United States District Court, E.D. North Carolina, Western Division.

POWERWARE CORPORATION,

Plaintiff and Counterclaim Defendant.

v.

AMERICAN POWER CONVERSION CORPORATION,

Defendant and Counterclaim Plaintiff.

No. 5:03-CV-17-BO(3)

Jan. 31, 2005.

C. Everett Thompson, II, Attorney at Law, Elizabeth City, NC, John J. Barnhardt, Alston & Bird, Charlotte, NC, for Defendant and Counterclaim Plaintiff.

ORDER

TERRENCE W. BOYLE, District Judge.

This matter is before the Court pursuant to the *Markman* hearing conducted on December 1, 2004 in Elizabeth City. In the underlying matter, the parties have alleged patent infringement claims against each other.

BACKGROUND

Each of the parties in this case produces a device commonly known as a "Uninterrupted Power Supplier" (UPS). Essentially, a UPS provides a weigh-station between the electricity that comes from the power outlet and the devices reliant on that power source. If for some reason the power from the outlet is interrupted, the UPS contains batteries which will, within a fraction of a second, begin to deliver power to the devices connected to it. Additionally, a UPS can regulate the power traveling through it from the outlet to the devices. This power regulation can provide more efficient energy to the connected devices.

Here, the parties claim that each of their devices in some way infringe on the patents of the other's. In no small part, the validity of each party's claim rests on the interpretation of the language in their respective patents. The aim of this order is to define the scope of the disputed language in each party's patents in anticipation of trial.

ANALYSIS

The principles of claim construction are well established. The language of the asserted patent claim is always the proper starting point in a claim construction, since the language of a patent claim frames, and ultimately resolves, all issues of claim interpretation. *See* E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433 (Fed.Cir.1988), *See also* Phonometrics, Inc. v. Northern Telecom, Inc.,

133 F.3d 1459, 1464 (Fed.Cir.1998). The claims are construed from the perspective of a person of ordinary skill in the field of invention. Hoechst Celanese Corporation v. B.P. Chemicals, Ltd., 78 F.3d 1575, 1578 (Fed.Cir.1998). Generally, patent claims are construed liberally to uphold a patent's validity. However, patents can be construed narrowly if required to avoid conflict with the prior art. *See* Marvin Glass and Associates v. Sears, Roebuck & Co., 318 F.Supp. 1089 (S.D.Tex .1970). *Aff'd in part, remanded in part*, 448 F.2d 60 (5th Cir1971). Furthermore, claims can be given a narrow construction if the art or field is crowded and the discovery is merely a small advancement. *See* Hazeltine Corp. v. Emerson Television-Radio, Inc., 129 F.2d 580 (2nd Cir.1942).

An inventor is free to define the terms of his patent claim however he chooses. Hormone Research Found, Inc. v. Genetech, Inc., 904 F.2d 1558, 1563 (Fed.Cir.1990). However, if there is no evidence that the inventor intended for a term to have a specific or idiosyncratic meaning, then the common meaning of the term should control. Frank's Casing Crew & Rental Tools, Inc. v. PMR Techs., Ltd., 292 F.3d 1363, 1374 (Fed.Cir.2002). A court is free to rely on the opinions of experts in the field, treatises in the field, or dictionaries to determine how the claim terms ought to be construed. *See* Vitrionics Crop. v. Conceptronic, Inc., 90 F.3d 1576, 1584 (Fed.Cir.1996), *See also* CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1365 (Fed.Cir.2002).

Beyond the language used in the patent claim, the court can rely on statements made during the prosecution of the patent claim. Vesture Corporation v. Thermal Solutions, Inc., 284 F.Supp.2d 290 (M.D.N.C.2003). Positions taken in order to obtain a patent are important to understanding why the inventor was granted a patent and may work as an estoppel against a subsequent, different or broader construction. *See* Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed.Cir.1995). More specifically, statements made during the prosecution history with respect to a patentee's understanding of the scope of a claim term can preclude the patentee from subsequently interpreting the term in an inconsistent manner. *See* Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1457 (Fed.Cir.1998).

Plaintiff's claims against Defendant

The first major term disputed by the parties is "uninterrupted power supply" as it is used in Plaintiff's '412, '586 and '678 patents. FN1 As outlined above, in interpreting claim language, the prior art in the field is relevant. Here, both parties agree that the relevant prior art is the "Tomoto" patent. FN2 The Tomoto patent illustrates that there have already been significant advancements in the design and production of UPS machines. Because the advancements on the prior art are minimal, as evidenced by comparing the Tomoto patent with Plaintiff's patents, the Court finds it appropriate to give a narrow construction to the '412, '586 and '678 claims. Furthermore, having reviewed the prosecution history of the '412, '586 and '678 patents, the Court concludes that Plaintiff's statements during the prosecution history of those patents preclude the claim construction it is now seeking. Rather, the Court believes that Defendant's construction of the '412, '586 and '678 patents is accurate, and therefore, it adopts that construction.

FN1. The actual numbers of all the patents involved in this case are in the millions. The Court will refer to each patent by its last three digits.

Accordingly, for the foregoing reasons, the Court adopts Defendant's construction of the term "uninterrupted power supply" with regard to Plaintiff's '412, '586 and '678 patent claims.FN3 Accordingly, the definition of uninterrupted power supply with regard to Plaintiff's claims is:

FN3. Specifically, the Court adopts this construction as it applies to claims one and twelve under the 6,069,412 patent, claim one under the 6,400,586 patent and claims two, three, four and six under the 6,661,678 patent.

An apparatus for providing a secure power supply to a load, such as a computer. The UPS includes: (1) an uninterrupted neutral from the input of the UPS to the output of the UPS; (2) a power factor correction (PFC) circuit that converts rectified AC voltage into DC voltages at the high voltage rails; and (3) a circuit for connecting a battery to the PFC circuit so that the DC battery voltage is converted into DC voltages at the high voltage rails, where the DC to DC conversion is performed using the same circuitry of the PFC circuit as is used to convert the rectified AC voltage (i.e. no additionally or independent circuitry is used to convert the DC battery voltage). In addition, the UPS is prohibited from having any capacitor(s), connected across the inputs of the PFC circuit, that is downstream of the rectifier diode that rectifies the AC input voltage.

Furthermore, the parties contest the meaning of the terms "power factor correcting converter circuit," "power factor correction," and "PFC circuit" as used in Plaintiff's '412, '586 and '678 patents. The Tomoto patent and the statements made by Plaintiff in the prosecution history of these patents also guides the Court's determination with regard to these terms. Accordingly, the Court also finds it appropriate to give these terms a narrow construction. Defendant's proposed construction of the above mentioned terms satisfies the Court's requirements.

Therefore, the Court adopts Defendant's construction of the terms "power factor correcting converter circuit," "power factor correction," and "PFC circuit" as used in Plaintiff's '412, '586 and '678 patents.FN4 Accordingly, the definition of these terms with regard to Plaintiff's claims is:

FN4. Specifically, the Court adopts this construction as it applies to claims one and twelve under the 6,069,412 patent, claims one, ten and eighteen under the 6,400,586 patent and claims two, three and seven under the 6,661,678 patent.

A circuit that (1) performs power factor correction, at the input terminals of the UPS, to improve the ration of the total active power in watts to the total apparent power in volt-amperes; (2) includes converter circuitry that converts the rectified AC input into DC voltages for the positive and negative high voltage rails; (3) does not have a capacitor connected across the inputs of the PFC circuit; and (4) does not use a converter circuit, independent of the PFC circuit, to convert the DC battery voltage into DC voltages for the positive and negative high voltage rails when the UPS operates on battery power (i.e. the same converter circuitry in the PFC circuit is used in both AC and battery modes of operation). The claimed PFC circuit is distinct from the circuit that rectifies the AC input from the power line source.

The final disputed term with regard to Plaintiff's patents is the use of the term "universal receiving location" in Powerware's '783 patent. The parties disagreement over the meaning of this term centers on whether the definition should include the language: "Insertion of the battery pack into the slot precludes insertion of the power module into the slot, and insertion of the power module into the slot precludes insertion of the battery pack into the slot." Having reviewed the '783 patent, the Court finds that the inclusion of the disputed

language is necessary to accurately define the term "universal receiving location." Accordingly, the Court adopts Defendant's construction of the term "universal receiving location." FN5 Therefore, the definition of universal receiving location is:

FN5. The Corut adopts this construction for claim thirty-one of the 6, 310,783 patent.

A slot capable of interchangeably receiving either a battery pack or a power module. Insertion of the battery pack into the slot precludes insertion of the power module into the slot, and insertion of the power module into the slot precludes insertion of the battery pack into the slot.

Defendant's claims against Plaintiff

In addition to the three patent claims asserted by Plaintiff, Defendant has alleged three patent infringement counterclaims. These counterclaims deal with the same basic UPS product and are governed by the same legal principles as Plaintiff's claims. Defendants counterclaims address its '509 patent, '779 patent and '950 patent.FN6 The Court will address each of these claims in turn.

FN6. The full number of the patents involved here are: 4,942,509, 5,712,779 and 6,274,950.

The first disputed term is the word "average" as used in the '509 patent. Plaintiff contends that "average" in the context of the '509 patent means "a smoothed (ripple removed) current, and not instantaneous current." The term "average" is used to modify the terms "input voltage" and "input current" in the '509 patent. Although the word "average" is being applied in a technical field here, it has not been given any particular technical meaning. In other words, average means average whether we are discussing height, weight, length, distance, or in this case, the value of input voltage and input currents. As mentioned above, where words in a patent claim have no specialized meaning to persons of skill in the art, the ordinary meaning of those words to those skilled in the art controls the construction of the words, unless the evidence indicates that the inventor used them differently. Accordingly, the Court finds that the word "average" used in the '509 patent should be interpreted as having its ordinary meaning. The Merriam-Webster Dictionary defines average as "a single value (as a mean, mode, or median) that summarizes or represents the general significance of a set of unequal values." *Merriam-Webster Dictionary* (2004). In this context, the "average" of the input currents and input voltage is more accurately reflected in Plaintiff's definition of the term. Accordingly, the Court adopts Plaintiff's construction of the term "average" as it applies to the "input current" and the "input voltage".FN7

FN7. The Court adopts this construction for claim one under the 4,942,509 patent.

The parties also disputed the meaning of the term "full wave rectifier" as used in the '509 patent. However, at the *Markman* hearing, Defendant conceded that Plaintiff's definition was correct. Accordingly, the Court adopts Plaintiff's construction of the term "full wave rectifier." FN8 Therefore, full wave rectified means "a DC waveform that is formed by inverting the negative half or positive half cycle of current of an AC waveform so that both half cycles flow in the same direction."

FN8. The Court adopts this construction for claim one under the 4,942,509 patent.

Furthermore, the parties contest the meaning of the terms "programmed monitor processor," "local battery packs," and "UPS processor" in APC's '950 patent. As for the first two disputed terms, the Court finds that the plain meaning of these terms should govern. Therefore, the Court adopts Plaintiff's construction of the terms "programmed monitor processor" and "local battery packs." FN9 Accordingly, the definition of programmed monitor processor as it relates to Defendant's claims is "a programmed processor within each battery pack monitor" and the definition of the term local battery packs is "a battery pack containing, or in close proximity to, its battery pack monitor."

FN9. The Court adopts these constructions for claim one under the 6,274,950 patent.

Unlike the first two terms, the definition of UPS monitor cannot be resolved by plain meaning. However, after reviewing the '950 patent, the Court finds that Defendant's construction of the term is overbroad. By contrast, the definition of the term provided by Mr. Gottlieb FN10 more accurately reflects the UPS monitor contained in the '950 patent. Therefore, the Court also adopts Plaintiff's construction of the term "UPS processor" as used in Defendant's '950 patent.FN11 Accordingly, the definition of this term with regard to Plaintiff's claims is:

FN10. Mr. Gottlieb reviewed the '950 patent for Plaintiff.

FN11. The Court adopts this constructions for claim one under the 6,274,950 patent.

The claimed UPS processor corresponds to CPU 5 shown in figures one and two of our application ... CPU 5 serves both the power control circuit of the UPS system comprising, respectively, the components identified by the reference numbers 3-6 of figure one and the battery monitors 8a-8b of figure 1. The final disputed term with regard to Defendant's patents is the use of the term "supported on [said frame]" in APC's '779 patent. There is no reason that the plain language of this term should not be applied. Accordingly, the Court adopts Plaintiff's construction of the term "supported on [said frame]." FN12 Therefore, the definition of that term is, "Physically held in position by [the frame]."

FN12. The Court adopts this construction for claims one, twenty-one, twenty-five, thirty-four, thirty-seven and forty-one under the 5,712,779 patent.

CONCLUSION

For the reasons outlined above the Court ADOPTS Defendant's construction of the terms in Plaintiff's '412, '586, '678 and '783 patent claims. The Court further ADOPTS Plaintiff's construction of the terms in Defendant's '509, '779 and '950 patent claims.

SO ORDERED.

This the 30 day of January, 2005.

E.D.N.C.,2005. Powerware Corp. v. American Power Conversion Corp.

Produced by Sans Paper, LLC.