United States District Court, S.D. Texas.

ALTECH CONTROLS CORPORATION and Richard H. Alsenz,

Plaintiffs.

v.

E.I.L. INSTRUMENTS, INC,

Defendant.

June 6, 1997.

Gale R Peterson, Cox & Smith, Inc., Attorneys at Law, San Antonio, TX, Pro se.

Ned L Conley, Conley Rose & Tayon, Randy J McClanahan, McClanahan & Associates, Houston, TX, for Altech Controls Corporation, Richard H Alsenz, plaintiff.

Michael O Sutton, Fish & Richardson, Houston, TX, for EIL Instruments Inc, defendant.

FINDINGS OF FACT, CONCLUSIONS OF LAW, CONSTRUCTION OF CLAIMS, AND ORDER HARMON, District J.

Pending before the Court in the above referenced case, alleging infringement of four patents under 35 U.S.C. s. 271, are the following motions:

- (1) Defendant E.I.L. Instruments, Inc.'s ("EIL's") motion for summary judgment regarding claim interpretation and noninfringement (instrument # 127) FN1;
- FN1. Specifically EIL moves for summary judgment in its favor that claims 1, 2, 3, 7, and 24 of the '776 patent are limited to the first-on/first-off ("FIFO") strategy described in the '776 patent, that any EIL product which does not use a FIFO strategy does not infringe claims 1, 2, 3, 7, and 24 of the '776 patent, and that EIL's manufacture and sale of controller devices RC-1000 and RC-2000 do not infringe, both literally and under the doctrine of equivalents, claims 1, 2, 3, 7, and 24 of the '776 patent because they do not use the FIFO control sequence strategy or its equivalent.

In the '776 patent, claims 1, 3, and 24 are independent claims. Claims 2 and 7 are depending from 1 and 3 respectively.

- (2) EIL's alternative FN2 motion for summary judgment regarding patent invalidity (# 129) in light of the Robb patent, the Knouse Foods system, or the Meijer Supermarket system;
- FN2. In the event that the Court determines that the '776 patent's asserted claims are not limited to FIFO control system, EIL contends that prior art not presented to the Patent Office during the examination of the asserted claims renders the patent statutorily invalid under 35 U.S.C. s. 102.

- (3) Plaintiffs Richard H. Alsenz and Altech Controls Corporation's (collectively "Altech's") motion for partial summary judgment as to claim interpretation (# 135);
- (4) EIL's motion for interpretation of asserted claims 9 and 10 of United States Patent No. 4,628,700 (# 245) indicating that the asserted claims teach a FIFO manner to selectively turn on and off compressors;
- (5) EIL's motion to strike bench brief (# 295) because it is untimely and raises new arguments with improper evidence;
- (6) Altech's motion in limine to limit testimony of Defendant's experts at Markman hearing (# 298);
- (7) Altech's motion to exclude deposition testimony (# 300) of Ronald Bliss, George Gunny, J.D. Flemming, Jr., Dr. Scott Marks, and Sam Shelton, pursuant to Fed.R.Civ.P. 32 because they can testify live at the *Markman* hearing;
- (8) EIL's motion to strike as untimely supplemental exhibits (# 307); and
- (9) EIL's motion to strike appendix to Plaintiffs' proposed findings of fact and conclusions of law on claim construction (# 320).

The Court held a *Markman* hearing from April 7-9, 1997. Accordingly, Altech's motion is limine is now moot. Moreover, because the Court, after reviewing the applicable law and the patent, issues the following findings of fact and conclusions of law and construes the patent as indicated below, because patent construction is a matter for the Court to decide,FN3 because the Court is fully apprised of nature of, and restrictions on, the evidence that can properly be considered in construing the disputed claims of the patents,FN4 because the Court's policy has been to establish a full record for its comprehension of this litigation, and because the Court has construed the patents on the basis of appropriate evidence and in light of pending motions, the Court denies EIL's motion to strike bench brief, Altech's motion to exclude deposition testimony, EIL's motion to strike untimely supplemental exhibits, and EIL's motion to strike appendix. Moreover, this order implicitly and explicitly resolves issues raised in motions # 127, # 135, and # 245. The Court can construe patent claims in the context of dispositive, summary judgment motions. *Markman*, 52 F.3d at 979.

FN3. Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995) (en banc), aff d, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

FN4. The Federal Circuit Court of Appeals held that intrinsic evidence, which constitutes the public record of a patentee's claim on which the public is entitled to rely in making decisions to design around a claimed invention, is comprised of the patent claims, the specification, and the prosecution file history (a/k/a the file wrapper history). Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576 (Fed.Cir.1996). While the parties presented extrinsic evidence, including expert and inventor testimony, at the *Markman* hearing so that the Court could grasp the nature of the field, the technology, and the role of the patented invention in it, the Court has relied only on the words of the claims, which it finds unambiguous, and on restrictions imposed by the patent specification, and has resorted to the prosecution history to confirm that it is not in conflict with the Court's construction of the claims and supports the Court's interpretation. *See* Markman, 52 F.3d at 980 (the district court has the discretion to "receive extrinsic evidence in order 'to aid the court in coming to

a correct conclusion as to the true meaning of the language employed' in the patent."). The expert testimony heard in a *Markman* hearing can assist the Court in understanding, when the claims are technologically complex or linguistically obscure, how a technician in the field, reading the patent, would understand the claims. *Id.* at 981. When a claim term is unambiguous, based upon the intrinsic evidence, extrinsic evidence may not be considered. Vitronics, 90 F.3d at 1583. Only in rare instances, when the patent terms are ambiguous after examination of intrinsic evidence, may the court turn to prior art documents and dictionaries, which are preferred over opinion testimony because they are accessible by the public prior to litigation and because they are more objective and reliable guides for the court than expert or inventor testimony. Id. at 1585. Opinion testimony of the inventor, patent attorney, or expert in the field of technology to which the patent is directed "should be treated with utmost caution" in claim construction by the court. *Id*.

Applying the law and based on the intrinsic evidence in the record, which the Court finds, and the parties have agreed, is sufficient to construe the claims and their terms and elements, the Court enters the following findings of fact and conclusions of law and construes the asserted claims in two of the patents at issue, the '776 and the '326.

FINDINGS OF FACT

Plaintiff Richard H. Alsenz ("Alsenz") is the sole inventor of U.S. Letters Patent Nos. 4,612,776 ("the '776 patent") (PX-1),FN5 4,628,700 ("the '700 patent") (PX-3), and 5,067,326 ("the '326 patent") (PX-4), and coinventor with Richard Ansted of No. 4,535,602 ("the '602 patent") (PX-2), the four patents in suit FN6 dealing with temperature control, for efficient energy use, of commonly piped multi-compressor refrigeration systems frequently used in supermarkets. The '776 patent discloses a refrigeration system and a method and apparatus for controlling temperatures, i.e., for selecting compressors to provide different increased or decreased horsepower capacities to circulate refrigerant through a refrigeration system in response to changing load demands for warmer or colder temperatures in numerous refrigeration cases. The asserted claims in suit to be construed here are claims 1, 2, 3, 7, and 24 of the '776 patent and claims 1, 2, and 3 of the '326 patent.

FN5. Attached as Exhibit A.

FN6. The '776 patent is the "mother" patent, while the other three disclose modifications of the mother patent.

Plaintiff Altech Controls Corporation, of which Alsenz is the president and founder, is the exclusive licensee of the four patents in suit.

The issue before the Court is whether the manner of selection of compressors in these asserted claims is limited to a first-on/first-off or "FIFO" control sequence or whether it also discloses a binary control sequence. In a FIFO sequence, when a signal for increased capacity is received, it turns on the compressor that has been off the longest; when a decrease capacity signal is received, it turns off the compressor that has been on the longest.

After examining the intrinsic evidence, this Court finds as a matter of fact and concludes as a matter of law that the specification of the '776 patent discloses a method and apparatus for controlling the sequencing of compressors of the same or varying capacities that is limited to a FIFO manner of selecting compressors. Moreover there is no disclosure of a binary sequence in the '776 patent.FN7

FN7. As EIL points out, Altech's argument that a binary sequence was disclosed undermines Altech's claims interpretation. It is established law that "subject matter disclosed but not claimed in a patent application is dedicated to the public." Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1562-63 (Fed.Cir.1991). In that case, at 1562, the panel wrote,

The statute requires that an inventor particularly point out and distinctly claim the subject matter of his invention. 35 U.S.C. s. 112 (1988). It would run counter to this statutory provision for an applicant for patent to expressly state throughout his specification and in his claims that his invention includes right angle corner border pieces and then be allowed to avoid that claim limitation in a later infringement suit by pointing to one paragraph in his specification stating an alternative that lacks that limitation, and thus interpret the claim contrary to its plain meaning. Such a result would encourage an applicant to escape examination of a more broadly-claimed invention by filing narrow claims and then, after grant, asserting a broader scope of the claims based on a statement in the specification of an alternative never presented in the claims for examination.

The '776 patent was issued on September 23, 1986 from Application Serial No. 257,113, filed on April 24, 1981, which was a continuing application of Application Serial No. 62,525, filed on July 31, 1979. Therefore in construing the claims of the '776 patent, the Court gives the terms and words the meanings that would have been understood by a person of ordinary skill in the art around July 31, 1979.FN8

FN8. Throughout the *Markman* hearing, the Court found credible and persuasive the testimony of Dr. V. Thomas Rhyne regarding what a person of ordinary skill in the art in July 1979 would understand by the terms in the asserted patent claims. Because extrinsic evidence about the application of the standard here was necessary, the Court has relied on Dr. Rhyne's testimony in coming to the conclusions presented here.

The '776 patent specification does not disclose to a person of ordinary skill in the art in July 1979 a structure for implementing a binary sequence. Contrary to Plaintiffs' contention, the section of the specification of the '776 patent at Column 7, line 58, through Column 8, line 10 FN9 does not disclose a binary sequence of compressor control. A plain reading of this section of the specification reveals that possible compressor capacities of 1, 2, 3, 4, 5, 6, and 7 HP may be achieved by independent operation of the compressors functioning in no specific, set sequence. Moreover, viewed in context, the word "Similarly," beginning Column 7, line 58, refers back to a previous portion (Column 7, 11. 7-10) of the specification that solely discloses a FIFO sequence of operation.FN10 The portion of the '776 specification introduced by "Similarly" does not use the term "binary sequence" nor disclose a binary sequence by description or operation. In contrast, the '602 patent (JX-602), filed over two years after the filing of the '776 patent and modifying its structure, expressly uses the term "binary" and implements such a structure by description and operation.

FN9. This portion of the specification reads,

Similarly, if the compressors 12, 14 and 16 are unequal in capacity and rate at 1, 2 and 4 horsepower (HP), respectively, then it has been found that the capacity controller 10 will select and provide increased or

decreased compressor horsepower capacity in discrete increments or combination to match the load demand. Assuming the above described ratings of 1, 2 and 4 HP for compressors 12, 14 and 16, then the various possible combinations of those compressors will provide capacities of 1, 2, 3, 4, 5, 6 and 7 HP in response to changing load demand. The number of combinations for multiple compressors whether of equal or unequal capacity will always be larger than the number of compressors or compressor stages in the system. It will be further evident from the above described operation and drawings showing multiple compressors 12, 14, 16-18 (1, 2, 3 to N number of compressors) that any number of compressors can be controlled, such as a system of two (compressors 14 and 16) or a system of N number (compressors 12, 14, 16-N). FN10. Lines 7-11 of Column 7 provide,

The compressor that has operated the longest will always be the first to be "cut out" when the system capacity needs diminish, and the compressor that has not operated the longest will be the next to be "cut in" when the system capacity needs increase.

The parties agree that only FIFO is disclosed in these lines.

Nor in the prosecution history of the '776 patent (JX-776) was there any reference to, by name or operation, a binary sequence. In contrast, FIFO is frequently referred to in the prosecution history of the '776 patent. Furthermore at pages 29-30 of the "Response to the Office Action Dated June 2, 1982 ('Response')," in Application Serial No. 257,113, Bates No. 145-46, submitted during the prosecution of the '776 patent, is the following representation:

In the hypothetical systems herein discussed, the present invention teaches a system capable of independently selecting from seven different combinations of three compressors, achieving system capacities of 1, 2, 3, 4, 5, 6 and 7 horsepower. The three identical compressors controlled by the first system are able to offer three combinations enabling the system to achieve total capacities of 1, 3 and 7 horsepower. It is the independent control of each compressor of the present invention without regard to the energized or deenergized state of other compressors in the system which makes the number of combinations of compressors available greater than the number of available compressors. Successive reiterations of the FIFO strategy enable the present invention to more efficiently match the system load with the expanded set of compressor combinations available, than previous systems, such as in Golber having only a limited number of combinations available.

There is no dispute that this paragraph discloses a FIFO sequence of operation, not a binary sequence. Moreover, this statement reiterates in almost identical language the substance of that section of the '776 specification (Column 7, line 58-Column 8, line 10) that Plaintiffs erroneously argue discloses a binary control sequence. In addition, the latter disputed portion of the specification was only added when application Serial No. 257,113 was filed. Original Application Serial No. 65,525 did not include this language and disclosed only a FIFO sequence of operation. Because "new matter," or any additional disclosure, may not be added in a continuation application under 37 C.F.R. s. 1.53(b)(1), this section of the '776 specification cannot disclose anything beyond a FIFO structure. Supporting the same conclusion, the Preliminary Amendment filed in Application Serial No. 257,113, consistent with the Court's finding and conclusion that Column 7, line 58-Column 8, line 10 discloses only FIFO, argues that no new matter was added to Application Serial No. 257,113.

As disclosed in the '776 patent, the FIFO sequence of operation cycles through compressor combinations by turning on or turning off one compressor at a time until the optimal combination of compressors is achieved to satisfy the load demand. The '776 patent does not disclose a "smart" system capable of generating and

analyzing a signal for the desired capacity and then directly turning on or off a specific combination of compressors that would most closely achieve the desired compressor capacity. Rather, the '776 patent discloses a system that must cycle through individual compressors in response to an increase or decrease capacity signal until the compressor capacity closest to the cooling load is reached.

The '700 patent matured from Application Serial No. 706,043, filed on February 27, 1985. Application Serial No. 706,043 was a continuation of Serial No. 458,914, filed on January 18, 1983. JX-700. Serial No. 458,914 was a continuation-in-part of Application Serial No. 257,113, which led to the issuance of the '776 patent.

The '700 patent and the '776 patent reflect a common disclosure of the previously described strategy for operating a plurality of commonly piped, parallel compressors. The '700 patent therefore also discloses solely a FIFO sequence. The '700 and '776 patents share in a common prosecution history in Application Serial Nos. 257,112 and 62,525.FN11

FN11. The '700 patent additionally discloses and claims limitations relating to dynamically adjusting upper and lower suction pressure set points in response to environmental conditions.

Unlike the FIFO sequence disclosed in the '776 and '700 patents, which the Court determined do not disclose a binary strategy for selecting compressors, the '602 patent employs a modified binary sequence to operate and control multiple unequal compressors that permits two compressors, but no more, to be turned on or off at a time in response to an increase or decrease capacity signal. Like the FIFO sequence of operation, the controller is not "smart," but turns on and off compressors in a step fashion until the desired combination to achieve the requisite capacity is achieved.

On January 16, 1986, Alsenz filed a continuation-in-part application from the '700 patent, which was assigned Serial No. 819,387. On January 15, 1897, he filed a continuing application, which was assigned Serial No. 819,387 and which issued as U.S. Patent No. 4,825,662 ("the '662 patent"), which is not asserted in this suit. On January 21, 1986, he filed a continuation-in-part application from the '662 patent. That application was assigned Serial No. 146,285 and ultimately issued as U.S. Patent No. 4,951,475 ("the '475 patent"), also not asserted here. On August 23, 1990, Alsenz filed a divisional application from the '475 patent that was assigned Serial No. 571,756. This divisional application issued on November 26, 1991 as U.S. Patent No. 5,067,326 ("the '326 patent"), which is asserted in this litigation. JX-326.

The '326 patent teaches a controller and methods of controlling a refrigeration system in which at least one of the compressors is a variable speed compressor operating between a minimum and a maximum speed. This variable speed compressor, which cannot allow oil pressure to fall below a predetermined minimum or inadequate oil flow will damage the compressor, speeds up when the pressure is too low.

CONCLUSIONS OF LAW

The Court has original and exclusive jurisdiction pursuant to 28 U.S.C. s.s. 1331 and 1338(a) over Altech's claims of infringement and EIL's counterclaims for a declaratory judgment that there has been no infringement and that the patents are invalid or unenforceable.

A patent specification must conclude with claims that particularly point out and distinctly claim the subject

matter which the applicant regards as his invention. 35 U.S.C. s. 112 FN12; Ultradent Prods. v. Life-Like Cosmetics, 924 F.Supp. 1101 (D.Utah 1996). To be "definite" under 35 U.S.C. s. 112, the claims must reasonably apprise those skilled in the art both in the utilization and scope of the invention. Markman, 52 F.3d at 979. The claims define the scope of the patentee's rights. Markman, 517 U.S. at ----, 116 S.Ct. at 1387.

FN12. Section 112, entitled, "Specification," provides in pertinent part,

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Determining whether a patent claim is indefinite requires analysis of whether one skilled in the art would understand the bounds of the claim when read in light of the specification and if claims read in light of the specification reasonably apprise those skilled in the art of the scope of invention, no more is required. Credle v. Bond, 25 F.3d 1566, 1576 (Fed.Cir.1994).

The construction of patent claims is exclusively within the province of the trial court. Markman, 517 U.S. at ----, 116 S.Ct. at 1387. The objective test for construing patent claims is what one of ordinary skill in the field of the invention would have understood the claims to cover at the time of the invention. Markman, 52 F.3d at 986.

In construing claims, a court should initially consider the intrinsic evidence, or public record, consisting of the patent claim, the patent specification, and, if it is in evidence, as here, the prosecution file history. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d at 1582. Generally an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such a case, reliance upon extrinsic evidence is improper. Id. at 1583.

In analyzing the intrinsic evidence, the court must first examine the words of the claims to define the scope of the patented invention. Id. at 1582. Claim terms are "given their ordinary and customary meaning" unless the patentee has chosen to use a term in another way and has provided a special definition in the patent specification or the prosecution history. *Id.* The specification should be reviewed to determine whether an inventor has used any terms in a manner or with a special meaning that is inconsistent with their ordinary and customary meaning to a person of ordinary skill in the art at the time the patent application was filed. Vitronics, 90 F.3d at 1582. After reviewing the specification and other intrinsic evidence of the patents in suit, the Court concludes and the parties have agreed that the words in the asserted claims of the patents at issue were not given a special meaning by the patentee and should be interpreted in accordance with their ordinary and customary meaning to a person of ordinary skill in the art and in light of their respective specifications and prosecution histories.

Paragraph 6 of 35 U.S.C. s. 112 ("Specification"), provides,

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and

FN13. The determination of "equivalents" under s. 112 par. 6 is a fact question to be determined by a jury. D.M.I., Inc. v. Deere & Co., 755 F.2d 1570, 1575 (Fed.Cir.1985).

Section 112 par. 6 allows "an applicant [to] describe an element of his invention by the result accomplished or the function served, rather than describing the item or element to be used...." Warner-Jenkinson Co. v. Hilton Davis Chemical Co., --- U.S. ----, 117 S.Ct. 1040, 1048, 137 L.Ed.2d 146 (1997). There are three requirements for a claim element to be subject to s. 112 par. 6:(1) the element must be expressed by the word "means" or "step," either of which raises a presumption that the inventor intended to invoke the claim format of s. 112 par. 6 FN14; (2) a specified function must follow the means or step and be linked to the means or step FN15; and (3) there must be an absence of definite structure, material, or acts for achieving the specified function.FN16

FN14. In Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1584 (Fed.Cir.1996), the Federal Circuit stated.

... [T]he use of the term "means" has come to be so closely associated with "means-plus-function" claiming that it is fair to say that the use of the term "means" (particularly as used in the phrase "means for") generally invokes section 112(6) and that the use of a different formulation generally does not.

FN15. York Prods., Inc. v. Central Tractor Farm & Family Ctr., 99 F.3d 1568 (Fed.Cir.1996).

FN16. Cole v. Kimberly-Clark Corp., 102 F.3d 524 (Fed.Cir.1996) (to invoke s. 112 par. 6, a means-plus-function limitation must not recite definite structure for performing the described function).

The recitation of specific structure, material, or act in a dependent claim achieving the function of a s. 112 par. 6 means or step in an independent claim does not invoke the equitable doctrine of claim differentiation because clever drafting cannot override the statutorily required interpretation to be given to a claim pursuant to s. 112 par. 6. Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533 (Fed.Cir.1991).

Because the three requirements to trigger s. 112 par. 6 are satisfied in elements of the asserted claims here, the Court concludes that the "selections means" limitations in elements of methods claims 23 and 24 FN17 of the '776 patent and in an element of method claim 9 FN18 of the '700 patent, should be interpreted, in light of 35 U.S.C. s. 112 par. 6 and the "means" limitation, as limited to the FIFO strategy that is disclosed in the specification or its equivalent. The specification and the prosecution history of the '776 patent contain numerous statements that the "selectively energizing" of the compressor controllers of the asserted claims employs FIFO logic. In addition, the preamble of claim 1 of the '776 patent identifies a series of steps, the last of which is "selectively energizing and deenergizing compressors."

FN17. Claim 23(c) reads,

a selection means for receiving said increase capacity signals and said decrease capacity signals and in respective response thereto, selectively energizing and deenergizing said compressors to provide a

combination of energized compressors that exceed in number the preselected number of compressors in the system so that the capacity of the system matches the common pressure load.

Claim 24(d) reads,

a selection means for receiving said delayed increase and decrease capacity signals and in respective response thereto, selectively energizing and deenergizing said compressors to provide a combination of energized compressors that exceed in number the preselected number of compressors in the system so that the capacity of the system matches the common pressure load.

FN18. Claim 9(c) reads,

a selection means for receiving said increase capacity signals and said decrease capacity signals and in respective response thereto, selectively energizing and deenergizing said compressors to provide combinations of energized compressors that exceed in total possible numbers of combinations the number of compressors in the system so that the average compressor capacity of the system produces an average suction line pressure in said operating suction pressure range;

Claims 10 and 14 of the '700 patent, which refer to 9, should also be construed under s. 112 par. 6. The three-part test for invoking s. 112 par. 6 is satisfied in designated elements of the asserted claims. First, each of the four independent claims at issue (the last element in claims 1, 3 and 24 of the '776 patent and in claim 9 of the '700 patent) expressly employs the phrase "a selection means for." Second, they also all include the recited function of "provid[ing] a combination of energized unequal capacity compressors that exceed in number the preselected number of compressors in the system ...". Third, there is an absence of definite structure, material, or acts for achieving the specified function because the word "selection" does not have a definitive structural definition and because there is no other definitive description of that selection means in structural terms within the claim. The Court further observes that no definite structure for achieving binary logic is disclosed in the specifications of the '776 and '700 patents. Under Fonar Corp. v. General Electric Co., 107 F.3d 1543 (Fed.Cir.1997), where a claim does not recite definite structure, the court must construe the means limitation in light of corresponding structure or acts that are disclosed in the specification, or their equivalents. See also O.I. Corp. v. Tekmar Co., No. 96-1427, Slip op. at 11, 1997 WL 270620 (Fed.Cir. May 22, 1997)(for this convenient method of expressing a claim's scope, "[t]he price that must be paid ... is limitation of the claim to the means specified in the written description [the specification] and equivalents thereof."). Since the claims at issue here therefore require definite structure in the specification to support the function in the means clause, claims 3 and 24 of the '776 patent and claim 9 of the '700 patent are limited to the use of a FIFO control strategy or its equivalent. Claim 1, whose last element is materially identical to the last element of claim 3, is also related to a FIFO control strategy. It is undisputed that the FIFO compressor strategy functions "to provide a combination of energized unequal capacity compressors that exceeds in number the preselected number of compressors in the system." Under Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1584 (Fed.Cir.1996), such a phrase invokes application of s. 112 par. 6.

Statements made during the prosecution history are relevant to construing the scope of claims, including claims drafted in accordance with s. 112 par. 6. Alpex Computer Corp. v. Nintendo Co., 102 F.3d 1214, 1220 (Fed.Cir.1996), petition for cert. filed, 65 USLW 3728 (April 15, 1997). The prosecution history limits

the interpretation of claim terms to exclude any interpretation that was disclaimed during prosecution. Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed.Cir.), cert. denied, 516 U.S. 987, 116 S.Ct. 515, 133 L.Ed.2d 424 (1995). Prosecution history estoppel FN19 precludes a patentee from obtaining in an infringement suit protection for subject matter which the patentee relinquished through amendment and argument during the prosecution in order to obtain allowance of the claims. Zenith lab., Inc. v. Bristol-Myers Squibb Co., 19 F.3d 1418, 1424 (Fed.Cir.), cert. denied, 513 U.S. 995, 115 S.Ct. 500, 130 L.Ed.2d 409 (1994); Dixie U.S.A., Inc. v. Infab Corp., 927 F.2d 584 (Fed.Cir.1991). Express representations in the intrinsic evidence of a patent about the scope of the patent claims supersedes the claim construction maxim known as "claim differentiation.FN20" North American Vaccine v. American Cyanamid Co., 7 F.3d 1571, 1575-77 (Fed.Cir.1993), cert. denied, 511 U.S. 1069, 114 S.Ct. 1645, 128 L.Ed.2d 365 (1994). Numerous statements by applicant Alsenz concerning the selectively energizing of compressors by FIFO and Alsenz's contrasting of his FIFO invention with prior art (see generally JX-776 at 139-147) during the prosecution history, as well as references to FIFO in the specification, provide a clear definition of that element, which trumps claim differentiation.FN21

FN19. Prosecution history estoppel, or file wrapper estoppel, is a question of law for the Court to decide. Warner-Jenkinson, --- U.S. at ----, 117 S.Ct. at 1051.

FN20. Under the judicially created doctrine of claim differentiation, where some claims are broad and others narrow, the narrow claim limitations cannot be read into the broad. D.M.I., Inc. v. Deere & Co., 755 F.2d 1570, 1574 (Fed.Cir.1985). Thus an accused infringer cannot escape infringement nor a patentee avoid invalidity by trying to read narrow claim limitations from a narrow claim into a broader claim. Durable Inc. v. Packaging Corp. of America, 1994 WL 140704 (Fed.Cir.1994); Yarway Corp. v. Eur-Control USA, Inc., 775 F.2d 268, 274 (Fed.Cir.1985). Nor can the doctrine override the statutory mandate of 35 U.S.C. s. 112 par. 6 that a means element is limited in scope to corresponding structure described in the specification and equivalents thereof.

Plaintiffs cite SRI, International v. Matsushita Electric Industrial Corp., 775 F.2d 1107, 1122 (Fed.Cir.1985) for the proposition that "it is settled law that when a patent claim does not contain a certain limitation and another claim does, that limitation cannot be read into the former claim in determining either validity or infringement." See also Specialty Composites v.. Cabot Corp., 845 F.2d 981, 987 (Fed.Cir.1988) ("where some claim are broad and others narrow, the narrow claim limitations cannot be read into the broad"). Nevertheless Plaintiffs' reliance on the common law doctrine of claim differentiation for their contention that dependant claims 6, 9, and 22 of the '776 patent and claim 14 of the '700 patent, with wording expressly directed to the FIFO sequence, contrast with the wording of the claims at issue and mandate a broader construction of claims 1, 3, and 24 of the '776 patent and claim 9 of the '700 patent to embrace more than a FIFO sequence and to avoid the dependant claims' being improperly redundant, must fail because the doctrine cannot override statutory construction required by s. 112 par. 6. FN21. See also O.I. Corp., Slip op. at 9, where the Federal Circuit held that the doctrine [of claim differentiation] cannot alter a definition that is otherwise clear from the claim language, description, and prosecution history. See Hormone Research Found., Inc. v. Genentech, Inc., 904

overshadow the express and contrary intentions of the patent draftsman"). We conclude that the description provides a clear meaning for the language of the claim in this case and that it trumps the doctrine of claim

F.2d 1558, 1567 n. 15 ... (Fed.Cir.1990) (stating that the doctrine of claim differentiation "cannot

differentiation.

A patentee bears the burden of establishing the reason for each amendment made during the patent prosecution. Warner-Jenkinson, --- U.S. at ----, 117 S.Ct. at 1051. The court will then decide whether the reason for the amendment should preclude prosecution history estoppel as a part to application of the doctrine of equivalents to any element added by the amendment. *Id*. Where no explanation is demonstrated for the amendment, the court should presume FN22 that the Patent and Trademark Office ("PTO") had a substantial reason related to patentability for including the limiting element added by amendment and prosecution history estoppel would bar application of the doctrine of equivalents to that element. *Id*. While the court is not free to explore the correctness of a PTO objection based on prior art, it may review the reason (right or wrong) for the objection and the manner in which the amendment addressed the objection and avoided it. *Id*. at n. 7.

FN22. The Federal Circuit further noted, "The presumption that we have described, one subject to rebuttal if an appropriate reason for a required amendment is established, gives proper deference to the rule of claims in defining an invention and providing public notice, and to the primacy of the PTO in ensuring that the claims allowed cover only subject matter that is properly patentable in a proffered patent application." *Id.* at 1051.

A dependent claim includes all the limitations of the claim from which it depends. 35 U.S.C. s. 112 par. 4. Thus the Court's interpretations determined as a matter of law of independent claims apply to any dependent claims whether specifically referred to or not.

Court's Construction of Claims

1. '776 Patent

In the '776 patent, the last element of each of claims 1, 3, and 24 is construed to be a step or means that energizes, or turns on, a compressor in response to an increase capacity signal and deenergizes, or turns off, a compressor in response to a decrease capacity signal. The claims do not allow for energizing a compressor in response to a decrease capacity signal or deenergizing a compressor in response to an increase capacity signal.

The word "respective" in the context of the claim means "in the order given." The order given in the claim is to energize and deenergize in response to increase capacity signals and decrease capacity signals. "Respective" links the energizing steps to the increase capacity signals and links the deenergizing steps to the decrease capacity signals. The Court adopts Dr. Rhyne's testimony that a person of ordinary skill in the art would give this interpretation to the word "respective."

In the specification, where "respective" is used many times, it also means "in the order given." *See*, *e.g.*, Column 4, line 66 through Column 5, line 4. The prosecution history further supports this interpretation. See JX-776, Response, Bates Nos. 144-45, example showing that a compressor was energized only in response to an increase capacity signal and that a compressor was deenergized only in response to a decrease capacity signal.

The language in claim 1 is exemplary and states that the last step comprises "selectively energizing and deenergizing compressors in response to respective increase capacity signals and the decrease capacity

signals." To understand why "compressors" and signals" are plural, the Court examined other portions of the claims, the specification, and the prosecution history. The next to last element in each of claims 1, 3, and 24 FN23 indicates that a single increase capacity signal is generated when more compressor capacity is needed and that a single decrease capacity signal is generated when lesser compressor capacity is needed. The use of the plural "signals" in the last element of claims 1, 3, and 24 reflects a history of operation, i.e., a result of controller operation over a time interval. The Court accepts and adopts Dr. Rhyne's testimony that a person of ordinary skill at the relevant time would have so understood and interpreted the use of plural "signals" and "compressors" in the claims. Because there is no indication from other portions of claims 1, 3, and 24 whether the use of the plural in "compressors" is also a result of the same time interval or history of operation, the Court looked to the specification and discovered that the specification and disclosure indicate that a single compressor is turned on in response to an increase capacity signal and a single compressor is turned off in response to a decrease capacity signal. See, e.g., Column 4, 1. 66 to Column 5, line 4 states that "one of the multiple compressors" is energized in response to an increase capacity signal. The prosecution history at pp. 28-29, JX-776, Response, Bates Nos. 144-45, reflects that only one compressor is turned on in response to an increase capacity signal and one compressor is turned off in response to a decrease capacity signal. On page 30 of the same Response, JX-776, Bates No. 146, the applicant argued,

FN23. The specific languages is

providing an increase capacity signal when said operating suction pressure exceeds said upper limit and a decrease capacity signal when said operation suction pressure is below said lower limit.

It is the independent control of each compressor of the present invention without regard to the energized or deenergized state of the other compressors in the system which makes the number of combinations of compressors available greater than the number of available compressors.

Thus the last element of claims 1, 3, and 24 of the '776 patent recites a step or means for energizing a single compressor in response to an increase capacity signal and deenergizing a single compressor in response to a decrease capacity signal.

Furthermore, this last element of claims 1, 3, and 24 of the '776 patent is construed to be a step or means for energizing or deenergizing a single compressor at a time and in such a manner that compressors are turned on and off in sequence until the appropriate compressor combination to meet the load demand is eventually achieved. Thus this last element of claims 1, 3, and 24 is not so broad as to cover the situation where a specific capacity signal is generated, the controller analyzes the signal, and in response turns on the specific combination of compressors that matches the load demand without cycling through a sequence of compressors.

The claim further needs interpretation in light of the collective limitations of the words and phrases, "selectively," "in respective response," and "to provide a greater combination of compressors." In combination with other limitations of "respectively" and "to provide a combination of compressors ...," "selectively" means energizing or deenergizing compressors according to some particular logic or criteria. Thus the claim element takes on the construction indicated *supra*. Support is found in the specification, Column 7, ll. 45-51, DX-119:

As described above, it will be evident that controller circuit 10 will "cut-in" or "cut-out" the next compressor or compressor stage as above described *until the combination of stages has an operating capacity closest to matching the system load*, i.e., causing the system suction pressure to return to the

previously established ... range as hereinabove described and shown in FIG. 4 [[[emphasis added].

Similarly, the prosecution history also supports this construction. On page 30, Response, JX-776, Bates Nos. 146), the applicant was commenting upon the example provided on the prior pages which compared the operation of "the invention" to the prior art (in which the example clearly cycled through compressors until the correct capacity match was made) and explained

Successive reiterations of the FIFO strategy enables [sic] the present invention to more efficiently match the system load with the expanded set of compressor combinations available than previous systems, such as in Golber, having only a limited number of combinations available [emphasis added].

The Court accepts and adopts Dr. Rhyne's testimony that a person of ordinary skill in the art at the time would have understood and interpreted the use of "selectively" and "respective" in the claims in the '776 patent as limited with respect to choosing the optimal combination without the cycling through individual compressors until the proper combination for the needed capacity was achieved.

As discussed above, the Court finds that the specification at Column 7, line 58 through Column 8, line 10 does not disclose a binary sequence as an alternate logic to the FIFO sequence of operation for controlling compressors. FN24 Instead, based upon the prosecution history, the Court interprets the claims as limited to the structure or an act for achieving a FIFO sequence. While the example of the invention given by the applicant was specifically directed at application claims 7, 8, and 10, among others, and did not explicitly limit the sequence to FIFO, the example is clearly a FIFO sequence. *See*, *e.g.*, the statement at page 29 of the Response, JX-776, Bates No. 145:

FN24. The '602 patent makes clear that both the binary and the FIFO sequences cycle through a set sequence of turning compressors on and off until they arrive at the optimal combination to satisfy the load demand.

By contrast, the second system [in accordance with the present invention] faced with the same five horsepower requirement will energize Compressor Number 3, being the compressor deenergized for the longest period of time, in addition to maintaining Compressor Number 2 in an energized state. This will establish a capacity of six horsepower which, being greater than that required, will initiate a cut-out signal for the compressor which is energized for the longest period of time, i.e., Compressor No. 2. This leaves a total capacity of four horsepower. In the final stage of matching the system capacity to the instantaneous load, the second system will then initial a cut-in signal and increase the capacity of the system by energizing the compressor which has been deenergized the longest period of time (i.e., Compressor Number 1) [emphasis added].

On the following page, the applicant states that "successive reiterations of the FIFO strategy" enabled the present invention to match more efficiently the system load.

On page 2 of a Supplemental Response (JX-776, Bates No. 162) mailed to the PTO on November 10, 1982, moreover, the applicant asserted that

[t]he arrangement claimed by applicant provides an operation that has several subtle advantages over the art which may not be readily apparent, and therefore, the claimed structural and functional operations do not really do justice to the many advantages of applicant's system, *except by comparison with operation in accordance with the prior art* [emphasis added].

The only comparison of the operation of the present invention against the prior art in the prosecution history is found at pages 28-29, Response (JX-776, Bates No. 144-45). Moreover also on page 2 of the Supplemental Response, the applicant states,

Expressed in shorthand terms, an applicant's claims are directed to a cooling system using a FIFO control strategy applied in tandem to a plurality of commonly piped compressors to enable independent compressor control.

Furthermore, the Court observes that the FIFO sequence is mentioned five more times in the following page and a half. In addition, Dr. Rhyne, whose expertise is greater than one of ordinary skill in the art in 1979, testified that in five readings of the prosecution history, he never construed the "shorthand terms" comment as limited to certain claims.

The statements in the Supplemental Response are not limited to any particular claims, as evidenced by the last quoted statement, which is not restricted to any particular claims. Moreover, the applicant stated in the first paragraph about the description of "THE INVENTION" (JX-776, Bates No. 208),

The claimed invention concerns a novel control system for controlling the capacity of a preselected number of commonly piped compressors, as typically employed in a cooling system. Expressed in shorthand terms, applicant's claims are directed to a FIFO control strategy applied in tandem to a plurality of commonly piped compressors to enable independent compressor control.

In sum, the Court concludes from these arguments and statements made during the prosecution history that all the claims of the '776 patent, regardless of the application of 35 U.S.C. s. 112 par. 6, are limited to the structure and acts for achieving a FIFO sequence of operation.

The Court concludes that the last element in each of claims 1, 3, and 24 of the '776 patent invokes application of s. 112 par. 6 and satisfies the three requirements indicated *supra*.

Specifically Claim 1 of the '776 patent is a method claim that recites a series of "steps." The preamble ends with the phrase "steps of," indicating that each of the following elements is a step. (DX-109). Thus the element "selectively energizing" is a step. Moreover the step of "selectively energizing and deenergizing" has a specified function, following the step and linked to the step, "to provide a combination of energized unequal capacity compressors that exceeds in number the preselected number of compressors in the system" Finally, the step does not recite structure, material or acts for achieving the designated function.

The last elements in claims 3 and 24 are also subject to s. 112 par. 6. These claim elements are expressed as "means for," signalling an intention to invoke s. 112 par. 6 and raising the presumption that it applies. The elements in claims 3 and 24 have the specified function "to provide ...," following the recited "means" and linked to that means. There is no recitation of structure, material or acts in those respective elements for achieving the specified function. Dr. Rhyne, testifying that s. 122 par. 6 applied, maintained that "selection" or "selection means" had no commonly understood meaning in the art at the time to define a particular structure.

Since claims 1, 3, and 24 are subject to s. 112 par. 6, they are limited to the corresponding structure or acts disclosed in the specification for performing the recited function, and their equivalents. As noted *supra*, the

only disclosure for such a means or step to achieve the recited function is a capacity controller circuit that implements a FIFO logic or sequence. Thus the last elements of claims 1, 3, and 24 are limited to a FIFO sequence of operation and structure.

The decision in *Altech Controls Corp. v. The Larkin Group, Inc.*, No. 1:88-CV-499-MHS at *6, 56-61 (N.D.Ga. September 18, 1990), holding that some claims were directed specifically to the FIFO control strategy and others to more combinations, is not binding on this Court. Moreover because E.I.L. was not a party, the doctrine of *res judicata* does not apply. Substantial questions have been raised about the order, adopted from the plaintiffs' proposed findings of fact and conclusions of law after a settlement was communicated to the court. Furthermore, it was issued prior to *Vitronics*, which clarified the need to focus on intrinsic evidence, and recent Federal Circuit cases dealing with s. 112 par. 6, including *Greenberg, York Products, Cole*, and *Fonar*.

2. '700 Patent

Asserted independent claim 9, in particular elements (b) and (c), FN25 is identical in all material respects to asserted independent claims 1, 3, and 24 of the '776 patent. The '700 and '776 patents share a common prosecution history with respect to Application Serial Nos. 257,113 and 062,525 (JX-700; JX-776). In light of their common specification, material identity of the pertinent claim language, and common prosecution history, the Court interprets claim 9 of the '700 patent as having the same scope as the corresponding elements of claims 1, 3, and 24 of the '776 patent.

FN25. Elements (b) and (c) read,

- (b) a detection means for sensing the suction pressure in the system and cooperating with said pressure selecting means for determining when said pressure exceeds said upper limit and providing *an increase capacity signal* in response thereto, and when said pressure is below said lower limit and providing *a decrease capacity signal* in response thereto;
- (c) a selection means for receiving said increase capacity signals and said decrease capacity signals and in response thereto, selectively energizing and deenergizing said compressors to provide combinations of energized compressors that exceed in total possible numbers of combinations the number of compressors in the system so that the average compressor capacity of the system produces an average suction line pressure in said operating suction pressure range [emphasis added].

Also supporting this interpretation is the remainder of the prosecution history of the '700 patent (JX-700). The '914 application was filed with eight application claims that were not expressly limited to a FIFO control sequence. The Examiner rejected these claims 1-8 over prior art as a being unpatentable "for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention." Although Alsenz argued against these rejections, the Patent Examiner reiterated them in an Office Action mailed July 2, 1984. Eventually the '914 application, with no pending claims expressly including FIFO language or language now at issue in claim 9 of the '700 patent, was abandoned because of the rejection. Originally the same eight claims were filed in the '403 application, but they were subsequently canceled and new, substitute claims 9-21 were submitted in a First Preliminary Amendment. The Remarks of this First

Preliminary Amendment stated that "9-21 have been prepared to more particularly point out and distinctly claim the Applicant's invention." Claims 11 and 19 included language explicitly limiting the claims to a FIFO sequence. JX-700. The Examiner subsequently indicated that claims 11, 18, and 19 would be allowable rewritten in independent form. Id. Alsenz filed a Response to Office Action dated June 28, 1985 arguing for patentability and a Supplemental Response to Office Action dated June 28, 1985, adding claim 25, which later became patent claim 9 at issue here. The Supplemental Response added claims 22-31, "which recite features of the invention which were previously disclosed in the material incorporated by amendment in the previously filed response to the Office Action." The previous response incorporated disclosure of the '113 application, in which the "in shorthand terms" FIFO arguments were made twice during the prosecution history. Along with the remaining prosecution history, in which the FIFO control sequence was explicitly referred to (e.g., in the Remarks section of the Response to Office Action dated March 24, 1986), this disclosure supports the Court's construction of asserted claim 9 of the '700 patent.

3. '602 Patent

Claims 1, 2, and 3 of the '602 patent are asserted here.

Independent claim 1 expresses the improvement in the overall claimed combination as follows:

the improvement in said selection means comprising a logic means for selecting no more that two of said compressors at a time for change in state energization, said selection means minimizing cycling of said compressors when matching capacity to the cooling load by skipping over those capacity stages which would require more than two of said compressors to change energization states when increasing or decreasing the capacity of the cooling system.

The language indicates that the claimed control strategy is directed to changing the energization states of two or fewer compressors at a time and that any capacity stages which require more than two compressors to change energization states are skipped over. Therefore any system which changes the energization of more than two compressors, or which does not skip over capacity stages that would require more than two compressors to change states in response to either an increase capacity signal or a decrease capacity signal, is outside the scope of claim 1 of the '602 patent. Thus the asserted claims of the '602 patent are limited to control sequences that never change the energization states of more than two compressors at any given time.

Again the prosecution history supports this construction of the claim. When originally filed, claim 1 included broader language than its current form. The Examiner rejected it as unpatentable in an Office Action dated August 20, 1984. In a response, filed on February 12, 1985, the applicant amended the language to add limitations, underlined in the following portion of that claim (JX-602 at p. 2):

The improvement in said selection means *comprising* a logic means for selecting no more that *two* of said compressors at a time for change in state energization, *said selection means minimizing cycling of said compressors when matching capacity to the cooling load by skipping over those capacity stages which would require more than two of said compressors to change energization states when increasing or decreasing the capacity of the cooling system.*

The Response (JX-602 at p.7) explains the amendment to claim 1 as follows:

The selection means recited includes a logic means which selects no more than two of said compressors at a

time to change their states of energization thereby *minimizing* the cycling of the compressors by *deleting* as one of those possible selectable capacity stages a stage which would require more than two of the compressors to change their energization states when increasing or decreasing the capacity of the cooling system.

The Response further explains that the amendment made it "clearly distinguishable over Golber in view of Overman and Kesterson," prior art references cited by the Examiner when the original wording of claim 1 was rejected.

Claim 2 is also limited to control sequences that never change energization states of more than one compressor at any time.

4, '326 Patent

Claims 1, 6, 7, and 8 of the '326 patent are asserted here. Independent claim 1 is directed to an apparatus for controlling the capacity of a refrigeration system. Claims 6, 7, and 8 are independent claims, each directed to a method of controlling a refrigeration system.

Claim 1, the only apparatus claim at issue, requires inter alia

[s]election means for receiving said first and second increase speed signals and causing the speed of the compressor to increase in respective response thereto, and for receiving the decrease in response thereto.

Each of the claim elements of independent claim 1 are written in the means-plus-function format of 35 U.S.C. s. 112 par. 6. Therefore each element is to be construed by resorting to the specification to find the structure, materials or acts disclosed therein for accomplishing the specified function for that means. The specified function for the selection means of claim 1 is

for receiving said first and second increase speed signals and causing the speed of the compressor to increase in respective response thereto, and for receiving the decrease speed signal and causing the speed of the compressor to decrease in response up thereto.

The structure, material or acts disclosed for accomplishing the specified function is a microprocessor.

If viewed in the context of its intrinsic evidence, claim 1 as a whole requires *inter alia* a selection means for receiving a first increase speed signal that is generated by the common suction pressure exceeding the pressure range and a second increase speed signal generated when the oil pressure in the variable speed compressor falls below a predetermined minimum operating oil pressure. When the selection means receives either one of the first or second increase speed signals, the selection means also receives a decrease speed signal generated when the common suction pressure falls below the suction pressure range. The selection means causes the variable speed compressor to decrease in speed when the decrease speed signal is received.

Each of independent method claims 6, 7, and 8 requires that a minimum oil pressure for operating the variable speed compressor be established and that the variable speed compressor's oil pressure be determined.

Method claim 6, in addition to the specified function in the means-plus-function format discussed above, requires that the speed of the variable speed compressor be increased whenever the variable speed oil pressure falls below a predetermined minimum oil pressure level.

In addition to the specified function in the means-plus-function format discussed above, method claim 7 requires that the speed of the variable speed compressor is increased whenever the variable speed compressor's oil pressure falls below the predetermined minimum oil pressure and when the variable speed compressor is operating below a predetermined maximum speed. Method claim 7 also requires that the speed of the variable speed compressor be decreased when the common suction pressure falls below the predetermined minimum common suction pressure and when the oil pressure of the variable speed compressor is above the predetermined minimum oil pressure level.

In addition to the specified function in the means-plus-function format discussed above, method claim 8 requires increasing the speed of the variable speed compressor whenever the oil pressure of the variable speed compressor falls below the predetermined minimum oil pressure level and when the variable speed compressor is operating at a speed below its predetermined maximum speed.

To the extent that a finding of fact should be more properly designated as a conclusion of law, and to the extent a conclusion of law should be more properly designated as a finding of fact, such misdesignation shall not affect the determination made by the Court.

Accordingly, in light of these findings of fact, conclusions of law, and construction of claims and for the reasons given above, the Court

ORDERS the following:

- (1) Defendant EIL's motion for summary judgment regarding claim interpretation and noninfringement (instrument # 127) is GRANTED in respect to literal infringement only; issue of infringement under the doctrine of equivalents will be determined by the jury;
- (2) EIL's alternative motion for summary judgment regarding patent invalidity (# 129) is MOOT in light of the above ruling;
- (3) Altech's motion for partial summary judgment as to claim interpretation (# 135) is DENIED;
- (4) EIL's motion for interpretation of asserted claims 9 and 10 of United States Patent No. 4,628,700 (# 245) is GRANTED;
- (5) EIL's motion to strike bench brief (# 295) is DENIED;
- (6) Altech's motion in limine to limit testimony of Defendant's experts at *Markman* hearing (# 298) is MOOT;
- (7) Altech's motion to exclude deposition testimony is DENIED (# 300);
- (8) EIL's motion to strike untimely supplemental exhibits (# 307) is DENIED; and

(9) EIL's motion to strike appendix to Plaintiffs' proposed findings of fact and conclusions of law on claim construction (# 320) is DENIED.

Moreover, the Court

ORDERS that the parties shall appear for jury selection and trial on alleged infringement under the doctrine of equivalents and on EIL's counterclaims at 9:00 a.m. on August 25, in Courtroom 9C. If the parties wish to file an amended joint pretrial order with amended proposed jury charges, they shall do so by August 18, 1997. Given the complexity of the charge, early submission would be of value to the Court.

S.D.Tex.,1997.

Altech Controls Corp. v. E.I.L. Instruments, Inc.

Produced by Sans Paper, LLC.