

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**EMED TECHNOLOGIES CORPORATION,**  
*Plaintiff-Appellant*

v.

**REPRO-MED SYSTEMS, INC., DBA KORU  
MEDICAL SYSTEMS,**  
*Defendant-Appellee*

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2019-2145

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Appeal from the United States District Court for the  
Eastern District of Texas in No. 2:15-cv-01167-JRG-RSP,  
Judge J. Rodney Gilstrap.

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Decided: April 9, 2020

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Before CHEN, SCHALL, and HUGHES, *Circuit Judges*.

CHEN, *Circuit Judge*.

Plaintiff EMED Technologies Corporation (EMED) sued Repro-Med Systems, Inc. (Repro-Med) for infringement of U.S. Patent No. 8,961,476 (the '476 patent). Following claim construction, the district court granted Repro-Med's motion for summary judgment of noninfringement. EMED appeals the noninfringement ruling. *We affirm*.

## BACKGROUND

### I. The '476 Patent

The '476 patent describes medical needle devices with built-in safety structures "to protect a user from the sharp tip of the medical needle." '476 patent at Abstract. The specification describes various embodiments, and both parties refer to Figure 10 as depicting the relevant embodiment:

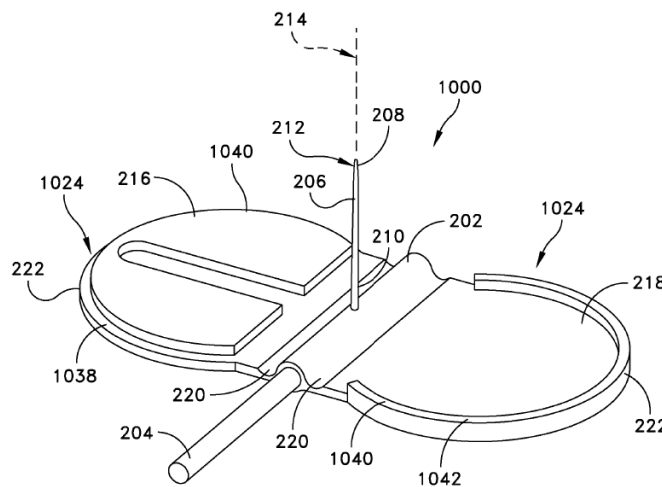


FIGURE 10

*Id.* at Fig. 10.

As shown in Figure 10, the safety device includes needle 208 between a pair of opposing "wings" 216 and 218. To

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protect a user from the needle, the wings rotate into a closed position in which the needle fits into a “groove” that is “sized for housing” the needle. *Id.* at col. 6, ll. 35–38; *see also id.* at claim 8. Although not labeled in Figure 10, the parties do not appear to dispute that the groove is depicted as the long and narrow recess in wing 216 on the left-hand side of Figure 10. In the closed position, the two wings are attached via mechanical fastener 1024, which includes protruding lip 1042 of wing 218 that engages with matching recess 1038 in the perimeter of opposing wing 216. *Id.* at col. 6, ll. 19–29.

The sole claim at issue on appeal is claim 9. Claim 9 depends from claim 8, which in turn depends from independent claim 1. Claim 1 is directed to a “device for protecting a user from a sharp tip of a medical needle,” and recites, *inter alia*, a “pair of wings” and a “mechanical fastener” including a “lip” on at least one wing and a “mating portion” on at least the other wing. *Id.* at claim 1. Claim 8 further recites a “groove having a size configured for housing at least a portion of the medical needle when the pair of wings are in the closed position.” *Id.* at claim 8. Claim 9 further specifies that the “groove is formed in a single one of the pair of wings.” *Id.* at claim 9. Claims 1, 8, and 9 are reproduced below:

1. A device for protecting a user from a sharp tip of a medical needle, the device comprising:

a central body portion;

the medical needle having a first end in fluid connection with a delivery tube, and a second end distal from the central body portion including the sharp tip;

a pair of wings, each wing of the pair of wings having an inner region and an outer region, the inner region of each wing in attachment to the central body portion, the outer region of each wing

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extending away from the central body portion, the pair of wings disposed in opposition to one another with the medical needle positioned therebetween, and the pair of wings being selectively positionable from an open position to a closed position, where the wings in the open position are spaced apart from each other to expose the medical needle to allow placement of the medical needle into a treatment site and delivery of a medicinal fluid, and wherein the wings in the closed position cover the medical needle to protect against accidental needle stick injury from the medical needle;

a mechanical fastener disposed on at least one wing of the pair of wings, the mechanical fastener configured to selectively attach the pair of wings together with the medical needle positioned therebetween so as to protect against accidental needle stick injury from the sharp tip of the medical needle;

the mechanical fastener including a lip extending along at least a portion of a perimeter of at least one wing of the pair of wings, and a mating portion along a perimeter of at least one other wing of the pair of wings, and wherein the mating portion and the lip are configured to align the at least one wing relative to the at least one other wing in the closed position.

8. The device in accordance with claim 1, wherein at least one of the pair of wings is formed with *a groove having a size configured for housing at least a portion of the medical needle when the pair of wings are in the closed position.*

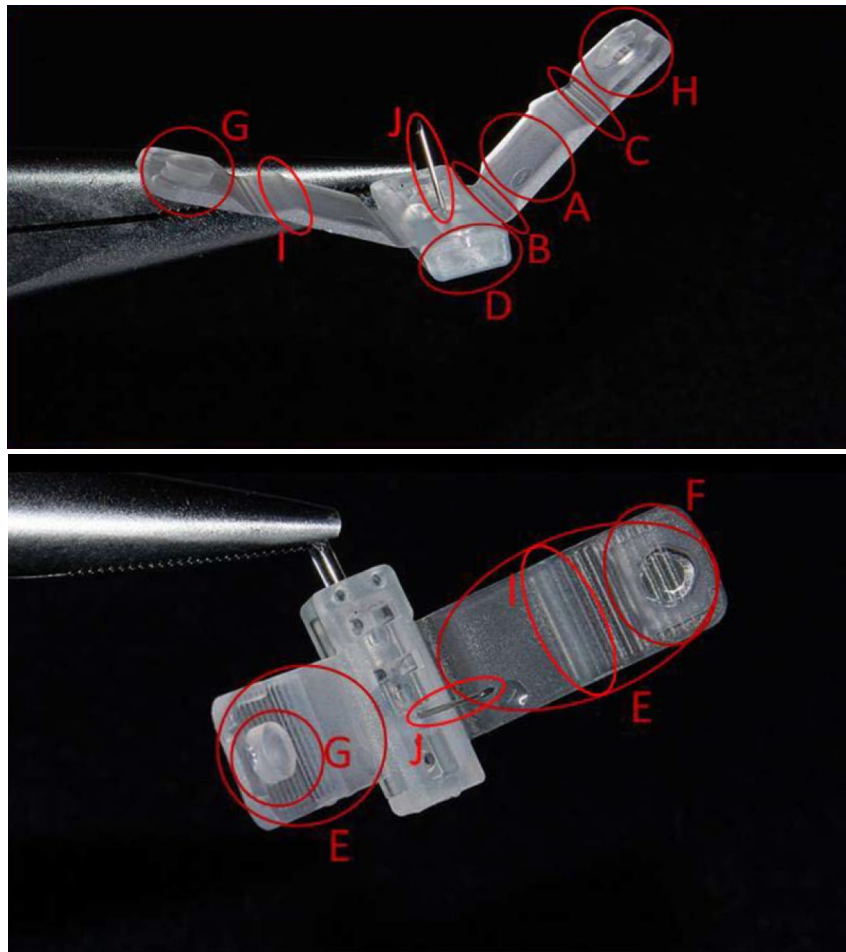
9. The device in accordance with claim 8, *wherein the groove is formed in a single one of the pair of wings.*

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*Id.* at claims 1, 8, 9 (emphases added).

## II. The Accused Products

EMED accuses various models of Repro-Med's safety needle devices (the Accused Products), which for the purposes of this appeal differ with respect to the exposed length of the needle as measured from the housing to the sharp tip. Repro-Med provides the following annotated diagrams of the Accused Products:



J.A. 113.

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Repro-Med also provides the following description of the Accused Products, which EMED does not dispute:

[E]ach wing (E) has a needle facing surface that includes a smooth rectangular section (A) interposed between two thinned areas (B and C). A first thinned area (B) is provided between the housing (D) and the wing (E), thereby allowing each wing (E) to move between open and closed positions. A second thinned area (C) is provided between the rectangular section (A) and the outer section (F) of the wing (E) bearing the plug (G) and the wing (E) bearing the socket (H). This second thinned area (C) allows the outer section (F) of each wing (E) to bend relative to its adjacent smooth rectangular section (A), allowing the plug (G) and the socket (H) to engage and thereby lock the wings together in the closed position about the medical needle. Each of the rectangular surface sections (A) have a ridge (I) adjacent the second thinned area (C), the ridge (I) extending perpendicular to the length (J) of the medical needle extending from the housing.

Appellee's Br. at 3–4.

### III. Procedural History

In 2015, EMED filed a complaint in the Eastern District of Texas alleging infringement of the '476 patent by the Accused Products. In response, Repro-Med petitioned for inter partes review (IPR), challenging claims 1–10 of the '476 patent. The Board instituted IPR and subsequently found claims 1–8 and 10 unpatentable. *Repro-Med Sys., Inc. v. EMED Techs. Corp.*, IPR2015-01920, 2017 WL 378978, at \*1 (P.T.A.B. Jan. 12, 2017). This court affirmed, leaving dependent claim 9 as the sole claim at issue in the district court litigation. *EMED Techs. Corp. v. Repro-Med Sys., Inc.*, 725 F. App'x. 1005, 1008 (Fed. Cir. 2018), *cert. denied*, 139 S. Ct. 418 (2018).

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After the Board's IPR decision, the district court conducted a *Markman* hearing and construed various terms relating to the "groove" of claim 9. Three of these claim terms are relevant to this appeal, and the parties do not contest the district court's constructions of any of the claim terms. First, the district court construed "groove" to mean "a long narrow cut or depression." *EMED Techs. Corp. v. Repro-Med Sys., Inc.*, No. 2:15-cv-1167-JRG-RSP, 2019 WL 1040604, at \*9 (E.D. Tex. Mar. 4, 2019). As the district court noted, "[t]he parties agree that the recited 'groove' is a 'long narrow' something," with EMED proposing "a long narrow cut" and Repro-Med proposing "a long narrow depression." *Id.* at \*8. The district court's construction combined those two proposals. Second, the district court accepted the parties' agreed-upon construction of the claimed groove "having a size configured for housing at least a portion of the medical needle" to mean "having a size designed for housing at least a portion of the medical needle that includes the sharp tip." *Id.* at \*7. Third, the district court also adopted the parties' construction of "wherein the groove is formed in a single one of the pair of wings" to mean "wherein the groove is formed in only one of the pair of wings." *Id.*

Following claim construction, Repro-Med moved for summary judgment of noninfringement on all Accused Products under either literal infringement or the doctrine of equivalents. The magistrate judge recommended that summary judgment be granted in favor of Repro-Med.

As to literal infringement, the magistrate judge explained that the claimed groove must house the needle, but "[i]n the Accused Products, there is no space to house anything, much less a medical needle, in the mechanical fastener once the fastener is closed." J.A. 19. Instead, the needle in the Accused Products is "merely positioned between the wings," and there was "no genuine dispute that the Accused Products' alleged mechanical fastener does not meet the limitations of a groove." *Id.* Moreover, the

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magistrate noted that “EMED points to no long narrow cut or depression on either wing of the Accused Products.” J.A. 20.

The magistrate judge further reasoned that applying the doctrine of equivalents to capture portions of the mechanical fastener as the claimed “groove,” as urged by EMED, would vitiate the claim limitations “groove having a size configured for housing at least a portion of the medical needle when the pair of wings are in the closed position” and “wherein the groove is formed in a single one of the pair of wings.” J.A. 21–22.

The district court adopted the magistrate judge’s recommendation and granted summary judgment of non-infringement. EMED appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

We review a grant of summary judgment in accordance with the law of the regional circuit, here the Fifth Circuit. *Ineos USA LLC v. Berry Plastics Corp.*, 783 F.3d 865, 868 (Fed. Cir. 2015). The Fifth Circuit reviews de novo a district court’s grant of summary judgment. *Id.* (citing *Triple Tee Golf, Inc. v. Nike, Inc.*, 485 F.3d 253, 261 (5th Cir. 2007)).

##### I. Literal Infringement

We apply a two-step analysis to determine whether accused devices literally infringe a patent’s claims. First, the claims are “construed to determine their scope.” *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1330 (Fed. Cir. 2001). Second, “the claims must be compared to the accused device.” *Id.* “Literal infringement exists when every limitation recited in the claim is found in the accused device.” *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1341 (Fed. Cir. 2016). “[O]n appeal from a grant of summary judgment of noninfringement, we must determine whether, after resolving reasonable factual

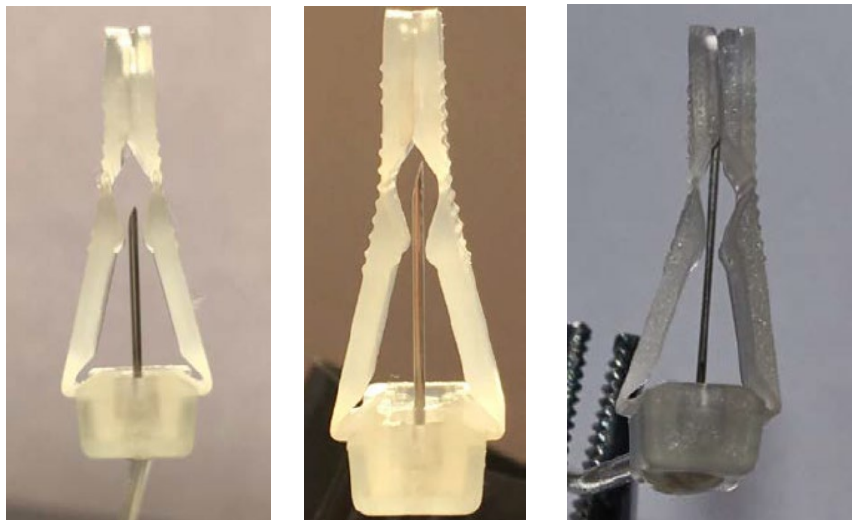


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inferences in favor of the patentee, the district court correctly concluded that no reasonable jury could find infringement.” *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1429 (Fed. Cir. 2000).

Under the district court’s undisputed constructions, the claimed groove is a “a long narrow cut or depression” formed in “only one of the pair of wings,” 2019 WL 1040604, at \*9, and “ha[s] a size designed for housing at least a portion of the medical needle that includes the sharp tip.” *Id.* at \*7. Moreover, the groove must perform the specific function of housing the needle “when the pair of wings are in the closed position.” ’476 patent at claim 8. Effectively, the claimed groove protects the user from the needle’s sharp tip while the wings are closed.

The Accused Products lack a “groove” as claimed and protect the user from needle injuries in a different way. Where the claimed device houses the needle in a groove in one of the wings—i.e., a long narrow cut or depression—the needle in the Accused Products is merely positioned between the two wings, as shown below.



J.A. 13–14.

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As shown in the far-right photograph above, the needle of at least one embodiment of the Accused Products appears to reach the plug and socket structure when the wings are closed. But the plug and socket structure does not contain any long narrow cut or depression that houses the needle, as shown in the close-up images below:



J.A. 14.

EMED argues that the claimed groove is self-evident from the above photographs. According to EMED, the “groove is the depression on the left wing that is formed by the lip at the left and right edges of the left wing.” Appellant’s Br. at 8. We disagree. EMED’s theory fails to account for the requirement that the groove “house[s]” the needle “when the pair of wings are in the closed position.” ’476 patent at claim 8. When the wings of the Accused Products are in the closed position, the surfaces of outer section (F) of the respective wings contact and mate with each other, thereby filling and eliminating any area in the left wing alleged to be a “groove” that may house the needle. As the magistrate judge explained, “there is no space to *house* anything, much less a medical needle, in the mechanical fastener once the fastener is closed.” J.A. 19 (emphasis added). It may be true that the needle, in one accused embodiment, contacts the plug-socket structure in the closed position, but mere contact is not sufficient to

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establish a genuine dispute that one of the wings might contain a groove “configured for housing” any portion of the needle.

Nor is the area surrounding the plug on which EMED relies “a long narrow cut or depression” as required by the district court’s construction of “groove.” 2019 WL 1040604, at \*9. The perimeter of this area appears to be roughly square, and the plug protrudes from the center of it. EMED’s briefing is markedly silent on how the region surrounding the plug could possibly be “a long narrow cut or depression.” Likewise, the report of EMED’s expert, Dr. Stoker, does not even attempt to explain how the Accused Products contain the claimed groove as construed. Thus, on the evidence in the record, we agree with the district court that there is no genuine dispute that the Accused Products do not contain the claimed groove.

## II. Doctrine of Equivalents

Under the doctrine of equivalents, “a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997). But an argument under the doctrine of equivalents fails if it “renders a claim limitation inconsequential or ineffective.” *Akzo Nobel Coatings*, 811 F.3d at 1342. As the Supreme Court instructed, “if a theory of equivalence would entirely vitiate a particular claim element, partial or complete judgment should be rendered by the court, as there would be no further *material* issue for the jury to resolve.” *Warner-Jenkinson*, 520 U.S. at 39 n.8.

As we explained above, the photographic evidence of the Accused Products establishes that what EMED alleges is the claimed “groove”—i.e., the area surrounding the plug—is filled by the socket structure from the other wing when the wings are attached in the closed position. The

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claims explicitly require that the “groove” must house the needle when the wings are in the closed position. ’476 patent at claim 8. To extend the claimed “groove” to encompass structures that do not house the needle would vitiate that claim limitation. In that same vein, EMED did not and cannot plausibly argue, without vitiating the limitation, that the area to which it refers as a “depression” is insubstantially different from a structure that is long and narrow.

#### CONCLUSION

We have considered EMED’s remaining arguments and find them unpersuasive. For the reasons stated above, we *affirm* the district court’s grant of summary judgment of noninfringement.

**AFFIRMED**