NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

ACUFLOOR, LLC,
Plaintiff-Appellant

v.

EVENTILE, INC., FORPAC, LLC,
Defendants-Appellees

2023-1887

Appeal from the United States District Court for the Middle District of Florida in No. 2:21-cv-00802-SPC-KCD, Judge Sheri Polster Chappell.

Decided: May 28, 2025

DEBRA JANECE MCCOMAS, Haynes and Boone, LLP, Dallas, TX, argued for plaintiff-appellant. Also represented by JOHN RUSSELL EMERSON, CAROLINE W. FOX; ADAM LLOYD ERICKSON, ANGELA M. OLIVER, Washington, DC.

ROBERT MANHAS, Orrick, Herrington & Sutcliffe LLP, Washington, DC, argued for all defendants-appellees. Defendant-appellee Eventile, Inc. also represented by PERRY S. CLEGG, Johnson & Martin, P.A., Salt Lake City, UT.

Defendant-Appellee Forpac, LLC also represented by WILLIAM JOHN EAGAN, Malloy & Malloy P.L, Miami, FL.

Before LOURIE, BRYSON, and STARK, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* BRYSON.

Opinion concurring-in-part and dissenting-in-part filed by *Circuit Judge* STARK.

BRYSON, *Circuit Judge*.

Acufloor, LLC, brought this action against EvenTile, Inc., and FORPAC, LLC, alleging that EvenTile and FORPAC have infringed two of Acufloor's patents. Following the district court's claim construction order, the parties stipulated to a judgment of non-infringement. Acufloor now appeals two of the district court's claim constructions. We modify one of the claim constructions and reject the other. We therefore vacate the judgment and remand for further proceedings.

I

A

Acufloor has asserted U.S. Patent Nos. 10,704,274 ("the '274 patent") and 10,513,857 ("the '857 patent") against the defendants in this case. The patents, which share a common specification, are directed to devices used for leveling, aligning, and properly spacing tiles. *See* '274 patent, col. 1, ll. 48–49.[1] Ceramic tile installers often use such devices to avoid lippage, a condition in which the edge of one tile is higher or lower than the edge of an adjoining tile.

When laying tile using the patented device, a tile installer spreads mortar over the subfloor where the tiles are

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[1] For convenience, this opinion cites to the specification of the '274 patent throughout.

to be installed and then places a tile on the mortar-covered subfloor. Next, the installer inserts one side of the horizontal base of the tile clip under the tile. *See id.* at Fig. 6. The installer then places a second tile on top of the other side of the base of the clip so that the upright body of the clip is positioned between the two tiles. *See id.* at Fig. 7. The installer then places a wedge, the other component of the tile-leveling system, through an opening in the body of the tile clip. When fully inserted, the wedge presses down on the two tiles to level them. *See id.* at Fig. 8. Once the tiles are set, the installer removes the wedge by breaking the body of the clip at a breaking point in the base. The installer then repeats the process with other sets of tiles. *See id.* at Fig. 9.

A depiction of an exemplary embodiment of the clip and wedge devices is found in Figures 11A and 11B of the '274 specification, which are reproduced below:

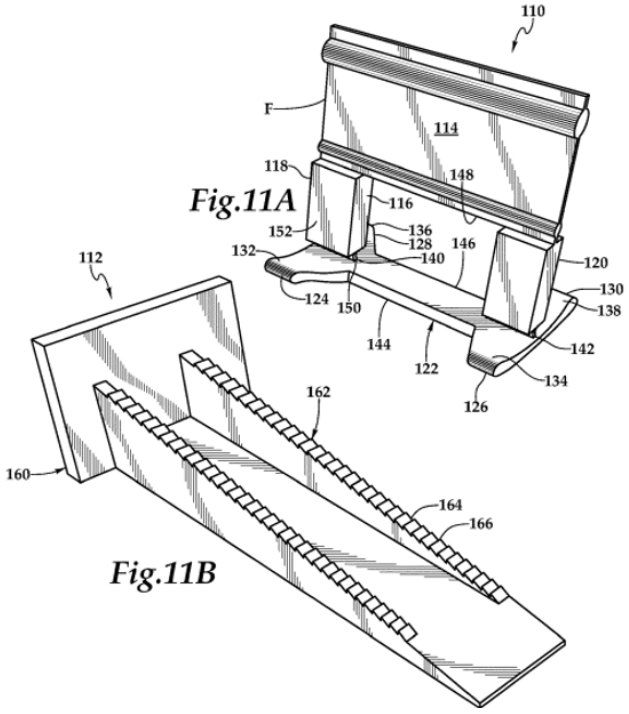


Fig.11A

Fig.11B

The I-shaped base of the tile clip (122) depicted in Figure 11A includes structures 124, 126, 128, and 130, two of which extend under each of the adjacent tiles. Structure 110 is the body of the clip, which extends upward between the tiles when the clip is in the intended position. Structures 118 and 120 are two stems of the body that intersect the base and define an open window in the body (116).[2] Structure 152 and its unnumbered equivalent on the other stem of the body are spacing pads that are attached to the stems of the body and can be used to position the tiles at a predetermined distance apart. *Id.* at col. 5, ll. 65–67.[3] Structure 112, which is depicted in Figure 11B, is the wedge device that is inserted in the opening (or window) in the body (structure 116) of the tile clip to press the tiles into a level configuration. Structures 140 and 142 are the narrow portions of the body, which define the location at which the body snaps off from the base of the clip when the leveling process is completed.

The '274 and '857 patents disclose various shapes for the clip and wedge devices. All of the clips have a pair of

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[2] Figure 11A is misleading in that structure 116, which the specification describes as the open window, '274 patent, col. 5, ll. 46, 62, 65 & col. 6, l. 11, seems to point to a spacing pad, which is otherwise designated as structure 152.

[3] The relationship between the stems and the spacing pads is easier to see in Figure 2 of the '274 patent, which depicts a side view of the clip with the wedge device inserted through the open window. In that figure, the stem is designated as 21 and the spacing pad is designated as 30. The specification explains that the spacing pad "contributes to furnishing a combination of vertical leveling and joint spacing within a single product." '274 patent, col. 3, ll. 23–30.

notches[4] in the base, which allow more of the surface area of the tile to be in direct contact with the mortar that is spread over the subfloor. *See id.* at Fig. 11A.

The common specification explains that a single leveling device and wedge can be used to align two, three, or four tiles at once. *See id.* at col. 3, ll. 43–47; col. 6, ll. 12–14; Figs. 3–5. In the four-tile embodiment, "each tile has corner-to-subfloor contact due to the notches that provide space for mortar contact therein." *Id.* at col. 6, ll. 15–18. In a two-tile implementation, "each tile has edge-to-subfloor contact due to the notches." *Id.* at col. 6, ll. 18–19.

B

Claims 5 and 8 of the '274 patent are generally representative of the claims of that patent for purposes of this appeal. Claim 5 recites:

> 5. A tile leveling device comprising:
>
> a body defining an open window;
>
> a base orthogonally coupled to the body, the base extending to the front of the body and the base extending to the rear of the body;
>
> a base to body coupling including a frangible breakaway section, the base and body being integral prior to frangible separation, the frangible breakaway section, upon breaking, frangibly separating the body from the base;
>
> a first notch formed at the base extending from proximate the base to body coupling to the front of the body the first notch providing

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[4] The district court construed the term "notch" to mean an "opening intersecting an edge of the base through which mortar can penetrate." App. 8. That construction is not challenged on appeal.

> first *tile edge-to-mortar-to-subfloor contact*; and
>
> a second notch formed at the base extending from proximate the base to body coupling to the rear of the body the second notch providing first *tile edge-to-mortar-to-subfloor contact*; and
>
> *the combination of the first notch and the second notch providing a majority of an area of tile-to-mortar-to-subfloor contact for the leveling device within the bounds of the base.*

'274 patent, cl. 5 (the emphasized text denotes the disputed limitations). Claim 8 recites:

> 8. A tile leveling device comprising:
>
> a body defining an open window;
>
> a base orthogonally coupled to the body, the base extending to the front of the body and the base extending to the rear of the body;
>
> a base to body coupling including a frangible breakaway section, the base and body being integral prior to frangible separation, the frangible breakaway section, upon breaking, frangibly separating the body from the base;
>
> a first notch formed at the base extending from proximate the base to body coupling to the front of the body; and
>
> a second notch formed at the base extending from proximate the base to body coupling to the rear of the body; and
>
> *the combination of the first notch and the second notch providing a majority of an area of tile-to-mortar-to-subfloor contact for the leveling device within the bounds of the base.*

'274 patent, cl. 8 (the emphasized text denotes the disputed limitation).

Claim 10 of the '857 patent is generally representative of the claims of that patent for purposes of this appeal. Claim 10 recites:

> 10. A tile leveling device comprising:
>
> a body defining an open window;
>
> an I-shaped base orthogonally coupled to the body, the I-shaped base having spaced first, second, third, and fourth bars extending transversely from the body, the spaced first and second bars extending to the front and outward of the body and the spaced third and fourth bars extending to the rear and outward of the body;
>
> an I-shaped base to body coupling including a frangible breakaway section, the I-shaped base and body being integral prior to frangible separation, the frangible breakaway section, upon breaking, frangibly separating the body from the I-shaped base;
>
> a first notch formed between the first and second bars;
>
> a second notch formed between the third and fourth bars;
>
> a first tile over the first bar, the first tile having a first surface opposite a second surface, the first tile having a first corner over the first notch, *the first corner having contact with mortar at the first notch with edge-to-subfloor contact of first corner-to-mortar-to-subfloor at the first notch*, wherein the first surface faces the first bar and the second surface is farther from the first bar than the first surface;

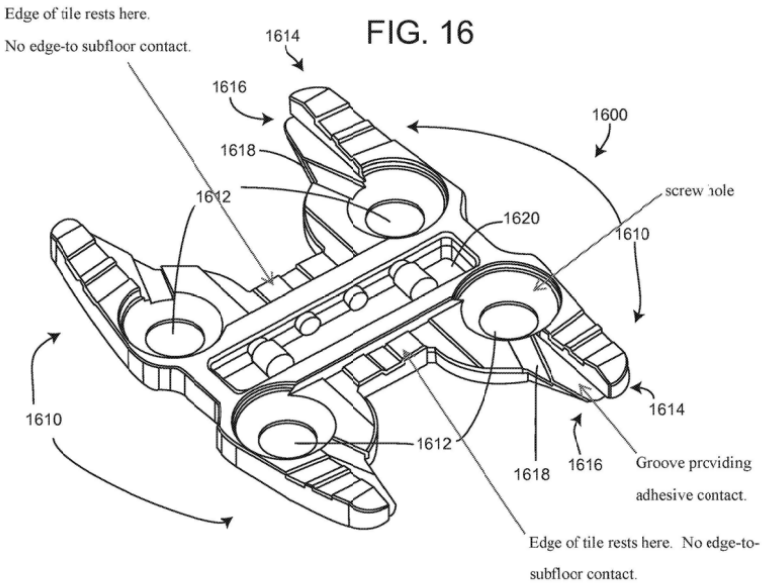
> a second tile over the second bar, the second tile having a third surface opposite a fourth surface, the second tile having a second corner over the first notch, *the second corner having contact with mortar at the first notch with edge-to-subfloor contact of second corner-to-mortar-to-subfloor at the first notch*, wherein the third surface faces the second bar and the fourth surface is farther from the second bar than the third surface; and
>
> the frangible breakaway section being located between the first and second surfaces of the first tile and the third and fourth surfaces of the second tile.

'857 patent, cl. 10 (the emphasized text denotes the disputed limitations).

C

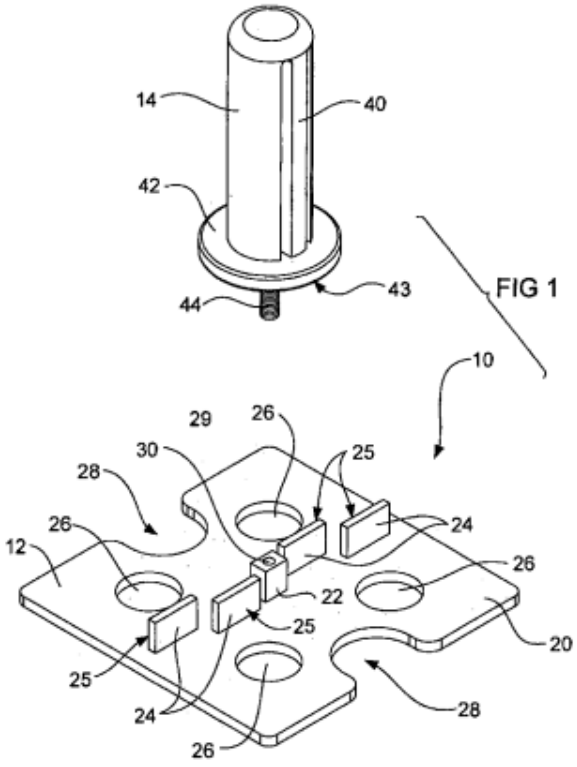
The prosecution histories of the '857 and '274 patents are highly relevant to this appeal. During the prosecution of U.S. Patent Application No. 16/102,207 ("the '207 application"), which matured into the '857 patent, the examiner initially rejected all the claims as obvious in view of two references: U.S. Patent Application Publication No. 2008/0236094 ("Doda") and U.S. Patent Application Publication No. 2013/0247508 ("Hoffman"). In response, the applicants amended the claims to add a limitation requiring edge-to-subfloor contact, App. 701–08; they argued that the proposed Doda-Hoffman combination did not disclose tile edge-to-subfloor contact because the grooves of the Doda-Hoffman combination "do not penetrate the base portion and provide this type of edge-to-subfloor contact for the tiles," App. 709–10. In support of that argument, the applicants submitted an annotated diagram of the Hoffman prior art reference, reproduced below. App. 1052. Referring to a plastic surface between the two grooves (1616) of the Hoffman embodiment, the applicants' annotation states: "Edge of tile rests here. No edge-to subfloor

contact." *Id.* In the accompanying remarks, the applicants described the contact in Hoffman as "edge-to-groove" in contrast to the claimed contact, which is "edge-to-subfloor." *Id.* In other words, the applications distinguished the Hoffman reference based on its lack of direct contact between the edge of the tile and the subfloor, as required by the claims in the application.



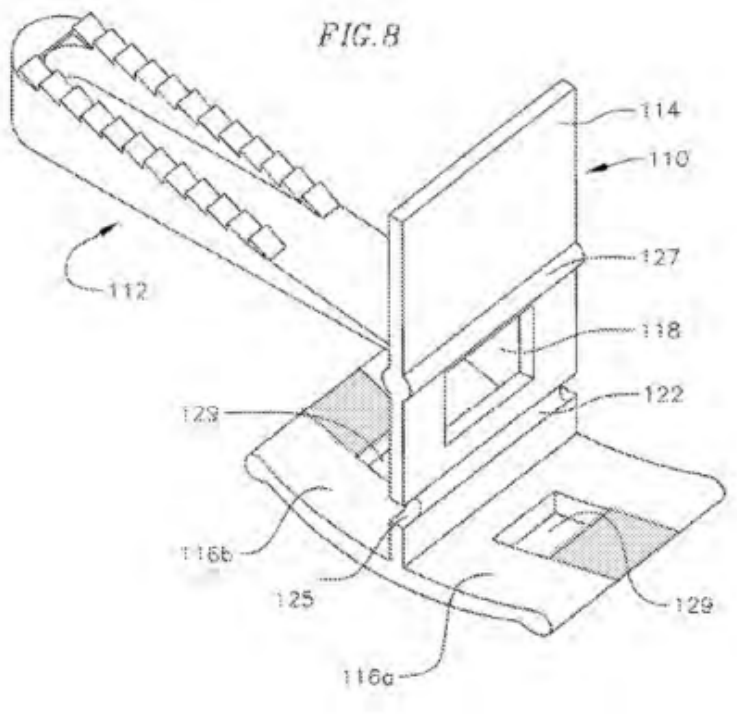
Id.

During the prosecution of U.S. Patent Application No. 16/102,344 ("the '344 application"), which matured into the '274 patent, the examiner issued a rejection for obviousness based on Doda and International Publication No. WO 2013/033761 ("Psaila"). The Psaila device is depicted below.



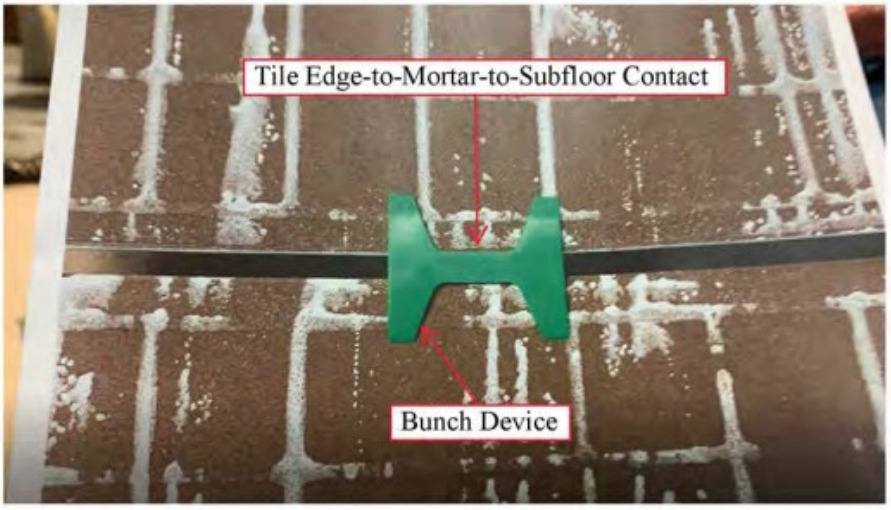
App. 835.

In the office action rejecting the claims, the examiner explained that it would have been obvious to "modify the base of Doda with the configuration of Psaila by extending the opening 129 [in Doda] all the way to the front portion of 116 for allowing more adhesive 132 to penetrate the opening and extend over a greater surface area of the tiles as taught by Psaila." *See* App. 1309 (quoting June 14, 2019, Non-final Rejection). The applicants responded by amending the claims to include a "tile edge-to-mortar-to-subfloor" limitation. App. 1299–305. In the next office action rejecting the claims, the examiner submitted a drawing of the proposed combination, which shows the structure of Doda with the two gray segments of the base removed to create notches similar to those in Psaila, thereby achieving a structure akin to the structure of the claimed invention:

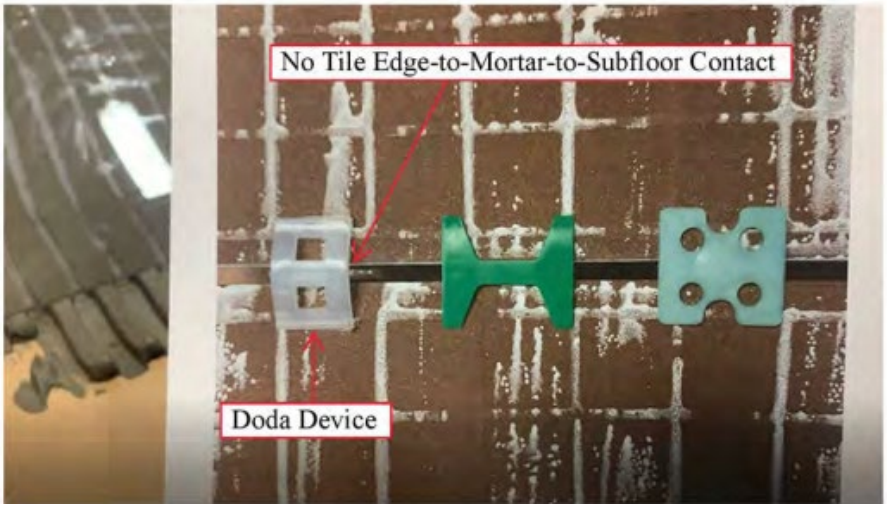


App. 799.

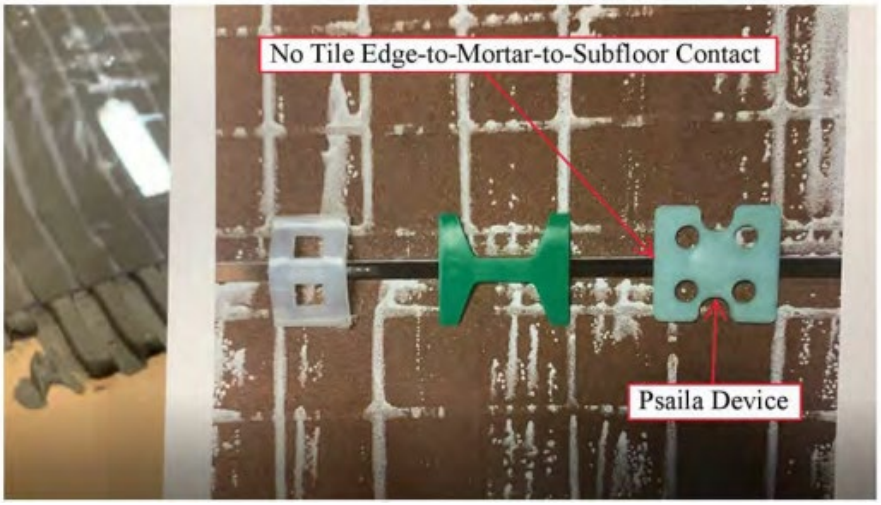
Subsequently, during an applicant-initiated interview with the examiner, the applicants showed a video as a demonstrative aid. In one image from the video, which is reproduced below, the applicants annotated a sample embodiment of the invention (referred to as the "Bunch Device"), in which the edges of two adjacent tiles appear to be flush with the inner edges of the two notches on either side of the base of the tile clip. The applicants' annotation of that image described the structure as showing "Tile Edge-to-Mortar-to-Subfloor Contact."



App. 1080. The applicants also included an image of the Doda device, which was annotated to describe the Doda device as showing "No Tile Edge-to-Mortar-to-Subfloor Contact."



App. 1081. The applicants annotated the same image to describe the Psaila device. As in the case of the Doda device, the applicants' annotation reads: "No Tile Edge-to-Mortar-to-Subfloor contact."



App. 1082. Following the interview, the examiner pointed out that "the video shows the size of the notch is critical to the success of the invention," and therefore suggested that the applicant "focus on the size of each notch in relation to the size of the base." App. 750.

In response, the applicants amended their claims to add the limitation reciting "the combination of the first notch and the second notch providing a majority of an area of tile-to-mortar-to-subfloor contact for the tile leveling device within the bounds of the base." App. 807–12. Seeking to distinguish the prior art from their invention, the applicants argued that a skilled artisan would not "have modified the base of Doda with the configuration of Psaila" by extending the openings 129 all the way to the outer edges of the base 116 to allow more adhesive to penetrate the opening and extend over a greater surface area of the tiles. App. 826. The applicants explained that "Psaila discloses and teaches keeping any opening 129 of Doda or cut-outs 28 of Psaila away from the inside of the base 116 so the integrity of the spacer tabs 24 is maintained." *Id.* The claims were then allowed as amended.

D

During the claim construction proceedings, the district court construed the two claim limitations that are challenged on appeal. First, the court construed the term "edge," which appears in the phrases "edge-to-subfloor contact" and "edge-to-mortar-to-subfloor contact," to mean "the line at which a surface of a tile terminates." App. 8. Second, the court construed the term "the combination of the first notch and the second notch providing a majority of an area of tile-to-mortar-to-subfloor contact for the tile leveling device within the bounds of the base," which appears in the claims of the '274 patent, but not the '857 patent, to mean "the notches in the base collectively span an area that is larger than the solid portions of the base." App. 11.

II

A

We review the district court's claim construction and interpretations of the intrinsic evidence de novo and any subsidiary factual findings based on extrinsic evidence for clear error. *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 967 (Fed. Cir. 2022).

Acufloor argues that the district court erred in construing the term "edge" to refer to a single line at which the surface of the tile terminates, as opposed to the region in the vicinity of the very edge of the tile.[5] FORPAC and EvenTile defend the court's construction, arguing that it is correct in view of the prosecution history.

As a preliminary matter, FORPAC and EvenTile argue that Acufloor has waived its right to challenge the district court's construction of the term "edge," because Acufloor argued before the district court that "edge" did not need to

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[5] For simplicity, we refer in this opinion to what the district court called the "line at which a surface of the tile terminates" as the "very edge of the tile."

be construed and should instead be given its plain and ordinary meaning. Although Acufloor requested that the term "edge" be given its plain and ordinary meaning, it is clear from the district court's opinion that Acufloor understood the plain and ordinary meaning of "edge" to refer to a region near the very edge of the tile, which is consistent with Acufloor's position before us. *See* App. 6. Accordingly, Acufloor has not waived its right to challenge the district court's claim construction. *Medtronic, Inc. v. Teleflex Innovations S.À.R.L.*, 68 F.4th 1298, 1305 (Fed. Cir. 2023).

Turning to the merits of the district court's claim construction, we agree with the district court that the term "edge" must include the very edge of the tile or, in the district court's words, the line at which the surface of the tile terminates. But we modify the court's claim construction slightly to include not only the very edge of the tile, but some amount of the tile's surface inward from the very edge of the tile.

Claim terms are generally given the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). The context in which the term is used in the patent's claims and specification is strong evidence of how a person of ordinary skill would understand the term. *See id.* Here, the claims use the term "edge" in the context of contact between two surfaces. Specifically, the claims require contact between either the edge and the subfloor, or the edge, mortar, and subfloor. As a physical matter, a line, such as the one at which the surface of the tile terminates, does not have a surface area, so restricting the edge to only a line would render the word "contact" meaningless. In short, for there to be contact between the edge and either the subfloor or mortar, the edge must have some surface area. *See Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.").

Although we conclude that the term "edge" is not limited to the very edge of the tile, it is still necessary to determine whether the "edge" must include that very edge. Based on the prosecution history, we hold that it does: the proper construction of "edge" must include the very edge of the tile, even though it also includes some surface area extending from the very edge of the tile toward the center of the tile.

During prosecution, the applicants repeatedly attempted to overcome obviousness rejections by distinguishing their claimed invention from the proposed prior art combinations based on the area of the tile that would be in contact with the mortar. Regarding the '857 patent, the applicants added the requirement that there be "edge-to-subfloor contact at the first notch" to each of the claims, App. 701–08, and they argued that the Hoffman prior art reference did not satisfy those "edge-to-subfloor contact" limitations, App. 714.

Specifically, the applicants argued that the grooves of the Hoffman prior art device do not provide tile edge-to-subfloor contact because the grooves do not "penetrate the base portion"—i.e., the grooves do not go all the way through the base portion. In addition, the applicants pointed out that the very edge of the tile in the Hoffman device rests on top of a strip of solid material and does not directly contact the subfloor. The applicants' annotated version of the Hoffman device points to that strip of material and states "Edge of tile rests here. No edge-to subfloor contact." App. 1052. The implication of those statements is that the Hoffman reference does not disclose tile edge-to-subfloor contact because the very edges of the tiles in the Hoffman device do not directly contact the subfloor.

During the prosecution of the '274 patent, the applicants added limitations requiring "edge-to-mortar-to-subfloor contact" to what became claims 1–7 of the '344 application. App. 1299–305. With that amendment, the applicants distinguished their invention from the prior art

combination, which would "push out" the mortar—i.e., it would push the mortar away from the very edge of the tile, such that the combination would not provide the claimed tile edge-to-mortar-to-subfloor contact. App. 1312. In contrast, the applicants explained that the "correct way" to use a leveling device is to insert it so that "it encourages mortar to reach as close to the edge as possible." App. 1085. Those statements indicate that the applicants viewed maintaining mortar up to the very edge of the tile to be an important feature of their claimed invention.

Finally, the images and statements from the applicants' demonstrative aids support this interpretation of "edge." They refer to the "Bunch device" with openings that are flush with the very edges of the adjacent tiles as having tile edge-to-subfloor contact, and they refer to devices with openings that do not allow contact between the very edges of the tiles and the subfloor as not having tile edge-to-subfloor contact. *Compare* App. 1080 *with* App. 1081 *and* App. 1082.

In short, the applicants repeatedly distinguished their invention from the prior art on the ground that the prior art devices do not permit the tile to be in contact with the mortar all the way to the very edge of the tile, whereas the claimed invention permits the mortar to extend to that point. In view of those statements, we agree with the district court that the inventors contemplated that the edge would include the very edge of the tile. Therefore, we construe edge to mean "the area around and including the very edge of the tile."[6]

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[6] We recognize that our construction of the "edge" limitation differs only slightly from the district court's construction, and that the difference may have little or no practical impact. However, because we are remanding this case based on the second disputed claim construction issue,

In support of its interpretation of the term "edge," Acufloor argues that the district court improperly relied on the prosecution history because Acufloor's statements did not constitute a clear and unmistakable disclaimer of claim scope. As we have consistently held, however, "any explanation, elaboration, or qualification presented by the inventor during patent examination is relevant, for the role of claim construction is to 'capture the scope of the actual invention' that is disclosed, described, and patented." *Iridescent Networks, Inc. v. AT&T Mobility, LLC*, 933 F.3d 1345, 1352–53 (Fed. Cir. 2019) (quoting *Fenner Invs., Ltd. v. Cellco P'ship*, 778 F.3d 1320, 1323 (Fed. Cir. 2015)). The prosecution history "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Phillips*, 415 F.3d at 1317. Here, we do not construe the term "edge" based on a finding of disclaimer. Rather, we look to the prosecution history to inform us of how a person of ordinary skill in the art would understand the term "edge" as used in the asserted patents.

Acufloor places great weight on the argument that the district court's construction improperly excludes an embodiment of the invention that is depicted in Figure 11A of the patents. We disagree. At page 44 of its brief, Acufloor has annotated Figure 11A by incorporating a dotted line extending along the base of the clip between the two spacing pads. Acufloor argues that the diagram shows that if a tile were installed over the base and pressed against the spacing pads, the very edge of the tile would lie on top of a

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and because this appeal was taken from a stipulated judgment, we deem it appropriate to allow the district court in the first instance to assess the effect of the modified construction of the "edge" term as applied to the facts of this case.

portion of the base, and thus not be in direct contact with the subfloor.

The problem with that argument is that it is based entirely on an interpretation of the perceived dimensions of the drawing in Figure 11A, and this court has held that "arguments based on drawings not explicitly made to scale in issued patents are unavailing." *Nystrom v. TREX Co.*, 424 F.3d 1136, 1149 (Fed. Cir. 2005); *see also Regents of Univ. of Cal. v. Satco Prods., Inc.*, No. 2023-1356, 2024 WL 4972639, at *3 (Fed. Cir. Dec. 4, 2024) ("[P]atent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue."); *Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1268 (Fed. Cir. 2012) ("This court has repeatedly cautioned against overreliance on drawings that are neither expressly to scale nor linked to quantitative values in the specification."); *In re Wright*, 569 F.2d 1124, 1127 (CCPA 1977) ("Absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value."). Here, the specification does not suggest that its figures are drawn to scale or are more than rough depictions of the invention.

The more reliable guide to the relationship between the tile edges and the notches in the claimed tile clip is found in the prosecution history summarized above, which makes clear that in the claimed clips, unlike in the prior art devices, the opening between the subfloor and tile extends to the very edge of the tile. Although Acufloor cites expert testimony to support its interpretation of Figure 11A, extrinsic evidence may not contradict intrinsic evidence. *See Phillips*, 415 F.3d at 1318.[7] And there is

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[7] In any event, the expert declaration on which Acufloor relies is addressed primarily to rebutting the defendants' theory that the "edge" of the tile is the line at

nothing in the intrinsic evidence to support Acufloor's contention that the very edge of the tile need not be in direct contact with the subfloor. Our construction therefore does not read a preferred embodiment out of the patent, as Acufloor contends.[8]

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which the tile terminates. *See* App. 644–45 (¶¶ 74–75). The expert's separate argument that the term "edge" does not include the very edge of the tile consists only of a restatement of Acufloor's argument based on Figure 11A from the common specification and a questionable interpretation of one of the images of the "Bunch device" presented to the examiner during the prosecution. *See id.* at 646–48 (¶¶ 78–79).

[8] The dissent argues for a construction of the term "edge" under which the mortar-to-subfloor contact could end at some undefined distance from the very edge of the tile. The dissent acknowledges that it "may well be" that its construction would render the claims at issue invalid. We agree that the dissent's construction would raise serious questions about the validity of the claims, as the construction leaves undefined how much distance there could be between the very edge of the tile and the portion of the tile having mortar-to-subfloor contact while still satisfying the limitation requiring "tile edge-to-mortar-to-subfloor contact." But the potential indefiniteness problem is more than just a happenstance consequence of the dissent's construction; it is a factor that cuts against adopting that construction in appropriate cases. As we have explained, when there is doubt as to the proper construction of a claim term, the construction that preserves the validity of the claim should be adopted. *See Phillips*, 415 F.3d at 1327; *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 911 (Fed. Cir. 2004).

B

With respect to the construction of "majority of an area" limitation in the '274 patent, the parties dispute whether that phrase refers to a majority of the area of contact between the tile and the subfloor, or a majority of the area of the base. The district court concluded that the operative area is the area of the base. We disagree.

The plain language of the "majority of an area" limitation dictates its proper construction. The limitation states in full: "the combination of the first notch and the second notch providing a majority of an area of tile-to-mortar-to-subfloor contact for the leveling device within the bounds of the base." Because the term "area" in the limitation expressly refers to the area of tile-to-mortar-to-subfloor contact and not to the area of the base, the plain terms of the limitation support Acufloor's construction. Nothing in the limitation relates the area of the notches to the area of the solid portions of the base.

It is true that the "majority of an area" limitation was added to the claims of the '274 patent following the examiner's suggestion that the applicants "focus on the size of each notch in relation to the size of the base" and "amend[] the claim language to better define the size of the notch [to] further distinguish from the prior art of record." App. 750. If the applicants had used the language suggested by the examiner, the construction adopted by the district court would likely have been correct. But the applicants did not adopt that language; instead, in their March 25, 2020, response to the examiner's February 27, 2020, communication, they adopted language clearly pointing in a different direction, App. 805–29, and the examiner allowed the claims as so amended, *id* at 831–32.

The district court relied on statements from earlier in the prosecution history to support its conclusion that the amendment "distinguishes Acufloor's device from the prior art because the Acufloor design allows a relatively large area of direct contact between subfloor, mortar, and tile."

See App. 10. In support of that conclusion, the district court quoted the applicants' argument that their design allowed "more adhesive to penetrate the opening and extend over a greater surface area of the tiles" than the prior art. *Id*. In making that argument, however, the applicants were explaining that a skilled artisan would not extend the opening 129 in Doda toward the base; they were not arguing that their device shrinks the size of the base, thereby generally permitting more contact. App. 826. Because the applicants' argument was specific as to how the opening of Doda would or would not be modified, we understand the applicants to have been distinguishing their device from the prior art based on the area of contact permitted by the notch as compared to the area of contact permitted by other openings—i.e., based on the fact that the claimed notches provide the majority of the area *of contact*. That understanding supports our conclusion that the district court erred in relating majority to the area of the base as opposed to relating it to area of contact.

The district court stated that the applicants "gave no indication [they] contemplated other openings when adding the 'majority of an area' phrase." App. 10. As noted above, however, the applicants explicitly argued that the opening 129 in Doda would not be extended. They similarly argued that the cut-outs in Psaila, i.e., the round openings shown in that reference, would not be extended. App. 826 ("Psaila does not disclose or teach extending . . . cut-outs 28 of Psaila . . . ."). The references in the prosecution history to the openings in Doda and Psaila suggest that the applicants' amendment was made with other openings in mind.

The defendants similarly argue that the "majority of the area" limitation cannot be directed to a comparison between the notch and other openings, because there are no other openings recited in claims. But the claims use the transition word "comprising" and are therefore presumptively open. *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997) ("'Comprising' is a term of art used in claim language which means that the named elements are

essential, but other elements may be added and still form a construct within the scope of the claim."). Accordingly, the claims, as amended, permit the claimed device to have other openings, such as those in the Psaila device, so long as the notches provide the majority of the open area for the tile, mortar, and subfloor contact. Based on the claim language and the prosecution history, we therefore construe the "majority of an area" term to mean "the combination of the first notch and the second notch providing the majority of the area of the tile-to-mortar-to-subfloor contact that exists within the bounds of the base."

III

For the foregoing reasons, we modify the district court's construction of the term "edge" as used in the claims of the '274 patent and the '857 patent. And we disagree with the district court's construction of the term "the combination of the first notch and the second notch providing a majority of an area of tile-to-mortar-to-subfloor contact for the leveling device within the bounds of the base" as used in the claims of the '274 patent. We therefore vacate the stipulated judgment of infringement and remand for further proceedings consistent with this opinion.

No costs.

VACATED AND REMANDED

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

ACUFLOOR, LLC,
Plaintiff-Appellant

v.

EVENTILE, INC., FORPAC, LLC,
Defendants-Appellees

2023-1887

Appeal from the United States District Court for the Middle District of Florida in No. 2:21-cv-00802-SPC-KCD, Judge Sheri Polster Chappell.

STARK, *Circuit Judge*, concurring-in-part and dissenting-in-part.

I agree with my colleagues that the district court erred in its construction of the "majority of an area" term in the '274 patent. The correct construction is "the combination of the first notch and the second notch providing the majority of the area of the tile-to-mortar-to-subfloor contact that exists within the bounds of the base." Maj. at 23. I further agree that we must vacate the judgment of non-infringement and remand for further proceedings. Therefore, I join all parts of the majority opinion other than Part II.A.

I disagree, however, with the majority's determination that the correct construction of "'edge' must include the very edge of the tile or, in the district court's words, the line at which the surface of the tile terminates." *Id.* at 15. In my view, the proper construction of "edge" is broader: it *allows* contact at "the very edge of the tile" but only *requires* that such contact occur either at the very edge or in the area near that very edge. Thus, in the remand proceedings we are ordering, I would instruct the district court to apply Acufloor's construction of "edge," which "includes an area or region where two surfaces of a tile meet." Open. Br. at 59; *see also* Appx584 (Acufloor arguing in claim construction briefing the "patents use the term 'edge' to refer to a region or area, not a single line").[1]

I

The majority does not suggest that the claim language itself clarifies for the person of ordinary skill in the art whether Acufloor's or the court's construction is correct. My colleagues also appear to recognize that the specification supports Acufloor's position. This is because the Figure 11A embodiment, which the specification describes as an "implementation" in which "each tile has edge-to-subfloor contact due to the notches," '274 patent at 6:18-19, is within the scope of the claims under Acufloor's construction but is excluded under the majority's. Maj. at 19-20. Because the specification tells us the Figure 11A embodiment meets the claim limitation, even though one can see from

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[1] It may well be that this construction renders Acufloor's claims invalid. *See generally Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014) ("[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them."). I would leave it to the district court on remand to allow the parties to litigate invalidity arguments, which are not before us on appeal.

the figure that this embodiment would not allow mortar to reach "the very edge" of the tile, a construction excluding this embodiment is likely incorrect.[2] *See, e.g.*, *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1277 (Fed. Cir. 2008) ("[W]here claims can reasonably [be] interpreted to include a specific embodiment, it is incorrect to construe the claims to exclude that embodiment, absent probative evidence [to] the contrary."). For this reason, I view the specification as providing strong support for Acufloor's construction.

The majority's analysis is devoted almost entirely to the prosecution history. While there are indications in the prosecution history that the patent applicant *may* have intended to narrow claim scope in the manner the majority has determined, *see* Maj. at 16-17, I find the prosecution history too ambiguous to support the majority's conclusion.

II

Patent prosecution involves an applicant in an "ongoing negotiation" with the Patent Office, ultimately resulting in allowable claims if its subject matter is determined to be patentable. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) (*en banc*). The record developed in reaching that endpoint "often lacks" clarity. *Id.* Even so, a patent's prosecution history can "inform the

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[2] The majority denigrates reliance on Figure 11A because it is not drawn to scale. Maj. at 19. I see nothing wrong with Acufloor pointing to the figure to help the court interpret a claimed feature that the specification unequivocally states is shown in that very figure. *See generally Motionless Keyboard Co. v. Microsoft Corp.*, 486 F.3d 1376, 1380 (Fed. Cir. 2007) (approving use of figure to construe disputed term in manner consistent with depiction in that figure). Acufloor is not trying to use the figure to limit claim scope, as the cases the majority cites caution against. *See* Maj. at 19.

meaning of the claim language by demonstrating [i] how the inventor understood the invention and [ii] whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.* (internal numbering added); *see also AstraZeneca AB v. Mylan Pharms. Inc.*, 19 F.4th 1325, 1335 (Fed. Cir. 2021) ("[A]ny explanation, elaboration, or qualification presented by the inventor during patent examination is relevant, for the role of claim construction is to capture the scope of the actual invention that is disclosed, described, and patented.") (internal quotation marks omitted). Here, while the prosecution history informs us as to how the inventor understood his invention, I do not read that history as showing the inventor "limited the invention" or made "the claim scope narrower than it would otherwise be."[3] *Phillips*, 415 F.3d at 1317.

The majority tells us that the proper construction of "edge" must include "the very edge" because, first, the "applicant[] added the [edge] requirement" to overcome the Hoffman reference. Maj. at 16 (citing Appx701-08, Appx714). Specifically, the majority points to the applicant's arguments "that the grooves of the Hoffman prior art device do not provide tile edge-to-subfloor contact because

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[3] The panel is unanimous in concluding that the prosecution history does not support a "finding of disclaimer." Maj. at 18. "For a statement during prosecution to qualify as a disavowal of claim scope, it must be so clear as to show reasonable clarity and deliberateness, and so unmistakable as to be unambiguous evidence of disclaimer." *Genuine Enabling Tech. LLC v. Nintendo Co.*, 29 F.4th 1365, 1374 (Fed. Cir. 2022) (internal quotation marks and citation omitted). My colleagues and I agree that the prosecution history here is devoid of such unmistakable, unambiguous evidence.

the grooves do not penetrate the base portion" and "the very edge of the tile in the Hoffman device rests on top of a strip of solid material and does not directly contact the subfloor." Maj. at 16 (internal quotation marks omitted). The majority concludes that "[t]he *implication* of those statements is that the Hoffman reference does not disclose tile edge-to-subfloor contact because the very edges of the tiles in the Hoffman device do not directly contact the subfloor." *Id.* (emphasis added).

I do not believe this mere "implication" is sufficient to overcome the clear indication in the specification, especially from Figure 11A and the discussion of it, that the "edge" limitation does not require mortar to reach "the very edge" of the tile. There are other plausible readings of the applicant's statements. One argued by Acufloor is that the applicant was distinguishing Hoffman based on Hoffman's grooves (element 1618 as shown in Figure 16 reproduced in the majority opinion at 9) being unable to provide edge-to-mortar-to-subfloor contact because they do not provide mortar-to-subfloor contact; the grooves instead provide edge-to-groove mortar contact. *See* Open. Br. at 56-58 (citing Appx714).

The majority next cites to the applicant's amendment adding the "edge-to-mortar-to-subfloor" limitation to claims 1-7 of the '274 patent, accompanied by a statement by which the "applicant[] distinguished the[] invention from the prior art combination, which would 'push out' the mortar . . . away from the very edge of the tile." Maj. at 16-17 (quoting Appx1312). But this statement, too, is ambiguous. It provides no clarity as to whether the applicant understood and intended "edge" to be limited to the "line at the very edge" or to more broadly also include the area near (and including) that line.

Finally, the majority finds support for its conclusion that the inventor narrowed claim scope during prosecution in statements the inventor made in a video demonstrative

he submitted to the examiner. Maj. at 17-20 (citing Appx1080-82).[4] The majority sees the video as showing, and thus requiring in the claims, "openings that are flush with the very edges of the adjacent tiles as having tile edge-to-subfloor contact . . . ." Maj. at 17. I see the video differently. I think it simply shows a person of skill in the art touting the benefits of getting mortar to an area as close to the very edge as possible. Appx1077-78 ("There is a tremendous advantage to notches, but only if they are inserted the correct way. The correct way would be to insert it as it encourages mortar to reach as close to the edge as possible."); *see also* Appx1073 ("[W]e are therefore trying to protect the other vulnerable portion of the tile installation, namely the edge.").

To the extent the video is pertinent to the claim construction dispute, it favors Acufloor's broader construction, because the embodiment used in the video (the "Bunch Device") shows no edge-to-mortar-to-subfloor contact at the very edge of the tile. Appx1086 (showing that mortar does not reach very edge of clear plexiglass tiles); Appx1087 (showing, from perspective of the underside of tile, how Bunch Device overlaps with the very edge of tile, preventing mortar contact at that line). If the majority's construction is correct, the devices the applicant chose to use to

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[4] Screenshots from the video appear in several places in the record, including Appx1073-94. The entire video was provided to the examiner through a Youtube link, Appx.750, and remains available there. *See* Comparison of Devices for Leveling and Aligning Tiles, YOUTUBE.COM, https://www.youtube.com/watch?v=qQHE4mq7SVg. Because the video demonstrative was submitted to and considered by the examiner, it is intrinsic evidence. I agree with the district court that there is no need in this case to consider the parties' extrinsic evidence.

show the examiner what his invention covers would not themselves be within the scope of the issued claims. The video, as well as the rest of the prosecution history, is too ambiguous to justify this implausible result.

III

In my view, the prosecution history contains little that helps us resolve the dispute over the proper construction of the "edge" term. It mostly reveals that the applicant understood his invention as allowing mortar to get as close as possible to the very edge of the tile, and that this is beneficial for reducing the vulnerability of tile at its edge, where it may break.

I conclude, then, that the applicant did not narrow the scope of his claims during prosecution, either by argument or by amendment. Consequently, the embodiment depicted in Figure 11A, which does not require edge-to-mortar-to-subfloor contact at the very edge, remained within the scope of the issued claims. The majority's construction, which excludes that embodiment by narrowly limiting the claims to only those embodiments in which such contact occurs at the very edge of the tile, is, therefore, incorrect. I respectfully dissent.