

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

PARKERVISION, INC.,

Plaintiff,

v.

Case No: 6:14-cv-687-Orl-40LRH

QUALCOMM INCORPORATED,
QUALCOMM ATHEROS, INC., HTC
CORPORATION and HTC AMERICA,
INC.,

Defendants.

ORDER

This cause is before the Court on the following:

1. Defendants' Motion for Partial Summary Judgment of Noninfringement Based on Collateral Estoppel, filed September 27, 2019 (Doc. 318)¹;
2. Plaintiff ParkerVision's Response in Opposition, filed October 25, 2019 (Doc. 327); and
3. Defendants' Reply, filed November 8, 2019 (Doc. 330).

Upon consideration and review of the record as cited by the parties in their respective briefs, the Court denies Defendants' motion for partial summary judgment.

I. BACKGROUND

This action was commenced on May 2, 2014, when ParkerVision sued several defendants for the alleged infringement of multiple patents. (Doc. 1). Plaintiff amended its

¹ Defendant filed a sealed version of the Motion for Partial Summary Judgment with leave of the Court. (Doc. 321).

Complaint on August 21, 2014. (Doc. 26). ParkerVision contends its “efforts to develop its down-conversion, up-conversion, and complementary wireless communications technologies culminated in the ideas patented in U.S. [among others] Patent Nos. . . . 7,218,907 (“the ‘907 patent”) [and] 7,865,177 (“the ‘177 patent”). . .”² (Doc. 26, p. 2). Those patents arose from a discovery by ParkerVision engineers in the mid to late 1990s that “RF direct conversion receivers using ParkerVision’s innovative RF energy transfer sampling could replace the widely used and conventional super-heterodyne receivers by the process of sampling a RF carrier signal and transferring power to create a downconverted baseband signal.” (*Id.* at p. 5). ParkerVision’s up-conversion and down-conversion technology provides numerous benefits, including lower power consumption, size and integration benefits, and reduced cost. (*Id.*). The emerging popularity of smartphones drove the need for smaller, more efficient receivers able to support multiple frequency bands, and that need was satisfied by ParkerVision’s patented technology. (*Id.* at p. 7).

ParkerVision contends that Qualcomm and HTC devices capable of down-conversion of a higher-frequency signal (a carrier signal) to a lower-frequency signal (a baseband signal), as claimed in the ‘907 patent, are infringing. (*Id.* at pp. 108, 111, 113, 116). For the same reasons, Plaintiff alleges that Qualcomm and HTC infringe their ‘177 patent. (*Id.* at pp. 122, 125, 127, 129). The issue is whether the district court’s finding of noninfringement in prior patent litigation between these parties, as affirmed by the Federal

² Defendants’ Motion for Partial Summary Judgment only concerns the ‘907 and ‘177 receiver patents. (*see generally* Doc. 318). Defendants allegedly infringed other patents held by ParkerVision, but those patents are not relevant to the instant motion.

Circuit, rises to the level of claim preclusion. The answer to that question requires an understanding of the prior lawsuit—*ParkerVision I*.³

A. *ParkerVision I*

The procedural history of *ParkerVision I* is not in dispute. In 2006, ParkerVision sued Qualcomm for infringing several patents claiming receivers that down-convert RF signals by energy sampling, including U.S. Patent Nos. 6,061,551; 6,370,371; and 6,266,518. (Doc. 318, p. 2; Doc. 327, p. 1); see also, *ParkerVision v. Qualcomm*, 27 F.Supp.3d 1266, 1271–75 (M.D. Fla. 2004). In 2013, a jury returned a verdict in favor of ParkerVision, but the district court ultimately granted Judgment as a Matter of Law (“**JMOL**”) in favor of the Defendant. *ParkerVision*, 27 F.Supp.3d at 1278.

In its order granting JMOL in *ParkerVision I*, the district court described the technology at issue:

The complex technology at issue in this patent infringement action concerns methods and devices for down-converting electromagnetic (radio frequency) signals by “energy sampling.” (See Doc. 336–13.) By using the same components previously used to down-convert modulated high frequency signals by “voltage sampling” (switches, capacitors, and resistors), energy sampling down-converts a modulated high frequency signal by altering the size of the capacitor, the duration that the switch is closed, the impedance of the resistors, and the value of the load. (See Doc. 386, pp. 273–78; Doc. 402, pp. 175–77.) Such alterations result in the energy—not the voltage—of the carrier signal being sampled, stored, and used to generate the desired lower frequency signal. (See Doc. 402, pp. 84–85.)

³ Defendants acknowledge that filing a summary judgment motion before the Court has issued a claim construction order and while discovery is ongoing is “somewhat irregular.” (Doc. 318, p. 2 n.2). However, the unique posture of this case renders Defendants’ motion for partial summary judgment an appropriate vehicle for determining whether the parties should invest energy and expense litigating the infringement allegations arising from receiver patents ‘907 and ‘177.

Id. at 1269.

The jury found Qualcomm's accused products infringed claims 23, 25, 161, 193, and 202 of the '551 patent; thus, the district court, in granting JMOL, analyzed the pertinent language of the '551 patent.⁴ *Id.* at 1270. Claim 23 of the '551 patent is an independent apparatus claim that covers:

An apparatus for down-converting a carrier signal to a lower frequency signal, comprising:

An energy transfer signal generator;

A switch module controlled by said energy transfer signal generator;

A storage module coupled to said switch module;

Wherein said **storage module** receives non-negligible amounts of energy transferred from a carrier signal at an aliasing rate that is substantially equal to a frequency of the carrier signal plus or minus a frequency of the lower frequency signal divided by n where n represents a harmonic or sub-harmonic of the carrier signal, wherein a lower frequency signal is **generated** from the transferred energy.

Id. at 1272 (emphasis added); (Doc. 318-14).

Claim 161 covers the "apparatus according to claim 23, wherein said storage device comprises a **capacitive storage device** sized to store substantial amounts of energy relative to energy contained in a percentage of half cycles of a carrier signal, whereby said capacitive storage device integrates the transferred energy." *Id.* (emphasis added); (Doc. 318-14).

⁴ While neither the '907 nor the '177 were at issue in *ParkerVision I*, both patents are continuations of the '551 patent. (Docs. 318-12-14; 318-23-29).

Claim 202 covers the apparatus of claim 23:

wherein said **storage module** receives and integrate [sic] controlled substantial amounts of energy transferred from the carrier signal over aperture periods wherein said **storage module generates** a lower frequency signal from the integrated energy wherein the transferring of energy substantially prevents accurate voltage reproduction of the carrier signal during the apertures.⁵

Id. (emphasis added); (Doc. 318–14).

The district court held that the testimony of ParkerVision’s expert witness, Dr. Prucnal, compelled entry of JMOL in favor of Qualcomm:

In his testimony on redirect examination, Dr. Prucnal again pointed to the charging and discharging of the capacitors as evidence of direct infringement:

[B]ecause the energy from the baseband signal—from the carrier signal is transferred through the switch. It’s accumulated by the capacitor. And that energy is then used to generate the baseband signal following the capacitor.... [And because the switch] completes the circuit and allows energy to flow into the capacitor. If it were not a switch circuit, this would not be a capacitor that’s being charged and discharged. It would just be a continuous flow. So the switch is creating the charging cycle. And then when the switch opens, that’s creating the discharging cycle. And that’s how the energy is then transferred from that point.

Id. at 1282. Dr. Prucnal testified on cross-examination that the double balance mixers in the Qualcomm accused devices “create the baseband before the lower frequency signal reaches the capacitors.” *Id.* at 1283. Because the Qualcomm devices create the baseband before the storage capacitor, the products do not infringe. *Id.*

⁵ The district court noted that “[i]n its Markman briefing, Qualcomm argued that the term ‘generating’ was indefinite but that if any construction was possible, it should mean ‘creating a lower frequency signal from the previously transferred energy.’” *Id.* at 1275. The district court elected not to construe the term “generating.” *Id.* at 1276.

The Federal Circuit cited the same testimony from Dr. Prucnal in affirming the district court's order granting JMOL:

Dr. Prucnal testified that the identified capacitors in the accused products contribute to the generation of the baseband signal by going through a "charging and discharging" cycle, which is controlled by a switch inside the mixer circuit. Closing the switch allows energy from the carrier signal to flow into the capacitor and accumulate there ("charging"); opening the switch allows the capacitor to release the accumulated energy into the rest of the circuit ("discharging"). Dr. Prucnal testified that the charging and discharging cycle results in an accumulation of energy from the carrier signal, which is then used "to generate the baseband signal following the capacitor.

...

Dr. Prucnal's admission that the double-balanced mixer creates the baseband signal before that signal reaches the identified capacitors means that Qualcomm products obtained the baseband signal from "somewhere other than" the energy stored in the capacitors, precluding a finding of infringement.

ParkerVision, Inc. v. Qualcomm Inc., 621 F. App'x 1009, 1013–14 (Fed. Cir. 2015), *reh'g denied*, 627 F. App'x 921.⁶

B. Summary of Claim Preclusion Contentions

1. Qualcomm's Position

Qualcomm contends that "ParkerVision cannot escape a basic fact: ParkerVision's receiver claims depend on the creation of a baseband signal using an energy storage device (e.g., a capacitor), but Qualcomm's receiver designs use a current-mode *double-balanced mixer* to create the baseband signal, not any energy storage device." (Doc. 318, p. 1). Qualcomm asserts that Plaintiff's infringement theory for the '907 and '177 patents

⁶ The Federal Circuit rejected Plaintiff's "newly minted theory that the signal coming out of the double-balanced mixer is not the baseband, but instead is a baseband being 'modulated' or 'carried' on the carrier signal." 627 F. App'x at 922.

are based on Qualcomm's Magellan (RTR8600) design. (*Id.* at p. 2). Qualcomm states that no other theory is charted in ParkerVision's infringement contentions.⁷ (*Id.*). Because Qualcomm's products use the double-balanced mixers to create a baseband signal before the signal reaches the capacitors, they do not infringe the '907 or '177 patents. (*Id.* at p. 3). Qualcomm further submits that the Court's finding in *ParkerVision I* constitutes claim preclusion, since the '907 and '177 patents are continuations of the '551 patent at issue in *ParkerVision I*. (*Id.* at p. 4).

To bolster its claim preclusion argument, Qualcomm discusses proceedings held before the International Trade Commission ("**ITC**") and a companion case in Jacksonville.⁸ (*Id.* at p. 7). The ITC investigation involved four ParkerVision patents, including the '528 patent. (*Id.* at p. 8). Similarly, the Jacksonville litigation concerned the '528 patent. (*Id.* at p. 10). The '528 patent stems from the '551 patent, and it lists the '177 patent as related and from the same family. (*Id.* at p. 12). ParkerVision ultimately dropped the case before the ITC, although the parties disagree over the motivation behind that decision.⁹ (*Id.* at p. 9). The Jacksonville case is ongoing.

⁷ ParkerVision identified the accused products as providing a method for down-converting an electromagnetic signal; for example, the Magellan and FlyingDutchman, Nucleus, Ramsis, Odyssey, and Volans. (Docs. 321-4; 321-5).

⁸ *In re the Matter RF Capable Integrated Circuits and Products Containing the Same*, No. 337-TA-982 (ITC); *ParkerVision v. Apple, et al.*, No. 3:15-cv-1477 (M.D. Fla. Dec. 14, 2015).

⁹ ParkerVision argues that the proceedings before the ITC involve different patents than those involved in this suit or *ParkerVision I*. (Doc. 327, p. 17). ParkerVision states it chose to terminate the investigation, because the ALJ granted a defense motion to strike key parts of Plaintiff's expert report. (*Id.* at p. 18). Because the outcome of the proceedings before the ITC were never resolved on the merits, the Court will not consider those proceedings, or the ongoing Jacksonville litigation, in resolving the instant motion.

2. *ParkerVision's Position*

Plaintiff identifies the critical finding by the district court and the Federal Circuit in *ParkerVision I* as the presence of a “generating” limitation in the asserted patents. (Doc. 327, p. 3). “Like the district court, the Federal Circuit understood the ‘generating’ limitation in the asserted patents to require ‘that the baseband signal is generated from the energy stored in’ the capacitors immediately downstream of the double-balanced mixers.” (*Id.* at pp. 3–4). ParkerVision argues that in the instant case, it has dropped the receiver patents that contain a “generating” limitation.¹⁰ (*Id.* at pp. 3, 5). ParkerVision claims that the lack of the “generating” limitation in the ‘907 and ‘177 patents prevents the application of claim preclusion. (*Id.*). ParkerVision thus contends the ‘907 and ‘177 patents do not raise the same noninfringement issue that the parties litigated in *ParkerVision I*. (*Id.* at p. 6). Plaintiff characterizes the key claim limitation in *ParkerVision I* as requiring “energy transferred to a storage device [capacitor to] ‘generate’ a down-converted [baseband] signal [for the first time].” (*Id.* at p. 10).¹¹

Plaintiff submits that the asserted claims of the ‘907 and ‘177 patents differ from the *ParkerVision I* claims, and supports this contention by observing that the Patent and Trademark Office (“PTO”) found these two patents to claim different inventions than the earlier-expiring patents asserted in *ParkerVision I*. (*Id.* at p. 11). That is, on examination,

¹⁰ ParkerVision identifies those patents as the ‘902, ‘836, ‘246, and ‘116 patents. (Doc. 327, p. 3).

¹¹ ParkerVision acknowledges that in the claim construction briefing, the parties request construction of “matched filtering/correlating module” in the ‘177 patent, but neither party’s proposed construction includes a “generating” limitation. (*Id.* at p. 5).

the examiner did not issue an obviousness-type double patenting rejection even though the '907 and '177 patents descend from the '551 patent (*Id.* at pp. 11–12).

3. *Miscellaneous*

Qualcomm also asserts the Plaintiff conceded that appellate finality in *ParkerVision I* would resolve the infringement claims as to the Receiver Patents. (Doc. 318, p. 11). However, the position ParkerVision expressed in its Motion to Sever and Stay is not as damning as Qualcomm claims.

Qualcomm quotes ParkerVision as stating that “appellate finality in its current form would resolve ParkerVision’s infringement claims as to the Receiver Patents and Claims.” (Doc. 318, p. 11). Yet ParkerVision said something quite different:

Defendants assert that the Receiver Patents and Claims in *ParkerVision II* recite the same “‘energy sampling’ concept” as is present in claim 27 of U.S. Patent No. 6,266,518 and that all of the accused Qualcomm products in *ParkerVision II* (including new *ParkerVision II* Accused Products that were not at issue in *ParkerVision I*) are substantially similar to the accused Qualcomm products in *ParkerVision I* with respect to the “‘energy sampling’ concept” so that preclusion should apply. Assuming, *arguendo*, that Defendants’ assertion is true, at most appellate finality in its current form would resolve ParkerVision’s infringement claims as to the Receiver Patents and Claims and the accused Qualcomm products . . . at issue in *ParkerVision I*. And, if Qualcomm’s new *ParkerVision II* Accused Products that were not at issue in *ParkerVision I* cannot be proven to be substantially similar so that issue preclusion applies, those products will likewise remain at issue.

(Doc. 217, pp. 3–4).

ParkerVision further qualified its acknowledgement of possible claim preclusion by observing that “none of the patents in *ParkerVision I* is at issue in *ParkerVision II*, and no receiver patent in *ParkerVision II* shares the exact same specification as any of the patents-in-suit in *ParkerVision I*.” (*Id.* at p. 3 n.5). ParkerVision also challenged

Qualcomm's assertion that the accused products in *ParkerVision II* are substantially similar to the Qualcomm accused products in *ParkerVision I*. (*Id.* at n.6). As a result, contrary to Qualcomm's representation, ParkerVision had not conceded the applicability of claim preclusion.

II. STANDARD OF REVIEW

A. Summary Judgment

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The party moving for summary judgment must "cit[e] to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations . . . , admissions, interrogatory answers, or other materials" to support its position that it is entitled to summary judgment. Fed. R. Civ. P. 56(c)(1)(A). "The court need consider only the cited materials," but may also consider any other material in the record. Fed. R. Civ. P. 56(c)(3).

An issue of fact is "genuine" only if "a reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A fact is "material" if the fact could affect the outcome of the lawsuit under the governing law. *Id.* The moving party bears the initial burden of identifying those portions of the record demonstrating a lack of genuine dispute of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986); *Hickson Corp. v. N. Crossarm Co., Inc.*, 357 F.3d 1256, 1260 (11th Cir. 2004). If the movant shows "an absence of evidence to support the nonmoving party's case," the burden then shifts to the non-moving party to show that there are, in fact, genuine disputes of material facts. *Celotex*, 477 U.S. at 325; *see also Porter v. Ray*,

461 F.3d 1315, 1320 (11th Cir. 2006), *cert. denied*, 549 U.S. 996 (2006).

To satisfy its burden, the non-moving party “must do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986). Rather, the non-movant must go beyond the pleadings and “come forward with specific facts showing that there is a genuine issue for trial.” *Id.* at 587 (emphasis and internal quotation marks omitted); see also *Crawford-El v. Britton*, 523 U.S. 574, 600 (1998) (holding that a non-movant carries its burden on summary judgment only by “identify[ing] affirmative evidence” which creates a genuine dispute of material fact).

In determining whether a genuine dispute of material fact exists, the Court must read the evidence and draw all factual inferences therefrom in the light most favorable to the non-moving party and must resolve any reasonable doubts in the non-movant’s favor. *Skop v. City of Atlanta, Ga.*, 485 F.3d 1130, 1136 (11th Cir. 2007). Summary judgment should only be granted “[w]here the record taken as a whole could not lead a rational trier of fact to find for the non-moving party.” *Matsushita*, 475 U.S. at 587.

B. Claim Preclusion

“[A] party who has litigated an issue and lost should be bound by that decision and cannot demand that the issue be decided over again.” *In re Freeman*, 30 F.3d 1459, 1465 (Fed. Cir. 1994); *Allen v. McCurry*, 449 U.S. 90, 94 (1980) (preclusion “relieve[s] parties of the cost and vexation of multiple lawsuits”). Collateral estoppel in a patent case “prevents a plaintiff who previously litigated a claim that certain technology infringed its patent (and lost) from taking ‘another bite at the apple’ by again asserting that the same technology infringes.” *Reese v. Verizon Cal.*, 498 F. App’x 980, 982 (Fed. Cir. 2012).

Collateral estoppel applies when: “(1) the issue is identical to one decided in the first action; (2) the issue was actually litigated in the first action; (3) resolution of the issue was essential to a final judgment in the first action; and (4) plaintiff had a full and fair opportunity to litigate the issue in the first action.” *In re Freeman*, 30 F.3d at 1465; *Pleming v. Universal-Rundle Corp.*, 142 F.3d 1354, 1359 (11th Cir. 1998) (identifying factors). The Federal Circuit has stated: “[o]ur precedent does not limit collateral estoppel to patent claims that are identical. Rather, it is the identity of the *issues* that were litigated that determines whether collateral estoppel should apply.” *Ohio Willow Wood v. Alps S.*, 735 F.3d 1333, 1342 (Fed. Cir. 2013) (emphasis in original); *Soverain Software v. Victoria’s Secret Direct Brand*, 778 F.3d 1311, 1319 (Fed. Cir. 2015) (“Complete identity of claims is not required to satisfy the identity-of-issues requirement for claim preclusion”). “If the differences between the unadjudicated patent claims and adjudicated patent claims do not materially alter the question of invalidity, collateral estoppel applies.” *Ohio Willow Wood*, 735 F.3d at 1342 (citation omitted).

III. DISCUSSION

A. The Accused Technology—*ParkerVision II*

ParkerVision correctly argues that issue preclusion extends to new products only if the Defendant shows “a close identity” between the accused and adjudicated devices. *ArcelorMittal Atlantique et Lorraine v. AK Steel Corp.*, 908 F.3d 1267, 1274 (Fed. Cir. 2018). “Accused devices are essentially the same where the differences between them are merely colorable or unrelated to the limitation in the claim of the patent.” *Id.* Plaintiff

argues that Qualcomm has failed to show that the Flying Dutchman design is essentially the same as the Magellan design.¹²

In an attempt to show that the Flying Dutchman and Magellan designs are essentially the same, Qualcomm cites its prehearing brief before the ITC. But citing one's own arguments during litigation is not enough to demonstrate the lack of a genuine issue of material fact. *Creative Compounds, LLC v. Starmark Labs.*, 651 F.3d 1303, 1311 (Fed. Cir. 2011) (discrediting "conclusory attorney arguments" as summary-judgment evidence). Qualcomm also references unsworn rebuttal witness statements by James Jaffee, (Doc. 321-8), and Dr. Behzad Razavi, (Doc. 321-7). Mr. Jaffee is employed by Qualcomm, and his experience and qualifications to offer an opinion on the similarity between the Flying Dutchman and Magellan designs are unclear. Moreover, Mr. Jaffee's statement is conclusory at best. Neither Mr. Jaffee nor the Defendant conduct a side-by-side comparison of the relevant architecture of Magellan and Flying Dutchman.¹³ Qualcomm's reference to Dr. Razavi's statement is also unhelpful. While Dr. Razavi's response to defense counsel's questions is a bit more detailed, the Defendant does not direct the Court to specific responses which support its contention that Flying Dutchman and Magellan share a close identity. The Court is not inclined to fill in the gaps of Defendant's summary judgment argument. Finally, Dr. Razavi's qualifications in the relevant field are unclear in that the exhibit is not accompanied by his CV.

¹² The Flying Dutchman design was not involved in *ParkerVision I*.

¹³ In its rebuttal, Qualcomm references an exhibit which purports to be one page of a deposition given by Mr. Jaffee. (Doc. 330, p. 4). It is not possible for the Court to determine the context of Mr. Jaffee's statement from the excerpt, Mr. Jaffee equivocates in his testimony, and he fails to discuss the Flying Dutchman.

Any similarity or dissimilarity between the design of Magellan and Flying Dutchman was not decided in the first action, nor did ParkerVision have a full and fair opportunity to litigate this issue. On this basis alone, Defendant's Motion for Partial Summary Judgement is due to be denied.

B. The '907 and '177 Patents

Qualcomm argues that “[e]ach of the independent asserted claims of the ‘907 patent requires ‘providing . . . energy from the energy storage device to the load’ and further requires that the same ‘energy provided to the load forms a down-converted signal.’” (Doc. 318, p. 23). Claim 1 of the ‘907 patent provides:

1. A method for down-converting an electromagnetic signal, comprising:

periodically coupling an electromagnetic signal that includes a carrier signal to an energy storage device and a load, wherein the periodic couplings occur at a rate less than twice the frequency of the carrier signal;

providing, during the periodic couplings, energy from the electromagnetic signal to the load; and

providing, between the periodic couplings, energy from the energy storage device to the load, thereby changing the amount of energy stored by the energy storage device;

whereby the energy provided to the load forms a down-converted signal.

(Doc. 318-25).

Qualcomm compares claim 1 of the ‘907 patent to claim 23 of the ‘551 patent, which provides: “said storage module receives . . . energy transferred . . . wherein a lower frequency signal is generated from the transferred energy.” (Doc. 318, p. 23). Qualcomm contends the language in claim 23 of the ‘551 patent is the “same concept” as claim 1 of

the '907 patent.¹⁴ (*Id.*). The Defendant argues claim preclusion applies because the two patents use “slightly different language to describe substantially the same invention.” *Ohio Willow*, 735 F.3d at 1342. (*Id.*).

As for the '177 patent, Qualcomm takes the position that all of the asserted claims require that a device produce a low-frequency baseband signal using energy transferred from the modulated carrier into a storage element. (*Id.* at p. 24). The Defendant points to claim language that requires “performing down-conversion using a ‘matched filtering/correlating module.’” (*Id.*). This language has not been construed by the Court, and the parties disagree over its correct construction. Qualcomm proposes that the “matched filtering/correlating module” include an integrator, which is an energy storage device used to store energy transferred from a high-frequency input signal. (*Id.*). On the other hand, ParkerVision’s proposed construction does not include an energy storage device. (Doc. 325-3, p. 3). As Qualcomm points out, however, ParkerVision’s proposed construction does include the accumulation and transfer of samples of a modulated RF carrier signal. (*Id.*). Qualcomm contends the accumulation and transfer language envisions an energy storage device. (Doc. 318, p. 25).

Qualcomm submits that a “named inventor of the '177 patent testified that the matched filtering/correlating module is ‘basically’ an ‘integration function,’ and uses energy stored in the ‘capacitor’ to generate the down-converted signal. (*Id.*). The Defendant submitted an excerpt from a deposition of Mr. Robert Cook taken December

¹⁴ Claim 23 of the '551 patent is an apparatus claim, and claim 1 of the '907 is a method claim.

17, 2015. (Doc. 318-40).¹⁵ Mr. Cook's qualifications are not discussed in the deposition excerpt, save that he acknowledges he is one of the inventors. (*Id.* at 199:18–20). When asked, “[w]hat’s a matched filtering correlating module,” Mr. Cook replies, “I’m going to say that I don’t know, because I did not develop that mathematical relationship for it.” (*Id.* at 199:13–17). When asked, “[d]o you have at least an understanding of how the matched filter correlating module performs ParkerVision’s energy sampling concept,” Mr. Cook states, “A matched filter basically has a response that is complimentary to the signal you’re looking for. And so it responds in an optimal way to the signal you’re looking for I don’t want to get too deep into the weeds, because it’s not my mathematics.” (*Id.* at 200:10–25). Mr. Cook does, however, testify that “the energy sampling process looks like a matched filter, because it’s – basically it’s an integration function; and current through a capacitor is – is the integral of the voltage.” (*Id.* at 201:7–11). He also agrees that for the matched filter correlating module, one must store energy in the capacitor. (*Id.* at 201:18–22). Cook states that one must also generate the downconverted signal. (*Id.* at 201:23–25). He elaborates that the matched filter correlating module does not eliminate the requirement to have a capacitor. (*Id.* at 202:17–22).

ParkerVision counters that the issue is not whether Qualcomm’s products infringe the asserted claims of the ‘907 and ‘177 patents, but whether the differences between those claims and the *ParkerVision I* claims change the infringement analysis. (Doc. 327, p. 13). See *Nichia Corp. v. VIZIO, Inc.*, No. CV 16-545, 2018 WL 1942413, at *7 (C.D. Cal. Mar. 29, 2018). Plaintiff argues that Qualcomm fails to compare the *ParkerVision I*

¹⁵ The excerpt is from page 198 through page 205, and the deposition concludes on page 264. (Doc. 318-40).

analysis to the '907 and '177 claim language to show the former bars infringement of the latter. (*Id.*). ParkerVision submits that claim 1 of the '907 patent requires that “energy provided to the load forms a down-converted signal.” (*Id.*). The asserted claims of the '177 patent required one or more “matched filtering/correlating modules.” Plaintiff thus concludes that the relevant claims of the '907 and '177 patents do not require a baseband signal and do not require any signal to be “generated” using an “energy storage device” to down-convert a high-frequency signal. (*Id.*).

In *ParkerVision I*, the district court and the Federal Circuit held the accused Qualcomm devices do not infringe because “baseband current is created by the double-balanced mixer before the current reaches the capacitors.” *ParkerVision I*, 621 F. App'x at 1016. ParkerVision argues that both the district court and the Federal Circuit understood the “generating” limitations of the *ParkerVision I* claims to require capacitors to create, in the first instance, the baseband signal. (Doc. 327, p. 14). ParkerVision contends that the '907 claims require that the “energy provided to the load,” which “forms a down-converted signal,” come from an energy storage device and “also from the electromagnetic signal itself.” (*Id.*). The claim therefore requires “a down-converted signal” formed in a load using energy taken directly from the electromagnetic signal, without charging and discharging a capacitor. (*Id.*).¹⁶ ParkerVision's interpretation of claim 1 of the '907 patent is supported by the sworn declaration of Dr. Phillip Allen. (Doc. 327-1, ¶ 12).¹⁷ Dr. Allen opines that claim 1 of the '907 patent describes “energy that is

¹⁶ Claim 1 of the '907 patent: “providing, during the periodic couplings, energy from the electromagnetic signal to the load.” (Doc. 318-25).

¹⁷ Dr. Allen's education, training, and experience are documented in his declaration.

provided to the load (during periodic couplings) from the electromagnetic signal, without passing through the energy storage device.” (*Id.*). Dr. Allen also attests that claim 1 describes that “energy provided to the load, including the energy provided directly from the electromagnetic signal, forms a down-converted signal.” (*Id.*). This testimony creates a material issue of fact precluding summary judgment as to the ‘907 patent.

ParkerVision argues that summary judgment is not appropriate as to the claims of the ‘177 patent, since “neither the ‘177 claims themselves nor the parties’ proposed constructions of ‘matched filtering/correlating module’ require an energy storage device to generate a down-converted signal.” (Doc. 327, p. 17). Dr. Allen has examined the ‘177 patent and ParkerVision’s proposed construction of “matched filtering/correlating module.” (Doc. 327-1, ¶ 20). Dr. Allen opines that “[a]s with the ‘907 claims, all of the energy provided to the load comes from the switch-down-converted signal. . . . Because the switch-down-converted signal is a down-converted signal, so too is the signal shaped in the load as a result of receiving energy from the switch-down-converted signal.” (*Id.*). Once again, Dr. Allen’s declaration creates a material issue of fact that bars summary judgment.

IV. CONCLUSION

Qualcomm carries the burden of proof to show there is no material difference between the patents-at-issue in *ParkerVision I* and the claims now asserted by ParkerVision; that is, identity of the issues. *Ohio Willow Wood Co.*, 735 F.3d at 1342. Qualcomm also has the burden of proving there is no material difference between the accused products in *ParkerVision I* and the accused products at issue now. *Aspex*

Eyewear, Inc. v. Zenni Optical Inc., 713 F.3d 1377, 1378 (Fed. Cir. 2013). The Defendant has failed to carry its burden on both issues.

For all these reasons, it is **ORDERED AND ADJUDGED** that Qualcomm's Motion for Partial Summary Judgment (Doc. 318) is **DENIED**.

DONE AND ORDERED in Orlando, Florida on January 16, 2020.


PAUL G. BYRON
UNITED STATES DISTRICT JUDGE

Copies furnished to:

Counsel of Record
Unrepresented Parties