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

## SENIOR INDUSTRIES,

INC. Plaintiff/Counter-Claim Defendant.

V.

# THOMAS AND BETTS CORPORATION, Diamond Communications Products Inc. and Sachs Communications, Inc,

a/k/a/ Sachs Worldwide Company Defendants/Counter-Claim Plaintiffs.

Sept. 28, 2001.

#### MEMORANDUM OPINION AND ORDER

GUZMAN, J.

## INTRODUCTION

Senior Industries, Inc. ("Senior Industries") brought a patent infringement action against Thomas and Betts Corporation, Diamond Communications Products, Inc. and Sachs Communications, Inc. (hereinafter Defendants), alleging infringement by the Defendants of three Senior Industries patents Nos 4,993,960; 5,006,074; and 5,160,271 (hereinafter '960, '074, and '271 patents respectively) concerning grounding clamps that attach to electrical utility boxes. The parties originally submitted claim construction briefs in which 23 total claims were disputed from the three Senior Industries patents, the '960, '074 and '271 patents. After the close of discovery, Senior Industries filed a motion for partial summary judgement regarding three claims at issue from the patents-in-suit, but this motion was dismissed without prejudice. Defendants have now filed a motion for summary judgement of non-infringement regarding only one claim from Senior's '271 patent, specifically claim 26 from the '271 patent. For the reasons set forth below, Defendant's motion for summary judgement of non-infringement regarding claim 26 of the '271 patent is granted with respect to both literal infringement, and infringement under the doctrine of equivalents.

#### BACKGROUND FACTS

Senior Industries is the owner of three United States Patents Nos. '960, '074 and '271 that are collectively referred to as the patents-in-suit. All three of these patents describe electrical grounding clamps that attach to a metal electric utility box/enclosure with the capability to provide an expedient grounding means for a telephone interface box/enclosure. The asserted patents by Senior Industries and the accused infringing Defendant's products provide an economical way to ground a building's auxiliary residential electrical systems, such as telephone systems, through an existing grounding system established for the building's main electrical service. Normally the main electrical system is grounded through a dedicated grounding rod or connected to the residential water service piping, provided that it is electrically conductive. Alternatively, the telephone service could provide its own dedicated ground rod or direct connection to the water piping system. Both parties products provide a means to make a mechanical and electrical connection to a metal

utility box in order to provide an alternative grounding means or path for an auxiliary system such as a telephone interface system.

Senior Industries' three patents all describe grounding clamps that connect to an electrical meter box and have a means for securing the clamp to the box in a way that creates an intimate electrical connection between the clamp and the meter box. The '960 patent describes a fixed length clamp, the '074 patent describes an adjustable clamp to accommodate for different sized meter boxes, and the '271 patent describes a grounding clamp that has improved adjustability and additionally provides a mounting arm for actually mounting the auxiliary system, such as a telephone interface system, to the grounding clamp. The Defendants' present motion seeks summary judgement of non-infringement of the '271 patent with respect to one asserted independent claim, Claim 26.

Claim 26 of the '271 patent reads as follows:

A clamp device for mechanical and electrical connection to the sides of a conductor which is to be grounded, comprising:

- [a] a base spanning the conductor, said base having first and second overlapping elongated members, in linear alignment with each other, each member having an arm extending from one end of the base member positionable adjacent one side of the conductor;
- [b] said first and second member having at least one hole, and said second member having a plurality of overlapping holes along its elongated length, where the alignment of each of the plurality of holes with the one hole of the said first member determines a different discrete distance of said arms from each other;
- [c] securing means receivable through the hole of said first member and any of the plurality of holes of said second member for interconnecting said first and second members; and
- [d] ground means mounted on one of the end portions and movable into engagement with its adjacent side of the conductor for abrading the adjacent side surface to form an intimate electrical ground connection therewith.

## **DISCUSSION**

# I. Summary Judgement Standard

The plaintiff bears the burden of proving infringement by a preponderance of the evidence in a patent infringement action. *Kegel Co., Inc. v. AMF Bowling, Inc.,* 217 F.3d 1420, (Fed.Cir.1997). The court in this situation considers the record as a whole and draws all reasonable inferences in the light most favorable to the non-moving party. Fisher v. Transco Services-Milwaukee, Inc., 979 F.2d 1239 (7th Cir.1992). Therefore, in order to defeat a motion for summary judgement of non-infringement, the plaintiff must show that the evidence is such that a reasonable jury could reasonably find for a verdict of infringement. Anderson v. Liberty Lobby, Inc., 477 U.S. 242 (1986).

# **II. Patent Infringement**

Defendant argues that their 40-2000X grounding clamp products do not infringe the asserted Claim 26 from Senior Industries' '271 patent, either literally or under the doctrine of equivalents. A two-step process is

utilized when analyzing a patent infringement case. First, the court construes the asserted claims as a matter of law to ascertain their meaning and scope. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1581-82 (Fed.Cir.1996). Second, the claims as construed are compared to the allegedly infringing device. *Id.* In order for a device to infringe a claim, each claim limitation or element must be present in the accused device either literally or equivalently. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 117 S.Ct. 1040 (1997).

When the meaning or scope of a patent claim is in dispute, as is in the case at hand, the court construes, as a matter of law, only those terms that are in controversy, and only to the extent necessary to resolve the controversy. Vivid Technologies, Inc. v. American Science & Engineering, Inc., 200 F.3d 795 (Fed.Cir.1999). It is well settled that when interpreting an asserted claim, the court should look first to the intrinsic evidence of record consisting of the patent itself, including the claims and specifications, and also the prosecution history of the patent. Vitronics, 90 F.3d 1576 (Fed.Cir.1996). First, the court looks to the words of the claims themselves to define the scope of the patented invention. Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995). Next, the court looks to the specification of the patent to determine whether the inventor has used any terms in a manner that is inconsistent with their ordinary meaning. Id. As a result, the specification is always highly relevant to the claim construction analysis because it acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication. Id. Third, the court may consider the prosecution history of the patent, if in evidence, because it contains a record of all the proceedings before the United States Patent and Trademark Office, including any express representations made by the applicant regarding the scope of the claims, which in turn limits the interpretation of the claim terms so as to exclude any interpretation that was disclaimed during the prosecution of the patent. Southwall Tech. Inc. v. Cardinal IG Co., 54 F.3d 1570 (Fed.Cir.1995). The prosecution history is used to understand the language in the claim, but is not used to enlarge, diminish, or vary the terms in the claim. Markman, 52 F.3d at 980 (Fed.Cir.1995). The court must also keep aware of the fact that reliance on any extrinsic evidence is improper unless the public record is ambiguous in describing the scope of the patented invention. Markman, 52 F.3d at 978-79. As such, extrinsic evidence is not needed in the present case to aid in the determination of the claim construction or for deciding the issue of infringement.

## **III. Parties Contentions**

In seeking summary judgement, Defendant contends that Senior Industries' expert Dr. Robert Turnbull did not endorse a finding of infringement under Claim 26 of the '271 patent, and therefore, Senior Industries' continued pursuit of infringement under the '271 patent is frivolous and unfounded. The Court does not agree. Expert testimony is not needed or required in order to pursue a patent infringement case. In fact, no expert is needed in order for a patent holder to file a patent infringement case. Further, courts tend to find that expert opinions can often lead to more confusion than help in construing claims, and therefore prefer when there are no experts needed for interpreting claims. Expert testimony is only used to help the court come to an understanding of the claims, and it may not be used to vary or contradict the import of other parts of the specification. Vitronics, 90 F.3d 1576, 1584 (Fed.Cir.1996). Where the patent documents are unambiguous, expert testimony regarding the meaning of a claim is entitled to no weight. Id. Opinion testimony of experts and the inventor may only be relied upon when the patent documents taken as a whole, are insufficient to enable a court to construe disputed claim terms. Id. These opinions should be treated with the utmost caution, as instances where the patent documents taken as a whole are insufficient to enable a court to construe disputed claim terms are rare. Id at 1585. As such, Senior Industries had every right to allege infringement against Defendants under its '271 patent, even though it did not have an expert opinion on how the claims of the '271 patent should be interpreted against the Defendants' products.

Next, we turn to the examination of Claim 26 from the '271 patent. Both parties interpreted element [a] in essentially the same way, except that Senior Industries contends that the base is formed by "at least" two members, while Defendants' interpreted the element to mean a base formed by "specifically" two members. The literal reading of element [a] only states a base "having first and second overlapping elongated members," which implies that there are only two members forming the base. The specification confirms this interpretation of element [a] in Claim 26, and therefore the proper construction of element [a] is a base that is formed by specifically two members, that are aligned in a linear arrangement. Interpretation of element [a] is not where the bulk of the disagreement lies between the parties though.

Defendant contents that their 40-2000X grounding clamps do not infringe Claim 26 of the '271 patent in light of its construction of the "said first and second members" found within element [b]. Defendant argues that the limitations found in element [b] of the "said second member having a plurality of overlapping holes along its elongated length" is not present in the accused product line. Defendant contends that the proper interpretation of element [b] calls for contiguous overlapping holes along the second base member. Senior Industries argues that upon further inspection of the specification of the '271 patent, an alternative is listed to the plurality of overlapping holes such that "each of [the overlapping] holes could be separated by a fixed distance." Senior Industries contends that this alternative embodiment sentence in the specification describes pairs of overlapping holes separated by a fixed distance.

The Court does not agree with Senior Industries' proffered interpretation of element [b] of Claim 26 from the '271 patent because it is not supported by the intrinsic evidence. A literal reading of the claim supports Defendants' position that the second base member must contain a plurality of contiguous overlapping holes along its elongated length. Furthermore, it would be understood by one skilled in the art reading the patent specification that the invention was directed to an adjustable clamp having at least two, and preferably a plurality of contiguous overlapping holes, each of which holes could be used to provide for fine adjustment of the clamp. Senior Industries' interpretation that the specification lists an alternate embodiment to the claim language which calls for "pairs" of overlapping holes separated by a fixed distance is not correct. A literal reading of the specification specifically states that "each" of the individual overlapping holes could be separated by a fixed distance. The word "each" in the specification provides dispositive proof that the claim is not covering "pairs" of overlapping holes separated by a fixed distance. Therefore, the correct construction of element [b] of Claim 26 is a second member that has a contiguous series of overlapping holes or alternatively a contiguous series of individual holes that may be separated by a fixed distance in order to provide for fine adjustments of the grounding clamp.

The other main dispute between the parties' interpretation of Claim 26 arises under element [c], and more specifically towards the "securing means" language. Element [c] is written in a means-plus-function format with the "securing means" language of the claim referring to the function of connecting the two elongated members of the clamp together. The allowable structure for this claim is found by reading the patent specification. The scope of a means plus function claim is limited to the function recited in the claim and the structure, material, or acts described in the specification that correspond to the means for performing that function. Kemco Sales Inc. v. Control Papers Co., 208 F.3d 1352, 1361 (Fed.Cir.2000).

With regard to element [c] of Claim 26 of the '271 patent, the specification describes a threaded bolt, which passes through both the first and second members of the base through threaded holes located on the different members, which acts to secure the clamp. Alternatively, the specification describes a flanged bolt fastener and nut arrangement for securing the two members of the base together, thereby eliminating the need for

threaded holes in the different base members. Another alternative that the specification describes is clips as a means for securing the two members of the clamp together. Although the specification does not describe how to use the clips, one skilled in the art would be able to enable a securing means for the two elongated members by using a clip. A last alternative described in the specification calls for the use of a fixed finger in order to secure the two members together. The specification describes the use of a fixed finger to aid in the function of securing the members, and also alternatively describes securing the two members together using at least two "securing means", which, from implication, refer to a threaded bolt, a flanged bolt and nut, a clip, or a fixed finger. Therefore the proper construction of a "securing means" shall be interpreted to include reasonable connectors (such as bolts, clips and equivalents) to secure the elongated members together at varying positions depending on the width of the conductor.

Element [d] addresses the "ground means" for the clamp, and both parties have essentially offered the same interpretation as to what the element means, except that Defendant contends that the tip of the threaded bolt used to create the ground connection is limited to a cone-shaped point. The described function is to abrade the side surface of an electric meter box adjacent to one of the arms in order to form an intimate electrical connection between the clamp and the meter box. The patent specification makes reference to what is disclosed in the '074 patent, and therefore, we shall construe this element consistent with our construction of the ground means in the '074 patent. The proper construction of the "ground means" will be construed as a threaded bolt positioned in the threaded opening of an arm extending from one of the two elongated members of the base, with the bolt having two distinct structures; 1) an abrasive end surface that has been formed with sufficient roughness to grind through the outer surface of the utility box; and 2) a cone-shaped point for penetrating the outside of the utility box without penetrating the inside of the utility box, both of which are used to create an intimate electrical connection between the grounding means/clamp and the utility box.

## A. Literal Infringement

We now move to the issue of infringement based upon, and utilizing the above construction of the elements in Claim 26 of Senior Industries' '271 patent. Infringement, either literal or under the doctrine of equivalents, is a question of fact. Bai v. L & L Wings, Inc., 160 F.3d 1350 (Fed.Cir.1998). A product literally infringes a patent claim only if every limitation and element of the claim is present in the device exactly. Lantech, Inc. v. Keip Mach. Co., 32 F.3d 542 (Fed.Cir.1994). Therefore, any deviation from the claim in question precludes a finding of literal infringement. *Id*.

The Defendants' 40-2000X products do not literally infringe Claim 26 of the '271 patent because the Defendants' products do not contain every limitation found within Claim 26. The most obvious of the elements listed in the claim and not present in the Defendant's product is element [b]. As stated above, the correct interpretation of element [b] of Claim 26 is in part "a second member that has a contiguous series of overlapping holes or alternatively a contiguous series of individual holes that may be separated by a fixed distance in order to provide for fine adjustments of the grounding clamp". Clearly there is no contiguous series of overlapping holes found in the second member of the Defendants' product because the holes on Defendants' product are not adjacent or touching. Even though the holes on the second member of the Defendants' product are separated by a fixed distance, they are not positioned so as to provide for fine adjustment of the clamp. The holes on the Defendants' second member more closely resemble and provide for coarse adjustments of the clamp, as was disclosed in Senior Industries' '074 patent and re-emphasized in its invention disclosure statement filed with the U.S. Patent and Trademark Office upon application for its '271 patent. Lastly, the securing means can not be found to be a literal infringement as the Defendants'

products contain rivets as a means for securing the two elongated members together, and does not contain a threaded bolt, a flanged bolt and nut, clips, or even fingers as means for securing the two elongated members together to form the base. As such, element [c] is not literally present in the Defendants' product. Therefore, because every element and limitation found within the claim is not present in the Defendants' product exactly, Defendants are entitled to summary judgement of non-infringement on literal infringement with respect to Claim 26 of the '271 patent.

## **B.** Infringement Under the Doctrine of Equivalents

The purpose of the doctrine of equivalents is to prevent competitors from duplicating the essence of an invention while narrowly avoiding the literal language of the patented claims. Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855 (Fed.Cir.1988). The doctrine of equivalents is intended to prevent a competitor from making merely insubstantial changes, but is not intended to punish legitimate designing around the patent claims. London v. Carson Pirie Scott & Co., 946 F.2d 1534 (Fed.Cir.1991). When a court is determining whether a product infringes a patent under the doctrine of equivalents, it must apply the doctrine of equivalents to each individual element of the claim in order to make its determination on an element-by-element analysis, and not to the invention as a whole. Warner-Jenkinson, 117 S.Ct. 1040 (1997). Furthermore, the court must not allow the application of the doctrine of equivalents to create a broad range of equivalents such that it would effectively eliminate an element in its entirety. *Id*. Only when the evidence is such that no reasonable jury could determine two elements to be equivalent, are district courts obliged to grant summary judgement. *Id*.

To aid in the determination of whether there is infringement under the doctrine of equivalents, the court may utilize the function-way-result test. *Graver Tank & Mfg. Co. v. Linde Air Prods.* Co., 132 F.Supp.2d 643 (1950). In order to prove infringement under the doctrine of equivalents function-way-result test, the patentee must show that the device in question performs substantially the same function, in substantially the same way, to produce substantially the same result as the claimed invention. *Id*. In addition, the functional equivalent of every limitation of the claimed invention must be found in the device in question or there is no infringement. Thomas & Betts Corp. v. Panduit Corp., 65 F.3d 654 (7th Cir.1995).

Senior Industries' claim of infringement under the doctrine of equivalence fails to satisfy the second element of the function-way-result test, requiring the accused product to act in substantially the same way as the claim elements. The function and result of the grounding clamps are substantially equivalent for the claim language and the product in that both the claim language and the product function so as to clamp onto a utility box in order to provide a resulting grounding path for an auxiliary system. The way in which the clamp and the claim achieve their substantially equivalent result differs though. The way in which the Defendants 40-2000X product secures itself together is through two elongated members, with the first member containing two rivets, and the second member containing "keyhole" shaped openings spaced apart at fixed distances, which act as to allow the rivets to be placed through the larger opening in the keyhole shape, and then slid into place, locking the rivet shaft into the smaller opening in the keyhole shape. Senior Industries contends that the keyhole shaped openings are actually made by overlapping holes, and therefore are equivalent to the plurality of overlapping holes found in Claim 26 of the '271 patent. The Court disagrees and again refers to the above construction of the claim elements. The plurality of holes referred to in element [c] of Claim 26 was construed to mean "a contiguous series of overlapping holes or alternatively a contiguous series of individual holes that may be separated by a fixed distance." Defendants' products do not contain a contiguous series of overlapping holes, but rather have a plurality of keyhole shaped openings separated from each other by a fixed distance. Even if the keyhole shaped opening are considered to be

made from a pair of overlapping holes, as Senior Industries suggests, the Defendants' 40-2000X product line still does not infringe because the claim does not provide for an equivalent structure of a second elongated member containing "pairs" of overlapping holes separated by a fixed distance. The construction of the claim as stated above verifies that there is no infringement under the doctrine of equivalents because element [b] was not found to include pairs of overlapping holes separated by a fixed distance.

Alternatively, if each keyhole shaped opening is considered to be one hole, then the product contains a plurality of holes that are separated by a fixed distance apart, as called for in the claim. The problem here is that the Defendants' product does not contain a "contiguous series of holes", or an equivalent thereof. The ordinary meaning and definition of contiguous is touching, or adjacent. The specification does not attempt to redefine the use of the word contiguous, and in fact supports that the word contiguous should be given its ordinary and usual meaning. Therefore, by applying the ordinary meaning of the word contiguous when reading the claim and analyzing the Defendant's product for infringement under the doctrine of equivalents, it is clear that Defendant's product does not contain a contiguous series of holes, or any equivalent configuration.

Furthermore, the "securing means" as called for in element [c] is not equivalent between the claim and the accused product. The Defendants' 40-2000X products contain rivets and use a sliding motion to complete the "way" in which the two elongated members secure together to form the clamp. Clearly, the rivets and sliding motion are not equivalent to the "way" in which the claim states. Specifically, the claim calls for a bolt being passed through both members, or a nut used in connection with a flanged bolt fastener, or the use of clips to secure the members together, or even the use of fixed fingers to get a secured base consisting of the two members. It is readily apparent that the use of rivets in connection with the sliding motion needed to lock the rivets in place, is not an equivalent "way" of securing the two elongated members of the clamp together as described in Claim 26 and in the specification of the '271 patent. The Defendants' products do not satisfy the function-way-result test with respect to every element and limitation, and therefore, because every equivalent element and limitation is not present in the Defendants' product, Defendants' are entitled to summary judgement of non-infringement with respect to claim 26 of the '271 patent.

## **CONCLUSION**

For the foregoing reasons, the Court grants Defendants' motion for summary judgement of non-infringement of Senior Industries' '271 patent on both literal infringement and under the doctrine of equivalents (# 70-1).

N.D.III.,2001.

Senior Industries, Inc. v. Thomas and Betts Corp.

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