (3) “[i]t is undisputed that double-balanced mixers . . . can be used to convert high-frequency carrier signals into low-frequency baseband signals”; (4) Dr. Prucnal admitted “the double-balanced mixer create the baseband signal”; and (5) in its opinion on ParkerVision’s motion for reconsideration, held the double-balanced mixer eliminates the carrier signal. *See ParkerVision I*, 621 F. App’x at 1012–14; *ParkerVision I*, 627 F. App’x at 921–24.

The Court finds the issue of fact here—how the accused products operate—is identical to the issue of fact in *ParkerVision I*, the issue of fact was resolved in *ParkerVision I*, the issue of fact was critical and necessary to the judgment in the prior proceeding, the judgment in the prior proceeding is final and valid; and the party to be foreclosed by the prior resolution of the issue or fact—ParkerVision—had a full and fair opportunity to litigate the issue or fact in the prior proceeding. Accordingly, the issues of fact decided in *ParkerVision I* are entitled to preclusive effect, and ParkerVision may not offer testimony or argument to contradict or rebut those factual findings.

2. *The Prior Art References*

In *ParkerVision I*, the Federal Circuit found DeMaw discloses a circuit that includes two transistors that qualify as switches, and these switches control the charging and discharging of two energy storage capacitors to generate the baseband signal. *ParkerVision I*, 621 F. App'x at 1022-24. The Federal Circuit found “the transistors designated as Q1 and Q2 in DeMaw correspond to the first and second switches in Figure 16H.” *ParkerVision I*, 621 F. App'x at 1022. Moreover, the Federal Circuit observed that “Dr. Razavi testified that ‘charging and discharging of the first and second capacitors’ occurs when the first and second switches (Q1 and Q2) ‘are turned on and off at a certain rate.’” *Id.* at 1023. Therefore, the Federal Circuit held, “[b]ecause there is no basis on which a reasonable jury could reject the evidence the DeMaw anticipated claim 18 of the ‘342 patent, we reverse the district court’s denial of Qualcomm’s motion for JMOL of invalidity regarding claim 18.” *Id.* The Federal Circuit’s interpretation of DeMaw was critical and necessary to the judgment.

Plaintiff does not quarrel with the Federal Circuit’s factual finding, but it argues DeMaw would not satisfy the “sampling” limitation at issue in this case. (Doc. 527, p. 11). This may be true, and nothing prevents Plaintiff from presenting evidence that DeMaw, as interpreted by the Federal Circuit, does not teach the sampling limitation which may or may not be fatal to Defendants’ invalidity defense. What Plaintiff may not do is offer testimony that distinguishes or disagrees with the factual findings of the Federal Circuit.

The Weisskopf reference is entitled “Subharmonic Sampling of Microwave Signal Processing Requirements,” and it teaches a “storage module [that] receives non-negligible amounts of energy transferred from a carrier signal at an aliasing rate.”¹⁴ *ParkerVision I*, 621 F. App’x at 1018–22. This factual finding by the Federal Circuit has preclusive effect. But the issue is not resolved quite so easily, because Plaintiff’s expert opines the issue is whether Weisskopf teaches the transfer of nonnegligible energy **to a load**, as opposed to an energy storage device. (Doc. 677, 95:1–6; Doc. 527, p. 11). Defendants argue the ‘940 patent does not recite a “load,” and Plaintiff is introducing a term not found in the claims and not addressed during the claim construction proceedings. Defendants’ objection goes beyond the scope of collateral estoppel, and the parties have not briefed whether Dr. Steer’s

¹⁴ The Federal Circuit considered the testimony of Mr. Sorrells, one of the ParkerVision inventors, and found the following:

Mr. Sorrells explained at trial that transferring a non-negligible amount of energy into the storage capacitor means ‘that you have to transfer enough energy to overcome the noise in the system to be able to meet your specifications.’ . . .

Mr. Sorrells’ testimony thus establishes that to determine whether or not energy in amounts distinguishable from noise has been transferred from the carrier signal, one may look to whether the down-converting circuit functions in practice. If a circuit successfully down-converts, that is proof that enough energy has been transferred to overcome the noise in the system.

The Weisskopf reference discloses such a down-converting system. Weisskopf touts the ability of the disclosed circuit to down-convert a high frequency carrier signal to a baseband ‘with great efficiency and without loss of fidelity.’ Dr. Razavi testified, without contradiction, that the Weisskopf system is designed to maximize the amount of energy transferred from the carrier signal. The fact that Weisskopf transfers as much energy as possible from the carrier signal, resulting in a commercially viable down-converting system is proof that the system successfully distinguishes the transferred energy from noise. No reasonable jury could have concluded otherwise.

anticipated testimony introduces a new term (load) not found in the claims of the '940 patent and not addressed in the claim construction.

For these reasons, Defendants' Motion to give preclusive effect to the Federal Circuit' factual findings regarding the accused products and the prior art (DeMaw and Weisskopf) is granted. Plaintiff may not offer testimony or evidence inconsistent with the Federal Circuit's factual findings. Whether "energy to the load" appears in the claims of the '940 patent is reserved for another day but suffice to say an expert may not change the claim limitations to suit a preferred theory.

D. Motion to Strike Unreliable and Speculative Infringement Opinions due to Lack of Testing and Simulation

The issue before the Court is whether infringement opinions offered by Dr. Allen, Dr. Steer, and Mr. Sorrell are unreliable because their opinions are not supported by testing and simulation. Defendants argue that Plaintiff's experts, and its employee Mr. Sorrell, failed to apply the same level of intellectual rigor that characterizes the practice of an expert in the relevant field (here circuit analysis) in forming their expert opinions. (Doc. 677, 120:4-13). *See Kumho Tire*, 526 U.S. at 152. Plaintiff argues the failure to perform testing or simulations to validate the expert's opinions and theories goes to the weight, not the admissibility of the expert's testimony. (Doc. 527, p. 13). *See Board of Regents, The Univ. of Texas System v. Ethicon, Inc.*, No. A-17-CV-001084-LY, 2020 WL 3580148, at *3 (W.D. Tex. Apr. 21, 2020) (citation omitted). Plaintiff claims they did not create simulations because "[t]he tests benches Qualcomm gave [ParkerVision] were

horrible.” (Doc. 677, 130:16-18). The point being that Plaintiff’s experts elected to rely on design review documents, testing review documents, schematics, and Defendants’ simulations in conjunction with mathematical analysis to support their opinions. (*Id.* 132:16–133:2). Plaintiff submits Defendants’ Motion is more about the strength of the evidence than reliability. (*Id.* 135:6–7).

1. *Feasibility and Importance of Creating Simulations*

Defendants’ counsel stated during oral argument that in *ParkerVision I* Plaintiff’s expert, Dr. Prucnal, created simulations which he later abandoned. (*Id.* 121:20–122:5). And in ParkerVision’s case before the ITC, Dr. Steer created simulations, and in the ParkerVision case initiated in the Jacksonville Division, Dr. Allen used simulations.¹⁵ (*Id.* 124:17–125:17; Slide 68). In the instant case, Plaintiff sought access to Defendants’ circuit schematics in electronic form to simulate how the circuit performs. (Doc. 214, 9:3–10:8). Plaintiff argued that relevance of this information in the following terms:

Now, this is very valuable and important information. Because the analogy that I’ve heard this is, circuits are all made up of very familiar components, much like keys on a piano. And just because you see those keys laid out in a circuit doesn’t mean you know what tune they’re set up to play.

That all depends on these different values that we’ve discussed. And these are very complicated. And so, of course, during the course of designing a circuit, it sometimes happens that the engineer thought that it would work a certain way and it doesn't work that way. It works a different way.

¹⁵ Plaintiff did not contest the accuracy of Defendants’ representation at oral argument.

The critical thing to understand here is, it's really not possible to test the actual performance of a circuit in one of these computer chips without simulation.

(*Id.* 10:9–23) (emphasis added).

Plaintiff explained that while it is possible to test a chip by “putting probes of some kind physically on the circuit [you] would actually distort the performance of the circuit. So, it’s really not measurable in a physical sense.” (*Id.* 11:9–12). Accordingly, engineers use simulations to test the circuit, and this can be accomplished with a software tool called Cadence which Plaintiff and Defendants both use.¹⁶ (*Id.* 11:13–22). Plaintiff characterized simulations as “an important piece of evidence” in view of *ParkerVision I* where they did not present simulations to the jury. (*Id.* 11:23–12:2, 12:19–13:7). Plaintiff claimed “[w]e want to be able to do the simulation that will provide valuable evidence of the actual operation of the circuits in question.”¹⁷ (*Id.* 13:7–9).

Plaintiff’s original contention that simulations are an important piece of evidence because “it’s really not possible to test the actual performance of a circuit in one of these computer chips without simulation” is consistent with the literature. Defendants reference two publications: NEIL H.E. WESTE & DAVID HARRIS, *CMOS VLSI DESIGN* (3d ed. 1993), and PHILLIP E. ALLEN & DOUGLAS R.

¹⁶ Defendants made available to Plaintiff [REDACTED], so Plaintiff could run simulations. (Doc. 540, p. 18).

¹⁷ At oral argument, Plaintiff excused their failure to create simulations on the quality of the test benches provided by Defendants. However, Plaintiff never moved the Court for any relief from the allegedly inadequate source data. Plaintiff is a sophisticated litigant, rendering its justification for failing to create simulations, which they characterized as very valuable and important evidence, unconvincing. (Doc. 677, 132:5–9, 133:3–21).

HOLBERT, CMOS ANALOG CIRCUIT DESIGN (2d ed. 2002). (Doc. 499-32; 499-29). CMOS VLSI Design teaches “VLSI circuits are complex and modern transistors have nonlinear, nonideal behavior, so simulation is necessary to accurately predict detailed circuit behavior.” (Doc. 499-32, p. 273). And in CMOS Analog Circuit Design, Plaintiff’s expert, Dr. Allen, discusses the differences between integrated and discrete analog circuit design. (Doc. 499-29, p. 3). He explains that “[u]nlike integrated circuits, discrete circuits use active and passive components that are not on the same substrate.” (*Id.*). Moreover, the “geometry of active devices and passive components in integrated-circuit design are under the control of the designer,” and as a result “the designer must turn to computer simulation methods to confirm the design’s performance.” (*Id.*).

Plaintiff relies on a footnote contained in the rebuttal report of Dr. Razavi, Defendants’ expert, stating “The Lepton LLDR, like Qualcomm’s other design reviews, is the type of document that experts in the field would reasonably consider in evaluating the operation of a circuit.” (Doc. 573-1, ¶ 83, n.59). Plaintiff’s reliance is misplaced because Dr. Razavi does not opine one may ignore simulations. To the contrary, Dr. Razavi states in his report that he “performed computer simulations of circuits disclosed in the prior art, simulations of circuits described in the Asserted Patents, and simulations of the Accused Receive Devices. Computer simulation of circuits is common in the field of RF circuit design.” (*Id.* ¶ 39).

Having staked out their position that simulations are vital to circuit analysis, Plaintiff reverses direction and now downplays the importance of simulations.

Making matters more incomprehensible, Plaintiff defends its decision to forgo simulations by pointing to the unreliability of Defendants' core data while simultaneously claiming their experts' opinions "rely on Qualcomm's schematics and technical documents." (Doc. 527, p. 12; Doc. 677, 149:18–22). As Defendants noted during oral argument, Plaintiff cannot have it both ways. (Doc. 677, 149:24–150:9).

2. *Reliability of ParkerVision's Experts' Methodology*

Defendants contend Plaintiff's experts' opinions are unreliable in the absence of simulations. For example, Defendants claim Plaintiff's experts opine that the accused devices "store" "non-negligible energy" in the TX filter capacitor, but they fail to simulate the circuits to prove this occurs. (Doc. 540, p. 19). In *ParkerVision I*, Defendants proposed the following construction for the claim term "transferring non-negligible amounts of energy from the carrier signal:" "transferring energy (i.e., voltage and current over time) in amounts that are distinguishable from noise." (3:11-cv-719; Doc. 110-2). Defendants offered the same "distinguishable from noise" construction for the claim term "receives non-negligible amounts of energy transferred from a carrier signal."¹⁸ (*Id.*). Yet, as Dr. Razavi states in his rebuttal report, "Dr. Allen provides his opinions concerning

¹⁸ Judge Dalton's Claim Construction Order recounts that "ParkerVision contends that one skilled in the art would, after reading all of the disclosures in the patents-in-suit, recognize that these terms refer to techniques that involve transferring non-negligible energy in amounts distinguishable from noise." (Doc. 243, p. 11). The Court adopted ParkerVision's proposed construction requiring non-negligible amounts of energy to be distinguishable from noise. (*Id.* at p. 13).

what constitutes negligible and non-negligible energy without considering noise.” (Doc. 573-1, ¶ 273; *see also*, Dr. Allen Report, Doc. 573-3). This is important because the Court in *ParkerVision I* ruled that non-negligible energy is energy that is distinguishable from noise. (Doc. 573-1, ¶ 275).

Accordingly, Dr. Razavi is correct that Dr. Allen’s opinion that in an energy sampler, non-negligible energy is transferred to the load when the switch is open is unreliable in that he does not take “distinguishable from noise” into consideration. (*See* Doc. 573-3, ¶ 48). Defendants correctly argue that “[w]ithout energy or noise values, [Dr. Allen] has no basis for determining whether energy stored in the TX capacitor is ‘non-negligible.’” (Doc. 540, p. 19). Plaintiff attempts to defend its failure to consider noise and to run simulations by arguing that “the amount of energy stored on the capacitors . . . can be calculated from information provided by Qualcomm schematics.” (Doc. 527, p. 17). At oral argument, Plaintiff claimed Dr. Allen’s calculations show energy stored on the capacitor. (Doc. 677, 138:13–139:2). There are two problems with Plaintiff’s argument: first, as Defendants note Dr. Allen fails to disclose the values of the variables in his calculation (for example, I_{Mix}). Secondly, to the extent that Plaintiff is relying on its $\text{Tau}_{\text{off}}/T$ calculation, the Court has rejected this methodology. And, finally, as previously discussed, Dr. Allen failed to employ a simulation to confirm his theory, rendering his methodology unreliable and his opinion inadmissible.

Next, Defendants challenge Dr. Steer’s opinions that the accused products perform “gating” or are “switch modules” as required by the construction of these

claim terms. (Doc. 540, p. 20). Defendants argue it is improper for Dr. Steer to take the position that he is not required to conduct a simulation because he relied on other evidence without citing the “other evidence” in his report. (Doc. 677, 128:11–16). That said, Dr. Steer’s report contains numerous references to gating, and he identifies switches on schematics which he contends performs the gating function. (See, e.g., Doc. 573-8, ¶ 170). And Plaintiff relied at oral argument on the deposition testimony of a Qualcomm principal engineer and manager who testified that “[w]hen signal of the gate goes over a voltage which is higher than the threshold voltage of the mixer devices, then the mixer devices allow the current to pass through.”¹⁹ (Doc. 573-11, 33:18–23). However, Dr. Razavi notes in his rebuttal report that Dr. Steer failed to “examine the currents flowing through the transistors and show that these currents are passed when the LO level is high and the transistor is ‘closed,’ and the currents are stopped (blocked) when the LO level is low and the transistor is ‘open.’” (Doc. 573-1, ¶ 556). While Dr. Steer may suspect that the transistors in the accused upconverters act as switch modules or perform gating, he fails to confirm that hypothesis via simulation.

To complicate matters further, Dr. Razavi observes in his rebuttal report that Plaintiff’s expert, Dr. Birkett, stated if “the FETs are unbiased, they operate near saturation (not in full saturation on or off). Therefore, the transistors are not really ‘switches,’ but act as quasi switches because they become resistors when not fully

¹⁹ Plaintiff also asked [REDACTED] if he knew the threshold voltage for the transistors, but he did not recall the threshold. (Doc. 573-11, 34:2–6).

turned in.” (*Id.* ¶ 557). Dr. Razavi states that Dr. Steer fails to show that the accused products are not “unbiased.” (*Id.*). The failure to conduct a simulation creates the very problem predicted by Plaintiff’s counsel when they requested access to data to conduct simulations:

... circuits are all made up of very familiar components, much like keys on a piano. And just because you see those keys laid out in a circuit doesn’t mean you know what tune they’re set up to play.

The critical thing to understand here is, it’s really not possible to test the actual performance of a circuit in one of these computer chips without simulation.

(*Id.* 10:9–23).

Here, Dr. Steer can theorize that the accused products satisfy (infringe) the asserted claims of the ‘940 and ‘372 patents, which require a device that can take two states, open and closed—the proverbial keys on a piano—but absent a simulation he cannot speak to the actual performance of the circuit. This is fatal to Dr. Steer’s methodology, and his opinion concerning whether the accused devices/products perform “gating” or are “switch modules” as required by the construction of these claim terms is inadmissible.

Defendants also challenge Dr. Steer’s opinion that the accused products have harmonically rich signals. (Doc. 540, p. 20). Defendants contend Dr. Steer failed to simulate or calculate the output and failed to show any specific frequencies would exist in the output. (*Id.*). Plaintiff points to an [REDACTED] low level test review harmonic test showing a second and third harmonic power level and low level design review document as evidence of a harmonically rich signal. (Doc. 677,

145:12–146:14). Plaintiff also quotes the deposition testimony of [REDACTED] who described the upconverter mixer as adding the LO signal and the baseband signal, resulting in “a whole spew of harmonics” and explaining that “what you would get—third harmonic is a very strong value, fifth harmonic, sixth harmonic, all those things will get generated.” (Doc. 573-13, 251:2–252:13).

Dr. Allen opines in his rebuttal report that because Dr. Steer fails to analyze any particular frequencies or tones used by the accused products, he cannot show there are integer multiple harmonics.²⁰ (Doc. 573-1, ¶ 470). At best, Dr. Steer has demonstrated that “a whole spew of harmonics of the LO mixing with the signal.” While Plaintiff does not address in its response whether “sideband frequencies” may also compromise a “plurality of harmonics,” the Court notes that Dr. Steer’s report fails to establish that the sideband frequencies generated by the accused double-balanced mixers include a plurality of harmonics. For these reasons, Dr. Steer’s opinions concerning a plurality of harmonics and harmonically rich signals are inadmissible.

Finally, Defendants submit the Court should not allow the opinions of David Sorrells, an employee of Plaintiff, because he has never seen Defendants’

²⁰ Plaintiff took the position before the Federal Circuit that “the determination of the presence of integer multiple harmonics depends on the specific LO and BB signals.” (Doc. 573-1, ¶ 470). That is, either $f_{LO}+f_{BB}$ or $f_{LO}-f_{BB}$. (*Id.* ¶ 473). And Dr. Allen attests that Plaintiff’s own inventors acknowledged during deposition testimony the need to analyze frequencies and tones to show integer multiple harmonics. (*Id.* at ¶ 470). Defendants do not contest the accuracy of this assertion, and it should be reminded that the proponent of the expert has the burden on establishing admissibility.

schematics or confidential information. (Doc. 540, p. 20). In response, Plaintiff offers the following defense of its expert:

Mr. Sorrells served an expert report and was deposed by Qualcomm on the substance of that report (he was also deposed in his personal capacity). *See* Ex. 26 (Sorrells Rpt.). In his report, Mr. Sorrells explains that he analyzed a “teardown” of a Qualcomm product and other non-confidential Qualcomm documents to which he applied the Court’s claim construction.

(Doc. 527, p. 19).

That is the sum and substance of Plaintiff’s argument that Mr. Sorrells’ opinions satisfy *Daubert*. Again, it bears repeating that the party offering an expert opinion has the burden of establishing three criteria by a preponderance of the evidence: qualification, reliability, and helpfulness. *See Metabolife Int’l, Inc.*, 401 F.3d at 1238; *Cheminova, Inc.*, 400 F.3d at 1292. Simply put Plaintiff has failed to carry its burden of establishing the reliability and helpfulness of Mr. Sorrells’ opinions—whatever they may be. Accordingly, Mr. Sorrell is excluded.

E. Motion to Strike ‘372 Patent Infringement Opinions

The issue is “[w]hether ParkerVision’s expert [Dr. Steer] should have based his infringement contentions on ‘layout’ documents, as opposed to ‘schematic’ documents” (Doc. 527, p. 19). Defendants argue that Dr. Steer’s opinions regarding the summing and combining limitations of the ‘372 patent should be struck because he failed to take into consideration layout documents, rendering his opinions unreliable. (Doc. 540, p. 21). That is, Defendants contend that “[w]ithout looking at the layouts Qualcomm produced Dr. Steer could not determine whether

the [accused] products practice the summing order required by the asserted claims. (*Id.*, quoting Dr. Razavi’s Reb. Rpt. ¶¶ 664-674, Doc. 573-1).

The parties do not dispute that the asserted claim of the ‘372 patent require summing signals in a particular order. (Doc. 540, pp. 21–22, quoting Doc. 573-1, ¶¶ 664, 681–682, 673, 679). And they do not quarrel over the fact that summing limitations are all about the physical layout of a device; that is, how things are connected inside the chip. (Doc. 677, 161:10–12; 162:20–24). Finally, the parties agree that schematics do not show how the different components are connected or how they sum. (*Id.* 164:1–2). Since schematics are merely an abstract estimation of the circuit, they “are not meant to show how the circuitry is actually implemented on the chip.” (Doc. 540, p. 21, quoting Doc. 537-1, ¶ 668).²¹ Defendants contend Dr. Steer’s failure to look at the layout of the accused products is fatal to his opinion, and the Court agrees.

Dr. Steer attempts to excuse his failure to consider the layouts by arguing that Defendants’ engineers *should* revise; that is, back-annotate, schematics with any changes made in layouts. (Doc. 540, p. 22). That said, Dr. Steer attended the deposition of Qualcomm Senior Director, ██████████ who explained that Defendants’ engineers use layout “extractions” to simulate actual designs rather than back-dating schematics. (*Id.* at p. 23). Defendants also argue that Dr. Steer

²¹ Dr. Razavi’s rebuttal report provides that “[o]ne must look to the layout of the device to show whether there is a node connecting the outputs of the first and second gating means at which there exists an in-phase phase-modulated harmonically rich signal.” (Doc. 540, p. 21, quoting Doc. 573-1, ¶ 668).

failed to present any evidence showing Defendants' engineers back-annotated the schematics for the accused products. (*Id.* at p. 22). Plaintiff offers no response to this contention and fails to cite any record evidence to show schematics were back-annotated.²² Moreover, Plaintiff clearly appreciated the importance of layouts to understanding how the circuitry is implemented on the chip, because they moved the Court to direct Defendants to produce the layouts. Dr. Allen, Plaintiff's expert, testified at the hearing as follows:

[ParkerVision counsel] Now, in layman's terms, if you can help us, why is the information that would not be on the schematic, the hidden information, useful to an engineer trying to understand how a circuit works?

[Dr. Allen] It would be useful for two purposes: For being able to make sure that you're simulating the component properly, and it also has some physical information as far as another activity which is called layout is concerned.

(Doc. 540, p. 24, quoting Doc. 214, 39:7–14).

Thus, Dr. Steer's contention that he did not have access to the layouts is undermined by the record.²³

Plaintiff, as the party offering an expert opinion, has the burden of establishing three criteria by a preponderance of the evidence: qualification,

²² To further illustrate the importance of layouts, Dr. Razavi points in his rebuttal report to examples where the layouts showed the symbolic representations in the schematics did not reflect how the accused products work. (Doc. 527, p. 22, quoting Doc. 573-1, ¶¶ 670–683). And Qualcomm engineer, ██████████ corroborated that one must review the layout in order to determine whether a node in a schematic actually exists in the final product. (Doc. 540, p. 23 n.19).

²³ Defendants further note that Dr. Steer had access to Cadence, the design tool used by Defendants which allows the user to switch between the schematic view and the layout view and used that tool to examine the layout for Defendants' accused products in the case brought by Plaintiff in the ITC. (Doc. 540, pp. 23 n.18, 24).

reliability, and helpfulness. See *Metabolife Int'l, Inc.*, 401 F.3d at 1238. Notwithstanding this burden of persuasion, Plaintiff's response to Defendants' *Daubert* challenge is limited to two paragraphs and is devoid of any citation to Dr. Steer's expert report or literature of any kind.²⁴ (Doc. 527, pp. 19–20). Instead of demonstrating how Dr. Steer's infringement opinions satisfy *Daubert*, Plaintiff elects to characterize the dispute as one concerning "conflicting sets of facts." (Doc. 527, p. 19). The issue is not over which conflicting set of facts is more persuasive. Rather, the issue is that Dr. Steer improperly bases his infringement opinions on the unsupported assumption that Defendants' engineers back-annotate schematics based on the layouts. That is, the issue is the reliability, or lack thereof, of Dr. Steer's methodology. Dr. Steer had access to Cadence, and he knew how to access the layout view to support his contention that the accused products infringe the summing claims of the '372 patent. Inexplicably, Dr. Steer elected not to employ the same intellectual rigor one expects of an expert in the same field conducting professional work outside the context of paid litigation. Simply put, Dr. Steer's methodology is unreliable and, therefore, inadmissible.²⁵

²⁴ Plaintiff only used 20 of the 25 pages allotted to its response. At oral argument, Plaintiff cited to two paragraphs of Dr. Steer's report. However, oral argument is not an opportunity to *sua sponte* supplement one's response to a *Daubert* challenge. Even if oral argument was a second bite at the apple, the citation to ¶¶ 253–254 does not change the outcome of this motion.

²⁵ Plaintiff attempts a feat of judo by claiming Dr. Steer's unreliably methodology is excused by Defendants' responses to Plaintiff's contention interrogatories. (Doc. 540, p. 20). That is, Plaintiff submits that Defendants indicated they would rely on "schematics and related documents" to support non-infringement. (*Id.*). Whether Defendants' reliance on schematics and related documents (presumably to include layouts) will win the day on invalidity is irrelevant to whether Dr. Steer's opinions are properly supported. In the same vein, Plaintiff complains that Defendants failed to tell them that Dr. Steer could not determine whether the

III. CONCLUSION

For the forgoing reasons it is **ORDERED AND ADJUDGED** as follows:

1. Qualcomm's motion to exclude as unreliable and untimely ParkerVision Tau_{off}/T theory is **GRANTED**.
2. Qualcomm's motion to strike opinions that have been estopped by *ParkerVision I* and by the Federal Circuit's affirmance of the PTAB is **GRANTED**.
3. The parties shall meet and confer in an attempt to reach agreement on the Board's factual findings regarding what the prior art teaches and the impact on Plaintiff's experts' testimony. If agreement cannot be reached, the parties may submit briefs on the issue no later than May 2, 2022, with responses due by May 16, 2022.
4. Qualcomm's *Daubert* motion to strike unreliable opinions due to the lack of testing and simulation is **GRANTED**; and
5. Qualcomm's *Daubert* motion to strike Dr. Steer's infringement opinions regarding the claims of the '372 patent is **GRANTED**.

DONE AND ORDERED in Orlando, Florida on March 9, 2022.

accused products sum in the required order envision by the '372 patent as a defense to Dr. Steer's unreliable methodology. The American system of civil justice is still an adversarial system, and, unlike criminal prosecutions where the prosecutor must turn over favorable evidence to an accused, Defendants are under no obligation to advise Dr. Steer on how best to advance his infringement theories. Finally, Plaintiff submits Defendants "waived" its ability to challenge Dr. Steer's methodology, but Plaintiff offers no legal authority for this novel theory.



PAUL G. BYRON
UNITED STATES DISTRICT JUDGE

Copies furnished to:

Counsel of Record
Unrepresented Parties