

United States Court of Appeals for the Federal Circuit

2006-1465

L.B. PLASTICS, INC.,

Plaintiff-Appellant,

v.

AMERIMAX HOME PRODUCTS, INC. (doing business as Gutter World)
and AMERIMAX DIVERSIFIED PRODUCTS, INC.,

Defendants-Appellees.

J. Michael Jakes, Finnegan, Henderson, Farabow Garrett & Dunner, of Washington, DC, argued for plaintiff-appellant. On the brief with him were W. Thad Adams, III and Stephen S. Ashley, Jr., Adams Evans, P.A., of Charlotte, North Carolina.

David A Rabin, Morris, Manning & Martin, LLP, of Atlanta, Georgia, argued for defendants-appellees.

Appealed from: United States District Court for the Western District of North Carolina

Judge Robert James Conrad, Jr.

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DECIDED: September 12, 2007

Before NEWMAN, RADER, and DYK, Circuit Judges.

DYK, Circuit Judge.

Appellant L.B. Plastics, Inc. (“L.B. Plastics”) appeals from the final judgment of the United States District Court for the Western District of North Carolina granting summary judgment of noninfringement in favor of Amerimax Home Products, Inc. and Amerimax Diversified Products, Inc. (collectively “Amerimax”). We hold that the asserted claims of U.S. Patent No. 6,463,700 (filed Jan. 16, 2001) (“700 patent”) were not literally infringed, and that L.B. Plastics cannot invoke the doctrine of equivalents in the circumstances of this case. We therefore affirm.

BACKGROUND

L.B. Plastics and Amerimax both sell gutter guards, which are devices that can

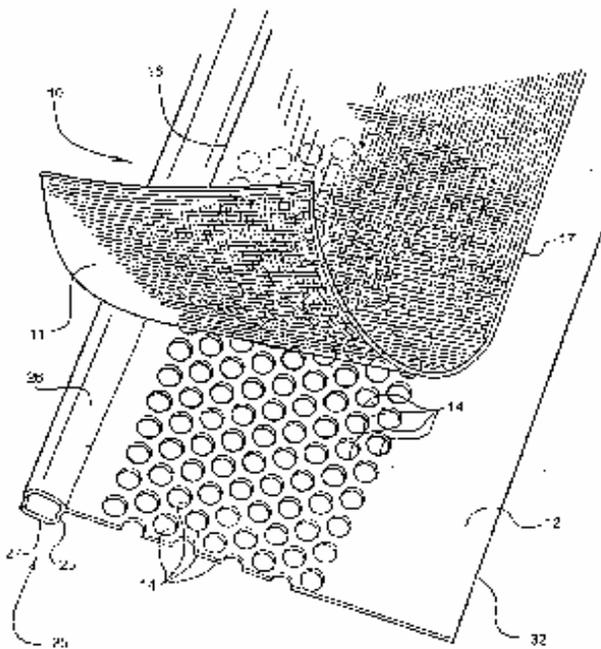


Fig. 1

be attached to a conventional gutter in order to allow the free flow of water into the gutter while filtering out dirt, leaves, and other debris. The claimed invention relates to a composite gutter guard that snaps onto existing gutters.

L.B. Plastics filed the application that resulted in the '700 patent on January 16, 2001. The application described a gutter guard that includes a guard panel to which is attached a "mesh layer." U.S. Patent Application No. 09/760,557 ("557 application"). The original claims of the '557 application required the guard panel and mesh layer to be attached by "a heat weld connecting said mesh layer to said guard panel." *Id.*

On December 5, 2001, the U.S. Patent and Trademark Office ("PTO") rejected the claims submitted by L.B. Plastics "as being unpatentable over U.S. Patent No. 5,555,680 to Sweers in view of U.S. patent No. 5,406,754 [{"754 patent"}] to Cosby." In rejecting the application, the examiner explained:

Sweers does not disclose welding a continuous weld along the entire edge of the mesh layer. However, Cosby discloses using spot weld every 12 inches along the mesh layer It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Sweers by adding welds disclosed by Cosby and to make the welds continuous without breaks in order to create a better bond between layers and to prevent debris from entering between layers.

J.A. at 121 (emphasis added). In its response, L.B. Plastics argued that a continuous weld line would distinguish the spot welding disclosed in the Cosby prior art because it

would stop debris from flowing beneath the mesh layer and into the gutter. J.A. at 131. The examiner then allowed the claims to issue after L.B. Plastics amended the claims to require “a continuous heat weld defining an uninterrupted longitudinal weld.”

The '700 patent issued on October 15, 2002. The '700 patent contains fourteen claims, of which three are independent. Claim 1 is representative and claims:

A composite gutter guard adapted for being positioned at an opening of a longitudinally extending, generally U-shaped gutter used for collecting and distributing rainwater runoff from the roofs of residential homes and other buildings, said gutter guard comprising:

- (a) an elongate polymer guard panel defining a plurality of spaced filter openings, said guard panel being adapted to extend laterally across the opening of the gutter and longitudinally along the length of the gutter;
- (b) a polymer-coated mesh layer overlying said guard panel in an area of said filter openings and cooperating with said guard panel to capture and separate debris from rainwater runoff entering the gutter, said mesh layer having first and second opposing side edges and first and second opposing end edges; and
- (c) a continuous heat weld defining an uninterrupted longitudinal weld line connecting said mesh layer to said guard panel, and extending from one end edge of said mesh later [sic] to the opposing end edge of said mesh layer.

'700 patent (emphasis added to show amendment during prosecution). Each of the other independent claims, claims 9 and 14, similarly requires that the guard panel be welded to the mesh layer and that the resulting “weld line” be “continuous.”¹

Two prior art patents, U.S. Patent No. 5,555,680 to Sweers and U.S. patent No.

¹ Thus claim 9 requires “a longitudinal weld line connecting said mesh layer to said guard panel, and extending continuously from one end edge of said mesh layer to the other;” and claim 14, a method claim, requires “welding the mesh layer to the guard panel along a continuous and uninterrupted longitudinal weld line extending from one end edge of the mesh layer to the opposing end edge of the mesh layer.” '700 patent col.5 ll.3-6, col.6 ll.18-21.

5,406,754 (“754 patent”) to Cosby are relevant and were cited during prosecution of the ’700 patent. J.A. at 120. Both Sweers and Cosby disclose gutter guards. Sweers discloses a one-piece gutter guard, while Cosby has a separate screen which the claims require to be “directly connected” to the guard panel. ’754 patent col.6 l.17. Cosby’s specification discloses several means of “directly connect[ing]” the screen to the guard panel. It first states that “[t]he fine mesh screen [] can be attached by adhesive, mechanical fastener, or heat welded to the wire mesh.” Id. col 4 l.65–col.5 l.1. An example then illustrates the method of “bond[ing] . . . approximately every 12 inches.” Id. col.5 ll.40-44. Then the specification again states that “[a]n adhesive can be applied . . . or some other means of attachment can be made.” Id. col.6 ll.1-4.

The specification of the ’700 patent criticizes prior art attachment means, stating: “[t]he attachment means used in other prior art gutter guards incorporating multiple layers is generally less effective, and more costly, time consuming, and labor intensive.” ’700 patent col.1 ll.27-29.

On February 24, 2004, L.B. Plastics filed this action against Amerimax, alleging that Amerimax’s competing gutter guard infringed the ’700 patent. Amerimax’s gutter guard is comprised of a mesh screen attached to a guard panel by means of an adhesive, hot glue, which is later cooled. This glue does not soften or melt the mesh or the guard panel. L.B. Plastics argued that Amerimax’s gutter guard literally infringed the ’700 patent because the “continuous heat weld” limitation of that patent was broad enough to encompass the hot glue adhesive used by Amerimax. In the alternative, L.B. Plastics contended that its patented weld and Amerimax’s hot glue adhesive were

equivalent. Both parties moved for summary judgment on infringement. The court granted Amerimax's motion and denied L.B. Plastics's motion.

The district court first held that no reasonable jury could conclude that Amerimax's gutter guard literally infringes L.B. Plastics's patent because Amerimax's process does not involve "heat weld" or "welding." In construing those terms, the district court first recognized that, while the claims do not define the terms, a standard dictionary defining "weld" as "to unite [plastics] by heating and allowing the [plastics] to flow together" was consistent with the statement in the specification that the mesh "fuse[]" to the polymer guard panel. L.B. Plastics, Inc. v. Amerimax Home Prods., Inc., 431 F. Supp. 2d 578, 581 (W.D.N.C. 2006) (quoting Merriam-Webster Online Dictionary, <http://www.m-w.com/dictionary/weld>; '700 patent col.3 l.44). The district court noted that the reference to "fus[ing]" in the specification confirmed its analysis because we have previously construed the term "fusion-bonding" to exclude a heat-activated adhesive that did not melt the components it was fusing together. L.B. Plastics, 431 F.Supp.2d at 582 (citing Trilogy Commc'ns, Inc. v. Times Fiber Commc'ns, Inc., 109 F.3d 739, 744 (Fed. Cir. 1997)). The district court found that it was undisputed that the adhesive Amerimax's gutter guard does not melt the components that it attaches, and concluded that summary judgment for Amerimax was therefore appropriate on the issue of literal infringement.

Turning to the doctrine of equivalents, the district court held that summary judgment in favor of Amerimax was appropriate for two reasons. First, the district court credited expert testimony that, while the methods of welding and gluing with adhesives accomplish the same function of joining two objects to each other, they were not

equivalents because they accomplish a different result in a different way since welding involves allowing the molecules of the two objects to interface, thereby connecting them, whereas joining with adhesives involves the introduction of a third substance. See Warner-Jenkinson Co. v. Hilton-Davis Chem. Co., 520 U.S. 17, 35 (1997) (quoting Machine Co. v. Murphy, 97 U.S. 120, 125 (1878) (function-way-result test for doctrine of equivalents)). Next, the district court held that prosecution history estoppel barred L.B. Plastics from invoking the doctrine of equivalents because, “[d]espite its knowledge of other means of attachment, specifically including adhesives, L.B. Plastics only filed claims relating to “hot weld” or “welding” the layers of its gutter guard.” L.B. Plastics, Inc., 431 F. Supp. 2d at 583.

L.B. Plastics timely appealed the district court’s judgment to this court. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1). We review a district court’s grant of summary judgment of noninfringement without deference. Flex-Rest, LLC v. Steelcase, Inc., 455 F.3d 1351, 1357 (Fed. Cir. 2006). Claim construction is an issue of law that we review without deference. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc). Infringement, whether literal or under the doctrine of equivalents, is a question of fact. Ferguson Beauregard/Logic Controls, Div. of Dover Res., Inc. v. Mega Sys., LLC, 350 F.3d 1327, 1338 (Fed. Cir. 2003).

DISCUSSION

I Literal Infringement

L.B. Plastics first argues that the district court erred in construing the term “weld” to require melting of the screen and guard panel, and that consequently the district court’s grant of summary judgment of noninfringement was improper.

In construing claims we search for the ordinary and customary meaning of a claim term to a person of ordinary skill in the art. We determine this meaning by looking first at intrinsic evidence such as surrounding claim language, the specification, the prosecution history, and also at extrinsic evidence, which may include expert testimony and dictionaries. Phillips v. AWH Corp., 415 F.3d 1303, 1314-19 (Fed. Cir. 2005) (en banc). The specification of the '700 patent describes “a composite gutter guard according to the present invention” and discloses that “[t]he mesh layer . . . is attached to the guard panel [] by continuous ultrasonic or heat welding.” The attachment involves the use of a mesh preferably constructed of a material “which readily fuses to the polymer guard panel [] during welding.” '700 patent col.3 ll.31-32, 39-44 (emphasis added).

Since the intrinsic record provides no further guidance to the meaning of the terms “weld,” “fuse” or “ultrasonic or heat welding,” the district court properly turned to extrinsic evidence in this case and consulted dictionaries. See Phillips, 415 F.3d at 1317-18. Here general and technical dictionaries clearly confirm the district court’s construction of the disputed term “weld” to require melting of the parts that are being joined. See Webster’s Third New International Dictionary 2594 (2002) (defining “weld” as “to unite or consolidate . . . by heating to a plastic or fluid state the surfaces of the parts to be joined and then allowing the metals to flow together”); McGraw-Hill Dictionary of Scientific and Technical Terms 2288 (6th ed. 2003) (defining “welding” as “[j]oining two metals by applying heat to melt and fuse them”); see also D.C. Miles & J.H. Briston, Polymer Technology 651 (Chem. Pub’g Co., 1979) (describing ultrasonic welding as a process where “the mechanical energy of motion is transformed into heat

which melts the mating surfaces of the plastics”). The definition of “fuse”—terminology used in the specification to describe the “welding” process—is also consistent with the district court’s construction of the term “weld.” See Webster’s at 925 (defining “fuse” as “reduce to a liquid or plastic state by heat: dissolve, melt . . . liquefy”).²

Consequently, we conclude that the district court correctly construed the term “welding.” The district court granted summary judgment of no literal infringement after it found that “[t]here is no dispute that the mesh layer in Amerimax’s gutter guard is not attached to the guard panel by ‘welding’ as construed above.” L.B. Plastics, 431 F. Supp. 2d at 582. Having found that no dispute of material fact existed under the correct claim construction, the district court properly granted summary judgment on the issue of literal infringement.

II Infringement under the Doctrine of Equivalents

However, L.B. Plastics maintains that Amerimax infringes under the doctrine of equivalents. “The doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes.” Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 733 (2002). Amerimax argues that L.B. Plastics cannot invoke the doctrine of equivalents in this situation because the specification of the ’700 patent makes clear that prior art attachment means, which included adhesives,

² L.B. Plastics argues that “welding” includes attachment by adhesives, citing testimony of the inventor of the ’700 patent that “one of ordinary skill in the relevant art . . . considers [heat welding and hot melt gluing] to be essentially the same.” Pet’r Br. at 30-31. This testimony is irrelevant as there is no suggestion that Davis testified that the term “welding” has a special meaning within the art that is different from its ordinary meaning.

are not within the scope of the '700 patent.

We have held that when a specification excludes certain prior art alternatives from the literal scope of the claims and criticizes those prior art alternatives, the patentee cannot then use the doctrine of equivalents to capture those alternatives. In Dawn Equipment Co. v. Kentucky Farms Inc., 140 F.3d 1009 (Fed. Cir. 1998), we described as “damning evidence” the fact that the specification of the patent-in-suit noted the disadvantages of prior art “multi-hole pinned height adjustment mechanisms” in devices for adjusting the height of farm implements and described the mechanism provided by the patented invention as solving such problems. Id. at 1016. We concluded that the patentee could not resort to the doctrine of equivalents to establish infringement, when the accused device used the same mechanism as the criticized prior art devices. Id. at 1016-17. In SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337 (Fed. Cir. 2001), we concluded that because the common specification of the patents-in-suit “referred to prior art catheters, identified them as using [the same configuration used by the accused device], and criticized them as suffering from [several] disadvantages,” the doctrine of equivalents was unavailable to recapture the catheters. Id. at 1345. “Having specifically identified, criticized, and disclaimed the dual lumen configuration, the patentee cannot now invoke the doctrine of equivalents to embrace a structure that was specifically excluded from the claims.” Id. (internal quotation marks omitted). Similarly, in Schwing GmbH v. Putzmeister Aktiengesellschaft, 305 F.3d 1318 (Fed. Cir. 2002), we noted that the patent-in-suit criticized “the use of embedded metal rings in the prior art,” and concluded that “Schwing cannot now overlook that deliberate decision and reclaim that subject matter

through the doctrine of equivalents.” Id. at 1329; see also Astrazeneca AB v. Mutual Pharm. Co., 384 F.3d 1333, 1340, 1342 (Fed. Cir. 2004); Gaus v. Conair Corp., 363 F.3d 1284, 1291 (Fed. Cir. 2004); J & M Corp. v. Harley-Davidson, Inc., 269 F.3d 1360, 1369 (Fed. Cir. 2001).

The rule of these cases applies here as well. The specification of the '700 patent criticizes prior art attachment means, stating that “[t]he attachment means used in other prior art gutter guards . . . is generally less effective, and more costly, time consuming, and labor intensive.” '700 patent col.1 ll.27-30. The specification emphasizes that the “novel construction” of the invention, by contrast, “facilitates an effective and secure attachment.” Id.; ll.24-26.³ There is no question but that the prior art attachment means included adhesives; thus the specification must be read to criticize the use of adhesives as attachment means. See '754 patent col.4 ll.67-68; id. col.6 ll.1-4. However, L.B. Plastics argues that the prior art referenced in the specification did not specifically disclose a continuous attachment using adhesives. But since the patentee elected to distinguish prior art attachment means and to limit its claim to continuous welded

³ The specification states:

Unlike some prior art gutter guards which have a relatively fine-mesh metal layer overlying a perforated polymer guard panel, the gutter guard of the present invention includes a coated mesh layer and perforated guard panel formed of like polymer materials, such as PVC. This novel construction facilitates an effective and secure attachment of the composite by ultrasonic or heat welding along the entire length of the gutter guard. The attachment means used in other prior art gutter guards incorporating multiple layers is generally less effective, and more costly, time consuming, and labor intensive.

'700 patent col.2 ll.20-30.

attachments, a person of ordinary skill in the field of the invention reading the specification would clearly conclude that the inventor thought that adhesive attachments generally were undesirable. Under these circumstances L.B. Plastics cannot now use the doctrine of equivalents to include adhesive attachments.

We therefore affirm the district court's holding that L.B. Plastics cannot resort to the doctrine of equivalents here.

CONCLUSION

For the foregoing reasons, the decision below is affirmed.

AFFIRMED

COSTS

No costs.