

# United States Court of Appeals for the Federal Circuit

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**WORLD CLASS TECHNOLOGY CORPORATION,**  
**an Oregon corporation,**  
*Plaintiff-Appellee,*

v.

**ORMCO CORPORATION,**  
**a Delaware corporation,**  
*Defendant-Appellant.*

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2013-1679, 2014-1692

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Appeals from the United States District Court for the District of Oregon in No. 3:13-cv-00401-AC, Magistrate Judge John V. Acosta.

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Decided: October 20, 2014

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BRIAN G. BODINE, Lane Powell PC, of Seattle, Washington, argued for plaintiff-appellee. With him on the brief was PETER D. HAWKES, of Portland, Oregon. Of counsel on the brief was WILLIAM O. GENY, Chernoff Vilhauer LLP, of Portland, Oregon.

PATRICK J. COYNE, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, of Washington, DC, argued for defendant-appellant. Of counsel on the brief were GREGORY F. AHRENS and PAUL J. LINDEN, Wood, Herron &

Evans, L.L.P., of Cincinnati, Ohio; and CHRISTOPHER B. MEAD, London & Mead, of Washington, DC.

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Before PROST, *Chief Judge*, TARANTO and HUGHES, *Circuit Judges*.

TARANTO, *Circuit Judge*.

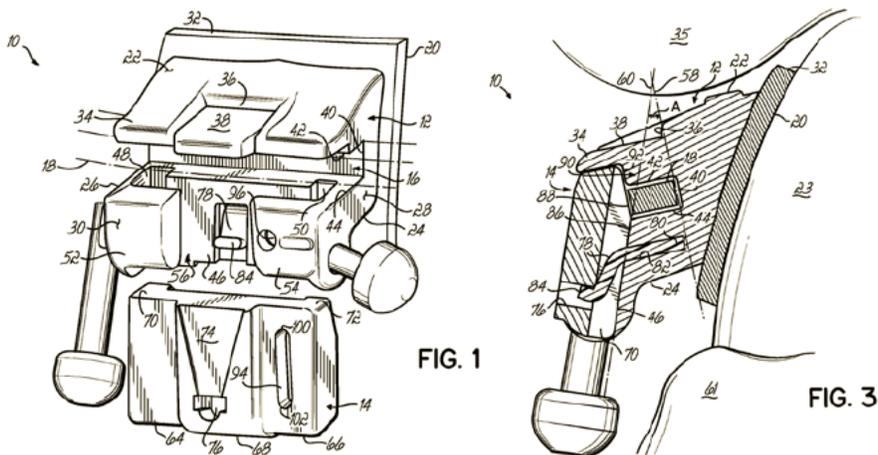
Ormco Corporation owns U.S. Patent No. 8,393,896, which claims a bracket for orthodontic braces that avoids or reduces interference with the gums even when being mounted on a molar tooth. Ormco accuses World Class Technology Corporation of infringing the '896 patent, and World Class Technology denies infringement. The district court construed two claim terms—"support surface" and "ledge." In view of the court's constructions, the parties stipulated to a judgment of non-infringement of the '896 patent. We affirm, rejecting Ormco's challenge to the district court's construction of "support surface," which, by the parties' stipulation, suffices for non-infringement.

#### BACKGROUND

The '896 patent, entitled "Self-Ligating Orthodontic Bracket," describes a bracket that attaches to a tooth for orthodontic braces. '896 patent, Title and Abstract. The bracket includes a slot to hold the archwire that connects (and exerts the desired corrective force on) the teeth, with a slide that moves across the slot opening to hold the wire in place. *Id.*, col. 1, line 19, through col. 2, line 44. The specification notes that self-ligating brackets were already known in the art. *Id.*, col. 1, lines 29–32. It states, however, that the prior-art brackets did not work well for molars, explaining that when the slide opened to release the wire it would bump into the gums, causing discomfort. *Id.*, col. 1, line 59, through col. 2, line 5.

The specification discloses a bracket that it says solves the problem. It describes a bracket structured so

that the slide, when moving from a slot-closed to slot-open position, moves at an angle away from the gums, avoiding gum contact. See, e.g., *id.* at Abstract; *id.*, col. 1, line 66, through col. 2, line 5; *id.*, col. 2, lines 40–44; *id.*, col. 6, lines 4–20. Figures 1 and 3 show embodiments of the contemplated bracket from two perspectives:



Slot 16—formed by base surface 40 and opposite sides 42 and 44—holds archwire 18. Slide 14 slides up along support surface 46 to cross the slot and then lodge against ledge surface 92 of ledge 90. The slide moves along plane 60 (defined by the support surface), which forms Angle A with plane 58 (defined by the base surface). The angle allows the slide to avoid gum 61.

Claim 1 of the '896 patent is representative of the asserted claims:

1. A self-ligating orthodontic bracket for coupling an archwire with a tooth, comprising: a bracket body configured to be mounted to the tooth, the bracket body including a support surface, a ledge, and an archwire slot including a base surface and opposing first and second slot surfaces extending from the base surface, the base surface being interposed between the opposing first and second slot surfaces, the support surface being acutely an-

*gled with respect to the base surface, and the ledge opposing the support surface across the archwire slot and including a surface that is generally parallel to the base surface; and a movable member coupled with the bracket body and movable between an opened position in which the archwire is insertable into the archwire slot and a closed position in which the movable member retains the archwire in the archwire slot, wherein the movable member comprises a first portion and a second portion extending at an acute angle from the first portion, the first portion engaging the acutely angled support surface of the bracket body when the movable member is in the closed position, the second portion being generally parallel to the base surface and extending across the archwire slot from the first slot surface to the second slot surface when the movable member is in the closed position.*

'896 patent, col. 10, lines 28–53 (emphases added).

World Class Technology brought the present case by seeking a declaratory judgment of non-infringement of five other Ormco patents, but the '896 patent became the focus of the dispute when Ormco counterclaimed, and sought a preliminary injunction, based on the allegation that World Class Technology was infringing the '896 patent. The heart of the parties' dispute is what constraints claim 1 places on the "support surface" during movement of the movable member (slide). As a complement to that issue, the parties also dispute what role is played by the "ledge" surface that lies on the other side of the wire-holding slot from the support surface.

Because claim 1 explicitly limits the support surface to "engaging" one portion of the slide when it is in the closed position, Ormco has argued that the claim does not require the support surface to play any role during slide

movement until the slide crosses the slot to move into the closed position. As long as it does that, and is situated at an acute angle to the base of the slot, no further support of the slide during sliding is required. World Class Technology, in contrast, has argued that “support surface,” properly construed, requires the surface to play a slide-supporting role as the slide moves along its (angled) path from one side of the slot, across the slot, and into the closed position at the ledge. What is critical for the accusation of infringement, Ormco’s position is that the claim language is broad enough to cover two arrangements. In one, shown in Figures 1 and 3, the slide is inserted from the bottom, moves first along the support surface, and reaches the ledge for closing. In the other, nowhere shown or described in the patent’s drawings or written description, the slide would be inserted from a top opening, move first along the ledge, and come to rest at the support surface after crossing the slot.

The district court rejected Ormco’s argument. In denying the requested preliminary injunction, and then again upon full consideration of the claim-construction dispute, the court held that the support surface “at least partially supports and guides the movable member during movement between the open position and the closed position.” *World Class Tech. Corp. v. Ormco Corp.*, 964 F. Supp. 2d 1273, 1280, 1285 (D. Or. 2013); *World Class Tech. Corp. v. Ormco Corp.*, No. 13-cv-00401, 2013 WL 5723306, at \*4, \*10 (D. Or. Oct. 21, 2013). In the latter ruling, the district court adopted a complementary construction of “ledge” as contacting the slide only when the slide is in the closed position. *World Class Tech.*, 2013 WL 5723306, at \*10.

Ormco and World Class Technology eventually stipulated to non-infringement of the ’896 patent under the “support surface” construction. The parties separately stipulated to non-infringement of the other five patents in the case, which are no longer at issue. The district court

entered a final judgment, and Ormco appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

Claim construction is a matter of law that this court reviews de novo. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1451 (Fed. Cir. 1998) (en banc). We generally give words of a claim their ordinary meaning in the context of the claim and the whole patent document; the specification particularly, but also the prosecution history, informs the determination of claim meaning in context, including by resolving ambiguities; and even if the meaning is plain on the face of the claim language, the patentee can, by acting with sufficient clarity, disclaim such a plain meaning or prescribe a special definition. *See, e.g., Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005) (en banc); *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Following that approach, we reject Ormco’s challenge to the district court’s construction of “support surface,” which Ormco stipulated requires non-infringement, without separate consideration of “ledge.”

The claim language does not by itself convey a clear, unambiguous meaning in the respect at issue. To begin with, while “support surface” requires a surface that provides support, and the slide is undisputedly what must be supported, the language itself does not resolve *when* the slide must be supported. An “engaging” must take place in the fully closed position, according to the claim. But the phrase “support surface” standing alone could mean that support must be provided generally during movement of the slide.

Moreover, the claim requires two surfaces on either side of the archwire slot and gives the surfaces two different names: the “support surface” and the “ledge” surface. ’896 patent, col. 10, lines 27–53. That difference suggests that their roles are different—which points away from

Ormco's suggestion that they are interchangeable regarding the timing of contact with the slide (in Ormco's view, either one can be contacted at the end of the sliding process, either one at the start). Indeed, the claim not only gives them separate names, but requires the two surfaces to line up differently relative to the base surface of the slot: the support surface must be at an acute angle relative to the base surface; the ledge surface must be parallel to the base surface. And the claim requires a specific interaction ("engaging") between one surface (the support surface) and a portion of the angled slide when in the closed position, with no analogous requirement for the other surface.

Rather than providing an unambiguous, clear meaning, therefore, the claim language leaves uncertainty about whether, contrary to Ormco's view, the slide must move along the support surface (and not the ledge surface) as it enters the bracket and moves toward the slot. In such circumstances, we turn to the specification to resolve the uncertainty. *See Phillips*, 415 F.3d at 1315–16 (quoting *Bates v. Coe*, 98 U.S. 31, 38 (1878) ("in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims"); *White v. Dunbar*, 119 U.S. 47, 51 (1886) (specification is appropriately resorted to "for the purpose of better understanding the meaning of the claim"); *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211, 217 (1940) ("The claims of a patent are always to be read or interpreted in light of its specifications."); *United States v. Adams*, 383 U.S. 39, 49 (1966) ("[I]t is fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention.")). Where, as here, the claim language itself leaves interpretive questions unanswered, "[t]he construction that stays true to the claim language and most naturally aligns with

the patent’s description of the invention will be, in the end, the correct construction.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998), adopted by *Phillips*, 415 F.3d at 1316.

Critically, the specification in this case identifies gum avoidance as the sole purpose of the acute angle the support surface must make with the slot base. *See, e.g.*, ’896 patent, Abstract; *id.*, col. 1, line 66, through col. 2, line 5; *id.*, col. 2, lines 40–44. Under Ormco’s construction, however, the acute angle would not serve the sole stated purpose in the arrangement that Ormco’s construction is aimed at covering—in which the slide is inserted from the top, first moves along the ledge, and arrives at the support surface for closing after crossing the slot. In that embodiment, there is no problem of gum contact and no need for the acute angle. Such a construction is unmoored from, rather than aligned with, the description of the invention.

Ormco has not identified anything in the written description or drawings that discloses an arrangement of the sort it seeks to cover, in which the slide does not contact the support surface until it approaches the closed position. And it is not just the sole statement of purpose of the acute angle, but other language of the specification, that shows Ormco’s view to be out of keeping with the description of the invention. Notably, the patent uses the phrase “translation plane” in identifying the key required acute angle (which is formed with the “base plane”). *E.g.*, ’896 patent, col. 2, lines 31–32; *id.*, col. 2, lines 40–44; *id.*, col. 6, lines 7–23; *id.*, col. 7, lines 8–12 and lines 18–21; *see also id.*, col. 10, lines 3–7; *id.* at fig. 3. The terminology of “translation” refers to movement of the slide—which is “translat[ed]” along the plane. *Id.*, col. 6, lines 1–4 (“translation plane 60 along which the ligating slide 14 moves”). And the patent makes clear that the “planar support surface 46 including grooves 48, 50 and guides 52, 54 collectively define a slide engagement track,” which is

what “generally defines a translation plane 60 along which the ligating slide 14 moves.” *Id.*, col. 5, line 61, through col. 6, line 4 (emphasis added). By thus tying the “translation” plane to the support surface, the patent strongly implies that it is along the support surface, not the ledge surface, that the slide generally moves from open to closed position.

The specification also sharpens the distinction between the support surface and the ledge surface that is suggested by the use of two different terms for the two surfaces. Whereas the support surface is linked with slide movement, the ledge is not. It is mentioned in a single paragraph. That paragraph explains that when the slide is closed, one end of the slide “abuts the labial surface of [the] ledge.” *Id.*, col. 7, lines 29–32 (figure reference numbers removed). The rest of the paragraph then describes a portion of the bracket connected to the ledge that covers the end of the slide, protecting the slide against food and acting as a stop for the slide’s movement (depicted as item 34 in Figure 3). *Id.*, col. 7, lines 32–38. Such statements are inconsistent with Ormco’s constructions of “ledge” and “support surface,” which would allow the slide to move along either surface interchangeably.

For those reasons, we conclude that the specification makes clear that the district court correctly resolved the uncertainties in the claim language, adopting a construction that aligns with the description of the invention.

Given that conclusion, we also reject Ormco’s argument that the difference between claim 6 and claim 1 demands a broad construction of claim 1. Claim 6, which depends on claim 1, adds the limitations that “the support surface intersects one of the opposing first and second slot surfaces to define an edge of the archwire slot and the support surface defines a translation plane that intersects the other of the opposing first and second slot surfaces.” ’896 patent, col. 11, lines 1–5. Since the phrase “the

support surface defines a translation plane” appears explicitly in claim 6, Ormco argues, we should not read claim 1 as itself limiting the support surface to supporting and guiding the slide during “translation.” We conclude, however, that this difference is not sufficient to support Ormco’s broad view of claim 1.

The doctrine of claim differentiation creates a presumption that distinct claims, particularly an independent claim and its dependent claim, have different scopes. See *Kraft Foods, Inc. v. Int’l Trading Co.*, 203 F.3d 1362, 1368 (Fed. Cir. 2000). But our construction of “support surface” does not give claim 1 the same scope as claim 6. At a minimum, claim 6 requires that the support surface form a corner (edge) with one side of the slot. That requirement is not implicit in claim 1 under our construction of “support surface.” To provide support for the slide throughout its movement, the support surface need not come directly up to the slot (or, therefore, form a corner with a slot side), but could stop short of the slot.

With claim 6 having independent significance, we see no basis for reading into its use of “translation” an implication that, but for the limitations claim 6 adds to claim 1, the slide need not move along the support surface. The focus of claim 6 seems more on a geometric characterization than on any question about support during movement; and the claim is readily understood to reinforce the connection between the support surface and the slide’s movement by tying the “translation plane” to the “support surface.” In any event, as we have concluded, the specification firmly establishes the requirement of slide support that Ormco disputes. That conclusion precludes drawing the inference from claim 6 that Ormco urges. Indeed, recognizing that claim drafting often involves finding different expressions to define the same invention, *Kraft*, 203 F.3d at 1368, we have held that even the presumption of different claim scope is ““overcome by a contrary construction dictated by the written description,”” *Retracta-*

*ble Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1305 (Fed. Cir. 2011) (quoting *Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005)); *see also Kraft*, 203 F.3d at 1368. *A fortiori*, we will not draw Ormco's inference from claim 6 here, where the inference is not even needed to maintain different claim scope.

We note, finally, that we do not find support for Ormco's position in the prosecution history, on which neither side places substantial weight. In particular, our conclusion is not changed by the Examiner-Initiated Interview Summary, U.S. Patent App. No. 13/052,759 (U.S.P.T.O. July 30, 2012). That document reports an interview in which (a) the examiner told the applicant that "the claims would most likely be allowable over the prior art if limitations were included in the claims that stated that the ligating member was moved linearly and that the first portion of the ligating member remained in contact with the support surface during the entire movement of the ligating member" and (b) the applicant responded that he "did not wish to amend the claims in the manner proposed." The document is not clear enough, as to either the applicant's or the examiner's views about claim scope in the absence of the proposed language, to support a different construction of "support surface" from the one we find compelled by the specification.

#### CONCLUSION

For the foregoing reasons, we affirm the district court's decision.

**AFFIRMED**