United States District Court,
N.D. Illinois, Eastern Division.

EISENMANN CORPORATION,
Plaintiff.
v.
REGENERATIVE ENVIRONMENTAL EQUIPMENT COMPANY, INC. and Elam Company, Inc,
Defendants.

Feb. 24, 2000.

Gerald S. Geren, Gregory B. Beggs, Lee, Mann, Smith, Mcwilliams & Sweeney, Chicago, IL, for Plaintiff.

Jerold B. Schnayer, John L. Ambrogi, Walter J. Kawula, Jr., Welsh & Katz, Ltd., Chicago, IL, Michael Quinn, Gibbons, Del Deo, Dolan, & Griffinger, Newark, NJ, Raymond E Scott, Patrick M. McCarthy, Randall L. Shoemaker, Steven C. Kohl, Theodore W. Olds, Howard & Howard, P.C., Bloomfield Hills, MI, James Dominick Adducci, Marshall Lee Blankenship, Adducci, Dorf, Lehner, Mitchell & Blankenship, P.C., Chicago, IL, for Defendants.

MEMORANDUM OPINION AND ORDER

DAVID H. COAR**, District Judge.**

For the reasons stated in the attached Memorandum Opinion and Order, defendant's motion for summary judgment of non-infringement is GRANTED and defendant's motion for partial summary judgment of non-infringement and summary judgment as to Durr Environmental, Inc. are DENIED AS MOOT. This case is now closed.

[For further detail see order attached to the original minute order.]

Before this court are two motions by defendants Regenerative Environmental Equipment Company, Inc. ("REECO") and Elam Company, Inc. ("Elam") (jointly as "defendants"): a motion for summary judgment of non-infringement of plaintiff Eisenmann Corporation's ("Eisenmann" or "plaintiff") United States Patent No. 5,562,442, Claims 1 through 12 ("patent '442" or "the Eisenmann patent"); and a motion for partial summary judgement of non-infringement and summary judgment as to Durr Environmental, Inc., the parent company of Regenerative Environmental Equipment Company. For the following reasons, defendants' motion for summary judgment of non-infringement is GRANTED, and defendants' motion for partial summary judgement of non-infringement and summary judgment as to Durr Environmental, Inc. is DENIED AS MOOT.

Statement of Facts

This case arises over the alleged infringement of a patent on a regenerative thermal oxidizer, or an "RTO."

RTO's are systems that treat contaminated air from industrial processes. (Dft.'s Ex. A). An RTO is constructed with several parts: an inlet valve, an outlet valve, and a purge valve, all which rotate around a central axis to create a rotary valve; a series of vertical heat exchangers; and a combustion chamber. Contaminated air comes up through the inlet, passes through the rotary valve, and up to the vertical heat exchangers above, where the heat burns the contaminants out of the air. The air then passes from the heat exchanger to the combustion chamber and is blasted with additional heat in order to burn off the remaining contaminants. The clean air then passes out of the combustion chamber, downward to another vertical heat exchanger, where the clean hot air is passed outward through the rotary valve and through the outlet valve.

Since the contaminants must be burned off, the clean air becomes extremely hot during the cleaning process, and the vertical heat exchanger absorbs a significant portion of this heat. Periodically, these heat exchangers are switched from "outlet mode" to "inlet mode," and since they are still hot, they can pre-heat the incoming contaminated air on its way to the combustion chamber. In this way, the heat used to decontaminate the air may be "recycled" or "regenerated," which makes the process less expensive.

The part of the RTO mechanism that this case focuses upon is the rotary valve. Claim 1 of the Eisenmann patent, an independent claim, FN1 is for "an incoming gas distribution surface which is angularly positioned relative the axis of rotation for directing incoming gas in said plenum to the center section." (Dft.'s Ex. A). In layperson's terms, this is the part of the rotary valve that pushes or guides the air up into the vertical heat exchangers. Eisenmann claims that the defendants' valve structure, which creates a 90-degree angle, violates their patent, while the defendants argue that the Eisenmann patent is specific to an "angular" structure as defined by the prosecution history, and thus the two perpendicular pieces in the defendants' structure does not violate the Eisenmann patent.

FN1. Claims 1, 10, 11, and 12 are "independent" patent claims. Therefore, if these independent patent claims are not infringed, then the dependent patent claims 2-9, which relate back to the independent claim 1, cannot be infringed. (Dft's 12(M) Stmt. para. 5).

The Eisenmann Patent

The Eisenmann patent discloses and claims features of a rotary valve of an RTO, with vertical heat exchangers below a combustion chamber. (Dft's 12(M) Stmt. para. 6). At various points throughout the patent, a description is given of a "gas distribution surface" that is positioned at an angle relative to the rotational axis of the rotary valve. FN2 (Dft's 12(M) Stmt. para.para. 6, 7, 8). This angular plate, or "gas distribution surface," is contained in and required by each of the independent claims 1, 10, 11, and 12. FN3 (Dft's 12(M) Stmt. para. 9). While the gas distribution surface, or plate 22, is always described in the patent as "angular" to the rotational axis, surrounding parts (such as the cylindrically shaped body 54, the disk-like distribution plate 56, or the housing part 5) are always pictured or described as perpendicular to the rotational axis. (Dft's 12(M) Stmt. para. 10).

FN2. For example, in the description of the preferred embodiment, at column 2, lines 55-58, the patent states, "The incoming gas fills the plenum and flows to a centrally-positioned rotary distributor 20 generally and is deflected by the angular plate 22 to the center section 26." Column 4, lines 3-6 state, "Incoming gas enters the inlet 12, fills the lower section 18, surrounds the rotary distributor 20 and is deflected by plate 22 through the grate 50 to the center section." Finally, column 4, lines 16-19 state, "The distributor plate is mounted to the rotor body 54 in a *particular orientation*. The incoming gas aperture 74 is aligned with the

deflection plate 22 so gas does not flow through the rotary distributer but is deflected off plate 22." (emphasis added) (Dft's 12(M) Stmt. para. 7; Dft's Ex. A). Plate 22 is pictured in the patent on a slope, at an approximately 45 degree angle. (Dft's Ex. A).

FN3. The language in each of those claims states, "... said rotary distributor having a substantially vertical axis of rotation and defining: an incoming gas distribution surface which is angularly positioned relative to the axis of rotation for directing incoming gas in said plenum to the center section ..." (Dft's Ex. A).

When Eisenmann originally filed for this patent, none of the independent claims and only one dependent claim (Claim 4) included the angular surface for deflecting incoming gas. (Dft's 12(M) Stmt. para. 11). The Patent Examiner rejected these original patent claims and found that all of the limitations in Eisenmann's application were shown in a previously approved United States Patent No. 5,016,547 (the "Thomason patent"). In particular, the Patent Examiner found:

With regard to the limitations recited in Claim 4, Thomason discloses an angular surfaces (82, 84, 86, 88) for deflecting incoming gas. The angular surfaces disclosed by Thomason appear to be 90 degrees with respect to the horizontal.

(Dft's 12(M) Stmt. para. 12).

In response to the Patent Examiner's finding, Eisenmann canceled all of its original patent claims and filed an amendment that replaced the original 11 claims with 12 new claims. (Dft's 12(M) Stmt. para. 14). The difference between the new and the old claims was language of the "angular" gas distribution surface that was angled "relative the axis of rotation." Each of the claims specifically states that the "axis of rotation" is the vertical axis of rotation of the rotary valve. (Dft's 12(M) Stmt. para. 15). In the "Remarks" section of these amendments, Eisenmann argued the differences between their patent application and the Thomason patent. For example, after discussing the Thomason patent, Eisenmann argues:

While the applicant's system is also for cleansing treating polluted gas the structure and method of accomplishing the results (as claimed) is quite different, not anticipated, not obvious and not suggested by the references. Specifically, in the Applicant's system ... (b) the rotary distributer communicates with incoming gas in the plenum and transmits the gas to the center section via the angular distribution surface ...

(Dft's 12(M) Stmt. para. 16e).

The REECO System

The REECO System has the features of a rotary valve, vertical heat exchangers, and a combustion chamber, that are contained in all RTO systems. However, while the Eisenmann system has the angular gas distribution surface, the REECO system's distribution surface is perpendicular to the rotational axis of the rotary valve. (Dft's 12(M) Stmt. para. 18). Originally, REECO had designed this distribution surface to have a conical shape, similar to the angular surface in the Eisenmann patent. (Dft's 12(M) Stmt. para. 23). However, once the Eisenmann patent was issued, the attorney for REECO obtained a copy of the prosecution history for the Eisenmann patent and directed a "design around" which eliminated the conical surface. (Dft's 12(M) Stmt. para. 24).

In December of 1997, prior to the commencement of this case, Gerald Geren ("Geren"), the attorney who prosecuted the Eisenmann patent and who is one of Eisenmann's present counsel, met with Ronald Gould ("Gould"), a patent attorney for Research-Cottrell, Inc., the then parent company of REECO. During the meeting, Geren was shown drawings of the REECO RTO, including the rotary valve in question, to allow him to access whether the design infringed the Eisenmann patent. At the meeting, Geren stated that the REECO RTO did not "literally infringe" the Eisenmann patent because REECO had eliminated the incoming gas distribution surface which is angularly positioned relative to the axis of rotation. Geren said he would advise Eisenmann that the REECO RTO did not literally infringe the claims of the Eisenmann patent. (Dft's 12(M) Stmt. para. 25).

Standard for Summary Judgment

Summary judgment is proper "if the pleadings, depositions, answers to interrogatories and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter if law." Fed.R.Civ.P. 56(c); Cox v. Acme Health Serv., Inc., 55 F.3d 1304, 1308 (7th Cir.1995). A genuine issue of material fact exists for trial when, after viewing the record and all reasonable inferences drawn from it in a light most favorable to the non-movant, a reasonable jury could return a verdict for the non-movant. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986); Hedberg v. Indiana Bell Tel. Co., 47 F.3d 928, 931 (7th Cir.1995). The party moving for summary judgment bears the initial burden of demonstrating that there is no genuine issue of material fact. Celotex Corp. v. Catrett, 477 U.S. 317, 323, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986); Hedberg, 47 F.3d at 931. If this burden is met by the movant, the non-movant must then set forth specific facts to show that there is a genuine issue for trial. Fed.R.Civ.P. 56(e); Celotex, 477 U .S. at 324. In deciding a motion for summary judgment, the court must read the facts in a light most favorable to the non-movant. Cuddington v. Northern Ind. Public Serv. Co., 33 F.3d 813, 815 (7th Cir.1994). However, Rule 56(c) mandates the entry of summary judgment against a party "who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and in which that party will bear the burden of proof at trial ." Celotex, 477 U.S. at 322. A scintilla of evidence in support of the non-movant's position is not sufficient to oppose successfully a summary judgment motion: "there must be evidence on which they jury could reasonably find for the [non-movant]." Anderson, 477 U.S. at 250.

Analysis

The patent owner has the burden of proving by a preponderance of the evidence that the asserted claims are infringed. S.R.I. International v. Matsushita Electric Corp. of America, 775 F.2d 1107, 1123 (Fed.Cir.1985). The first step in that process is to construe the claims. Locite Corp. v. Ultraseal, Ltd., 781 F.2d 861, 866 (Fed.Cir.1985). Claim interpretation is a question of law. Markman v. Westview Instruments, Inc., 52 F.3d 967, 989 (Fed.Cir.1995), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). Once the claims have been construed, the next step is to compare them to the accused device and determine if there has been either literal infringement or infringement under the Doctrine of Equivalents. Southwall Tech. Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed.Cir.1995).

Literal Infringement

"To establish literal infringement, every limitation set forth in a claim must be found in the accused product, exactly." Southwall Tech., Inc., 54 F.3d at 1575. If the required function is not performed exactly in the accused device, then there is no literal infringement. Pennwalt Corp. v. Durand Wayland, Inc., 833 F.2d 931,

934 (Fed.Cir.1987).

Eisenmann's claims 1, 10, 11, and 12 clearly state that the incoming gas distribution surface is "angularly positioned relative to the axis of rotation." (Dft.Ex. A). In the REECO RTO system, the gas distribution system is parallel to the rotary axis (labeled "Z" on Dft. Ex. E) and is connected to the rotary axis by a perpendicular surface (labeled "Y" on Dft. Ex. E). (Dft's 12(M) Stmt. para.para. 18, 19). Therefore, the main question is the meaning of the word "angular."

Eisenmann attempts to argue that the court should look to the "normal usage" of the word "angular," and states that the meaning of the word includes ninety degree angles as well as straight lines in the definition. (Pl's Resp., p. 4, citing Webster's English Dictionary). However, as the defendant correctly points out, Eisenmann surrendered the use of the ordinary meaning of the word "angular," for the prosecution history of the Eisenmann patent limits the use of the word. Gentry Gallery, Inc. v. Berkline Corp., 134 F.3d 1473, 1477 (Fed.Cir.1998). In fact, the prosecution history of the Eisenmann patent excludes a vertical surface which is parallel to the axis of the rotation valve, for this limitation was necessary to overcome the original claim rejection by the Patent Examiner. (See Dft's 12(M) Stmt. para.para. 12, 14, 15). If the court allowed the Eisenmann patent to be read as broadly as the plaintiff suggests, then the Eisenmann patent would also include the Thomason patent, the prior art. A claim cannot be construed so broadly as to cover the prior art and remain valid. Harris Corp. v. IXYS Corp., 114 F.3d 1149, 1153 (Fed.Cir.1997); Amhil Enterprises Ltd. v. Wawa, Inc., 81 F.3d 1554, 1562 (Fed.Cir.1996). Therefore, the word "angular" does not include parallel and perpendicular surfaces, and the defendant does not literally infringe Eisenmann's claims 1, 10, 11, and 12.

Doctrine of Equivalents

Under the doctrine of equivalents, infringement is shown by affirmative proof that the accused structure performs "substantially the same function in substantially the same way to achieve the same result" as the patented structure. Graver Tank & Mfg. Co. v. Livide Air Products, 339 U.S. 605, 608, 70 S.Ct. 854, 856, 94 L.Ed. 1097 (1950). However, the Supreme Court somewhat recently stated its concern that the doctrine of equivalents had "taken on a life of its own, unbound by the patent claims." Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 28-29, 117 S.Ct. 1040, 1048, 137 L.Ed.2d 146 (1997). Therefore, the Supreme Court has read two conceptual limitations into the doctrine of equivalents. First, the text of the claim in question must be closely followed, for "[e]ach element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole." Id., at 29, 117 S.Ct. at 1048. This allows for an inquiry as to whether the accused element matches the "function, ways, and result" of the claimed element, or whether the accused element plays a "substantially different" role than the claimed element. Id. at 40, 117 S.Ct. at 1054. Second, the patent owner "may not use the doctrine of equivalents to recover subject matter that has been surrendered. For example, prosecution history estoppel will exclude for the doctrine of equivalents any subject matter that was, by amendment or argument during prosecution, relinquished." K-2 Corp. v. Salom S.A., 191 F.3d 1356, 1367 (Fed.Cir.1999), citing Warner-Jenkinson, 520 U.S. at 30-31, 117 S.Ct. at 1049 and Litton Sys., Inc. v. Honeywell, Inc., 140 F.3d 1449, 1455 (Fed.Cir.1998).

In the present case, the surfaces within the rotary valve of the REECO RTO (labeled "Y" and "Z" in Dft. Ex. E) plays a substantially different role that the "angular" distribution surface of the Eisenmann RTO. First, REECO relying upon the prosecution history of the Eisenmann patent, purposely designed around the

angular surface of the Eisenmann patent. Evidence of "designing around" is relevant to the application of the doctrine of equivalents. *State Industry, Inc. v. A.O. Smith,* 1751 F.2d 226, 1236 (Fed.Cir.1985). Second, while Eisenmann has not offered any material evidence that REECO'S surfaces match the "function, way, and result" of the claimed surface, as required by *GraverTank,* REECO has presented evidence that these parallel and perpendicular surfaces within the rotary valve are not only not "angular," but in no way act as a deflection or distribution surface for incoming air. (Dft's Ex. E, F para.para. 12-14).

Finally, prosecution estoppel prevents Eisenmann from arguing that claims 1, 10, 11, and 12 include surfaces that are at a ninety degree angle, for the prior art, the Thomason patent, contained such a construction and the Patent Examiner rejected Eisenmann's original application on such grounds. (Dft's 12(M) Stmt. para. 12). Eisenmann then returned to the Patent Office with the language of an "angular" surface that was angled "relative the axis of rotation" within each claim, thus limiting Eisenmann's claims and differentiating them from the prior art. (Dft's 12(M) Stmt. para. 15). Eisenmann cannot now come back and expand that definition to include that same ninety degree angle construction, for "a patentee can not expand its claims to contradict clear arguments and amendments made to obtain the patent in the first place." Warner-Jenkinson, 520 U.S. at 31, 117 S.Ct. at 1050-51. Therefore, prosecution history estoppel bars the application of the doctrine of equivalents to these claims.

Motion for Partial Summary Judgment and Summary Judgment as to Durr Environmental, Inc.

Since these motions concern the exact same claims on the exact same accused product, these motions are denied as moot.

Conclusion

For the foregoing reasons, defendants Regenerative Environmental Equipment Company, Inc. and Elam Company, Inc.'s defendants' motion for summary judgment of non-infringement of plaintiff Eisenmann Corporation's United States Patent No. 5,562,442, Claims 1 through 12, is GRANTED, and defendants' motion for partial summary judgement of non-infringement and summary judgment as to Durr Environmental, Inc. is DENIED AS MOOT.

N.D.Ill.,2000.
Eisenmann Corp. v. Regenerative Environmental Equipment Co., Inc.