

NOTE: This disposition is nonprecedential.

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

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**INVENTIST INC., SHANE CHEN,**  
*Plaintiffs-Cross-Appellants*

**v.**

**NINEBOT INC. (USA), DBA NINEBOT US INC.,  
NINEBOT (TIANJIN) TECHNOLOGY CO., LTD.,  
NINEBOT INC. (CHINA),**  
*Defendants-Appellants*

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2024-1010, 2024-1267

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Appeals from the United States District Court for the  
Western District of Washington in No. 3:16-cv-05688-BJR,  
Senior Judge Barbara Jacobs Rothstein.

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Decided: November 14, 2025

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DEVRA R. COHEN, Foster Garvey PC, Seattle, WA, ar-  
gued for plaintiffs-cross-appellants. Also represented by  
BENJAMIN JAMES HODGES.

ANDREW C. AITKEN, Aitken Law Offices, Bethesda, MD,  
argued for defendants-appellants.

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Before DYK, HUGHES, and STARK, *Circuit Judges*.

DYK, *Circuit Judge*.

Inventist, Inc. and Shane Chen (collectively, “Inventist”) sued Ninebot Inc. (USA) and its affiliates (collectively, “Ninebot”) for infringement of U.S. Patent No. 8,807,250 (the “’250 patent”). Ninebot appeals a judgment of infringement awarding lost profits and a reasonable royalty on the grounds that Inventist failed to mark its products as required by 35 U.S.C. § 287(a) and that Ninebot’s evidence of noninfringing substitutes was improperly excluded on the issue of lost profits. Inventist cross appeals the district court’s grant of summary judgment of noninfringement as to the second generation of Ninebot’s products. We affirm the district court’s summary judgment grant as to the second-generation products, dismiss Ninebot’s appeal of the district court’s denial of its new trial motion related to the marking issue for lack of jurisdiction, and conclude that a new trial is required on the issue of lost profits because the district court erred in excluding evidence of noninfringing substitutes. We accordingly *dismiss in part, affirm in part, reverse in part, vacate in part*, and remand.

#### BACKGROUND

Inventist owns the ’250 patent, which issued on August 19, 2014. Shane Chen is the inventor of the ’250 patent and the principal owner of Inventist. The ’250 patent discloses an electrically powered self-balancing unicycle. To allow a user to ride the claimed unicycle while standing, the unicycle “is controlled by gripping the device with the legs.” ’250 patent, col. 2, ll. 23–27. The user’s legs grip on to leg contact surfaces that “protrude slightly from the sides of the device, to the extent that they come into contact with the legs while the user is standing in a natural upright stance with his feet upon the foot platforms.” *Id.*, col. 2, ll. 14–18.

Claim 1 provides:

A powered unicycle device, comprising:

- a single wheel having an axis of rotation and defining a central vertical plane in the line of direction of travel that is rotatably coupled to a seatless frame;

- a motor which drives the wheel;

- an electronic fore-and-aft balance control system which controls said motor;

- first and second foot platforms coupled to the frame and each having a standing surface that is below the axis of rotation of the wheel;

- a first leg contact surface that in its entirety extends substantially longitudinally in the line of travel of the device and is configured to be readily contactable by the side of a user's leg, at or below the knee, when that user is standing on the first foot platform; and

- a second leg contact surface that in its entirety extends substantially longitudinally in the line of travel of the device and is configured to be readily contactable by the side of a user's leg, at or below the knee, when that user is standing on the second foot platform;

- wherein the first and second foot platforms extend in a direction perpendicular to the central vertical plane of the wheel further than the contact surfaces extend perpendicular to the central vertical plane, and further wherein the leg contact surfaces are configured so as to not substantially encircle a user's leg.

'250 patent, claim 1.<sup>1</sup>

On August 4, 2016, Inventist sued Ninebot in the Western District of Washington, alleging Ninebot's unicycles infringed at least claim 1 of the '250 patent. Chen was later joined as a plaintiff. Following claim construction and the close of discovery, the district court determined that no reasonable jury could find that Ninebot's second-generation unicycles included "leg contact surface[s]," and thus granted Ninebot's noninfringement summary judgment motion for the second-generation models.<sup>2</sup>

Ninebot also moved for summary judgment on Inventist's lost profits damages, arguing Inventist could not make the required showing under *Panduit* of the absence of non-infringing substitutes. J.A. 151–54 (citing *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978)).<sup>3</sup> The district court denied Ninebot's motion. Following a pretrial conference on July 25, 2023, the district court ruled "[n]o non-infringing substitutes hav[e] been shown to be available for sale during the infringement period," and excluded "any proposed evidence" of "[n]on-infringing substitutes not on sale during period of infringement." J.A. 30–31.

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<sup>1</sup> Claim 18 similarly requires "first and second leg contact members that each, in its entirety, extends substantially longitudinally in the line of travel of the device and is configured to be readily contactable by the side of a user's leg, at or below the knee, when that user is standing on the foot platforms." '250 patent, claim 18.

<sup>2</sup> The district court also determined the first-generation Ninebot unicycles infringed the '250 patent as a matter of law. Ninebot does not challenge this ruling on appeal.

<sup>3</sup> Citations to the J.A. refer to the Corrected Joint Appendix filed by the parties in this case. Dkt. No. 56.

The case proceeded to a jury trial on August 14, 2023, to determine Inventist’s entitlement to damages, including lost profits. Before the close of evidence, Ninebot again argued that it should be permitted to introduce evidence of noninfringing substitutes and made an offer of proof. It argued that “we sought to have our witness explain how he could have altered a first-generation product fairly easily . . . so it would no longer have . . . protruding leg contact surfaces, and we were precluded from providing that evidence in the pretrial order.” J.A. 905. The district court ruled, “[W]e’re going to continue with the case in the present form the way it is,” and told Ninebot’s counsel, “I think you have made your offer of proof.” J.A. 907. In instructing the jury, the district court did not include either of the parties’ proposed instructions about the absence of noninfringing substitutes. The jury awarded Inventist \$835,220 in lost profits and \$29,593 as a reasonable royalty.

After the verdict, Ninebot moved for a new trial, arguing there was not legally sufficient evidence to support the jury’s finding that Inventist complied with the marking requirement of 35 U.S.C. § 287. J.A. 591.

On September 21, 2023—one day after filing its motion for new trial—Ninebot appealed. Inventist timely filed a cross appeal. Thereafter, the district court denied Ninebot’s motion for new trial. Ninebot did not file a supplemental notice of appeal.

We have jurisdiction under 28 U.S.C. § 1295(a). The parties dispute whether Ninebot’s notice of appeal is sufficient to cover the denial of Ninebot’s new trial motion.

## DISCUSSION

### I

We first address Inventist’s cross appeal of the district court’s summary judgment order that the second-generation Ninebot unicycles do not infringe the ’250 patent

because they do not satisfy the leg contact surfaces limitation of claims 1 and 18.

The parties agreed that the claim terms “leg contact surface” and “leg contact members” are “a surface, which protrudes from the sides of the device, and which may come into contact with a user’s leg, enabling the user to hold the device in place with the lower leg.” J.A. 129. Under the district court’s agreed claim construction, Inventist was required to show that a reasonable jury could find that a component of the second-generation Ninebot unicycle “protrudes from the sides of the device.” *Id.* The district court concluded that the second-generation Ninebot unicycles do not infringe as a matter of law because they “do not possess anything that could be construed by a reasonable observer as ‘protrud[ing] from the sides of the device.’” J.A. 21 (alteration in original).

Primarily relying on photographs of the second-generation Ninebot unicycles, Inventist argues that whether these models have “leg contact surfaces” was a question of fact for the jury to decide.<sup>4</sup>

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<sup>4</sup> The plates where the users rest their feet in the below pictures are the claimed “foot platforms.” ’250 patent, claim 1. Neither Inventist nor Ninebot allege these components are “leg contact surfaces.”

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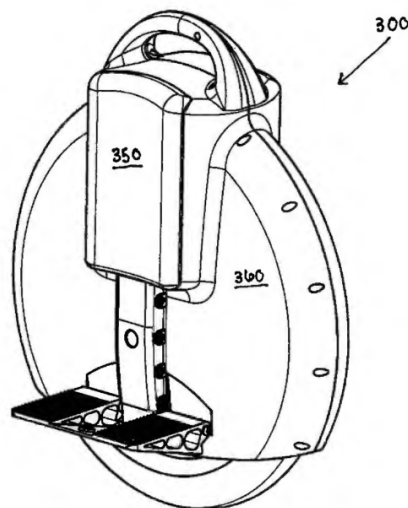
J.A. 180.



J.A. 220.

Notably, the specification differentiates the “leg contact surfaces 350” and a “casing [wheel cover] 360.” *E.g.*, ’250 patent, col. 5, ll. 19–23. Figure 6 discloses these features.

Fig 6



’250 patent, fig. 6. The photographs do not show a surface “protruding from the sides of the device,” but rather a rounded wheel cover, which corresponds to a “casing 360.” We see no error in the district court’s conclusion that no reasonable jury could find that the second-generation Ninebot unicycles have leg contact surfaces that satisfy the construed claims.

## II

### A

On the main appeal, Ninebot, while not contesting infringement with respect to the first-generation unicycle, claims that a new trial is required because the evidence was insufficient to establish marking of Inventist’s

products in compliance with 35 U.S.C. § 287(a).<sup>5</sup> Inventist argues that we do not have jurisdiction over Ninebot’s new trial motion because Ninebot did not amend its notice of appeal to include the district court’s later ruling on the new trial motion.

“If a party files a notice of appeal after the court announces or enters a judgment—but before it disposes of any motion listed in Rule 4(a)(4)(A) [including a motion for new trial]—the notice becomes effective to appeal a judgment or order, in whole or in part, when the order disposing of the last such remaining motion is entered.” Fed. R. App. P. 4(a)(4)(B)(i). But “[a] party intending to challenge an order disposing of any motion listed in Rule 4(a)(4)(A) . . . must file a notice of appeal, or an amended notice of appeal—in compliance with Rule 3(c)—within the time prescribed by this Rule measured from the entry of the order disposing of the last such remaining motion.” Fed. R. App. P. 4(a)(4)(B)(ii). “The authorities point to a single conclusion: When an appellant challenges an order ruling on a motion governed by Appellate Rule 4(a)(4)(B)(ii), a new or amended notice of appeal is necessary even if the issue raised in the motion and sought to be challenged could also have been challenged in an appeal from the final judgment.” *Husky Ventures, Inc. v. B55 Invs., Ltd.*, 911 F.3d 1000, 1010 (10th Cir. 2018); *see also Texas Peanut Farmers v. United States*, 409 F.3d 1370, 1375 (Fed. Cir. 2005); *United States v. McGlory*, 202 F.3d 664, 668 (3d Cir. 2000) (en banc). Without an amended or additional notice of

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<sup>5</sup> Inventist cross appeals the district court’s decision to allow Ninebot to present evidence related to marking to the jury. This is not a proper cross appeal because success on this issue would not expand the scope of the judgment. *TypeRight Keyboard Corp. v. Microsoft Corp.*, 374 F.3d 1151, 1157 (Fed. Cir. 2004).

appeal addressing the new trial motion, we lack jurisdiction to consider it.

### III

Finally, we address Ninebot's arguments related to the lost profits award. Ninebot challenges the lost profits award in two aspects. First, Ninebot argues that the lost profits award cannot be sustained because "the district court's acceptance of Inventist's flawed lost profit theory was unsupported by the evidence and contrary to well established law." Appellant's Br. 32. Although Ninebot made a Rule 50(a) motion for judgment as a matter of law related to lost profits, it did not file a Rule 50(b) motion after the verdict, nor did it file a motion for new trial on this ground. There is therefore "no basis for review" of these arguments. *Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.*, 546 U.S. 394, 407 (2006).

Second, Ninebot argues that the lost profits award cannot stand because the district court improperly excluded evidence of noninfringing substitutes. Ninebot clearly raised and preserved the noninfringing substitutes issue.<sup>6</sup> To be awarded lost profits, a patentee must establish a prima facie case that "but for" the infringer's sales, the patentee would have received the claimed lost profits. *Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995). As Inventist attempted to do here, a patentee may prove but-for causation by providing proof of each of the four *Panduit* factors: "(1) demand for the patented product;

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<sup>6</sup> Ninebot presented its noninfringing substitute arguments throughout its summary judgment briefing, in the joint pretrial statement, and at trial. During trial, when Ninebot's counsel explained why its evidence of noninfringing substitutes was proper during trial, the district court judge responded, "I think you have made your offer of proof, and that's enough." J.A. 907.

(2) absence of acceptable non-infringing substitutes; (3) manufacturing and marketing capability to exploit the demand; and (4) the amount of the profit it would have made.” *Id.* (citing *Panduit*, 575 F.2d at 1156).

The district court excluded “any proposed evidence” of “[n]on-infringing substitutes not on sale during period of infringement” and did not instruct the jury about the second *Panduit* factor. J.A. 31. Under our precedent in *Grain Processing Corp. v. American Maize-Products Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999), the noninfringing substitutes need not be on sale. Evidence of “available alternatives—including but not limited to products on the market”—may be used “to preclude lost profits damages.” *Id.* We held that under *Panduit*, “[t]he ‘but for’ inquiry . . . requires a reconstruction of the market, as it would have developed absent the infringing product, to determine what the patentee would . . . have made.” *Id.* at 1350 (internal quotation marks omitted; second omission in original). This means that just as a patentee engages in a “hypothetical enterprise” to construct its lost profits model, “alternative actions the infringer foreseeably would have undertaken had he not infringed” must also be taken into account. *Id.* at 1350–51. Thus, “an available technology not on the market during the infringement can constitute a noninfringing alternative.” *Id.* at 1351 (citing *Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 932 F.2d 1453 (Fed. Cir. 1991)); see also *Siemens Med. Sols. USA, Inc. v. Saint-Gobain Ceramics & Plastics, Inc.*, 637 F.3d 1269, 1288–89 (Fed. Cir. 2011). We agree with Ninebot that the district court erred in applying the wrong legal standard. Indeed, Inventist conceded at oral argument that the district court applied the wrong legal standard. Oral Arg. at 16:49–17:10.

However, Inventist contends that under the correct standard, Ninebot did not show that its proposed noninfringing substitute could be readily commercialized, as required by *Grain Processing*. In its summary judgment motion, Ninebot argued that first-generation models could

be modified to become noninfringing through a “simple design change, namely removing the pads from the lateral side cover,” and referred the Court to its later unicycle models. J.A. 152. In the first joint pretrial statement, Ninebot offered several witnesses who would testify:

[P]urpose of protruding pad was just a battery cover. Cost of wheel cover was minimal. About \$20.00–30.00 US.

J.A. 343, *accord*. J.A. 344. Contrary to Inventist, no more detailed offer of proof was required. Fed. R. Evid. 103(b) (“Once the court rules definitively on the record—either at or before trial—a party need not renew an objection or offer of proof to preserve a claim of error for appeal.”); *see also Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1391 (Fed. Cir. 2003). This evidence, if credited by a jury, could have been sufficient to establish the existence of noninfringing substitutes, which would have defeated the lost profits claim, and Ninebot is entitled to a new trial.

#### CONCLUSION

On the cross appeal, we affirm the district court’s ruling that the second-generation Ninebot unicycles do not infringe the ’250 patent. On the main appeal, we dismiss Ninebot’s arguments related to its new trial motion for lack of jurisdiction and reverse the district court’s exclusion of Ninebot’s evidence of noninfringing substitutes because it applied an incorrect legal standard to its evidentiary ruling. Accordingly, we *affirm* the royalty award, *vacate* the lost profits award, and *remand* to the district court for further proceedings consistent with this opinion.

**DISMISSED-IN-PART, AFFIRMED-IN-PART,  
REVERSED-IN-PART, VACATED-IN-PART, AND  
REMANDED**

#### COSTS

Costs to Ninebot.