

United States Court of Appeals for the Federal Circuit

BARRETTE OUTDOOR LIVING, INC.,
Plaintiff-Appellant

v.

**FORTRESS IRON, LP, FORTRESS FENCE
PRODUCTS, LLC,**
Defendants-Cross-Appellants

2024-1231, 2024-1359

Appeals from the United States District Court for the
Northern District of Texas in No. 3:21-cv-02008-E, Judge
Ada Elene Brown.

Decided: October 17, 2025

TYLER ROBERT MARANDOLA, Duane Morris LLP, Phila-
delphia, PA, argued for plaintiff-appellant. Also repre-
sented by DAVID JON WOLFSOHN.

PAUL V. STORM, Foley & Lardner LLP, Dallas, TX, ar-
gued for defendants-cross-appellants. Also represented by
JOHN JACOB MAY.

Before MOORE, *Chief Judge*, LINN and CUNNINGHAM,
Circuit Judges.

LINN, *Circuit Judge*.

Barrette Outdoor Living, Inc. (“Barrette”) appeals from an entry of judgment of non-infringement by the U.S. District Court for the Northern District of Texas based on Barrette’s stipulation that it could not prove—under the district court’s construction of “boss,” “projection,” and other related terms as fastener-less and integral—that products sold by Fortress Iron, LP and Fortress Fence Products, LLC (collectively, “Defendants”) infringe claims 1–7 of U.S. Patent No. 8,413,332 (“332 patent”); claims 1, 2, 3, and 5–12 of U.S. Patent No. 8,413,965 (“965 patent”); claims 1, 2, 3, and 5–20 of U.S. Patent No. 9,551,164 (“164 patent”); and claims 1, 2, and 4–13 of U.S. Patent No. 9,963,905 (“905 patent”). *See Barrette Outdoor Living, Inc. v. Fortress Iron, LP*, No. 3:21-cv-02008-E, 2023 WL 8610184, at *1 (N.D. Tex. Nov. 14, 2023) (“*Final Judgment*”) (citing J. App’x 145–51). Defendants cross-appeal from a final judgment holding the asserted claims are not indefinite. *Id.*

Because the district court correctly construed the claims as limited to integral bosses and projections, we *affirm* the judgment of non-infringement. Because the district court correctly determined that the asserted patents’ specification and prosecution histories would allow a skilled artisan to ascertain the claims’ scope with reasonable certainty, we *affirm* the judgment of no invalidity based on indefiniteness.

BACKGROUND

I

Barrette owns the asserted patents, which share a common specification and parent application that issued as U.S. Patent No. 9,151,075 (the “075 patent”). *Barrette Outdoor Living, Inc. v. Fortress Iron, LP*, No. 3:21-cv-2008-E, 2023 WL 5503030, at *7 (N.D. Tex. Aug. 25, 2023) (“*Markman Order*”).

The patents' common specification describes a fencing assembly featuring pivoting, sliding connectors that connect pickets to rails. This sliding pivotal connection purportedly allows the pickets to rack (i.e., pivot with respect to the rail) to a greater extent than prior art fencing assemblies. The connectors "can include small projections (e.g., bosses) that extend from one surface thereof and engage holes (e.g., recesses) formed in the pickets" and "this provides a fastener-less but still pivotal connection." *See, e.g.*, '965 patent col. 1 ll. 42–46. Moreover, the Detailed Description describes prior art assemblies that "incorporate screws S and/or bolts to rotatably couple pickets P to rails R" and notes that "[s]uch couplings are time consuming to install," whereas "the present invention utilizes a sliding pivotal connection between the pickets **20** and the rails **30** that is very easy and fast to install." *Id.* at col. 5 ll. 55–66.

Claim 1 of the '965 patent recites:

1. A fencing/railing assembly adapted to be positioned between a pair of posts and mounted thereto, the assembly comprising:
 - a plurality of vertical pickets, each picket comprising an upper end and a lower end opposite the upper end, each picket further comprising at least one pivot hole formed therein between the upper and lower ends;
 - a plurality of elongate rails extending transverse to the pickets, each rail having a first end and a second end opposite the first end, and having at least an upper wall and a side wall, each rail further comprising a plurality of picket openings formed therein and spaced longitudinally along the upper wall thereof, wherein the plurality of pickets are each individually received in a respective one of the plurality of picket openings;
 - and

one or more connectors for connecting the plurality of pickets to the plurality of rails, each connector comprising an elongate strip with opposing first and second sides, wherein at least one boss extends from the first side of the strip, and a sliding surface is formed on the second side;

wherein each at least one boss of a respective connector is inserted into the at least one pivot hole in a respective one of the plurality of pickets such that the connector is pivotably connected to the picket, and

wherein the sliding surface of the respective connector is slidably engaged with an inner surface of the side wall of a respective one of the plurality of rails;

whereby pivoting the upper end of the respective picket towards the first end of the respective rail causes the respective connector to slide along the inner surface of the side wall of the respective rail towards the second end of the respective rail, and vice versa, in such a manner that a pivotal range of the plurality of pickets relative to the plurality of rails is at least about 20 degrees in each direction.

Id. at claim 1.

While the claims of the '965, '332, and '164 patents recite bosses, the claims of the '905 patent, instead, recite connectors featuring "at least one projection." *See, e.g.*, '905 patent at claim 1.

II

During the prosecution of the '075 patent, but after the '332 and '965 patents had already issued, the examiner rejected claim 1 because, among other reasons, U.S. Patent Application Publication No. 2009/0065755 ("Sherstad")

discloses the claimed connector. In response, Barrette argued that Sherstad discloses “a conventional pivot hole and pivot pin assembly,” and not “a slip-together connection with *the claimed integral boss*.” J. App’x 499 (emphasis added). Barrette further contended that “there is no disclosure . . . to substitute in the pivot-pin assembly of Sherstad,” and, even if there were, “the resulting structure would not include *the claimed integral boss* and as such would not provide the same slip-together functionality.” *Id.* at 499–500 (emphasis added). The examiner nevertheless maintained the rejection, explaining that Sherstad’s boss “can either be integral with the clip 130, or be a separate pin member.” J. App’x 515.

Barrette subsequently cancelled the then-pending claims and filed new claims that mirrored the claim language of the already issued ’965 patent. After the applicant’s amendments, the examiner allowed the claims and the ’075 patent issued.

III

Barrette brought this lawsuit in district court alleging that Defendants’ Athens Residential fences (“accused products”) infringed the asserted claims.

During *Markman*, Barrette argued that the terms “boss,” “nub,” and “projection” should be construed according to their plain and ordinary meaning; specifically, “Barrette urge[d] that a ‘boss’ in the context of the Patents-in-Suit is simply ‘a projection or protrusion.’” J. App’x 1650–53. Defendants argued that the term “boss” should be construed as limited to integral, fastener-less structures. *Markman Order*, 2023 WL 5503030, at *6.

Defendants argued that the “sliding” terms (e.g., “slidably engaged,” “slidably connected,” and “sliding surface”) should be held indefinite, in part, because the specification provides no guidance as to the minimum amount of force needed to effectuate sliding or whether any mechanical

obstructions are acceptable. J. App'x 1686–88. Defendants also contended that the “causes” terms (e.g., “pivoting . . . causes the respective connector to slide”) should be held indefinite because Barrette disclaimed the ordinary meaning of “causes” and the specification does not provide sufficient guidance as to the scope of the term. J. App'x 1688–89.

The district court noted that “the parties agree that the terms ‘boss,’ ‘projection,’ and ‘nub’ are used interchangeably.” *Markman Order*, 2023 WL 5503030, at *7 (citing ECF No. 48 pg.29, also available at J. App'x 1651). Further, the district court held that “the intrinsic evidence indicates that the terms ‘boss,’ ‘projection,’ and ‘nub’ should be construed the same.” *Id.* Concluding that the specification identified fastener-less connections as advantageous and disparaged prior art systems requiring fasteners, the district court construed the “boss” terms as fastener-less. *Id.* at *10–11. The district court also held that the prosecution history of the '075 patent further limited the “boss” terms to integral structures by distinguishing the “claimed integral bosses” from the “conventional pivot hole and pivot pin assembly” disclosed in Sherstad. *Id.* at *7–10.

The district court concluded that the “sliding” terms are not indefinite. *Id.* at *21. The district court noted that the specification contains examples of “slidably engaged” and “slidably connected” structures in Figures 7C and 7D and contrasts such connections with those present in prior art systems that merely allowed for pivotal rotation. *Id.* Further, the district court, concluding that Defendants’ indefiniteness position relied “on the incorrect premise that the ‘sliding’ terms must be described with calculations or formulas to be definite,” rejected their contention that the specification needed to provide guidance as to certain “fundamental parameters” to render the claims definite. *Id.* at *23. The district court concluded the “sliding” terms, when read in view of the specification, would inform a

skilled artisan of the scope of the claims with reasonable certainty. *Id.* at *21.

The district court also rejected Defendants’ position that the “causes” terms are indefinite, concluding that the prosecution history did not disclaim the ordinary meaning of “causes” and a skilled artisan, reading the specification, would ascertain the scope of the terms with reasonable certainty. *Id.* at *24.

After *Markman*, Barrette stipulated that it could not prove infringement under the district court’s construction of the “boss” terms because the accused products use non-integral fasteners. Defendants stipulated that they could not prove the claims invalid for indefiniteness under the district court’s construction. The district court subsequently entered final judgment of non-infringement and no indefiniteness. *Final Judgment*, 2023 WL 8610184, at *1.

Barrette appealed, and Defendants cross-appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

I

Claim construction, when based solely on the intrinsic record, is a question of law that we review de novo. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346 (Fed. Cir. 2015). Indefiniteness is also a question of law reviewed without deference. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1341 (Fed. Cir. 2015).

II

In its appeal, Barrette argues that the district court committed two key errors in construing the “boss” terms: first, the district court erred by concluding that the specification disclaimed bosses with fasteners by disparaging prior art assemblies that employed fasteners, and, second, the district court erred by concluding that the prosecution history disclaimed non-integral bosses and by

applying that disclaimer to other terms with presumptively different meanings. We address each argument in turn.

A

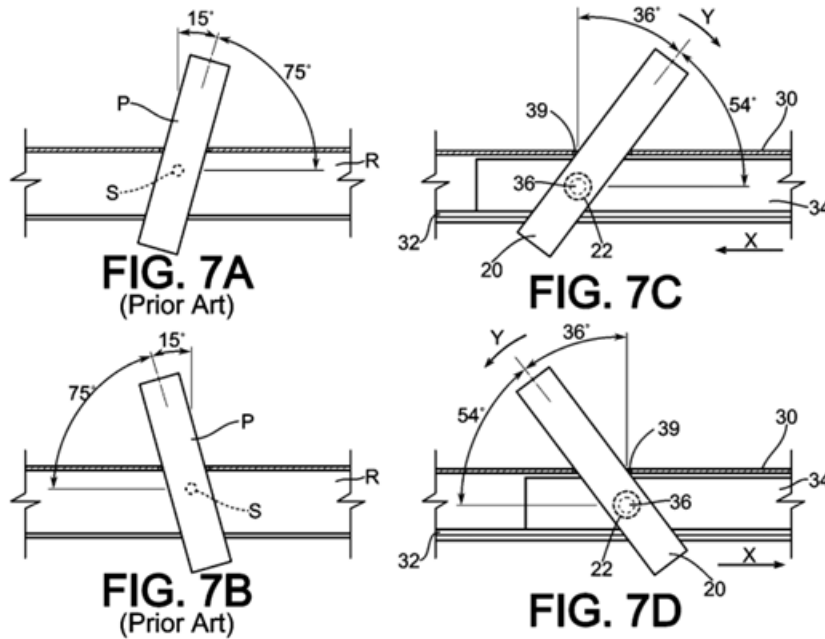
Barrette argues that the district court erred in construing the “boss” terms as fastener-less because the specification does not criticize the use of fasteners but, instead, distinguishes the prior art based on the use of a sliding pivotal connector that joins the picket to the rail without a direct connection between the two. Barrette also argues that the specification’s embodiments solve multiple problems in the prior art (e.g., slow installation, poor racking ability, etc.) and that its claims are not required to solve every problem identified in the specification. Appellant’s Opening Br. 60–61 (citing *Honeywell, Inc. v. Victor Co. of Japan, Ltd.*, 298 F.3d 1317, 1326 (Fed. Cir. 2002)).

Defendants argue that the district court correctly construed the “boss” terms as fastener-less because the specification frequently criticizes the use of fasteners. Specifically, Defendants contend that the specification’s Summary of the Invention states that bosses provide “a fastener-less but still pivotal connection.” Cross-Appellants’ Opening Br. 50–51 (citing ’965 patent col. 1 ll. 42–46). Further, the detailed description describes prior art assemblies that use fasteners to join the rails to the pickets as “time consuming to install,” *id.* at 51–52 (citing ’965 patent col. 5 ll. 51–67), and contrasts such assemblies with the present invention, which uses a connector boss strip “that is very easy and fast to install.” *Id.* at 52–53 (citing ’965 patent col. 5 ll. 55–67). Defendants also contend that quick installation is not merely an optional advantage that the claimed bosses may provide in some but not all embodiments; rather, because the specification attributes the quick installation advantage to the use of bosses, a correct construction of “boss” must ensure this advantage and, thus, the claimed bosses must be fastener-less.

We agree with Barrette that the specification does not clearly and unmistakably disclaim bosses with fasteners. Allowing for quick and easy installation is just one purported advantage disclosed by the asserted patents. It is well-established that while a patent may present multiple advantages over the prior art, not every embodiment of the invention will embody every advancement. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1327 (Fed. Cir. 2005) (“We have held that the fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives.” (citation modified)). Claims, therefore, should not be construed to require every advancement disclosed in the specification. *See id.*

Here, the asserted patents purport to provide at least two advantages over prior art railing systems, namely quick and easy installation and improved racking ability. *See* ’965 patent col. 5 l. 64 – col. 6 l. 16. And the latter advantage does not call for a fastener-less connection. While the specification criticizes “railing assemblies [that] incorporate screws . . . to rotatably couple pickets P to rails R” because “[s]uch couplings are time consuming to install and only allow for a limited range of rotation,” this does not indicate that a fastener-less connection is required to achieve an increased range of motion. *Id.* at col. 5 ll. 56–60. Consistent with Barrette’s contention that the specification’s criticism focuses on direct connections between the picket and the rail, Figures 7A and 7B depict fencing assemblies with rails R connected to pickets P without the use of an intermediate connector, whereas Figures 7C and 7D show fencing assemblies that employ a sliding

connector 34 coupling the rails 30 to the pickets 20. *Id.* at figs. 7A–7D.



Id.

Further, the specification credits the invention’s increased racking ability to the connector strip’s ability to slide within the rail. *Id.* at col. 6 ll. 1–9. Nothing in the intrinsic record establishes that the use of fasteners is incompatible with the connector’s ability to slide. Because the specification discloses multiple advantages—including some that do not require a fastener-less connection—the fastener-less limitation should not be read into the claims.

We further reject Defendants’ argument that because the specification attributes the easy-to-install advantage to the use of bosses, the term “bosses” should be construed as always providing this advantage. In *Phillips*, we held that the claimed baffles were not limited to those disposed at acute and obtuse angles, in part, because projectile deflection was just one of several benefits provided by the claimed invention even though the specification

contemplated achieving projectile deflection via the use of angled baffles. *Phillips*, 415 F.3d at 1327. In short, a patent may achieve a benefit via a particular structure, but that does not mean that the structure must always provide that benefit. Here, the asserted patents facilitate fast and easy installation via the use of bosses, but a “boss” is not limited to structures that always provide this advantage. A skilled artisan, therefore, would not interpret the specification and claims of the asserted patents to mean that a protruding structure without a fastener is a boss but that a similar structure that employs a fastener is not. Accordingly, we hold that the district court erred in limiting the claims to fastener-less bosses.

B

1

The district court construed the term “boss” as limited to integral structures in partial reliance on Barrette’s argument during prosecution that the Sherstad reference’s disclosure of a discrete pivot pin assembly did not disclose the “claimed integral boss.” *Markman Order*, 2023 WL 5503030, at *7–8.

Barrette argues that the district court erred in concluding that Barrette disclaimed non-integral bosses during prosecution of the ’705 patent by distinguishing the Sherstad reference on the grounds that it failed to disclose “the claimed integral boss.” Appellant’s Opening Br. 42–43 (citing J. App’x 499–500). Barrette contends that its purported statements of disavowal are not effective at least as to any earlier issued patents, namely the ’965 and ’332 patents. Even if the office action response argument distinguishing Sherstad amounts to disclaimer, Barrette argues that the prosecution history, when taken as a whole, does not show clear and unmistakable disclaimer in view of the examiner’s rejection—and Barrette’s subsequent abandonment—of that argument. Appellant’s Opening Br. 43–45 (citing *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1342–43

(Fed. Cir. 2009); *Malvern Panalytical Inc. v. TA Instruments-Waters LLC*, 85 F.4th 1365, 1376 (Fed. Cir. 2023) (“[W]here an applicant abandons its unsuccessful argument, we conclude that the prosecution history lacks the clarity necessary to establish prosecution disclaimer.”)).

Defendants contend that Barrette forfeited many of its arguments by relying on portions of the prosecution history never presented to the district court. On the merits, Defendants argue that Barrette’s contention that the examiner did not agree with its argument is unavailing because examiner agreement is not required for prosecution history disclaimer. Cross-Appellants’ Opening Br. 43 (citing *Fenner Invs., Ltd. v. Cellco P’ship*, 778 F.3d 1320, 1325 (Fed. Cir. 2015)). Defendants also dispute Barrette’s reliance on *Malvern*, because, unlike the prosecution history in *Malvern*, the prosecution history here provides no indication that Barrette’s statement regarding the “claimed integral boss” was made in error or that Barrette acquiesced to the examiner’s position. *Id.* at 43–44 (citing *Malvern*, 85 F.4th at 1376).

As a preliminary matter, we reject Defendants’ position that Barrette forfeited any argument based on portions of the prosecution history not expressly presented to the district court. We have long held that a party may cite portions of the intrinsic record on appeal to support a previously advanced construction even if the party did not cite that evidence before the district court. *See, e.g., Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1346 (Fed. Cir. 2001) (noting that forfeiture “has not been invoked . . . to prevent a party from clarifying or defending the original scope of its claim construction, or from supporting its existing claim construction position with new citations to the specification”). The prosecution history, which “consists of the complete record of the proceedings before the [patent office] and includes the prior art cited during the examination of the patent,” is intrinsic evidence that

properly may be considered on appeal. *Phillips*, 415 F.3d at 1317.

We disagree with Defendants’ contention that this precedent is inapplicable in this case because Barrette did not present to the district court the precise portions of the prosecution history on which it now relies. “Courts must take care . . . to interpret purported disavowals in the context of the prosecution history as a whole.” *Azurity Pharms., Inc. v. Alkem Lab’s Ltd.*, 133 F.4th 1359, 1366 (Fed. Cir. 2025); *see also Ecolab*, 569 F.3d at 1342 (“Even if an isolated statement appears to disclaim subject matter, the prosecution history as a whole may demonstrate that the patentee committed no clear and unmistakable disclaimer.”). When a district court holds that a patentee disclaimed a term’s full scope based on a subset of the prosecution history, the patentee may on appeal support its original construction with citations to the overlooked portions of the prosecution history.

On the merits, we agree with the district court that Barrette disclaimed non-integral bosses during prosecution. As the district court observed, Barrette clearly distinguished Sherstad’s pivot pin assembly—featuring a through-hole and “a loose pin member”—from the “claimed integral boss.” J. App’x 499–500. In doing so, Barrette expressly clarified the scope of its claims. Barrette does not meaningfully dispute this point,¹ but instead argues its

¹ Barrette argues in a footnote that it does not concede that it meant to disclaim non-integral bosses in its office action response and that “Fortress failed to meet its burden on that point too.” Appellant’s Opening Br. 44 n.9. However, arguments raised only in a footnote are forfeited as undeveloped. *CommScope Techs. LLC v. Dali Wireless Inc.*, 10 F.4th 1289, 1296 (Fed. Cir. 2021).

subsequent communications with the patent office rendered any purported disclaimer ambiguous.

Barrette relies upon views expressed in *Ecolab* and *Malvern* to support its conclusion that prosecution disclaimer may not apply when a reasonable reader of the prosecution history could conclude that the examiner rejected the applicant's characterization of the scope of its invention; the applicant never raised the disclaimer again; and the applicant overcame the examiner's rejections on other grounds. In *Ecolab*, the patentee, FMC, attempted to overcome prior art rejections by arguing that its claims contemplated using peracetic acid ("PAA") as the only antimicrobial agent. 569 F.3d at 1343. But the examiner rejected that argument, concluding that the pending claims were not so limited. *See id.* (noting that the examiner concluded that "the terminology 'consisting essentially' does not mean that [FMC's] sanitizing solution is consisted 'solely' of a peracetic acid solution"). FMC never raised that argument again and overcame the rejections on other grounds. *Id.* Consequently, we reasoned that the prosecution history did not contain a sufficiently clear disclaimer because a reasonable reader of the prosecution history could conclude that FMC's statement regarding the scope of its claims was made in error; the examiner corrected that error; and FMC acquiesced to the examiner's correction. *Id.*

Likewise, in *Malvern*, we held that an applicant's statements regarding the scope of the invention did not rise to the level of disclaimer where the examiner rejected the applicant's prior characterization of the patent-at-issue. 85 F.4th at 1376. There, *Malvern* accused TA Instruments-Waters ("Waters") of infringing its patent on an isothermal titration calorimeter (the "ITC patent"). *Id.* at 1367–68. During the prosecution of an unrelated application, also assigned to *Malvern*, the examiner rejected several claims as anticipated by the ITC patent. *Id.* at 1370 & n.3. In response, the applicant argued that the ITC patent disclosed

only manual systems whereas the application concerned automatic systems. *Id.* Reading the ITC patent as encompassing both manual and automatic systems, the examiner disagreed; consequently, the applicant had to overcome the rejection on other grounds. *Id.* In the subsequent infringement action, the district court concluded that the ITC patent was limited to manual systems based on the disclaiming statements made during the prosecution of the unrelated application. *Id.* at 1371. We vacated the district court’s construction, in part, because a reasonable reader of the application’s prosecution history could conclude that the applicant “recognized its *error*” when assessing the scope of the ITC patent and “acquiesced to the examiner’s views.” *Id.* at 1376 (emphasis added) (quoting *Ecolab*, 569 F.3d at 1343). Therefore, in both *Ecolab* and *Malvern*, the patentee was not held to a narrower construction advanced during prosecution because a reasonable reader of the file wrapper could conclude that those arguments did not accurately reflect the proper scope of the claims.

Moreover, the fact that an applicant secures allowance on an independent ground does not render prior characterizations of claim scope insufficiently clear for purposes of prosecution disclaimer. *See Uship Intell. Props., LLC v. United States*, 714 F.3d 1311, 1315 (Fed. Cir. 2013) (holding that the prosecution disclaimer analysis “focuses on what the applicant said, not on whether the representation was necessary or persuasive”). Here, although Barrette maintains that the examiner rejected the view that the claims required an integral boss, the examiner disagreed not with Barrette’s characterization of the “boss” term in its own claims but with Barrette’s assessment of the scope of Sherstad’s disclosure. *See* J. App’x 515 (indicating that Sherstad disclosed a boss that “can either be integral with the clip 130, or be a separate pin member”). Unlike the prosecution histories in *Ecolab* and *Malvern*, the prosecution history of the ’075 patent does not suggest that the examiner disagreed with Barrette’s assessment of

the scope of its claims, much less that Barrette acquiesced to the examiner's broader view of the claims. Thus, the prosecution history would not suggest to a reasonable reader that Barrette's narrowing characterization of its claims was incorrect.

Without an indication that Barrette's characterization of its claims was erroneous, the prosecution history would lead a reasonable reader to conclude that Barrette clarified the scope of the claimed invention and that the claimed invention was not patentable over the examiner's prior art rejection. *See* J. App'x 515. The fact that Barrette's disclaimer proved unavailing does not render it ineffective as a disclaimer. *See Uship*, 714 F.3d at 1315 ("The fact that the applicant may have given up more than was necessary does not render the disclaimer ambiguous."). Accordingly, we conclude that Barrette clearly characterized the claimed invention as limited to integral bosses, and the subsequent communications with the patent office do not render Barrette's disclaimer ambiguous.

Moreover, the fact that Barrette cancelled the claims to which the disclaimer applied and filed new claims similar to those previously allowed in the '332 and '965 patents does not defeat the determination of disclaimer. *See Hakim v. Cannon Avent Grp., PLC*, 479 F.3d 1313, 1317–18 (Fed. Cir. 2007) (holding that, although an applicant had the right to refile and attempt to broaden the claims, an applicant cannot recapture claim scope that was surrendered). While applicants may rescind a disclaimer made during prosecution when the applicant puts the examiner on notice that previously examined prior art may need to be revisited, *see id.* at 1318, Barrette conceded during oral argument that it did not make such a rescission here. *See* Oral Argument at 8:35–9:30, available at cafc.uscourts.gov/oral-arguments/24-1231_07102025.mp3.

Additionally, we reject Barrette's contention that the purported disclaimer in the '075 patent's prosecution

history cannot apply to the claims of the already issued '965 and '332 patents because “[a] statement made during prosecution of related patents may be properly considered in construing a term common to those patents, *regardless of whether the statement pre- or post-dates the issuance of the particular patent at issue.*” *Teva Pharms.*, 789 F.3d at 1343 (emphasis added).

Accordingly, we conclude that the district court correctly determined that the patentee disclaimed non-integral bosses during prosecution.

2

Barrette also argues that the district court erred by extending the prosecution history disclaimer as to the term “boss” to other claim terms, including “nub,” “projection,” and “series of axles,” which are presumed to carry different meanings and have different scopes. Barrette contends that, contrary to the district court’s *Markman* order, it never agreed that the specification uses the terms “boss,” “projection,” and “nub” interchangeably. And, in Barrette’s view, the intrinsic record confirms that the terms “nub” and “series of axles” are not interchangeable with “bosses” and “projections” because the claim language and specification demonstrate that “nub” and “series of axles” are narrower.

Defendants argue that Barrette did not argue to the district court that the terms “nub,” “series of axles,” or “projections” should be construed differently than “bosses,” and that Barrette’s arguments distinguishing those terms are thus forfeited.

We agree with Defendants that Barrette forfeited its argument that the term “projection” should be afforded a different construction. Parties may not adopt a claim construction position on appeal that is inconsistent with the one taken before the district court. *See Interactive Gift*, 256 F.3d at 1346 (noting that the general rule that a federal

appellate court does not consider an issue not presented to the district court “has been applied to preclude a party from adopting a new claim construction position on appeal”). The claims of the ’905 patent recite “projections” rather than “bosses.” While the specification provides some indication that projections may be broader than bosses, *see, e.g.*, ’965 patent col. 1 ll. 41–44 (noting that the connectors “can include small projections (e.g., bosses)”), Barrette did not argue before the district court that the term “projection” should be construed differently than bosses; in fact, “Barrette urge[d] that a boss in the context of the Patents-in-Suit is simply a projection or protrusion.” J. App’x 1651 (internal quotation marks omitted). Moreover, in its *Markman* slides, Barrette referred to the limitation “wherein each connector includes at least one projection” as a “boss” term. J. App’x 2130. Because Barrette argued before the district court that the terms “projection” and “boss” are commensurate in scope, it may not argue differently here.

Further, Barrette’s argument that the terms “nub” and “series of axles” are narrower than the terms “boss” and “projection,” respectively, is unavailing. The claims of the ’164 patent require that “at least one boss includes a circular nub.” *See, e.g.*, ’164 patent at claim 5. The specification indicates, as Barrette contends, that the term “nub” is narrower than the term “boss.” *See* ’965 patent col. 4 ll. 6–12 (noting that “the boss strip includes at least one inwardly extending boss (e.g., a nub, pin, or other protruding structure)” (reference numbers omitted)); *see also* Appellant’s Opening Br. 56 (“Claim differentiation thus confirms that a ‘circular nub’ must have a narrower meaning than ‘boss’ . . .”). But because the broader terms “boss” and “projection” are integral, the narrower terms must be integral as well. Therefore, even if the district court erred in concluding that the specification uses the terms “nub” and “series of axles” interchangeably with “bosses,” the district court did not err in construing the terms “nub” and “series of axles” as integral structures.

* * *

In its stipulation, Barrette conceded that the accused products do not contain integral bosses, projections, nubs, or series of axles. J. App’x 147. Thus, notwithstanding our conclusion that the district court erred by construing the claims to require fastener-less bosses, we affirm the judgment of non-infringement because the district court correctly held that Barrette disclaimed non-integral bosses and projections during prosecution.

III

We now turn to Defendants’ cross-appeal. Defendants challenge the district court’s conclusions that the so-called “sliding” terms (e.g., “sliding surface,” “slidably engaged,” “slidably engaged,” etc.) and the “causes” term are not indefinite.

A

Defendants contend that the “sliding” terms are functional limitations in apparatus claims and, as such, “are inherently ambiguous.” Cross-Appellants’ Opening Br. 63–64 (citing *Nevro Corp. v. Bos. Sci. Corp.*, 955 F.3d 35, 39 (Fed. Cir. 2020)). To resolve this ambiguity, Defendants argue, the specification must provide guidance that would allow a skilled artisan to compare a potentially infringing product with the examples in the specification to determine whether the infringing product falls within the scope of the claims. Further, Defendants contend that they provided unrebutted expert testimony as to the kind of information a skilled artisan would need to assess the scope of the “sliding” terms and that the specification nowhere provides this information, but that the district court erroneously disregarded this evidence.

We disagree with Defendants’ argument that the specification does not provide sufficient guidance. Claims are invalid for indefiniteness if they, when read in the light of the specification and the prosecution history, “fail to

inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). A specification’s guidance is sufficient where it “allow[s] a skilled artisan to compare a potentially infringing product with the examples in the specification” to determine the scope of the claim. *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017) (internal quotation marks omitted). But “[d]efiniteness does not *require* that a potential infringer be able to determine *ex ante* if a particular act infringes the claims.” *Nevro*, 955 F.3d at 40 (emphasis added).

Here, the surrounding claim language provides guidance as to the scope of the “sliding” terms. *See* ’965 patent at claim 1 (“[P]ivoting the upper end of the respective picket towards the first end of the respective rail causes the respective connector to slide along the inner surface of the side wall of the respective rail towards the second end of the respective rail.”). Thus, while the asserted patents do not define with mathematical precision the magnitude of force needed for sliding to occur, the claims indicate what sorts of actions suffice.

Moreover, the specification provides guidance as to the scope of the “sliding” terms. For example, the Summary of the Invention states that “the rails each have an inner profile that is sized and shaped to slidably retain or capture the connector between the rails and the picket, *while permitting the connector strip to slide relative to the rail*” and “the rail can have an inwardly extending shelf or ledge that slidably supports the connector strip so that the connector strip slides atop the shelf.” ’965 patent col. 1 ll. 46–53 (emphasis added). The specification also states that “the connector boss strip **34** slides within the rail **30** in the transverse directions denoted by the arrows X when the pickets **20** are pivoted in the angular directions denoted by the arrows Y, thereby allowing the pivot point between the connector hole **22** of the picket and the rail to slide one way

or the other, as shown in FIGS. 7C-7D.” ’965 patent col. 6 ll. 1–6.

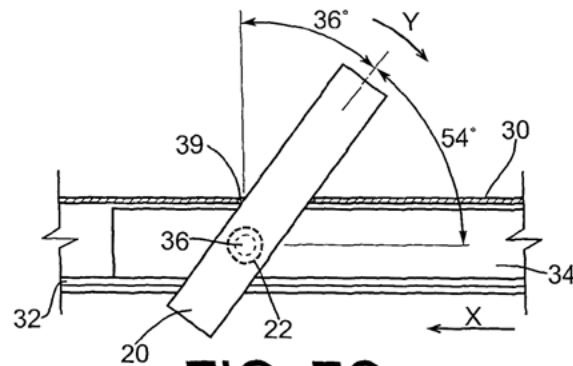


FIG. 7C

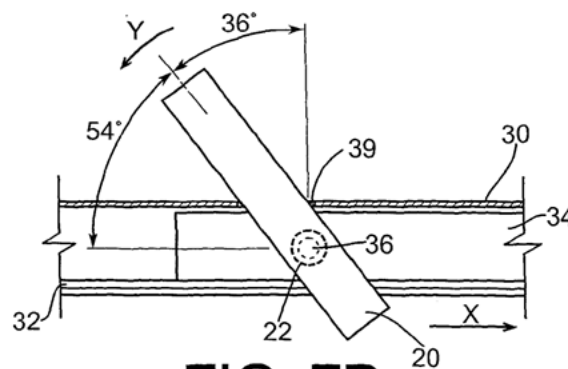


FIG. 7D

Id. at figs. 7C & 7D.

Thus, the specification provides numerous examples of structures that are slidably engaged. Accordingly, we conclude that the specification provides sufficient guidance to permit a skilled artisan to ascertain the claim scope with reasonable certainty. *See Nautilus*, 572 U.S. at 901.

We also reject Defendants’ argument that the district court erred by ignoring unrebutted expert testimony that a skilled artisan would need to know certain characteristics of the sliding mechanism to reasonably ascertain the scope of the claim, including “the magnitude and direction of the applied force, whether there is any hinderance to motion

(e.g. adhesives, etc.), any aspect facilitating motion (e.g. lubricant, friction reducing surface treatment, etc.), . . . and the amount of surface area in contact.” See Cross-Appellants’ Opening Br. 65 (quoting J. App’x 1758). Our indefiniteness cases do not require this level of certainty; an inventor “need not define his invention with mathematical precision in order to comply with the definiteness requirement.” *Sonix*, 844 F.3d at 1377 (quoting *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1384 (Fed. Cir. 2005)).

We also reject Defendants’ argument that the district court’s construction of the “sliding” terms does not resolve the ambiguity. The thrust of Defendants’ argument is that, even after *Markman*, the claims are ambiguous because it is not clear whether the claims read on the accused products. But definiteness “does not require that a potential infringer be able to determine *ex ante* if a particular act infringes.” *Nevro*, 955 F.3d at 40; see also *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1340–41 (Fed. Cir. 2005) (“The test for indefiniteness does not depend on a potential infringer’s ability to ascertain the nature of its own accused product to determine infringement, but instead on whether the claim delineates to a skilled artisan the bounds of the invention.”). Thus, the fact that the district court’s claim construction is not wholly dispositive of the infringement inquiry does not, on its own, evince indefiniteness.

B

Defendants argue that the limitation “pivoting . . . causes the respective connector to slide along the inner surface” is indefinite because, as the specification and prosecution history indicate, some acts of pivoting result in sliding and others do not. Cross-Appellants’ Opening Br. 71–72 & n.18. Essentially, in Defendants’ view, “cause” implies a one-to-one relationship between two occurrences; causes are always followed by their

corresponding effects. But, Defendants argue, Barrette disclaimed that meaning during prosecution by explaining that “the connectors of the presently claimed invention are caused to move relative to the rails after the pickets engaged the sides . . . of the openings of the rails.” *Id.* at 73–74 (quoting J. App’x 410).

This argument lacks merit. Defendants, at most, have shown that the asserted patents use the term “causes” more narrowly than it is commonly used and that Barrette clarified the meaning of the “causes” term during prosecution and in the specification. But this confirms that a skilled artisan—reading the term in view of the surrounding claim language, specification, and prosecution history—*could* determine the scope of the term with reasonable certainty. Accordingly, we conclude the district court correctly determined that the “causes” terms are not indefinite.

* * *

Because we identify no error in the district court’s indefiniteness analysis, we affirm the judgment of no invalidity for indefiniteness.

CONCLUSION

We have considered the parties’ other arguments but do not find them persuasive. For these reasons, the district court’s judgment of non-infringement and no indefiniteness is *affirmed*.

AFFIRMED

COSTS

Each party to bear its own costs.