United States District Court,
E.D. Texas, Marshall Division.

MICRO INT'L, LTD,
v.
ROHM CO., LTD.

No. 2:05-CV-211

Nov. 16, 2007.

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MEMORANDUM OPINION AND ORDER

CHARLES EVERINGHAM IV, United States Magistrate Judge.

1. Introduction

In this case, O2 Micro asserts various claims of five United States patents against Rohm. FN1 Three of the asserted patents are related, each sharing a common written description directed to power converters. These patents include U.S. Patent Nos. 6,259,615, 6,396,722, and 6,804,129. The two remaining patents are also related, each sharing a common written description directed to sequential burst mode circuits and systems. These patent include U.S. Patent Nos. 6,501,234 and 6,707,264. This opinion and order resolves the material claim construction disputes between the parties.

FN1. Rohm is the only defendant remaining in this action.

2. General Principles Governing Claim Construction

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." Burke, Inc. v. Bruno Indep. Living

Aids, Inc., 183 F.3d 1334, 1340 (Fed.Cir.1999). Claim construction is an issue of law for the court to decide. Markman v. Westview Instruments, Inc., 52 F.3d 967, 970-71 (Fed.Cir.1995) (en banc), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. Markman, 52 F.3d at 979. Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. A patent's claims must be read in view of the specification, of which they are a part. *Id*. For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id*. "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." Watts v. XL Sys., Inc., 232 F.3d 877, 882 (Fed.Cir.2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's claims. Otherwise, there would be no need for claims. SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1121 (Fed.Cir.1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. Intellicall, Inc. v. Phonometrics, 952 F.2d 1384, 1388 (Fed.Cir.1992). And, although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. Electro Med. Sys., S.A. v. Cooper Life Scis., Inc., 34 F.3d 1048, 1054 (Fed.Cir.1994).

This court's claim construction decision must be informed by the Federal Circuit's decision in Phillips v. AWH Corp., 415 F.3d 1303 (Fed.Cir.2005) (en banc). In *Phillips,* the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the *claims* of a patent define the invention to which the patentee is entitled the right to exclude." *Id*. at 1312 (emphasis added) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed.Cir.2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id*. The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e*. as of the effective filing date of the patent application." Id. at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention. The patent is addressed to and intended to be read by others skilled in the particular art. *Id*.

The primacy of claim terms notwithstanding, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id*. Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id*. at 1315 (quoting Markman, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id*. at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." Bates v. Coe, 98 U.S. 31, 38, 25 L.Ed. 68 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed.Cir.1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The

construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. The prosecution history helps to demonstrate how the inventor and the PTO understood the patent. Phillips, 415 F.3d at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id*. Nevertheless, the prosecution history is intrinsic evidence. That evidence is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims.

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by Tex. Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193 (Fed.Cir.2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Id*. at 1319-24. The approach suggested by *Tex. Digital*-the assignment of a limited role to the specification-was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id*. at 1320-21. According to *Phillips,* reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of the claim terms within the context of the patent." *Id*. at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id*. What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id*. The definitions found in dictionaries, however, often flow from the editors' objective of assembling all of the possible definitions for a word. *Id*. at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id*. at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

3. Discussion

A. Converter Circuit Patents

Most of the terms raised with respect to these three patents have been construed in other cases. By way of background, Judge Claudia Wilken construed the '615 patent in a California litigation involving O2 Micro and Monolithic Power Systems. Judge Ward construed the '615 and the '722 patents in the Sumida case and in the Bitek case. *See O2 Micro Int'l Ltd. v. Taiwan Sumida,* 2:03-CV-07 and *O2 Micro Int'l Ltd. v. Beyond Innovation Tech.,* 2:04-CV-32. Judge Ward construed all three of these patents in the Samsung Case. *See O2 Micro v. Samsung Elecs. Co., Ltd.,* 2:04-CV-323. In yet a separate litigation involving Monolithic Power Systems, Judge Wilken construed the '615, '722, and '129 patents.

The technology relates to power inverter circuitry used in connection with laptop and notebook computers. The circuit utilizes a DC power source and converts it to higher voltage alternating current used to power a load. In this context, the load is typically a cold cathode fluorescent lamp used to light the computer display screen. Broadly, the converter circuit can be described as a circuit with an input DC voltage connected to one side of a transformer through pluralities of switches, typically transistors, with the load connected to the other side of the transformer. Each plurality of switches forms a conduction path to connect the DC input to the primary side of the transformer in such a way that the DC current flows in one direction through the primary side of the transformer when the first plurality of switches conducts and in the opposite direction when the second plurality of switches conducts. Alternating these two conduction paths results in current with an alternating polarity flowing through the primary side of the transformer. This generates an AC output on the secondary side of the transformer which is used to power to the load.

Drive circuitry determines when and for how long the switches in the plurality are turned on or off. The time that both switches in a plurality are turned on (the overlap time) determines the amount of power delivered to the load. The longer the overlap time, the more power that is delivered to the load. The circuit includes a feedback signal to help adjust the amount of power delivered to the load. By comparing the feedback signal to a reference, the circuit determines whether an adjustment to the load power is necessary. The circuit can also detect an open lamp condition and operate in a mode where only a minimum amount of power is delivered to the load.

Turning now to the task at hand, the court has considered Rohm's arguments in support of altering prior claim constructions. The court rejects these arguments and is persuaded that the prior constructions are correct. Accordingly, the court adopts Judge Ward's and Judge Wilken's constructions from the previous O2 Micro litigations for all terms not discussed herein, *e.g.* "predetermined" and "open lamp condition."

1. a feedback signal indicative of an electrical condition at a cold cathode fluorescent lamp load

Rohm's proposed construction of this term is "an electrical signal that is used to determine an electrical condition at a cold cathode fluorescent lamp load." O2 Micro contends that this tem does not need construction. O2 Micro alternatively proposes a construction of "an electrical signal that can be used to determine an electrical condition at a cold cathode fluorescent lamp load." The parties' disagreement is focused on whether the feedback signal must be used to detect the electrical condition at the CCFL. Consistent with previous claim construction rulings, the court construes this term to mean "an electrical signal that can be used to determine an electrical condition at a cold cathode fluorescent lamp load."

2. range

O2 Micro proposes that the term "range" means "the set of values that a quantity or function may assume." Rohm proposes a construction of "the set of values between the highest and lowest value that a quantity or function may assume." Claim 3 of the '129 patent is instructive. In this regard, claim 3 states "[a] circuit as claimed in claim 2, wherein said predetermined range is zero amps to a first predetermined current value." As such, the court concludes that the term "range" means "the set of values between the highest and lowest value that a quantity or function may assume."

3. predetermined range

The court construes "predetermined range," consistent with the previous constructions, to mean "a range

determined beforehand."

4. only if said electrical condition is outside a predetermined range

The court rejects Rohm's argument and concludes that this term needs no construction.

5. selective coupling / selectively couple / selectively coupling FN2

FN2. Rohm asserts that all grammatical forms have the same meaning. *See* Rohm Response Brief at 24; Microsemi Response Brief at 10 n .3.

Judge Ward has previously construed the term "coupled" to mean "electrically connected, directly or indirectly." *O2 Micro v. BiTEK,* 2:04-CV-32. Judge Ward also declined to construe the term "selectively coupling" beyond its construction of "coupled." In this regard, however, Judge Ward rejected the argument that the term "selectively" is limited to "alternatingly." In light of this background, Rohm proposes that the term "selectively coupling" means "coupled under some circumstances and not coupled under other circumstances." O2 Micro asserts that no construction of this term is necessary. In view of the parties' arguments, the court adopts the prior construction of the term "coupled," and concludes that "selective coupling" means "coupling under some circumstances and not others."

B. Sequential Burst Mode Patents

By way of background, Judge Ward construed the '234 and the '264 patents in the Samsung case. *See O2 Micro Int'l Ltd. v. Samsung Electronics, Co.,* 2:04-CV-323. As discussed above, the Sequential Burst Mode patents are related, as the '264 patent is a continuation of the '234 patent. The technology is used to regulate the power delivered to a plurality of fluorescent lamps that provide backlighting for the LCDs used in laptops, desktop computers, and other electronic products.

The patents provide an overview of the relevant art. A lighting/dimming system is a system used to regulate the amount of power delivered to a lamp and control its brightness. One type of prior art system is a voltage control dimming system. This system varies the input voltage to an inverter to adjust the output voltage. The lower the input voltage, the lower the output voltage to the lamp. The constraints of such a system include a low dimming range ratio. '234 patent, col. 1:37-39.

A second dimming system described by the prior art is the "burst mode" dimming system. In a "burst mode dimming system," an alternating signal is cut with a notch of variable width so as to reduce the power supplied to a lamp to provide a desired dimming. The smaller the widths of the AC power, the lower the luminance at which the lamp operates. Id. at ln. 40-45.

The patents-in-suit describe one of the prior art patents in the field. The prior art '540 patent uses burst mode techniques to synchronize a single back light with the LCD to reduce flicker problems. In addition, the use of a burst mode system as described in the '540 patent reduces the noise associated with the lighting display.

Bearing this background in mind, the Sequential Burst Mode patents describe inventions used to regulate the power delivered to multiple lamps as opposed to a single lamp. In the field of the invention, many larger LCD screens use more than one lamp. The goal of the patents is to regulate the power given to the various

lamps to reduce flicker and noise problems. The patents accomplish this by generating a plurality of "burst mode signals," which are phase shifted so as to sequentially supply power to the plurality of lamps. In this way, the individual lamps are activated sequentially. According to the detailed description of the preferred embodiment, "burst mode, as used herein and as understood in the art, generally means the regulation of power to a load using a PWM signal to modulate the power delivered to a load based on the pulse width of the PWM signal." '234 patent, 4 :57-61. The patents describe the invention as a phase delay array that receives a pulse width modulated signal and a frequency selection signal. The array generates a plurality of burst mode signals that are phased in time to regulate power to their respective loads, such that the loads are not on at the same time.

The court has considered Rohm's arguments that certain constructions should be altered. The court rejects Rohm's efforts, and adopts Judge Ward's constructions from the previous Samsung litigation for all of the disputed terms herein, *e.g.* "frequency selection signal," "reference signal," and "phase delay array." The term "phase delay" needs no construction.

Likewise, with respect to the term "delaying at least one of said phased pulse signals," O2 Micro contends that the court should revisit Judge Ward's previous ruling. In this regard, O2 Micro argues that claim 27 should be construed to provide for the simultaneous occurrence of the "generating step" and the "delaying" step. Rohm argues that Judge Ward's previous ruling in this regard is correct. The court agrees, and adopts Judge Ward's previous ruling.

4. Conclusion

The court adopts the above constructions. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the constructions adopted by the court.

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