

United States District Court,
C.D. California.

CHAD INDUSTRIES, INC., etc,
Plaintiff.

v.
AUTOMATION TOOLING SYSTEMS, INC., et al,
Defendants.

No. SACV 95-969-EE

Sept. 4, 1996.

Patentee brought action against competitor, alleging infringement of its patented circuit board assembly system. Following *Markman* hearing held to construe patent claims, the District Court, Edwards, United States Magistrate Judge, held that: (1) pretrial hearing held to construe patent claims complied with requirements of *Markman* ; (2) claim in patent covered a system whose clinching pin went up and down before it had finished bending all leads to be bent on particular component; (3) claims covered system programmed so that clinching pin never moved sideways while it was up unless it was touching a lead; and (4) issue of whether circuit assembly system that was "capable of" being programmed to move clinching mechanism in infringing manner infringed only if it was actually so programmed was infringement issue that was beyond scope of *Markman*, hearing.

Ordered accordingly.

4,910,859. Cited.

Leonard Tachner, Newport Beach, CA, for plaintiff.

John C. Rawls, Blanc Williams Johnston & Kronstadt, Los Angeles, CA, for defendants.

MEMORANDUM OPINION AND ORDER ON PATENT CLAIMS CONSTRUCTION

EDWARDS, United States Magistrate Judge.

1. Introduction.

Plaintiff Chad Industries, Inc. ("Chad"), brought this action pursuant to 28 U.S.C. s. 1338(a). Chad alleges that defendant ATS Automation Tooling Systems, Inc. and its subsidiary ATS Ohio, Inc. (both referred to singularly herein as "ATS") has and is infringing Chad's U.S. patent no. 4,910,859. On October 20, 1995, the parties filed a stipulation for disposition of this action before United States Magistrate Judge Elgin Edwards, pursuant to 28 U.S.C. s. 636(c). FN1

FN1. This case was filed on February 7, 1994 in the Western Division of this district and was previously assigned to Judge Lourdes G. Baird and later to Judge George H. King. Before its transfer to this division, it was assigned various case designations, including CV 94-833-LGB(Bx), CV 94-833-LGB (VAPx), CV 94-833-GHK (VAPx), and CV 94-833-LGB (AJWx), reflecting the various district judges and magistrate judges assigned to the case. Only defendant ATS Ohio, Inc. filed an answer; however, its counsel represented two other entities, namely, ATS Automation Tooling Systems, Inc. and Automation Tooling Systems Corp. All three joined in motions for summary judgment or to dismiss but later withdrew the motions. The various defendants were referred to regularly by both sides in the singular, as "defendant." Thereafter, only ATS Automation Tooling Systems, Inc. and ATS Ohio, Inc. continued to be represented on papers filed. On May 16, 1995, counsel for ATS Automation Tooling Systems, Inc. and ATS Ohio, Inc. and counsel for Chad lodged a proposed pretrial conference order acknowledging that each of these two parties had been served and had appeared and that any other parties "are now dismissed." The proposed order was never signed either by Judge Baird or by Judge King. To insure that all parties are bound by and can rely on its contents, Judge Edwards has now signed the order. (Because the proceedings discussed herein were only tentatively considered at the time of the lodging of the order, some portions are obsolete. The obsolete portions will be addressed at the next status conference.)

2. Bifurcation of proceedings.

Chad timely demanded trial by jury on "all issues" in this patent infringement action. Just prior to the time set for pretrial conference before Judge Baird, however, the Court of Appeals for the Federal Circuit decided *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 975, 34 U.S.P.Q.2d 1321, 1326 (Fed.Cir.1995) (*en banc*). The parties agree that *Markman* requires this Court to construe the claims of the Chad patent but reserves for the jury the ultimate question of infringement, as well as other questions such as whether infringement was willful and the amount of damages to be awarded, if any. In the present case, it will also be more efficient to separate the claims construction proceedings from the jury trial, because it is probable that witness testimony and other evidence needed at trial will be substantially impacted by the construction of the claims in issue. Accordingly, on December 6, 1995, after this case was transferred to the Southern Division of this district, the parties filed a stipulation requesting "a trial date for a patent claim construction bench trial." The parties thereafter stipulated to a "trial" date of February 15, 1996. Although denominated in the papers as a "trial," the proceedings conducted to construe the patent claims pursuant to the stipulation consisted of an evidentiary hearing (hereafter "the *Markman* hearing"), supplemental briefing, and oral argument before Judge Edwards.

3. The *Markman* hearing.

[1] Because *Markman v. Westview Instruments, Inc.* involved the construction of claims after a jury verdict to determine whether the verdict could stand, it provided no procedural guidance for the nature of proceedings required for a pretrial construction of claims. After the *Markman* hearing herein, the Supreme Court unanimously affirmed the Federal Circuit's decision in *Markman v. Westview Instruments, Inc.* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577, 38 U.S.P.Q.2d 1461 (1996). Before turning to the facts of this case, it is therefore necessary to determine whether this Court's *Markman* hearing was consistent with the rationale of the Supreme Court and the Federal Circuit.

The issue in *Markman v. Westview* was simply whether the 7th Amendment entitles a party to have patent claims interpreted by a jury, rather than by the Court. While the Supreme Court held unequivocally that

claims are to be interpreted by the Court, it also emphasized that "there is no dispute that infringement cases today must be tried to a jury, as their predecessors were more than two centuries ago." *Markman v. Westview*, supra, 517 U.S. at ----, 116 S.Ct. at 1389. The Supreme Court also acknowledged that the Court's role was limited to interpreting the contents of the patent as a document, leaving to the jury the interpretation of the construction of the devices alleged to infringe the patent-and that the line drawn between these roles may be a fine one. *Id.* at ----, 116 S.Ct. at 1394.

This Court did not consider itself limited, however, simply to reading the patent in issue. Nor did it consider itself prohibited from determining the relative credibility of different sources of evidence, although such determinations are concededly normally matters for a jury to decide. Instead, to maximize the opportunity for the parties to give input while drawing boundaries to define and limit the scope of the *Markman* hearing, the Court proceeded as follows:

(1) A week before the *Markman* hearing, each side filed

(middle dot) a statement of issues to be decided;

(middle dot) lists of exhibits and witnesses to be used at the hearing;

(middle dot) a narrative statement of each witness's expected testimony on direct examination; and

(middle dot) a legal brief.

(2) At the *Markman* hearing, each side was permitted to

(middle dot) make any opening statement desired;

(middle dot) offer its narrative statements of witnesses, including statements of experts;

(middle dot) amplify the narrative statements with additional examination of the witness on the witness stand;

(middle dot) cross-examine the opposing witnesses;

(middle dot) object to and rebut the other side's evidence; and

(middle dot) make a final argument.

(3) Strict rules of evidence were not applied at the *Markman* hearing, but evidence was excluded when objected to if its probative value was too marginal to justify the time it would take to receive it. Primarily, the testimony was used to explain demonstrative models and drawings to assist the Court in understanding features of the invention described in the patent as well as to contrast it with prior art devices. The intent of the Court was to obtain information to assist it in determining how one skilled in the art would interpret the claims in issue in this case. To the extent that the testimony and narrative statements of witnesses constituted evidence about facts or expert opinion about factual matters, including opinion about how those skilled in the art would interpret words in the claims, it was treated as evidence. To the extent that the testimony and narrative statements of witnesses constituted mere legal conclusions or arguments or expert

opinions on legal issues, the Court accepted the information after advising counsel that it would be treated simply as an extension of their legal arguments and briefs. (Two court days were allowed for the *Markman* hearing; however, it actually consumed less than one day.)

(4) After the hearing, counsel stipulated to a schedule for post-hearing briefing and oral argument. Both sides filed briefs and replies to each other's briefs. Oral argument was then heard, and the Court took the matter under submission.

A review of the opinions in *Markman v. Westview* both by the Supreme Court and by the Federal Circuit gives no reason to believe that the above proceedings failed to comply with the requirements of law. The Supreme Court, for example, cited with approval passages from learned treatises noting that matters of claim construction, *even those aided by expert testimony*, are ultimately questions for the court:

"Questions of construction are questions of law for the judge, not questions of fact for the jury. As it cannot be expected, however, that judges will always possess the requisite knowledge of the meaning of the terms of art or science used in letters patent, it often becomes necessary that they should avail themselves of the light furnished by experts relevant to the significance of such words and phrases. The judges are not, however, obliged to blindly follow such testimony." [A. Walker, *Patent Laws* (3d ed. 1895)], s. 189, at 173 (footnotes omitted). Virtually the same description of the court's use of evidence in its interpretive role was set out in another contemporary treatise: "The duty of interpreting letters-patent has been committed to the courts. A patent is a legal instrument, to be construed, like other legal instruments, according to its tenor.... Where technical terms are used, or where the qualities of substances or operations mentioned or any similar data necessary to the comprehension of the language of the patent are unknown to the judge, the testimony of witnesses may be received upon these subjects, and any other means of information be employed. *But in the actual interpretation of the patent the court proceeds upon its own responsibility, as an arbiter of the law, giving to the patent its true and final character and force.*" 2 W. Robinson, *Law of Patents* s. 732, pp. 481-483 (1890) (emphasis added).

Markman v. Westview, supra, 517 U.S. at ---- - ----, 116 S.Ct. at 1394-1395.

Also, it is noted that the Federal Circuit itself has permitted parties to provide it with extrinsic evidence, including "photographs and experimental data, the testimony of the scientists who produced the data and interpreted it, and the testimony of experts in the field" to explain technology and technical terms to construe claims. *Hoechst Celanese Corp. v. BP Chemicals Ltd.*, 78 F.3d 1575, 1579, 38 U.S.P.Q.2d 1126, 1129 (Fed.Cir.1996). That court has also relied on such extrinsic evidence even when it had to decide the relative credibility of conflicting evidence "and credit certain evidence over other evidence." *Id.* Thus, the mere fact that the Court was required to make credibility judgments about evidence does not mean that it intruded on the constitutionally protected function of the jury.

In short, it appears that the procedure and information used in the *Markman* hearing herein to inform the Court to enable it to make a reasoned interpretation of the claims would be considered acceptable by the Federal Circuit and was not inconsistent with the guidance provided by the Supreme Court. Accordingly, the matter is now ready for decision.

4. Background and issues for decision.

(a) The subject matter of the patent.

Chad's patent in issue, no. 4,910,859, naming Gregory W. Holcomb (Chad's president and CEO) as the inventor, is entitled "Circuit Assembly System." It describes a type of robotic mechanism for putting electrical components (*e.g.*, resistors, capacitors, and microprocessors) on printed circuit boards and securing them in place. In this art it is well known, and was known before the invention covered by the Holcomb patent, to use robotic mechanisms to do this work. Typically, a robotic hand ("gripper") grips an electrical component and moves it into position over a circuit board, which may be lying flat on a conveyor-type assembly line. The electrical component may have 2 or 3, or 30 or more, electrical wires or "leads" sticking down from it, and the circuit board has holes in it designed to fit the leads. The robotic gripper is moved by a computer-programmed drive to position the electrical component so that its leads are exactly over the holes they are supposed to go into, and then the gripper lowers the component down onto the board with the leads going into the proper holes.

While the demonstration model in the courtroom was human-sized, typical circuit boards are very small devices. A commercial gripper may be able to move components to a position that is precisely determined within a thousandth of an inch. The electrical components are also tiny and, according to Chad's patent, may be crammed onto a circuit board as little as 0.05 inches apart. Thus, the little leads' will be sticking down very close together through the holes in the board. This presents the next difficulty in the art of attaching electrical components to circuit boards.

Before a circuit board can be used, the leads have to be soldered in place. As a temporary measure to hold them still for the soldering process, board makers bend the leads sideways under the board, sometimes bending them completely flat against its bottom surface (somewhat like a staple looks on the bottom of a piece of paper). This locks the components to the top of the board. Two techniques have generally been used to bend the leads. One is to put a barrier under the circuit board against a wire lead and move the board sideways until the lead is bent. The other is to hold the board still and move the barrier against the lead to bend it. Either way, in the circuit board art this bending of the leads to hold the component against the board is called "clinging." Once the component is clinched to the board, the robotic gripper can turn loose the component and go get another one to put on the board.

Clinching is not as simple as it sounds. FN2

FN2. Another method coming into use in recent years to temporarily hold components on a board until they are soldered is to glue them with an adhesive.

When the types of components to be attached to a circuit board are "standard," *i.e.*, have uniform configurations, the manufacturer can justify investing in apparatus specially designed for those configurations. Chad's patent purports to be especially useful, however, for attaching non-uniform components-called "odd-form components"-to boards. If a board has just one component on it that has a particular configuration, for example, it is not practical to invest in apparatus designed to clinch that one configuration to the board. (It may be cheaper to do it by hand.) It would, however, be practical to invest in apparatus that could work with a variety of odd-form components. According to Chad, for apparatus to work with all kinds of odd-form components requires that the clinching device be able to bend a lead in any direction, not just one specialized direction. Also, it has to be able to bend a lead to any angle-not just flat against the board-because there may not be room to completely flatten the lead sideways without hitting something. In other words, with all the tiny leads sticking down through the board at irregular locations close together, there is a risk that one lead will be bent over so that it touches another lead (or another

electrically conductive surface), which will make the circuit board inoperable. FN3

FN3. Chad alleges that its apparatus also is capable of having its robotic drive reprogrammed easily, so that it can accommodate different circuit board layouts without physically changing the clinching mechanism. It is unnecessary to consider the significance of that aspect of the invention to decide the issues of claim interpretation presently before the Court.

The invention in the Chad patent purports to do these things-permit bending the leads in any direction and permit bending them toward the board to any angle of bend-by using a movable table underneath the apparatus that holds the circuit board. A pin, called a clinching pin, sticks up from the movable table, and the table can move the pin against each lead that sticks down from the circuit board above. In other words, the circuit board can be visualized as sitting still relative to the movable table below it, and the pin sticking up from the movable table darts around underneath the board bending the various leads in various directions and flattening them to various angles depending on the shape of the components and the board. (Referring to the pin as darting around is the Court's expression, not the patent's. It is based on the statement in the patent that the pin may move at velocities up to 100 inches per second.)

One final complication pertinent to the *Markman* hearing is addressed by invention of the patent. When a pin darts around in an inverted forest of wire leads, some not bent flat and some located behind other obstructions on the bottom of the board, the pin cannot always simply move around sideways under the board without hitting things that it is not supposed to hit. The invention in the Chad patent purports to overcome this problem by making the pin retractable. In other words, the pin can extend all the way up to where it is almost touching the bottom of the circuit board when it is necessary to completely flatten a lead against the board. However, to get past an obstacle (*e.g.*, when it cannot go around it because of other obstacles), the pin can be retracted down lower than the lowest part of any obstacle. The movable table then moves the pin past and underneath the obstacle, after which the pin is extended back up again when it gets in the vicinity of the next lead it needs to bend. The table then moves the pin enough to bend the lead, and the retraction-extension process can repeat as often as necessary until all the leads that the operator wants to bend are bent.

It is within the framework of the forgoing functions that the claims of the Chad patent must be construed. FN4 But this is only a framework. The fact that the patent *discloses* these functions does not mean that the claims cover each such function. On the contrary, much of the description is concededly about things that are not patentable, and the claims cannot be construed to cover such subject matter. Similarly, if the proceedings before the U.S. Patent & Trademark Office leading to the issuance of the patent show that Chad gave up an coverage of particular functions, the claims cannot now be interpreted to cover those functions.

FN4. This is, of course, a vastly simplified description of the art described in the patent. The patent also describes such features as fiber optic sensors, wire straightening mechanisms, sophisticated control devices and a computer software program among its 78 pages. The whole board assembly apparatus may sell for from \$200,000 to more than \$800,000 depending on all the features it has. However, these features are not asserted to have any special significance or bearing on the claim interpretation issue.

(b) The claims in issue.

The Chad patent has 51 claims. It is only necessary, however, to reproduce claim 1 in its entirety to make the claim interpretations needed to resolve the issues before the Court. Claim 1 reads as follows:

1. A system for active clinching of component leads after insertion thereof from an upper side of a circuit board and through apertures in the board to extend from the lower surface thereof, comprising:

a clinching element for contracting [sic] and bending said leads; means for driving said clinching element through a programmably determined path of travel substantially within a plane adjacent said lower surface in response to control signals to contact and bend one or more leads of said component adjacent said lower surface of said board; programmable controller means adapted to provide control signals to said drive means so as to pass said clinching element through a programmably determined sequence of movements substantially within said plane to contact and bend one or more leads of said component to secure said component in its inserted position, and wherein the clinching element effects the bending of a lead by running into the lead during the course of its programmably determined travel.

(patent, col. 121, 1.5-26.)

(c) The *Markman* Issues.

At the *Markman* hearing, ATS sought interpretations of the Chad patent that:

(middle dot) all claims require that a computer-controlled clinching mechanism be programmed to move *entirely* in a single horizontal plane from the time it begins to fasten a component to a circuit board until it finishes that operation;

(middle dot) if horizontal movement occurs only while the clinching element is actually in contact with a component lead, the claims are not infringed; and

(middle dot) a system that is "capable of" being programmed to move the clinching mechanism in an infringing manner does not infringe unless and until it is actually so programmed.

(defendants' statement of factual and legal issues filed February 8, 1996, p. 2.)

Chad sought an interpretation of the claims that they cover a clinching system irrespective of whether there is vertical motion of the clinching element after a lead has been bent in the manner claimed, that is, by driving the clinching element along a path within a plane adjacent the circuit board until it effects bending of a lead by running into it.

(plaintiff's succinct statement of factual and legal issues filed February 8, 1996, p. 2.)

Though phrased differently, the wording of the issues by both parties, as amplified in their briefs, seek the same determinations:

(1) Whether, to come within the claims, the clinching pin must stay up and move only sideways until it has bent all the leads that are to be bent on a particular component, *i.e.*, whether the claims cover a system if the pin goes down to dodge an obstacle or for any other reason (or for no reason) before it has finished bending all the leads to be bent on the component;

(2) Whether the claims cover a system programmed so that the pin never moves sideways while it is up unless it is touching the lead; and

(3) Whether, to come within the claims, a system has to actually be programmed to make the bending movements described in the claims, or whether it is sufficient if it has computer hardware and software capable of being so programmed.

5. Controlling law.

[2] Both sides use a good deal of their briefs discussing the issue of whether there is infringement in this case. However, at this stage of the proceedings, the Court's task is to interpret the claims without reference to the accused device. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1123 (Fed.Cir.1985) (*en banc*). Therefore, the Court gives no consideration at this time to what system ATS is accused of making. The only significance of that at this stage is to frame the issues that are pertinent to this case, and the Court accepts the parties' identification of the issues as described above.

As previously noted, "[a] patent is a legal instrument, to be construed, like other legal instruments, according to its tenor.... Where technical terms are used, or where the qualities of substances or operations mentioned or any similar data necessary to the comprehension of the language of the patent are unknown to the judge, the testimony of witnesses may be received upon these subjects, and any other means of information be employed." *Markman v. Westview*, supra, 517 U.S. at ---- - ----, 116 S.Ct. at 1394-1395 (citing 2 W. Robinson, *Law of Patents* s. 732, pp. 481-483 (1890)).

There are, however, some specialized rules applicable to interpreting patent claims:

[3] [4] The starting point for interpretation is to examine the claim language. *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 1575 (Fed.Cir.1993), *cert. denied*, 511 U.S. 1069, 114 S.Ct. 1645, 128 L.Ed.2d 365 (1994). The language of the claims must be construed objectively, as "one skilled in the art would construe [it]." *SmithKline Diagnostics v. Helena Laboratories Corp.*, 859 F.2d 878, 882 (Fed.Cir.1988). The claims, the specification, and the prosecution history of the patent can all be considered to ascertain the meaning of the claims. *Markman v. Westview*, supra, 52 F.3d at 983.

[5] [6] [7] Testimony by experts skilled in the art can also help elucidate the meaning of the claim terms. However, testimony by the patentor's attorney "amounts to no more than legal opinion" and co-opts the "process of construction that the court must undertake"; therefore, "it is entitled to no deference." *Markman v. Westview*, supra, 52 F.3d at 983. The inventor can give a patent term a definition different from its ordinary meaning to one skilled in the art, but "he must set out his uncommon definition in some manner within the patent disclosure." *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed.Cir.1992). When an inventor claims to have given a term an uncommon meaning, the specification and patent history must be consulted to interpret the term. *Hormone Research Found., Inc. v. Genentech, Inc.*, 904 F.2d 1558, 1563 (Fed.Cir.1990), *cert. dismissed*, 499 U.S. 955, 111 S.Ct. 1434, 113 L.Ed.2d 485 (1991); *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed.Cir.1984) ("the place to [set forth an uncommon definition] is in the specification").

6. Chad's claims can cover a system whose clinching pin goes down and up before it has finished bending all the leads to be bent on a particular component.

(a) The terminology in dispute.

[8] The parties agree that, while the language is slightly different in different claims, interpretation of claim

I will be dispositive of the dispute as to all claims. The pertinent part of claim 1 reads as follows:

means for driving said clinching element through a programmably determined *path of travel substantially within a plane adjacent said lower surface* in response to control signals *to contact and bend one or more leads of said component* adjacent said lower surface of said board;

(emphasis added).

ATS argues that the path of the clinch pin cannot go up and down because its path would then not be "substantially within a plane adjacent [the] lower surface" of the circuit board. Chad agrees that the pin has to stay in the same plane while it bends a lead, but Chad contends that the claim language does not exclude operations where the pin goes down and back up *between* leads. The claim language itself does not answer the question. Chad urges, correctly, that it can be read to mean that the path is in one plane only while the pin bends *one* lead. ATS urges that the language "one or more" means the pin bends all the leads on a component while it is in the plane adjacent the lower surface-whether there is only one lead or more than one.

(b) Reference to the specification supports Chad's view. FN5

FN5. Chad devotes a good deal of its arguments both in its pre-hearing brief and in its post-hearing brief challenging ATS's patent expert for taking inconsistent positions regarding the claim interpretation at different stages of the dispute. ATS devotes an equal amount of argument, with accompanying declarations, attempting to reconcile the expert's positions. The Court agrees with Chad that the attempted reconciliation is strained and not credible; however, the Court also agrees with ATS that it doesn't matter. The expert was an expert on *law*, not one skilled in the art of circuit board manufacture. Accordingly, his opinions are accepted merely as extensions of litigation counsel's arguments, not as *evidence* of how one skilled in the art would interpret the claims in issue. If it were probative *evidence*, the earlier admissions would indeed be indicative that those skilled in the art would favor Chad's interpretation of the claims.

The specification refers to the invention as being able to adapt the system to the clinching requirements for "any type of inserted component." (*See*, patent at col. 14, l. 14-16.) The adaptability is attributed to being able to program the path the clinching pin takes to handle different components (which is consistent with the general theme of the entire system-not just the clincher-that it can adapt to different sizes and types of components). (*See*, patent at col. 13, l. 43-47.)

The programming operation itself shows that it was intended that a clinch *path* was contemplated to constitute the route of travel during the bending of a single lead, not all the leads on a component. As described in the specification, omitting the references to drawings and unnecessary verbiage, the procedure reads in substance as follows:

In a typical manual teaching sequence, an identifying number for the component to be clinched is entered into the controller via the keyboard. Then the operator ... moves the clinch element to the appropriate start position required to initiate the desired clinch path. The start position ... is then stored in the memory of the controller.

* * * * *

If, during the next move, it is desired to clinch a lead of the component, the operator activates the "clinch up" control.... The appropriate movement controls ... are then activated to execute the desired clinch path. If the leads are not to be clinched during this sequence of moves, the "clinch up" switch is not activated. In the next step of the ... sequence, the final position of the clinch head and clinch element (up or down) are stored in the controller memory.

The preceding two steps are then repeated to perform all desired clinching movements for the particular component. The entire sequence is then repeated for each of the components on the board requiring clinching.

(See, patent at col. 19, 1.6-32.)

While the interpretation of the specification urged by ATS is far from frivolous, it appears to the Court that the reference to a starting position and a final position for the bending of a single lead, *repeated* to perform all desired movements for each *particular component*, is indicative that it was contemplated that the precise meaning of a *clinching path* was contemplated as the route taken for bending a single lead, not all the leads on a component.

Even assuming the claims read in the light of the specification still were ambiguous, the ambiguity would be resolved in this case in favor of Chad by resort to extrinsic evidence of how those skilled in the art would interpret the patent language. The Court's interpretation of the disputed language is consistent with the declaration of the inventor that:

The definition of the clinch as disclosed in the patent is the act of running into and bending the lead, not moving the pin up to the board and dropping away from the board.... [T]he actual clinching takes place when the pin runs into a lead and bends it over. Everything before and after that is not clinching, it's just movement of the system in preparation for the clinching action.

(declaration of Gregory Holcomb filed February 8, 1996, p. 20-21.)

Although the inventor's declaration is entitled to no special deference, it does constitute evidence of what those skilled in the art would understand from reading the claims in issue. In this case, it, taken together with the testimony at the *Markman* hearing and all the other evidence and information presented, is persuasive that this Court's interpretation of the claims is correct. FN6

FN6. ATS objects to the testimony of Holcomb as expert testimony from a witness who was not timely identified as an expert witness pursuant to local and federal rules. The Court agrees that Holcomb's testimony as to what such terms as "clinching" would mean in the context of his invention constitutes expert testimony. Treated as a motion in limine to exclude the testimony at trial, ATS's objection may be well-founded; however, it is not an issue for the *Markman* hearing. This Court is required to make its own determination of the issues of law, including claim interpretation, and the Court instructed the parties to call all witnesses who would be useful for that purpose. Accordingly, for purposes of the *Markman* hearing only, ATS's objection is overruled.

(c) Chad's interpretation is not inconsistent with the patent prosecution history.

ATS also argues that Chad is precluded by the prosecution history of the patent application that resulted in issuance of its patent from asserting that its claims cover systems whose clinching pins go up and down between leads on the same component. *Markman v. Westview* indisputably requires this Court to consider such prosecution history in interpreting the claims. However, Chad's arguments on this issue are persuasive that nothing in the prosecution history did limit the scope of the claims insofar as the issues in this proceeding are concerned.

[9] Chad also argues generally that this Court should not consider the prior art cited by the examiner to limit the interpretation of the claims herein because they are means-plus-function claims, citing *Intel Corp. v. I.T.C.*, 946 F.2d 821 (Fed.Cir.1991). The Court agrees with ATS, however, that nothing in *Intel* prohibits this Court from considering the prosecution history, including the prior art cited therein. In fact, as noted above, this Court has an affirmative duty to do so. FN7

FN7. The Court agrees, however, that it should not consider prior art that was not a part of the prosecution history, except as evidence of how those skilled in the art would interpret the claims, and then only if the claims could not be adequately interpreted by resort only to the patent and the prosecution history.

[10] It is elementary that a patentee cannot obtain, in an infringement suit, protection of subject matter that was relinquished in order to obtain allowance of other subject matter during prosecution of the patent application. *Mannesmann Demag Corp. v. Engineered Metal Prods. Co.*, 793 F.2d 1279, 1285, 230 U.S.P.Q. 45, 48 (Fed.Cir.1986). The standard for determining whether particular subject matter was relinquished is an objective one to be determined as a matter of law and is based on the reasonable reading, by a person of skill in the field of the invention, of the entire prosecution history. *Modine Manufacturing Company, Appellant v. United States International Trade Commission*, 75 F.3d 1545, 37 U.S.P.Q.2d 1609 (Fed.Cir.1996).

ATS refers to the fact that claims in Chad's patent application were rejected as unpatentable when they did not include the limitation that the path of travel of the clinching pin was "substantially within a plane" adjacent the lower surface of the circuitboard. After that limitation was put in, the patent examiner allowed the claims. However, a review of all the papers filed fails to show, objectively, that either the examiner or Chad construed the amendment of the claims as relinquishing Chad's right to assert infringement over systems whose pins go up and down *between* clinching paths. The Court agrees with Chad that the issue before the examiner was whether the claims were patentable over the Foley reference and others without the "substantially within a plane" language. Without that language, Chad's claims could have covered a clinching device that moved in an arc, rather than a plane, while performing the bending. Since Foley showed a prior art device that moved in an arc, it was not surprising that the examiner rejected Chad's attempt to cover that subject matter.

Nor is ATS's argument persuasive that Chad limited the scope of its claims by arguing that the Chad pin did not have to go up and down like Foley's device. This was simply an advantage of Chad's system, not a prohibition against using its ability to go up and down when there was an obstacle in the way or other reason to do so. The flexibility of the Chad system-in permitting an operator to choose when to have the pin extend or retract-was obviously a *difference* between it and the prior art device, and it would be ironic to construe that as a restriction *against* asserting coverage of that very flexibility.

In short, there is nothing in the prosecution history presented in the papers filed that tends to lead to any

interpretation of the claims different from that which results from merely reading the claims and specification of the patent, as discussed above. The claims are not interpreted as limited so as to preclude asserting infringement against systems whose clinching pins go up and down between each bending step for each lead in the same component.

7. The claims cover a system programmed so that the pin never moves sideways while it is up unless it is touching the lead.

[11] ATS argues that if horizontal movement of the clinch pin occurs only while the pin is actually in contact with a component lead, the claims are not infringed. It bases its argument on Holcomb's submission to the examiner of an argument along with a new claim 42. In the argument, Holcomb's counsel argued that the new claim distinguished over prior art because the prior art apparatus "relies on actuating the clinch head after it has positioned relative to the lead." From this, ATS argues that Holcomb was disclaiming any coverage of devices that operate by having the clinch pin come up along side the lead exactly positioned to touch it, presumably by sliding along vertically beside it, before starting sideways.

Given that Holcomb's invention was expressed as one where the leads appear to point straight down and the pin points straight up, it is not implausible that Holcomb was willing to disclaim an embodiment that would require such perfect precision to function. There is simply no evidence that such a subject ever came up in discussions with the examiner, however, and it is clear that what the examiner insisted on was a limitation that the bending part of the pin movement be in a plane. The addition of that limitation is clearly what resulted in the allowance of the claims. FN8

FN8. To the extent that ATS is arguing that the claims cannot cover devices that operate without having the clinch pin go further horizontally after it has finished bending the lead, there is nothing in Holcomb's arguments to the examiner to support that interpretation, and it would be inconsistent with being able to bend leads only partially flat.

In short, ATS's argument on this point is strained and is not persuasive that Chad's claims should be limited to prevent coverage of a system programmed so that the clinch pin never moves sideways while it is up unless it is touching the lead.

8. The issue of whether a system that is "capable of" being programmed to move the clinching mechanism in an infringing manner infringes only if it is actually so programmed is beyond the scope of the *Markman* hearing.

[12] The Court entertained argument and briefing on the issue of whether ATS can be found to infringe merely because its systems are "capable of" being programmed to infringe. However, the Court now concludes that this is an issue of infringement, not mere claim interpretation. *See*, *Pennwalt v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed.Cir.1987), cited by ATS. In the *Markman* hearing, however, the Court's task was to interpret the claims without reference to the accused device. *See*, *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1123 (Fed.Cir.1985) (*en banc*).

Concedely, the construction of the claims may ultimately make it determinable as a matter of law whether ATS is infringing Chad's claims. Nonetheless, the infringement decision will hinge on particular facts that are not necessarily of record yet. For example, it may well be that ATS would be entitled to judgment of non-infringement as a matter of law, if all that ATS sold was apparatus containing a computer and a

programming language. Conversely, it may be that Chad would be entitled to judgment of infringement as a matter of law, if ATS sold apparatus that contained all the computer program necessary to run the system except that the operator had to type in the name of the components to be clinched. Between these extremes, however, there may be legitimate jury questions. If so, the 7th Amendment still preserves the parties' right to have them decided by a jury. When the facts are focused, it may also be that a concrete issue of claim interpretation will be presented that is capable of decision. That is not presently before the Court.

9. Order

For the foregoing reasons, IT IS HEREBY ORDERED that the claims in plaintiff's patent no. 4,910,859 shall be construed in accordance with the foregoing. If infringement remains an issue for trial, the parties shall take into account the foregoing interpretation of the claims in preparing proposed jury instructions. If either party contends that it is entitled to judgment as a matter of law, the party shall confer with the opposing party and attempt to select a mutually agreeable date for hearing of a motion for same. Any such motion shall be filed not later than 30 days after the date of this order.

IT IS FURTHER ORDERED that the Clerk shall serve copies of this Memorandum Opinion and Order on Patent Claims Construction by United States mail upon counsel for all parties.

C.D.Cal.,1996.

Chad Industries, Inc. v. Automation Tooling Systems, Inc.

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