UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
ORLANDO DIVISION

PARKERVISION, INC., *Plaintiff*, v. QUALCOMM INCORPORATED, QUALCOMM ATHEROS, INC., *Defendants*.	Case No. 6:14-cv-00687-Orl-40LRH

DEFENDANTS' REPLY IN SUPPORT OF THEIR MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT AND INVALIDITY (DKT. 494)[1]

ORAL ARGUMENT REQUESTED (DKT. 500)

PUBLIC/REDACTED DOCUMENT SOUGHT TO BE FILED UNDER SEAL

[1] Filed pursuant to Dkt. 309 and Local Rule 3.01, as amended by Dkt. 384 at 6, 451, 469, 477 at 2.

TABLE OF CONTENTS

Page

I. INTRODUCTION 1

II. ARGUMENT 1

A. Collateral Estoppel Applies to the Receiver Patents 1

B. Qualcomm Does Not Infringe the Receiver Claims 4

C. The '177 Patent Claims Are Indefinite 5

D. Qualcomm Does Not Infringe the Transmitter Claims 7

1. ParkerVision Misapplies the "Harmonics" Requirement 7

2. The '372 Patent Allegations Rest on Improper Expert Opinions 9

E. Defendants Did Not Willfully Infringe or Induce Infringement 9

TABLE OF AUTHORITIES

Page(s)

Cases

Amgen v. Aurobindo Pharma,
2018 WL 1061369 (D. Del. Feb. 27, 2018) 9

Aspex Eyewear v. Zenni Optical,
713 F.3d 1377 (Fed. Cir. 2013)..... 2

Bayer Healthcare v. Baxalta,
No. 2019-2418, 2021 WL 771700 (Fed. Cir. Mar. 1, 2021)..... 9

Berkheimer v. HP,
881 F.3d 1360 (Fed. Cir. 2018)..... 6

Eon Corp. IP Holdings v. Silver Spring Networks,
815 F.3d 1314 (Fed. Cir. 2016)..... 9

GE Lighting Solns. v. AgiLight,
750 F.3d 1304 (Fed. Cir. 2014)..... 8

HZNP Medicines v. Actavis Labs. UT,
940 F.3d 680 (Fed. Cir. 2019) 6

Media Rights Techs. v. Capital One Fin.,
800 F.3d 1366 (Fed. Cir. 2015)..... 6

Medicines Co. v. Mylan,
853 F.3d 1296 (Fed. Cir. 2017)..... 7

Medidea v. DePuy Orthopaedics,
422 F. Supp. 3d 459 (D. Mass. 2019)..... 8

O2 Micro Int'l v. Beyond Innovation Tech.,
521 F.3d 1351 (Fed. Cir. 2008)..... 9

ParkerVision v. Qualcomm,
621 Fed. Appx. 1009 (Fed. Cir. 2015).....3, 4

ParkerVision v. Qualcomm,
627 Fed. Appx. 921 (Fed. Cir. 2015) 5

Rovi Guides v. Comcast,
No. 16-9278, 2017 WL 3447989 (S.D.N.Y. Aug. 10, 2017) 6

Scoche Industries v. Visor Gear,
121 F.3d 675 (Fed. Cir. 1997) 2

TABLE OF EXHIBITS

Document	Dkt. / Ex. #
Qualcomm's Motion for Summary Judgment ("Mot.")	Dkt. 494
ParkerVision's Response to Qualcomm's Motion for Summary Judgment ("Opp.)	Dkt. 523
Excerpt of Dr. Razavi's Opening Expert Report, dated October 9, 2020	Dkt. 495, Ex. A
Excerpt of Expert Rebuttal Report of Dr. Razavi, dated November 23, 2020	Dkt. 495, Ex. B
Gardner Declaration and Exs. 1-81	Dkt. 499
ParkerVision v. Qualcomm, 621 F. App'x 1009 (Fed. Cir. 2015)	Dkt. 499-1
ParkerVision v. Qualcomm, 627 F. App'x 921 (Fed. Cir. 2015)	Dkt. 499-2
ParkerVision's RX Rebuttal Report, dated November 23, 2020	Dkt. 499, Ex. 14
Excerpt of ParkerVision's RX Expert Deposition Transcript, dated December 7, 2020	Dkt. 499, Ex. 27
Excerpt of Deposition Transcript of Michael Steer, dated January 28, 2021	Dkt. 499, Ex. 43
Document bates numbered, QCPV001416119	Dkt. 523, Ex. 20
Excerpt of Deposition Transcript of Mr. Wheatley, dated January 23, 2020	Dkt. 523, Ex. 21
Excerpt of Deposition Transcript of Michael Steer, dated December 9, 2020	Gardner Ex. 84
Email, dated May 28, 1999	Gardner Ex. 85
Steer Depo. Ex. 3, from deposition dated December 9, 2020	Gardner Ex. 86
Steer Depo. Ex. 4, from deposition dated December 9, 2020	Dkt. 507-6
Steer Depo. Ex. 5, from deposition dated December 9, 2020	Gardner Ex. 87

I. INTRODUCTION

Summary judgment of noninfringement and invalidity is required. ParkerVision relies on legal misinterpretations, not disputes of material fact. Because Qualcomm's expert and ParkerVision's RX expert agree that the asserted claims have the same requirement that Qualcomm was found not to infringe in *ParkerVision I*, collateral estoppel applies. Summary judgment of noninfringement is additionally required because ParkerVision cannot avoid that Qualcomm's products operate in a fundamentally different way than the RX patents. In a last-ditch effort to avoid summary judgment, ParkerVision introduces another new theory. But it's too late to add theories, and here, they lack support and result in noninfringement. With respect to the invalidity of the '177 patent and noninfringement of the TX patents, there are no disputed facts, only the legal issues of indefiniteness, claim construction, and whether ParkerVision's infringement theory can rest on improper expert testimony. Finally, despite efforts to confuse the record through irrelevant emails dated before the patents issued, ParkerVision fails to present the patent-by-patent analysis required for willfulness and inducement. The Court should grant Defendants' motion.

II. ARGUMENT

A. Collateral Estoppel Applies to the Receiver Patents

ParkerVision does not dispute that there is no material difference between the accused products in *ParkerVision I* and the accused products in this case.[2] The only

[2] ParkerVision's reference to a representative products agreement is misplaced. Products can operate differently in some respects (*e.g.*, additional noninfringement arguments, additional features) while also be noninfringing of other claim elements for the same reason. (Dkt. 527, Ex. 30 at 113-205.)

remaining issue concerns the similarity of the patent claims. On this issue, ParkerVision's arguments to avoid summary judgment fail as a matter of law.

First, ParkerVision argues "the Receiver Claims are different than those from *ParkerVision I*." (Opp. at 2.) But the relevant inquiry is whether the claims are *materially* different. *Aspex Eyewear v. Zenni Optical*, 713 F.3d 1377, 1379 (Fed. Cir. 2013). In response to Dr. Razavi's analysis, ParkerVision presented **no evidence** that the receiver claims here are materially different from the claims found not infringed in *ParkerVision I*. Indeed, it is undisputed that ParkerVision's RX reports contain no analysis or mention of the *ParkerVision I* claims. (*E.g.*, Dkt. 499, Ex. 27, 12/7/20 PV RX Depo. 225:12-226:14, 116:4-25; Dkt. 499, Ex. 43, 1/28/21 Steer Depo. 237:20-238:7.) ParkerVision's attorney argument about alleged trivial language differences is insufficient to defeat summary judgment. *Aspex Eyewear*, 713 F.3d 1381-82.

Second, given that its expert failed to analyze or even review the *ParkerVision I* claims, ParkerVision attempts to manufacture a factual dispute by (i) pointing to a 2019 declaration of its withdrawn expert, and (ii) citing irrelevant report passages. (Opp. at 6.) As to the 2019 declaration, ParkerVision cannot rely on hearsay statements of an expert that has been withdrawn. (Dkt. 469, 479; *Scoche Industries v. Visor Gear*, 121 F.3d 675, 682 (Fed. Cir. 1997) (on SJ, "the evidence presented in the affidavit must be evidence that would be admissible if presented at trial through the testimony of the affiant as a sworn witness").) As to the report passages (paragraphs 39-47 of the RX opening report and paragraphs 73-74 of the RX rebuttal report), these

passages appear in background sections where the expert purports to outline the features of energy sampling downconverters. But it is undisputed that (1) the receiver claims in this case and (2) the patents found not to be infringed in *ParkerVision I* are examples of ParkerVision's energy sampling downconverter. (*E.g.*, *ParkerVision v. Qualcomm*, 621 Fed. Appx. 1009, 1011 (Fed. Cir. 2015); Dkt. 499, Ex. 14, PV RX Reb. Rpt., ¶ 33.) These "energy sampling downconverter" background sections cannot pertain to material differences between the asserted claims and the *ParkerVision I* claims—to the extent these background sections apply, they apply to both sets of claims. Further, these passages fail to cite either the language or requirements of the *ParkerVision I* claims or the asserted claims. Likewise, invoking paragraphs 542-550 of the RX opening report and Dr. Steer's deposition is misplaced as these sections contain no analysis or even mention of the *ParkerVision I* claims. (*Cf.* Dkt. 499, Ex. 43, 1/28/21 Steer Depo. 237:20-238:7 (not familiar with *ParkerVision I* claims).)

Third, ParkerVision argues its experts' admissions about the similarity in claims were based on "a line from the Federal Circuit decision in *ParkerVision I* out of context." (Opp. at 6.) Not so. The Federal Circuit defined the "generating" limitation in each of the asserted claims as requiring that "the accused products produce a low-frequency baseband signal using energy that has been transferred from a high-frequency carrier signal into a storage medium." *ParkerVision*, 621 Fed. Appx. at 1013. The Federal Circuit then agreed with the district court "that no reasonable jury could have found that the accused products satisfy the 'generating' limitation under

ParkerVision's infringement theory." *Id.* at 1016. ParkerVision's expert in this case admitted that the claims here require all elements of the Federal Circuit's definition of the "generating limitation." (Dkt. 499, Ex. 27, 12/7/2020 PV RX Depo. 210:22-211:16, 200:3-21 ('177 patent); *id*. at 211:6-16 and 205:12-206:7 ('907 patent); *id.* at 216:21-219:25 ('940 patent).) ParkerVision's expert thus agreed that the asserted claims include the same requirement that the Federal Circuit relied on in its holding.

ParkerVision identifies no evidence the claims here are materially different from the *ParkerVision I* claims. Rather, ParkerVision's opposition confirms that Qualcomm presented unrebutted evidence demonstrating the material similarity of the claims. (Dkt. 495, Ex. A, Razavi Opening Rpt., ¶¶ 565-584 (charts); Dkt. 495, Ex. B, Razavi Reb. Rpt., ¶¶ 805-828; Mot. at 3.) Summary judgment is required.

B. Qualcomm Does Not Infringe the Receiver Claims

An additional basis for summary judgment of noninfringement of the RX claims concerns Defendants' uncontroverted evidence that the products "form" or "produce" the baseband signal via double-balanced mixers—not via an energy storage device as required by the claims. ParkerVision presents no valid evidence otherwise.

First, ParkerVision seeks to rely on a new theory—that the double-balanced mixers do not create a "usable downconverted signal"—presented for the first time in the deposition by ParkerVision's replacement expert. (Opp. at 10.) This is improper. ParkerVision failed to disclose this new "usability" theory during discovery and it does not appear in expert reports, as evidenced by ParkerVision's failure to provide a report

citation for the new theory. Because the new expert cannot provide opinions in deposition that "expand the parameters, analysis, conclusions, or scope of the Original Expert's opinions" (Dkt. 479 at 7), the Court should disregard this argument. ParkerVision's "shifting sands" approach is unacceptable. *E.g.*, *ParkerVision v. Qualcomm*, 627 Fed. Appx. 921, 922 n.1 (Fed. Cir. 2015); Dkt. 537 at 12 ("If such were permitted, a defendant would never know what it is to defend against.").

Second, ParkerVision pieces together citations to make it seem like its expert disputed that the accused products "produce" or "form" the baseband signal using the double-balanced mixers. But this argument cannot overcome the facts: ParkerVision's original RX expert, along with Dr. Razavi, opined that the double-balanced mixers "produce" or "form" the baseband signal upstream of the accused capacitors. (*E.g.*, Mot. at 6-7; Dkt. 499, Ex. 27, 12/7/2020 PV RX Depo. 57:2-19; Dkt. 499, Ex. 14, PV RX Opening Rpt., ¶¶ 601, 543; Dkt. 495, Ex. B, Razavi Reb. Rpt., ¶¶ 48-112; *see also* PV RX Opening Rpt., ¶¶ 313, 333, 365, 384, 458, 548, *etc.* (accusing the TX filter capacitor and TIA feedback capacitor as the energy storage device).) This point, which ParkerVision fails to dispute with any evidence, shows that Qualcomm is entitled to summary judgment of noninfringement of the RX claims because the products fail to "produce" or "form" the baseband signal via the capacitors.

C. The '177 Patent Claims Are Indefinite

The '177 claims are invalid as indefinite. *First,* ParkerVision does not dispute that "enhanced signal-to-noise power ratio" is a term of degree. ParkerVision argues

"a person of ordinary skill in the art could easily compare SNR values to determine whether SNR was 'enhanced.'" (Opp. at 7.) But an artisan being able to compare SNR values between embodiments does not address the problem that to do any such comparison, one needs an objective reference point to compare to.[3] This is why for terms of degree, the Federal Circuit requires the patent to specify an objective point of comparison. *Berkheimer v. HP*, 881 F.3d 1360, 1364 (Fed. Cir. 2018) (indefinite where "specification contains no point of comparison" for an "objective boundary").[4] The '177 patent fails to provide any point of comparison, rendering the claims indefinite.

Second, for the term "linear time variant circuitry,"[5] ParkerVision attempts to obfuscate the lack of a definite standard for what is "linear," by referencing Qualcomm's expert. But Dr. Razavi's publications use the term "linear" when discussing the idealized operation of a circuit—they do not provide any objective standard for analyzing infringement of ParkerVision's patent by practical circuits like the accused devices. And Dr. Razavi's application of the term "linear" to the prior art is not an admission. It is commonplace in patent cases for an expert to (i) opine that certain terms are indefinite but (ii) apply the patentee's position to the art. The expert

[3] For example, 2014 products may have improved SNR versus 2012 products, but worse SNR versus 2016 products. *Rovi Guides v. Comcast*, No. 16-9278, 2017 WL 3447989, at *13-14 (S.D.N.Y. Aug. 10, 2017) ("to determine if a database is 'relatively large,' all one needs is a reference point to compare to. Jupiter is relatively large compared to Earth but relatively small compared to the Sun").

[4] *Media Rights Techs. v. Capital One Fin.*, 800 F.3d 1366, 1371 (Fed. Cir. 2015) (indefinite); *HZNP Medicines v. Actavis Labs. UT*, 940 F.3d 680, 698 (Fed. Cir. 2019) (same).

[5] It is undisputed that no practical device is perfectly linear. (Opp. at 7.) ParkerVision must thus argue that devices that are not actually "linear" are "linear" enough. But ParkerVision makes no attempt to identify any patent disclosure regarding how "linear" circuitry must be to satisfy the claims.

must be able to address multiple scenarios until the Court rules on indefiniteness.

Third, ParkerVision argues it should not be limited by the '177 patent's sole disclosure of a "non-negligible aperture" for a "matched filtering/correlating module." But the "approximate half cycle of the received carrier signal" disclosure is not just the only *embodiment* of a "non-negligible aperture" for a "matched filtering/correlating module"—it is the only *description* of what "non-negligible aperture" means. *Medicines Co. v. Mylan*, 853 F.3d 1296, 1309-10 (Fed. Cir. 2017) (collecting cases). Notably, if a "non-negligible aperture" is not "an approximate half cycle of the received carrier signal," ParkerVision fails to identify any disclosure explaining what it does mean.

D. Qualcomm Does Not Infringe the Transmitter Claims

1. ParkerVision Misapplies the "Harmonics" Requirement

ParkerVision provides no *evidence* creating a material factual dispute. (Mot. at 12-13; Opp. at 13.) Instead, ParkerVision confirms that its theory is that the accused [redacted] (Opp. at 14.) ParkerVision also confirms its theory that [redacted] *Id.* Under ParkerVision's theory, therefore, the accused signals [redacted]. (Mot. at 19 (figure).)

Given the absence of evidence showing a material dispute regarding the accused

functionality,[6] ParkerVision argues that even when **no signal** exists at the integer multiple frequencies themselves (1 MHz, 3 MHz, and 5 MHz in Mot. at 19 figure), that frequency is a "harmonic." (Opp. at 14.) This is the claim construction dispute Qualcomm identified—does a harmonically rich signal require that each of its plurality of harmonics has a signal at the integer multiple frequency, [redacted]? (Mot. at 16-20.)[7] This is a new dispute raised by Dr. Steer's theory, and neither addressed nor resolved by the parties' stipulated construction. Qualcomm did not (and could not) waive seeking construction on this unresolved new issue. *GE Lighting Solns. v. AgiLight*, 750 F.3d 1304, 1310 (Fed. Cir. 2014) (requiring further construction where "[t]he dispute over this term pertains to an issue not addressed by the stipulation"). The *Akamai* and *Apple* cases cited by ParkerVision are inapplicable. Here, the stipulation did not resolve the "meaning and scope of the term" because the stipulation did not address the disputed issue. *See Medidea v. DePuy Orthopaedics*, 422 F. Supp. 3d 459, 466-67 (D. Mass. 2019) (further construing a previously stipulated term during the summary judgment phase). In addition, Qualcomm promptly raised this dispute after it became apparent from ParkerVision's expert report and expert deposition.

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[6] ParkerVision incorrectly alleges Qualcomm does not dispute its depiction of the accused signals. (Opp. at 12.) [redacted], and for other reasons not relevant to its motion. Even Dr. Steer confirmed that the figure, the only figure he provides of the allegedly infringing signal, is only a "stylized" depiction or "illustration," and such figures are merely "cartoons." (12/9/2020 Steer Depo. 74:23-75:21, 101:20-103:14, Gardner Exs. 84, 86, 87, Dkt. 507-6.)

[7] The construction requires a harmonically rich signal has a plurality of harmonics and the construction of harmonic requires a "frequency or tone" that are at integer multiple frequencies.

2. The '372 Patent Allegations Rest on Improper Expert Opinions

If this Court finds Dr. Steer's opinions regarding the summing elements unreliable or that Dr. Steer raised a new theory as to the "reference potential," summary judgment of the '372 patent follows. (Mot. at 21-23.) ParkerVision does not argue otherwise. Instead, ParkerVision complains that these arguments should have been in the summary judgment motion, not Qualcomm's *Daubert* motion. (Opp. at 16-18.) However, challenges to an expert were to be included as part of the *Daubert* motion. (Dkt. 309.) Summary judgment is just the natural consequence after ParkerVision's sole evidence (its expert's opinion) is excluded.

Regarding claim 107, ParkerVision also argues that Qualcomm should not be able to brief the construction of "reference potential." *But see Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1316, 1319-20 (Fed. Cir. 2016); *O2 Micro Int'l v. Beyond Innovation Tech.*, 521 F.3d 1351, 1361-62 (Fed. Cir. 2008). But the dispute about whether a "reference potential" is a control signal resulted from Dr. Steer's new theory, one never disclosed during fact discovery. If the new theory is allowed in the case, claim construction is required. *Amgen v. Aurobindo Pharma*, 2018 WL 1061369, *1 (D. Del. Feb. 27, 2018) (construing term after motions *in limine* where the issue arose after claim construction hearing).

E. Defendants Did Not Willfully Infringe or Induce Infringement

ParkerVision has not satisfied the demanding requirements for showing willful and induced infringement, let alone on a patent-by-patent basis. *See Bayer Healthcare*

v. Baxalta, No. 2019-2418, 2021 WL 771700, at *16 (Fed. Cir. Mar. 1, 2021) (willfulness "requires deliberate or intentional infringement"). Instead, ParkerVision lumps the patents together and resorts to out-of-context 20-year-old emails. For example, ParkerVision never explains how statements in 1998 show an intent to infringe the '177 patent, *which did not issue until 13 years later.* Moreover, ParkerVision already argued this same email "evidence" was about the *ParkerVision I* patents. ParkerVision is barred from claiming the emails are now about these patents, particularly when it is trying to defeat estoppel by arguing the patents are different.

ParkerVision also tries to argue there should have been an opinion of counsel. But by the time the complaint was served (Dkt. 36) and Qualcomm was notified of alleged infringement, Judge Dalton had issued his order finding that Qualcomm did not use ParkerVision's technology. The Federal Circuit and ITC Staff followed by rejecting ParkerVision's claims. (Dkt. 318 at 6-9.) Qualcomm thus did not need an opinion of counsel; several courts had unanimously rejected ParkerVision's claims. And, even if the clock is turned back, the evidence shows Qualcomm thought ParkerVision had nothing of value—certainly not evidence of egregious behavior. (Dkt 527, Ex. 30 at 99-102 ("checkered history", "never substantiated"); Dkt. 528, Ex. 20 (Qualcomm's belief that alternatives and prior art existed and Qualcomm did not know "[i]f D2D is for real.").) The Court should grant Defendants' motion.[8]

[8] The *Fuji* case, where the patents had issued and defendant "was aware" of the infringement contentions, is inapplicable. Qualcomm never sought a license to the patents-in-suit, none of which had issued at the time of ParkerVision's "evidence". (Dkt. 523, Exs. 20 (patents had not issued), 21 (discussing Gardner Ex. 85 ([redacted]")).)

Dated: March 16, 2021

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and forgoing document has been served on all counsel of record via the Court's ECF system on March 16, 2021.

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