

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

2009-1135

LYDALL THERMAL/ACOUSTICAL, INC.,
LYDALL THERMAL/ACOUSTICAL SALES, LLC, and LYDALL, INC.,

Plaintiffs-Appellants,

v.

FEDERAL-MOGUL CORPORATION
and FEDERAL-MOGUL POWERTRAIN, INC.,

Defendants-Appellees.

Timothy C. Meece, Banner & Witcoff, Ltd., of Chicago, Illinois, argued for plaintiffs-appellants. With him on the brief were Janice V. Mitrius and Aimee B. Kolz, of Chicago, Illinois, and Bradley C. Wright, of Washington, DC.

John A. Artz, Dickinson Wright, PLLC, of Bloomfield Hills, Michigan, argued for defendants-appellees. With him on the brief was Robert L. Kelly. Of counsel was John S. Artz.

Appealed from: United States District Court for the Eastern District of Michigan

Senior Judge Avern C. Cohn

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

2009-1135

LYDALL THERMAL/ACOUSTICAL, INC.,
LYDALL THERMAL/ACOUSTICAL SALES, LLC, and LYDALL, INC.,

Plaintiffs-Appellants,

v.

FEDERAL-MOGUL CORPORATION
and FEDERAL-MOGUL POWERTRAIN, INC.,

Defendants-Appellees.

Appeal from the United States District Court for the Eastern District of Michigan in Case No. 07-CV-12473, Senior Judge Avern C. Cohn.

DECIDED: September 8, 2009

Before LOURIE, RADER, and PROST, Circuit Judges.

LOURIE, Circuit Judge.

Lydall Thermal/Acoustical, Inc., Lydall Thermal/Acoustical Sales, LLC, and Lydall, Inc. (collectively, "Lydall") appeal from the U.S. District Court for the Eastern District of Michigan's final judgment of noninfringement. Lydall Thermal/Acoustical, Inc. v. Federal Mogul Corp., No. 07-cv-12473 (E.D. Mich. Nov. 19, 2008) (Dkt. No. 55). The final judgment was entered pursuant to a stipulation by the parties that allowed Lydall to appeal the district court's claim constructions of any of thirteen terms. Lydall Thermal/Acoustical, Inc. v. Federal Mogul Corp., No. 07-cv-12475 (E.D. Mich. Nov. 17, 2008) (Dkt. No. 53) ("Stipulated Order"); Lydall Thermal/Acoustical, Inc. v. Federal

Mogul Corp., 566 F. Supp. 2d 602 (E.D. Mich. 2008) ("Claim Construction Opinion"). Lydall has appealed the construction of two terms: "fibrous batt of fibers" and "tufts of fibers." Because we agree with the district court's claim construction for both terms, we affirm.

BACKGROUND

Lydall owns U.S. Patents 6,092,622 ("the '622 patent") and RE 39,260 ("the '260 patent"). The '260 patent is a continuation-in-part of U.S. Patent Application 09/033,852 ("the '852 application"), which issued as the '622 patent. The specifications of the '622 patent and the '260 patent are the same for the purposes of this appeal. Lydall selected claim 45 of the '260 patent, which was one of the claims added in the reissue application, as the paradigm claim for both patents in the district court. Accordingly, we will refer only to the '260 patent in this opinion.

The '260 patent is directed to flexible insulating shields that can be used for thermal and acoustic insulation. The shields include a fibrous batt of fibers oriented in a horizontal X-Y plane, as illustrated in figure 2 of the '260 patent.

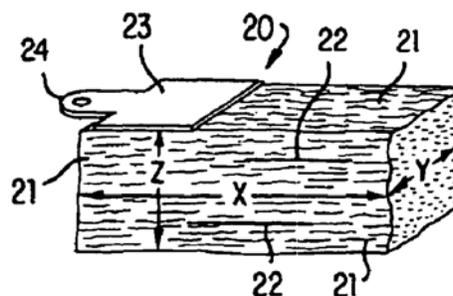


FIG.2 PRIOR ART

The specification of the '260 patent describes "the present invention" as including "a needled, flexible, fibrous batt having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers." '260 patent col.6 ll.53-55. This

description of the batt of the invention as composed of three layers is repeated throughout the specification. See id. col.9 ll.21–25 (“[T]he present insulation batt, generally, also has organic fiber layers which function as binding layers. An insulating layer of insulating fibers is disposed between opposite binding layers of binding fibers.”) (reference numbers removed); id. col.13 ll.19–23 (“To produce the present shield, a flexible fibrous batt of an insulating layer of insulating fibers is disposed between opposite carded binding layers of binding fibers.”). The patent further specifies that

The insulating fibers preferably will be any of the usual inorganic fibers, such as glass fibers, mineral fibers, alumina fibers and the like, but, more usually, the insulating fibers are glass fibers. However, where the requirement for thermal insulation is lower and the requirement for acoustical insulation is higher, the insulating fibers need not be inorganic fibers and may be, at least in part, organic fibers, such as polyester fibers, nylon fibers and the like. . . .

The binding fibers are normally organic fibers, such as polyester fibers, nylon fibers, olefin fibers, and cellulose acetate fibers.

Id. col.11 ll.1–13. Thus, the patent describes the batt as having three layers, an insulating layer disposed between two binding layers, with the composition of the layers being variable according to particular insulating needs.

The strength of the batt in the Z-direction is central to the invention. See '260 patent col.4 ll.30–35 (discussing how to obtain the high Z-directional strength disclosed in the '852 application). The specification states that the batt is “needled,” i.e., penetrated with a barbed needle. As described, needling a fibrous batt pulls some fibers from the binding layer nearest the needle entry point through the insulating layer and then through the far binding layer to create “stitches” oriented in the Z-direction. Because the needle penetrates through the surface of the opposite binding layer from the needle’s entry point, the ends of the stitches protrude in a “tuft” on the opposite

surface of the batt from the needle's entry point. The tuft remains on the surface of the batt when the needle is withdrawn from the same side as it entered the batt. See id. col.12 ll.53–col.13 ll.13. Figure 10 of the '260 patent illustrates a single needle at various stages of the needling technique and the creation of tufts, indicated by reference number 46.

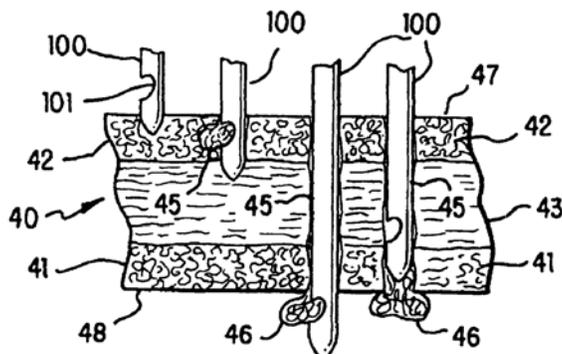


FIG. 10

The specification describes the tufts created by the needling as forming on the opposite side of the needle entry. See '260 patent col.6 ll.55–59 (“Binding fibers of each binding layer are needledly disposed through the insulating layer and an opposite binding layer to provide tufts of binding fibers protruding from that opposite binding layer.”); id. col.9 ll.25–29 (same); id. col.13 ll.27–31 (same); id. col.12 ll.62–64 (“As the needle is withdrawn back through [upper] binding layer, that tuft remains at the tufted lower surface.”) (reference numbers removed); id. col.13 ll.7–13 (“To achieve the tufted surfaces, at least the lowermost barb of any needle should pass through the tufted lower surface or tufted upper surface, depending upon the needle direction, sufficiently such that the tufted fibers remain on the respective surface when the needle is withdrawn from the batt.”) (reference numbers removed). The specification also describes the batt as having tufts on both the upper and lower surfaces. See id. col.6

II.59–60 (“This forms a tufted upper surface and a tufted lower surface of the batt.”); *id.* col.9 II.29–30 (describing the needling “so as to form a tufted upper surface and a tufted lower surface of insulation batt”) (reference numbers removed); *id.* col.13 II.30–31 (same); *id.* col.13 II.3–6 (“By using conventional needling machines, where needling is conducted from both sides of batt, tufts will be disposed on both the tufted upper surface and the tufted lower surface.”) (reference numbers removed).

After the batt is needled, a flexible adhesive is applied to the tufted upper and lower surfaces of the batt. The adhesive locks the tufts and thus the stitches in place, thereby increasing Z-directional strength. *See* '260 patent col.9 II.43–II.60. A flexible piece of foil can be placed on top of the adhesive to provide further Z-directional strength and to prevent the adhesive from inadvertently sticking to a surface. *See id.* col.9 II.61–col.10 II.25. Figure 5 depicts the binding layers (41 and 42), the insulating layer (43), the stitches (34), the tufts (46), the adhesive (50), and the foil (51).

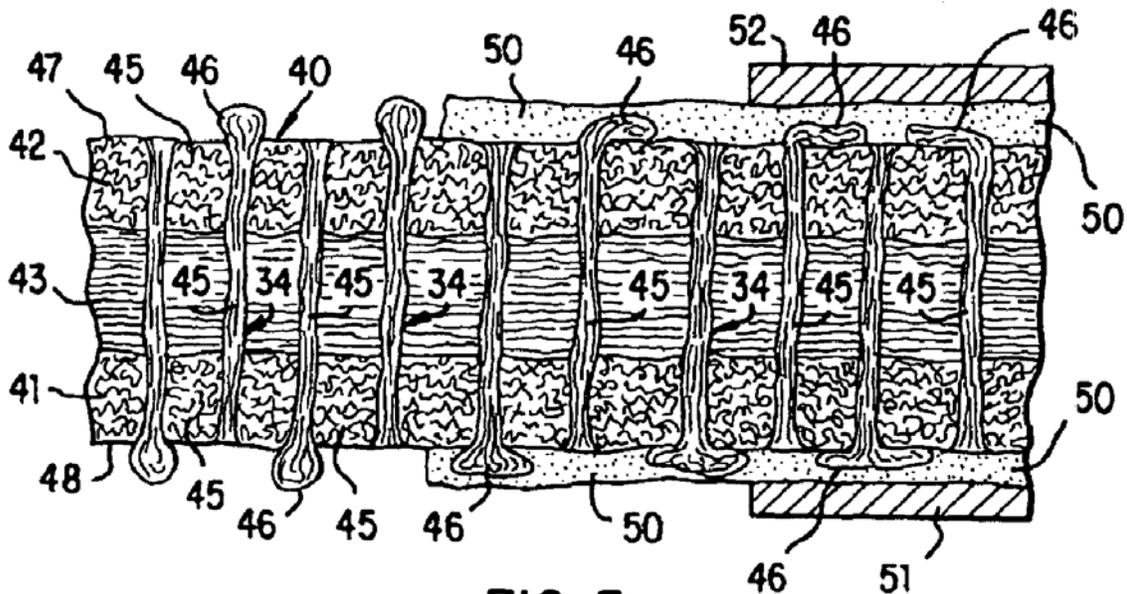


FIG. 5

Paradigm claim 45 of the '260 patent reads as follows, with emphases on the disputed claim terms:

A flexible, adhesively attachable, thermal and acoustical insulating shield, comprising:

- (1) a needled, flexible, fibrous batt (40) of fibers (44, 45), some of the fibers (45) located at a bottom portion of the batt (40) and a top portion of the batt (40) being needledly disposed through the batt (40) to provide tufts (46) of fibers (45) protruding from the fibrous batt (40) so as to form a tufted upper surface (47) and a tufted lower surface (48) of the batt (40);
 - (2) a flexible adhesive (50), disposed and adhered substantially over the tufted upper surface (47) such that the tufts (46) on the upper surface (47, 48) are secured 45 to that surface by the adhesive (50); and
 - (3) a flexible, protective foil (51) permanently adhered to the lower surface (48) of the batt; and
- wherein the shield may be flexed and pressed to configure and permanently attach the tufted upper surface (47) to 50 an object (1) to be shielded.

'260 patent, claim 45 (emphases added).

Federal-Mogul Corporation and Federal-Mogul Powertrain, Inc. ("Federal-Mogul") produces the ReflectShield 1440™, which is an insulating fibrous batt. According to a stipulation by the parties, the ReflectShield 1440™ has the following characteristics: (1) a layered structure of foil, nonwoven fibrous batt, and adhesive (the foil being adhered to the nonwoven fibrous batt), in that order; (2) in which the nonwoven fibrous batt is needled from only one side of the batt; and (3) in which the fibrous batt of fibers is formed of a homogenous material. See Stipulated Order, No. 07-cv-12473, slip op. at 1.

On January 24, 2007, Federal-Mogul filed an action against Lydall for a declaratory judgment of noninfringement, invalidity, and unenforceability of the '622 and '260 patents. On June 8, 2007, Lydall sued Federal-Mogul for infringement of the

patents. The two cases were consolidated. After Lydall designated claim 45 for the purposes of claim construction, the district court conducted a technology tutorial and a Markman hearing.

On July 3, 2008, the district court issued its claim construction decision. The court construed “fibrous batt of fibers” as “a composite batt having a layer of insulating fibers sandwiched between layers of binding fibers.” Claim Construction Opinion, 566 F. Supp. 2d at 615. The court stated that “there is not a hint in the specification that the batt can be a single homogenous layer.” Id. at 613. The court found that because the specification consistently described the batt as having an insulating layer sandwiched between binding layers, the patent disclosed a single embodiment of the batt, i.e., a batt with those three layers. The court then construed “tufts of fibers” as “clusters of binding fibers which have been intentionally needle-punched on a downstroke and which extend beyond an opposite surface of the batt.”* Id. at 617. The court found that the specification and the drawings made clear that “tufts” had to extend beyond the exit or second side of the needle and that the patent made no mention of a tuft appearing on the entry or first side of the needle.

On November 17, 2008, the parties stipulated that under the district court’s claim constructions, Federal-Mogul’s ReflectShield 1440™ did not infringe the ’622 and ’260 patents, subject to appeal. A decision negating either of the appealed constructions would negate the stipulation. See Stipulated Order, No. 07-cv-12473, slip op. at 2.

* The court used a slightly different construction in Exhibit A of its Claim Construction Opinion, construing “tufts of fibers” as “a cluster of binding fibers which have been needled-punched on the forward stroke and which extend beyond the opposite surface of the batt.” For the purposes of this appeal, the differences between the two constructions are irrelevant.

On December 12, 2008, Lydall filed a timely appeal. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review claim construction de novo on appeal. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc). We begin a claim construction analysis by considering the language of the claims themselves. See Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc). However, “claims must be read in view of the specification, of which they are a part.” Id. at 1315 (quotation marks omitted). The specification is the “single best guide to the meaning of a disputed term.” Vitronics Corp. v. Conceptoronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); see Phillips, 415 F.3d at 1315 (“The specification is, thus, the primary basis for construing the claims.”) (citation omitted). A court should also consider the patent’s prosecution history, Phillips, 415 F.3d at 1317, and may rely on dictionary definitions, “so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents,” id. at 1322–23.

A. Fibrous batt of fibers

With regard to the term “fibrous batt of fibers,” Lydall argues that the district court incorrectly believed that there was only one embodiment disclosed in the ’260 patent. In making this error, Lydall contends, the district court applied its own Honeywell decision instead of following our decision in Phillips. Lydall asserts that the claim language is clear and unambiguous and does not suggest that the batt must be layered. Lydall argues that, in addition to describing the claimed invention, the specification uses the term “fibrous batt” to describe the prior art, which included single-layer batts. Lydall

contends that the specification expressly teaches that organic fibers may be used throughout the batt and that the binding fibers and the insulating fibers can be made of the same material, thus indicating that the term “fibrous batt of fibers” includes a homogenous batt made of one material. Lydall asserts that the specification expressly states that the drawing reference numerals used in the claims are not meant to be limitations and that the file history expressly indicates the same. Lydall also argues that the prosecution history indicates that the inventors intended to cover a homogenous batt in claim 1, which uses the same language as claim 45. Finally, Lydall asserts that claim differentiation of dependent claim 48, which includes a limitation for a three-layer, non-homogenous batt, requires a presumption, which Lydall argues is un rebutted, that claim 45 does not include such a limitation.

In response, Federal-Mogul argues that Lydall has failed to acknowledge that this court upheld the district court’s decision, including its claim construction, in Honeywell after we issued the Phillips decision. Federal-Mogul asserts that, as in Honeywell, the ’260 specification disclosed only one invention: a multi-layered composite batt of fibrous materials with tufts of fibers formed on each side by two-sided needling. Federal-Mogul contends that all references in the specification to “batt” describe an insulating layer sandwiched between binding layers. Federal-Mogul argues that the broadest configuration in the specification is an insulating layer that is “at least in part” organic, but even that configuration, Federal-Mogul asserts, does not indicate that the term “fibrous batt of fibers” encompasses a single-layer, homogenous batt of all organic fibers. Federal-Mogul contends that Lydall cannot rely on its statements during the reissue prosecution to expand the scope of the ’260 patent when the specification

clearly limits the invention to a narrower scope. Finally, Federal-Mogul argues that claim 45 has only one interpretation, so claim differentiation does not apply because the written description and claims overcome the presumption of claim differentiation. Regardless, Federal-Mogul asserts that claim 48 also contains other limitations that distinguish it from claim 45.

We agree with Federal-Mogul that the specification of the '260 patent discloses a single embodiment of the invention, viz., an insulating shield that includes a fibrous batt consisting of an insulating layer sandwiched between two binding layers that is, as discussed infra, needled on two sides. Although Lydall is correct in saying that the claim language “fibrous batt of fibers” does not, in isolation, suggest a layered batt, Lydall’s arguments completely ignore the consistent use of the term “batt” in the specification. It is fundamental that we give due weight to the specification when construing this claim term. Phillips, 415 F.3d at 1315.

We have stated that “when the preferred embodiment is described in the specification as the invention itself, the claims are not necessarily entitled to a scope broader than that embodiment.” Chimie v. PPG Indus., 402 F.3d 1371, 1379 (Fed. Cir. 2005); see Honeywell, 452 F.3d at 1318 (construing claim term to include fuel filter because “[o]n at least four occasions, the written description refers to the fuel filter as ‘this invention’ or ‘the present invention’”); SciMed, 242 F.3d at 1343 (construing term to include feature characterized as “the present invention”). In other words, when a patentee consistently describes one embodiment as “the present invention,” “[t]he public is entitled to take the patentee at his word.” Honeywell, 452 F.3d at 1318; see also SciMed, 242 F.3d at 1341 (“Where the specification makes clear that the invention does

not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question.”). Such is the case here. The specification identifies a three-layered batt as “the present invention.” ’260 patent col.6 ll.50. In addition, the specification repeatedly describes the batt as having an insulating layer disposed between two binding layers. See id. col.6 ll.53–55, col.9 ll.21–25, col.13 ll.19–23. Lydall’s consistent description of “the present invention” as including a three-layered batt makes clear that the claimed “fibrous batt of fibers” must have three layers, an insulating layer sandwiched between two binding layers. The fact that the specification discloses that the insulating fibers may “at least in part” be made up of the same organic fibers as the binding layers does not dissuade us from our conclusion. It may be that the insulating layer and the binding layers are made from the same material, but the batt still has three layers. It is not, therefore, a single, homogenous layer.

We also agree with the district court that Lydall’s reliance on the prosecution history and the doctrine of claim differentiation is unpersuasive. “Representations during prosecution cannot enlarge the content of the specification.” Biogen, Inc. v. Berlex Labs., Inc., 318 F.3d 1132, 1140 (Fed. Cir. 2003). Thus, when the prosecution history appears in conflict with the specification, any ambiguity must be resolved in favor of the specification. See id. The specification is the “best source for understanding a technical term,” to be supplemented, “as needed, by the prosecution history.” Phillips, 415 F.3d at 1315 (quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.2d 1473,

1478 (Fed. Cir. 1998)). Here, the specification is clear. The sole embodiment of the invention includes a batt that has three layers.

The patentee's efforts during the prosecution of the reissue patent to enlarge the claims beyond what the specification discloses also must fail. Similarly, Lydall cannot rely on claim differentiation to expand the scope of the claim term. See Nystrom v. Trex Co., 424 F.3d 1136, 1143 (Fed. Cir. 2005) (“[S]imply noting the difference in the use of claim language does not end the matter. Different terms or phrases in separate claims may be construed to cover the same subject matter where the written description and prosecution history indicate that such a reading of the terms or phrases is proper.”). In addition, as Federal-Mogul asserts, claim 48 can be differentiated from claim 45 by other limitations. Thus, we conclude that the district court properly construed “fibrous batt of fibers” as “a composite batt having a layer of insulating fibers sandwiched between layers of binding fibers.”

B. Tufts of fibers

With regard to the second disputed claim construction, Lydall argues that the parties and the district court agreed that “tufts of fibers” are clusters of fibers and thus that the court should have given the term this ordinary and customary meaning. Lydall asserts that nothing in the specification or prosecution history provided a special meaning or definition that would override that ordinary meaning. Lydall also contends that the specification shows various methods for needling a batt to produce tufts on the surface, including a single-sided example shown in figure 10 that would still result in tufts being present on both sides of the batt. Accordingly, Lydall argues that the court incorrectly limited the claim to the two-sided needling shown in figure 5. Lydall argues

that no textual hook in “tufts of fibers” justifies reading additional limitations to the term from an example in the specification. According to Lydall, it does not matter how the tufts were created as long as the batt is needed to produce them. Finally, Lydall asserts that the court’s claim construction of “tufts of fibers” overlaps with other claim constructions and renders them inconsistent.

In response, Federal-Mogul argues that Lydall’s assertion that an embodiment where tufts are formed on both sides of a batt when a batt is needed from only one side is not described or shown anywhere in the patent. Such a construction, according to Federal-Mogul, contradicts the purpose of the tufts to strengthen the batt in the Z-direction. Federal-Mogul contends that there is only one embodiment of the invention, which uses two-sided needling. According to Federal-Mogul, figure 10 shows a single barbed needle at various locations as it proceeds through a batt to produce a tuft. Finally, Federal-Mogul argues that Lydall’s selective appeal and position for the two claim constructions before us conflict with constructions of other claim terms.

We agree with Federal-Mogul that, as described in the '260 patent, “tufts of fibers” are only formed on the opposite side of a batt from a needle’s entry point and, therefore, that the batts must undergo two-sided needling. Lydall is correct that the parties agreed that the ordinary meaning of “tufts” is “clusters.” See Claim Construction Opinion, 566 F. Supp. 2d at 616. However, although the construction of a claimed term is usually controlled by its ordinary meaning, we will adopt an alternative meaning “if the intrinsic evidence shows that the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention.” CCS Fitness, Inc. v. Brunswick

Corp., 288 F.3d 1359, 1366–67 (Fed. Cir. 2002). Here, the specification clearly describes a single embodiment as the invention, viz., an insulating shield that includes a three-layered batt that undergoes two-sided needling to produce tufts on both its upper and lower surfaces. Every time the specification discusses how to create the tufts of fibers, it states that the tufts form on the opposite side of the needle’s entry point. See ’260 patent col.6 ll.55–59, col.9 ll.25–29, col.12 ll.62–64, col.13 ll.7–13, col.13 ll.27–31. The description of figure 10 provides a detailed explanation of how the needling accomplishes this:

The needling used in producing the present batt is illustrated in FIG. 10. As a needle 100 having a barb 101 begins to penetrate binding layer 42, the bar[b] 101 picks up and is essentially loaded with binding fibers 45 in that barb. The needle then passes through insulating layer 43 without picking up substantial insulating fibers since the barb is essentially loaded. The needle then passes through the opposite binding layer 41 such that the barb penetrates below the tufted lower surface 48 and presents a tuft 46 beyond that tufted lower surface 48. As the needle 100 is withdrawn back through binding layer 41, that tuft 46 remains at the tufted lower surface 48. Of course, during that needling operation, as is common with barbed needles, binding fibers 45 will also be pulled with the needles to form stitches 34 of those binding fibers, as shown in FIG. 5. Thus, with the retraction of the needle 100, the tufts 46 which terminate the stitches 34 of fibers 45 remain o[n] the surface. By using conventional needling machines, where needling is conducted from both sides of batt 40, tufts will be disposed on both the tufted upper surface 47 and the tufted lower 5 surface 48, as shown in FIG. 5.

To achieve the tufted surfaces, at least the lowermost barb of any needle should pass through tufted lower surface 48 or tufted upper surface 47, depending upon the needle direction, sufficiently such that the tufted fibers remain on 10 the respective surface when the needle 100 is withdrawn from the batt 40.

Id. col.12 ll.53–col.13 ll.13 (emphases added).

The specification identifies a batt with tufts on the upper and lower surfaces as “the present invention.” ’260 patent col.6 ll.50. In addition, the specification consistently

describes the batt with tufts on both sides. See id. col.6 ll.59–60, col.9 ll.29–30, col.13 ll.3–6, col.13 ll.30–31. Lydall’s description of the “needling used in producing the present batt” makes clear that the batt must be needled from both sides to produce tufts on both surfaces. Thus, contrary to Lydall’s assertions, figure 10 is entirely consistent with the remainder of the specification discussing two-sided needling. In other words, rather than disclosing a batt subjected to single-sided needling as a possible embodiment, the specification clearly indicates that all batts disclosed in the ’260 patent must undergo two-sided needling. Thus, we affirm the district court’s construction of “tufts of fibers” as “clusters of binding fibers which have been intentionally needle-punched on a downstroke and which extend beyond an opposite surface of the batt.”

We have considered Lydall’s remaining arguments and find them unpersuasive. Therefore, for the foregoing reasons, we affirm the claim constructions of the district court. Under the parties’ stipulation, the final judgment of noninfringement is also affirmed.