

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

PARKERVISION, INC.,

Plaintiff,

vs.

QUALCOMM INCORPORATED,

Defendant.

Case No. 3:11-cv-719-J-37TEM

QUALCOMM INCORPORATED,

Counterclaim Plaintiff,

vs.

PARKERVISION, INC.; and STERNE,
KESSLER, GOLDSTEIN & FOX PLLC,

Counterclaim Defendants.

ORDER

This cause is before the Court on the following:

1. ParkerVision's Motion for Summary Judgment of No Invalidity (Doc. 269), filed May 22, 2013;
2. Qualcomm's Opposition to ParkerVision's Motion for Summary Judgment of No Invalidity (Doc. 275), filed June 24, 2013;
3. ParkerVision's Reply to Qualcomm's Opposition to ParkerVision's Motion for Summary Judgment of No Invalidity (Doc. 295), filed July 11, 2013;
and
4. Declaration of Mario A. Apreotesi in Support of ParkerVision's Motion for

Summary Judgment of No Invalidity (Doc. 296), filed July 11, 2013.

BACKGROUND

ParkerVision contends that Qualcomm infringes, either directly or indirectly, the claims of U.S. Patent No. 6,061,551 (“the ‘551 Patent”), U.S. Patent No. 6,266,518 (“the ‘518 Patent”), U.S. Patent No. 6,370,371 (“the ‘371 Patent”), U.S. Patent No. 6,963,734 (“the ‘734 Patent”), U.S. Patent No. 7,496,342 (“the ‘342 Patent”), and U.S. Patent No. 7,724,845 (“the ‘845 Patent”). The patents-in-suit relate to methods, systems, and apparatuses used to convert electromagnetic signals from higher frequencies to lower frequencies. Such down-conversion is used, for instance, during the operation of cellular telephones and similar devices.

Qualcomm contends that the claims of these patents are invalid. (Doc. 248.) At the close of discovery, ParkerVision moved for summary judgment on Qualcomm’s invalidity counterclaims. (Doc. 269.) The motion is now ripe for adjudication.

STANDARDS

Summary judgment is appropriate where there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). A genuine dispute of material fact exists if “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). To defeat a motion for summary judgment, the nonmoving party must “go beyond the pleadings, and present affirmative evidence to show that a genuine issue of material fact exists.” *Porter v. Ray*, 461 F.3d 1315, 1320 (11th Cir. 2006). The Court must “draw all justifiable inferences in favor of the nonmoving party, including questions of credibility and of the weight to be accorded particular evidence.” *Masson v. New Yorker Magazine, Inc.*, 501 U.S. 496, 520 (1991).

DISCUSSION

ParkerVision seeks summary judgment on Qualcomm's anticipation and obviousness invalidity counterclaims, on Qualcomm's theory that the claims are not enabled, on the definiteness of several claim terms, and on the general allegations in Qualcomm's counterclaims that the claims are invalid under numerous provision of the Patent Act.

I. Anticipation and Obviousness

ParkerVision's motion for summary judgment on Qualcomm's anticipation and obviousness counterclaims rests on the Court rejecting the invalidity opinions of Qualcomm's expert, Dr. Behzad Razavi. ParkerVision contends that Dr. Razavi failed to offer any opinion or set forth any evidence establishing that any prior art reference meets the generating limitation of each asserted claim of the '551 Patent, the '518 Patent, and the '371 Patent. (Doc. 269, pp. 6–17.) Each asserted claim of these patents contains, among other things, a transferring limitation and a generating limitation. (*Id.* at 7.) ParkerVision contends that Dr. Razavi conflates and confuses these two limitations because he concludes that the transferring limitation and the generating limitation are necessarily satisfied during the operation of certain circuitry known in the art. (*Id.* at 8–9.) Dr. Razavi reasons that this is so because the generating limitation “can happen simultaneously with the transferring of energy from the carrier signal.” (*Id.*)

Qualcomm argues in response that Dr. Razavi did not conflate the transfer limitation and a generating limitation of the asserted claims. (Doc. 275, pp. 9–11.) His analysis, according to Qualcomm, merely rests on fundamental principles of physics and the understanding that the transferring and generating limitations of the claims can occur simultaneously. (*Id.*) Qualcomm also argues that ParkerVision's theory—that the

lower frequency signal is generated from the discharge path of a capacitor or storage device—is not supported by the claim language. (*Id.* at 15–17.)

In reply, ParkerVision contends that “the plain and ordinary meaning of ‘generating’ a lower frequency signal ‘from the transferred energy’ requires the discharge of energy from a storage device.” (Doc. 295, pp. 4–6.) It points to portions of the specification that teach the discharging of a storage device to generate the lower frequency signal, as well as portions of the specification that teach the sawtooth-like voltage waveform which demonstrates that a lower frequency signal has been generated. (*Id.*)

The Federal Circuit instructs that anticipation, “though a question of fact, may be resolved on summary judgment if no genuine issue of material fact exists.” *OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 704 (Fed. Cir. 2012). “Similarly, ‘a district court can properly grant, as a matter of law, a motion for summary judgment on patent invalidity when the factual inquiries into obviousness present no genuine issue of material facts.’” *Id.* (quoting *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 716 (Fed. Cir. 1991)).

Claim 1 of the '551 Patent claims:

A method for down-converting a carrier signal to a lower frequency signal, comprising the steps of:

- (1) receiving a carrier signal;
- (2) transferring non-negligible amounts of energy from the carrier signal, at an aliasing rate that is substantially equal to a frequency of the carrier signal plus or minus frequency of the lower frequency signal, divided by n , where n represents a harmonic or sub-harmonic of the carrier signal; and
- (3) generating a lower frequency signal from the

transferred energy.

Qualcomm's position is that the language of the claim requires only (1) the "transfer of energy from the carrier signal" and (2) the generation of a "lower frequency signal from the transferred energy." In other words, "[t]he claims at-issue in this motion require only that the signal be generated; they have no discharge requirement." (Doc. 275, p. 15.) ParkerVision's position by contrast rests on its theory that these two claim limitations together define the inventions disclosed in the '551 Patent, the '518 Patent, and the '371 Patent—namely that the lower frequency signal is generated by "discharging the transferred energy from [a] storage device." (Doc. 269, p. 11.)

Qualcomm has the better argument. First, the Court adopted ParkerVision's claim construction position that the generating limitation was clear enough that it need not be defined. ParkerVision cannot adopt a new position now. If, as ParkerVision now contends, the generating limitation is restricted to those devices and methods that discharge the transferred energy from a storage device, then it is not apparent to the Court why ParkerVision opposed the majority of Qualcomm's proposed claim constructions, which attempted to limited the scope of the claims to methods and devices that used storage devices such as capacitors.

Second, the transferring limitation of claim 1 of the '551 Patent contains no language that requires the use of a storage device. Rather, it requires merely the "transferring non-negligible amounts of energy from the carrier signal" at a specified rate. Dr. Razavi contends that down-conversion using an aliasing rate can be accomplished by a simple switch, the opening and closing of which would cause non-negligible amounts of energy to transfer from a carrier signal to a lower frequency signal. This testimony is sufficient to create a material issue of fact as to the transferring

limitation.

Likewise, the generating limitation does not describe the generating step as being performed by the discharge of a storage device. To be sure, the scope of the generating limitation embraces ParkerVision's discharge theory, which is described in detail in the patent specifications, but the language used is not so restricted. It claims simply "generating . . . from the transferred energy." It is apparent from the briefing and patent specifications that a signal could be "generated" from a charge held in a capacitor either directly, by discharging the capacitor, or indirectly, by measuring the voltage across the capacitor. The language used in the generating claim limitation does not distinguish between these two techniques. One skilled in the art who reads the disclosure may conclude that the various elements of the claims combine to restrict the claimed invention to the former rather than the latter. ParkerVision's motion, however, rests on the satisfaction of the generating limitation. The parties' experts disagree if the generating limitation is disclosed in the prior art, which is all that is required to deny the motion.

Accordingly, because Qualcomm has identified genuine disputes of material fact, ParkerVision's summary judgment motion is due to be denied with regard to Qualcomm's anticipation and obviousness counterclaims.

II. Enablement

ParkerVision seeks summary judgment on Qualcomm's counterclaim that the claims of the '551 Patent, the '518 Patent, and the '371 Patent are invalid under 35 U.S.C. § 112 for lack of enablement. (Doc. 269, pp. 17–19.) ParkerVision contends that the only evidence Qualcomm has advanced in support of its enablement challenge are the opinions of Dr. Razavi. (*Id.*) ParkerVision argues that Dr. Razavi's opinions are

based on an incorrect understanding of the law of enablement and a flawed analysis of one embodiment of the claimed invention. (*Id.*) Qualcomm responds that Dr. Razavi merely demonstrated that the invention is not capable of distinguishing the signal from noise and interference throughout the scope of the claims. (Doc. 275, pp. 18–19.)

Enablement is a legal determination of whether a patent enables one skilled in the art to make and use the claimed invention. *BJ Servs. Co. v. Halliburton Energy Servs., Inc.*, 338 F.3d 1368, 1371 (Fed. Cir. 2003). A specification is enabling even if one skilled in the art would be required to perform some experimentation so long as the experimentation is not unduly extensive. *Id.* The enablement requirement applies to the invention as claimed. A patent applicant who obtains broad claims must be prepared to defend the proposition that the full scope of those claims has been enabled. *Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1282–83 (Fed. Cir. 2007). While enablement is a question of law, it may rest on factual determinations that should be decided by the jury. *BJ Servs. Co.*, 338 F.3d at 1371.

The issue of enablement in this case rests on factual issues amenable to resolution by the jury. See, e.g., *Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1288 (Fed. Cir. 2012) (noting that determining whether undue experimentation is required “is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations.”) Dr. Razavi’s demonstration tends to show that the methods disclosed in the patents cannot transfer non-negligible amounts of energy in amounts that are distinguishable from noise throughout the entire scope of the claims. Qualcomm has therefore brought some evidence that the claims are not enabled. ParkerVision’s argument in response raises a question of fact—whether the experimentation required to enable the invention

throughout the scope of the claims is unduly extensive. *See id.*

ParkerVision's motion for summary judgment on Qualcomm's enablement challenge is therefore due to be denied.

III. Indefiniteness

ParkerVision asks the Court to grant summary judgment to it on Qualcomm's indefiniteness counterclaims. (Doc. 269, pp. 19–24.) Qualcomm contends that some claim terms are indefinite words of degree. It also contends that certain claims are invalid because they have mathematical formulas that contain typographical errors. The Court considers each argument in turn.

A. Words of Degree

Qualcomm contends that claims 113, 161, 202, and 203 of the '551 Patent, claims 4 and 7 of the '845 Patent, and claims 81 and 91 of the '518 Patent are invalid as indefinite because of the use of the terms "substantial" and "accurate." (*Id.* at 19–22.) ParkerVision argues that, in the context of the claims, the meanings of these terms are readily apparent. (*Id.*) Qualcomm argues in response that these terms are indefinite because these terms are words of degree for which the specification must, but does not, provide an objective standard. (Doc. 275, pp. 19–20.)

Indefiniteness is a legal determination that "focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the specification." *BJ Servs. Co.*, 338 F.3d at 1372. Though a question of law, if underlying factual findings are necessary to resolve a dispute, then the indefiniteness question is amenable to resolution by the jury. *Id.* If the patent claims use less than precise terms—which are sometimes called words of degree—then the Court must determine whether the specification provides some guidance for measuring that degree. *Seattle Box Co. v.*

Indus. Crating & Packing, Inc., 731 F.2d 818, 826 (Fed. Cir. 1984). Put another way, when confronted with a word of degree a court must ask, “Would an expert know the limitations imposed by the claims?” *Id.*

Here, the issue of indefiniteness turns on the disclosure found in the patents’ specifications and the knowledge of those skilled in the art. Dr. Razavi opines that specifications do not provide any standards for measuring the terms substantial and accurate. (Doc. 269, p. 21.) He states in his expert report that he reviewed the specification and claims in this case and determined that they do not provide any guidance as to what constitutes “substantial amounts of energy” and what is meant by “accurate voltage reproduction.” Dr. Razavi, who worked as an engineer designing integrated circuits for communication systems during the 1990s before turning to teaching, is familiar with the level of knowledge of one skilled in the art during the relevant time period. (Doc. 269-1.) His testimony is sufficient to raise a material issue of fact that should be resolved by the jury.

B. Typographical Errors

ParkerVision also seeks summary judgment on Qualcomm’s counterclaim that claims 4 and 7 of the ’845 Patent are indefinite because they contain typographical errors. (*Id.* at 22–24.) Those errors are present in mathematical formulas that specify, in claim 4, a mathematical transformation that must be applied to the carrier signal in one step of the methods claims and, in claim 7, describe mathematically the accumulation of energy. (*Id.*) ParkerVision proposes corrections to the formulas. (*Id.*) Qualcomm opposes, arguing that ParkerVision’s proposed fixes are not clear from the face of the patent and, in any event, would introduce additional error. (Doc. 275, p. 17–18.)

The Federal Circuit has held that district courts may “correct obvious minor

typographical and clerical errors in patents.” *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003). Major errors in patents can only be corrected by the U.S. Patent and Trademark Office pursuant to a request under 35 U.S.C. § 254 or 35 U.S.C. § 255. *Id.* A minor error can be corrected by a district court “only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *Id.*

The corrections proposed by ParkerVision are not minor. The mathematical formulas are a central feature of their respective dependent claims—they *are* the reason for those claims. The formulas are supposed to define the precise way in which the carrier signal is to be transformed and how energy is to be accumulated in particular steps of the claimed methods in contrast to the broader, word-based limitations used in independent claims. The errors in the formulas are not so obvious as to have been apparent to the patentees or their patent attorneys during the prosecution of the patents. And the errors require a person with a technical background to work through a substantial specification in order to reach the corrections proposed by ParkerVision. The Court therefore finds that the errors in claim 4 and claim 7 of the '845 Patent are not so minor as to be amendable to correction by a district court. Such claims are indefinite until such a time as they are corrected by the U.S. Patent and Trademark Office pursuant to 35 U.S.C. § 254 or 35 U.S.C. § 255.

* * * * *

ParkerVision’s motion for summary judgment on these issues is therefore due to be denied. The Court will grant summary judgment in favor of Qualcomm on its counterclaim that claim 4 and claim 7 of the '845 Patent are indefinite.

IV. Qualcomm's Remaining Invalidity Allegations

ParkerVision seeks summary judgment on Qualcomm's invalidity counterclaims that: (1) the asserted claims fail to comply with the written description requirement of 35 U.S.C. § 112; (2) the asserted claims are not patentable subject matter or violate the prohibition on double patenting under 35 U.S.C. § 101; (3) the asserted claims were abandoned, or were the subject of a prior foreign filing, or were derived from another under 35 U.S.C. § 102; and (4) the specifications fail to disclose the best mode as required by 35 U.S.C. § 112. (Doc. 269, pp. 24–25.) Qualcomm responds that, although it does allege that each “claim of the Patents-in-Suit is invalid for failure to comply with one or more provisions of 35 U.S.C. §§ 101, 102, 103, and 112” in its counterclaims (see Doc. 248, ¶ 12), it limited its invalidity attacks to specific defenses to the claims asserted by ParkerVision. (Doc. 275, p. 20.) Qualcomm then explains that because of this “defenses which might have arisen within the scope of these counterclaims were never raised, and thus there is nothing to grant summary judgment against.” (*Id.*)

Qualcomm is mistaken when it argues that there is nothing to grant summary judgment against. The allegations contained in its counterclaims broadly attack the validity of the patent claims. ParkerVision is entitled to seek summary judgment on “each claim or defense” or “part of each claim or defense” that has been asserted against it. Fed. R. Civ. P. 56(a). The moving party bears the initial burden of stating the basis for its motion and identifying those portions of the record that demonstrate the absence of genuine issues of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986); *Hickson Corp. v. N. Crossarm Co.*, 357 F.3d 1256, 1259–60 (11th Cir. 2004). That burden can be discharged if the moving party can show the court that there is “an absence of evidence to support the nonmoving party's case.” *Celotex Corp.*, 477 U.S. at

325. ParkerVision, as the moving party, has discharged its burden by identifying specific invalidity claims raised by Qualcomm in its pleadings for which there is an absence of evidence.

The nonmoving party must come forward with affirmative evidence to support its claims.¹ *Anderson*, 477 U.S. at 257. “A mere ‘scintilla’ of evidence supporting the opposing party’s position will not suffice; there must be enough of a showing that the jury could reasonably find for that party.” *Walker v. Darby*, 911 F.2d 1573, 1577 (11th Cir. 1990). Qualcomm has offered no evidence whatsoever in support of the allegations of the counterclaims identified by ParkerVision. Qualcomm has therefore failed to support its position on an issue for which it bears the burden of proof at trial. In these circumstances, “summary judgment may be granted.” *Anderson*, 477 U.S. at 249–50.

The Court therefore finds summary judgment is due to be granted in favor of ParkerVision on Qualcomm’s counterclaims that: (1) the asserted claims fail to comply with the written description requirement of 35 U.S.C. § 112; (2) the asserted claims are not patentable subject matter or violate the prohibition on double patenting under 35 U.S.C. § 101; (3) the asserted claims were abandoned, or were the subject of a prior foreign filing, or were derived from another under 35 U.S.C. § 102; and (4) the specifications fail to disclose the best mode as required by 35 U.S.C. § 112.

CONCLUSION

Accordingly, it is hereby **ORDERED AND ADJUDGED** that:

1. ParkerVision’s Motion for Summary Judgment of No Invalidity (Doc. 269) is **GRANTED IN PART** and **DENIED IN PART**, as discussed in this Order;

¹ There is no question that Qualcomm has been afforded ample opportunity to discover the existence of any evidence in support of its invalidity counterclaims.

and

2. Summary judgment is **GRANTED** against ParkerVision and in favor of Qualcomm on Qualcomm's counterclaim that claim 4 and claim 7 of the '845 Patent are indefinite under 35 U.S.C. § 112.

DONE AND ORDERED in Chambers in Jacksonville, Florida, on August 25, 2013.



ROY B. DALTON JR.
United States District Judge

Copies:

counsel of record