

United States Court of Appeals for the Federal Circuit

02-1151

MIDDLETON, INC.,

Plaintiff-Appellant,

v.

MINNESOTA MINING AND MANUFACTURING COMPANY
(now known as 3M Company),

Defendant-Appellee.

George C. Summerfield, Jr., Stadheim & Gear, of Chicago, Illinois, for plaintiff-appellant. Of counsel was Gregory M. Jordan.

William A. Streff, Jr., Kirkland & Ellis, of Chicago, Illinois, for defendant-appellee. Of counsel were David K. Callahan, Mary E. Zaug, and Christopher R. Liro.

Appealed from: United States District Court for the Northern District of Illinois

Senior Judge John F. Grady

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DECIDED: November 27, 2002

Before CLEVINGER, RADER, and LINN, Circuit Judges.

RADER, Circuit Judge.

On summary judgment, the United States District Court for the Northern District of Illinois ruled that Minnesota Mining and Manufacturing Co. (3M) did not infringe Middleton, Inc.'s U.S. Patent No. 4,944,514 ('514 patent), either literally or under the doctrine of equivalents. Because the district court failed to correctly construe the claims and determine whether prosecution history barred Middleton from relying on the doctrine of equivalents, this court reverses and remands.

I.

Middleton owns the '514 patent entitled "Floor Finishing Material and Method." The patent claims an improved material for finishing the top surface of a floor. The improved floor finishing material, according to the patent, provides quick and easy application of "a replaceable finish of uniform

thickness” to athletic, commercial, and residential floor surfaces. ’514 patent, abstract and col. 1, ll. 67-68. Claim 4 recites:

4. On a floor having a flat top surface and an improved material for finishing the top surface of the floor, the improvement comprising:

at least one elongated sheet including a uniform flexible film of clear plastic material having a thickness between about one mil and about twenty-five mils and

a continuous layer of adhesive material disposed between the top surface of the floor and the flexible film, the adhesive layer releasably adhering the flexible film onto the top surface of the floor.

Id., col. 6, l. 66 to col. 7, l. 11 (emphases added).

The ’514 patent is a continuation-in-part of two parent applications, U.S. Patent No. 4,795,152 (’152 patent) and U.S. Patent No. 4,867,816, that both derive from a common abandoned parent, Application No. 06/871,318. During prosecution of the application that led to the ’152 patent, the examiner finally rejected the claims in light of U.S. Patent No. 4,221,620 to Milne. To avoid this prior art, the applicant amended claim 1 from “a dry flexible film” to “a uniform flexible film.” With that amendment, the examiner allowed the claims.

3M makes and sells a floor graphics product called Floorminders. Floorminders applies images, such as advertising or decoration, to a smooth floor. It consists of a graphic image embedded between a base layer of film and an “overlamine” layer of film. The base and overlamine layers are flexible plastic materials backed with an adhesive layer. 3M buys the overlamine film from two suppliers, Bando Chemical Industries, Ltd. and Achilles USA. Both the Bando and Achilles overlamine films have textured surfaces produced during manufacturing by a textured embossing roll.

In 1996, Middleton sued 3M alleging infringement of the ’514 patent. Middleton alleged that the Floorminders product infringed claim 4, among others, of the ’514 patent. On February 9, 1998, the district court construed the “material for finishing,” “elongated sheet,” and “uniform flexible film” limitations of claim 4. The district court limited uniform flexible film to a flexible film having “a uniform thickness, and exclud[ing] material in which there are any variations in thickness.” Because the district court found that 3M’s Floorminders product did not satisfy the “material for finishing” limitation, it granted 3M’s motion for summary judgment of non-infringement without reaching the “uniform” limitation. Middleton, Inc. v. Minnesota Mining & Mfg. Co., 1998 U.S. Dist. LEXIS 19428, No. 96-C6781, at 13 (N.D. Ill. Nov. 24, 1998). Middleton appealed.

On appeal, this court determined that the district court erred in its claim construction of the phrase “material for finishing” and reversed the summary judgment of non-infringement. Noting that the trial court’s infringement analysis did not turn on the “uniform flexible film” limitation, this court stated:

We understand the district court’s interpretation [of the term “uniform flexible film”] to mean that the film must have the same thickness throughout, except that normal manufacturing tolerances are allowed. Thus, while the film cannot have a thickness of 1 mil at one location and 25 mils at another, it

may have variations in thickness due solely to the practical realities of the film manufacturing process. We note that at oral argument, the parties did not appear to dispute this reading of the district court's claim construction.

Middleton, Inc. v. Minnesota Mining & Mfg. Co., No. 99-1202, at 11-12 (Fed. Cir. Nov. 16, 1999).

On remand, the district court recognized that this court "did not adjudicate the meaning of 'uniform flexible film'" during the prior appeal. Nevertheless the trial court adopted as its claim construction this court's statements regarding the "uniform" limitation. The district court then granted summary judgment in 3M's favor, because the textured overlamine film of 3M's Floorminders product did not meet the "uniform" limitation. Specifically, the district court found that the textured Bando and Achilles films did not have the same thickness throughout because the films were "intentionally manufactured in a manner that results in an uneven thickness throughout the film." The district court, relying on this court's decision in Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558 (Fed. Cir. 2000), further barred Middleton from relying on the doctrine of equivalents to show infringement. Middleton appeals.

II.

This court reviews without deference a district court's grant of summary judgment. Cortland Line Co. v. Orvis Co., 203 F.3d 1351, 1355 (Fed. Cir. 2000). Whether the accused device contains each claim limitation, as properly construed, or its equivalent, is a question of fact. Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575, 34 USPQ2d 1673, 1676 (Fed. Cir. 1995). In reviewing the district court's summary judgment in favor of 3M, this court draws all reasonable inferences from the evidence in favor of the non-movant, Middleton. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986).

A patent infringement analysis involves two steps: claim construction and application of the construed claim to the accused process or product. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 976, 34 USPQ2d 1321, 1326 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). This court reviews the first step, claim construction, without deference. See Cybor Corp. v. FAS Techs., Inc.,

138 F.3d 1448, 1454, 46 USPQ2d 1169, 1172 (Fed. Cir. 1998) (en banc). The second step, application of the claim to the accused product to determine infringement, is a question of fact. See Mannesmann Demag Corp. v. Engineered Metal Prods. Co., 793 F.2d 1279, 1282, 230 USPQ 45, 46 (Fed. Cir. 1986). When a district court grants summary judgment of non-infringement, this court reviews the district court's determination without deference. See Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1309, 51 USPQ2d 1161, 1169 (Fed. Cir. 1999); Vitronics Corp. v. Conceptoronic, Inc., 90 F.3d 1576, 1582, 39 USPQ2d 1573, 1576-77 (Fed. Cir. 1996).

A.

This appeal presents the question of the proper meaning of “uniform flexible film.” As the district court correctly determined, this court did not need to and did not actually construe that limitation when reversing the grant of summary judgment in the previous appeal. Rather, this court stated its understanding of the district court’s own prior construction. On remand, the district court erred by treating this court’s statement as a definitive claim construction. The trial court thus construed “uniform” to mean the “same thickness throughout, except that normal manufacturing tolerances are allowed.”

The term “uniform flexible film” does not appear to convey any special technical meanings. Texas Digital Sys., Inc. v. Telegenix Inc., 308 F.3d 1193, __ (Fed. Cir. 2002) (stating that there is a “heavy presumption” that claim terms mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art (internal citations omitted)). The accustomed meaning of “uniform” is having always the same form. Webster’s Ninth New Collegiate Dictionary 1290 (1985). The specification defines “flexible” as “bendability of the sheet but [] not . . . stretchability.” ‘514 patent, col. 2, l. 67 to col. 3, l. 1. Furthermore, “film” clearly refers to the clear plastic material referenced often in the patent disclosure.

As usual, the most important indicator of the meaning of “uniform” is its usage and context within the claim itself. Thermalloy, Inc. v. Aavid Eng’g, Inc., 121 F.3d 691, 693 (Fed. Cir. 1997) (stating that “throughout the interpretation process, the focus remains on the meaning of the claim language.”). The claim recites a “uniform flexible film.” This term, in context, describes floor coverings. Specifically, the preamble of claim 4 recites “an improved material for finishing the top surface of the floor. ‘514 patent, col. 6, ll. 66-68. As noted, uniformity means that a floor covering has always the same form. Floor coverings may have the same smooth form, as in a bowling or basketball surface. Floor coverings may also have the same woven form, as in a carpeted surface. Floor coverings may also have the same textured form to prevent slippage in a setting like Grand Central Station where a wet surface may receive a lot of foot traffic. This phrase in the claim does not place any particular limitations on the concept of uniformity. Rather the claim suggests that the form of the film – whether smooth or textured – must remain the same throughout the floor surface. In this context, uniformity could apply to many different types of floor surface as long as they exhibit the same form across the relevant surface.

The written description of the patent does not suggest that the inventor provided a special meaning or

definition of “uniform.” Kegel Co. v. AMF Bowling, Inc., 127 F.3d 1420, 1427 (Fed. Cir. 1997). Instead the written description of the ‘514 patent explains that achieving a “uniform finish” of conventional varnish or urethane is difficult. ‘514 patent, col. 1, ll. 27-29, 37-39. Furthermore, it explains the object of the present invention is to provide a material of “uniform thickness” that can be “quickly and easily appl[ied].” Id., col. 1, ll. 66-68. Other than ease of application, the specification imparts no further insight into the meaning of “uniform.” Id., col. 4, ll. 4-5. Thus, the written description neither suggests an exceptional meaning for uniform nor supports departing from the term’s ordinary meaning.

This court also considers the prosecution history of the ‘514 patent to determine whether the applicant clearly and unambiguously “disclaimed or disavowed [any interpretation] during prosecution in order to obtain claim allowance.” Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 452, 227 USPQ 293, 296 (Fed. Cir. 1985); Inverness Med. Switz. Gmbh v. Princeton Biomeditech Corp., No. 01-1188, at 12-13 (Fed. Cir. Oct. 31, 2002) (stating that statements made during prosecution were not a clear and unambiguous disclaimer of a claim scope). The district court concluded that, during prosecution, Middleton disclaimed all interpretations of uniform flexible film that include any variations of thickness.

The prosecution history does not show this clear and unambiguous disclaimer. During prosecution of the application that led to the ‘152 patent, one of the parent applications of the ‘514 patent, the examiner rejected the claims as obvious over Milne. The parent application of the ‘514 patent at that time claimed only bowling alleys and bowling alley surfaces. The claims of the parent application (later the ‘428 patent) included a uniform flexible film for finishing a smooth wooden surface of a bowling alley. Milne disclosed a method for adhering two types of decorative surface panels to an athletic floor: a one-eighth inch thick, high compression, stiff film; and a film sufficiently flexible to be rolled for delivery. To avoid this prior art involving the uniformity necessary for a bowling surface, Middleton amended claim 1 from “a [dry] flexible film” to “a uniform flexible film . . . covering the wood top surface of the bowling lane.” In the accompanying remarks, Middleton’s attorney explained:

[T]he preformed film can be provided in a thickness that could be obtained only by applying multiple coats of a liquid varnish, and with a uniformity of thickness that is unobtainable with hand-applied liquid finishes. (Emphasis added.)

Middleton further stated:

The flexible plastic film of claim 1 essentially duplicates the characteristics of a conventional liquid varnish type of finishing while requiring less skill and time to apply and to remove. By permitting preselection of the thickness of the film and assuring uniformity of the thickness, the finishing material disclosed and claimed in the present application can provide much improved wear over conventional liquid finishes without affecting the bowling performance of the lane. (Emphasis added.)

Thus, in the context of a limited claim to bowling alley surfaces, Middleton asserted to the United States Patent & Trademark Office that the claimed flexible film avoids the thickness irregularities that result from the application of liquid varnishes. This prosecution history applies to the claims that cover smooth sporting surfaces, like bowling alleys.

The inventor later filed a continuation that broadened the invention. The broader continuation applications claimed floor surfaces in general, not just smooth sporting surfaces. Therefore, the prosecution history in the context of varnishes for smooth bowling alleys does not limit the broader claims to other flooring surfaces. Throughout, the prosecution history is consistent with the ordinary meaning of “uniform,” namely that the term means having the same form. As used in the patent, the term has the broad meaning that includes both uniformity of thickness as well as uniform in irregularity; by overcoming Milne, the inventor did not limit the term to uniformity of thickness. Uniformity of thickness is within the breadth of the term “uniform” and that aspect of the term’s meaning was sufficient to avoid Milne. The district court erred by limiting the scope of “uniform” to thickness uniformity. In context, as this court has explained above, the term is entitled to its full scope, which is structure that is the same in form even when that same form includes consistent non-uniform thickness or other “uniform” irregularities.

This court also takes this opportunity to comment on Middleton’s argument that a flexible film is “uniform” when its thickness falls within manufacturing tolerances. According to Middleton, evidence of manufacturing tolerances includes the specification and tolerances found in the contract between 3M and Bando or Achilles for manufacture of the overlamine films. The meaning of a patent term, however, is not subject to revision or alteration by subsequent contract between the patentee and its suppliers. The meaning of patent terms depends on the usage of those terms in context by one of skill in the art at the time of application. Schering Corp. v. Amgen Inc., 222 F.3d 1347,1353 (Fed. Cir. 2000). Patent terms are not subject to later revision by a supply contract. If a contract supplies some insight into the understanding of skilled artisans at the time of invention, it may have some relevance to claim construction, but Middleton makes no such explanation for invoking a contract to define claim terms.

In sum, the proper construction of “uniform flexible film” is a flexible film having always the same form. Thus, a uniform flexible film includes, for example, a flexible film having the same thickness throughout, as well as a flexible film having the same textured surface throughout. The district court granted summary judgment holding that 3M’s overlamine films do not infringe the ‘514

patent based solely on its construction of “uniform” to mean the “same thickness throughout, except that normal manufacturing tolerances are allowed.” Because the district court erred in its construction of “uniform,” this court reverses and remands for a determination of infringement in accordance with the correct claim construction.

B.

On summary judgment, the district court held that 3M’s overlamine films did not infringe claim 4 of the ‘514 patent under the doctrine of equivalents. Based on this court’s decision in Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558 (Fed. Cir. 2000), the district court barred Middleton from relying on the doctrine of equivalents because Middleton amended claim 4 during prosecution to include the term “uniform.” Because the district court erred in its construction of “uniform” and because the Supreme Court’s recent decision in Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 152 L. Ed. 2d 944, 122 S. Ct. 1831 (2002), supplants the framework employed by the district court for infringement analysis under the doctrine of equivalents, this court reverses the district court’s grant of summary judgment.

COSTS

Each party shall bear its own costs.

REVERSED AND REMANDED