

NOTE: This disposition is nonprecedential.

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

APPLE INC.,
Appellant

v.

OMNI MEDSCI, INC.,
Appellee

2023-1034

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. IPR2021-
00453.

Decided: June 21, 2024

JEFFREY PAUL KUSHAN, Sidley Austin LLP, Washing-
ton, DC, argued for appellant. Also represented by THOMAS
ANTHONY BROUGHAN, III, JOSHUA JOHN FOUGERE; MICHAEL
ROBERTS, Dallas, TX.

THOMAS A. LEWRY, Brooks Kushman PC, Royal Oak,
MI, argued for appellee. Also represented by JOHN S.
LEROY, CHRISTOPHER C. SMITH.

Before REYNA and CUNNINGHAM, *Circuit Judges*, and
ALBRIGHT, *District Judge*¹.

ALBRIGHT, *District Judge*.

Appellant Apple Inc. appeals from a Final Written Decision of the Patent Trial and Appeal Board finding Apple failed to show that claims 3–6 and 8–14 of U.S. Patent No. 10,517,484 were unpatentable.² Those claims were upheld because the Board found prior art did not disclose the claim limitation “configured to identify an object” (the “identifying limitation”). In contrast, the Board found claim 16 unpatentable, which is like upheld claims 3 and 8 except for the claim limitation “configured to detect an object” (the “detecting limitation”).

Apple appeals on two grounds, one substantive and one procedural. First, Apple claims that the Board incorrectly construed the identifying limitation. Second, Apple argued below that U.S. Patent No. 9,241,676 (“Lisogurski”) and U.S. Patent No. 8,108,036 (“Tran”) disclose the identifying limitation even under appellee Omni MedSci, Inc.’s proposed construction (the “alternative argument”). Apple faults the Board for considering this an improper new reply argument. Because the Board erred only in disregarding the alternative argument, we *affirm-in-part*, *vacate-in-part*, and *remand* to the Board for further consideration.

¹ Honorable Alan D Albright, District Judge, United States District Court for the Western District of Texas, sitting by designation.

² The Board found unpatentable several other claims of the ’484 patent. However, appellee Omni MedSci, Inc. does not appeal any aspect of the Final Written Decision, including the Board’s unpatentability finding on claim 16 or its claim constructions.

BACKGROUND

I

Omni MedSci, Inc. is the assignee of U.S. Patent No. 10,517,484, entitled “Semiconductor Diodes-based Physiological Measurement Device with Improved Signal-to-Noise Ratio.” The patent is generally directed to a “wearable device includ[ing] a measurement device to measure a physiological parameter adapted to be placed on a wrist or an ear of a user.” ’484 patent, at [57]. The wearable device measures the physiological parameter by emitting light and analyzing the light that is reflected back. *See id.* The specification has sections corresponding to various blood constituents of potential interest, such as glucose, ketones, and hemoglobin A1c. *Id.* at 11:20; 13:1; 14:23.

Claims 3, 8, and 16 are relevant to the arguments presented in this appeal. Although each depends on a different independent claim, none of the limitations of any independent claim—or any claim upon which claims 3, 8, or 16 depend—are at issue. The three claims state:

3. The system of claim 2, wherein the wearable device is at least in part ***configured to identify an object***, and to compare a property of at least some of the output signal to a threshold.

8. The system of claim 7, wherein the wearable device is at least in part configured to ***identify*** an object, and a property of at least some of the output signal is compared by at least one of the wearable device, the smart phone or tablet to a threshold.

16. The system of claim 15, wherein the wearable device is at least in part configured to ***detect*** an object, and a property of at least some of the output signal is compared to a threshold.

’484 patent, 37:43–46; 38:63–67; 40:33–36 (emphases added).

II

A

Apple petitioned to institute an *inter partes* review of claims 1–23 of the ’484 patent. J.A. 203, 220. One ground is relevant to this appeal. Apple argued that the combination of prior art references Lisogurski, Tran, and U.S. Patent Application Publication No. 2005/00494468 (“Carlson”) rendered claims 3, 8, and 16 (among others) obvious. J.A. 220. For the identifying and detecting limitations, Apple argued that Lisogurski discloses sending an error signal when its sensor has fallen off the subject—which requires identifying and detecting when an object, such as a wrist or an ear, is in range of the sensor. J.A. 275. For the limitation “configured . . . to compare a property of at least some of the output signal to a threshold,” the petition claimed that Lisogurski discloses comparing detected signals, such as blood oxygen saturation, to thresholds or target values. J.A. 276. Similarly, the petition argued that Tran discloses monitoring health information, such as pulse oximetry measurements, and comparing it to user-provided parameters for generating health alerts. J.A. 271, 276. Neither the petition nor the patent owner’s preliminary response discussed the identifying or detecting limitations in their claim construction sections. J.A. 232–34; 4761–62.

The Board instituted the IPR. J.A. 5162. The institution decision did not construe the identifying and detecting limitations. *See* J.A. 5169–70.

Omni’s patent owner response disputed, for the first time, the construction of the “identify an object” limitation in Claims 3 and 8 and the “detect an object” limitation in Claim 16. J.A. 5242–45. For the “identify an object” limitation, Omni proposed the construction “to recognize or establish an object as being a particular thing.” J.A. 5244. For the “detect an object” limitation, Omni proposed the construction “to discover or notice the existence or presence

of something.” J.A. 5245. The proposed constructions were based off the Random House Kernerman Webster’s College Dictionary (2010). J.A. 5242; 5244. In both cases, Omni argued that the ’484 patent claims and specification confirmed the dictionary-based plain meaning. J.A. 5242–45.

In its reply brief, Apple argued that the terms of the identifying and detecting limitations were commonly understood and needed no construction. J.A. 5378. To the extent construction was necessary, Apple proposed the same construction for both limitations: “to discover or determine the existence, presence, or fact of an object.” J.A. 5378–79. For the “identify an object” limitation, Apple argued that its construction aligned with the claims and specification, which use the term “identify” to confirm that an object is present or not, rather than to take action dependent on what the object is. J.A. 5379. Apple argued that Lisogurski discloses both the identifying and detecting an object limitations based on Apple’s proposed construction. J.A. 5381–82.

Apple also argued in its reply brief that Lisogurski and Tran disclose the identifying limitation even under Omni’s proposed construction. J.A. 5383. Apple pointed to Lisogurski and Tran’s techniques for measuring blood oxygen saturation and other blood constituents, *id.*, which Apple relied on in the petition to show “compar[ing] a property of at least some of the output signal to a threshold.” J.A. 275–76. Apple argued that measuring blood constituents requires identifying and quantifying them, which Lisogurski and Tran perform using the same reflected light measuring technique disclosed in the ’484 patent. J.A. 5383.

B

The Board issued a Final Written Decision finding claim 16 unpatentable but refusing to find claims 3–6 and 8–14 unpatentable. J.A. 61. Starting with claim construction, the Board construed “to identify an object” as “to recognize or establish an object as being a particular thing”

and “to detect an object” as “to discover or notice the existence or presence of something.” J.A. 10. The Board rested its analysis on the presumption that different claim terms are presumed to have different meanings. J.A. 9; *see SimpleAir, Inc. v. Sony Ericsson Mobile Commc’ns AB*, 820 F.3d 419, 431 (Fed. Cir. 2016). The Board rejected Apple’s arguments for applying the same meaning—the dictionary-based meaning of “detect”—to both limitations. *Id.* The Board noted the different dictionary definitions for “identify” and “detect” and issued the constructions above, which are “consistent with the dictionary definitions.” J.A. 9–10.

Turning to the petition’s grounds, the Board held that the combination of Lisogurski, Carlson, and Tran rendered claim 16 obvious. J.A. 54. Applying its construction of claim 16’s detecting limitation, the Board agreed with Apple that Lisogurski discloses the detecting limitation by recognizing when its sensor has fallen off the subject, which implies the ability to recognize the subject’s presence. J.A. 50–51.

In contrast, the Board held that the combination of Lisogurski, Carlson, and Tran did not render claims 3 or 8 obvious. J.A. 54. The Board recited Apple’s argument in its reply brief that Lisogurski discloses the identifying limitation because “Lisogurski and Tran each teach techniques for measuring blood oxygen saturation and other blood constituents.” J.A. 51. The Board further recited Omni’s sur-reply counterarguments that “measuring” is not “identifying,” and that Apple’s reply argument was procedurally improper. *Id.* The Board ultimately sided with Omni’s position “that the Petition does not sufficiently articulate support for Petitioner’s assertions.” *Id.* The Board cited the discrepancy between Apple’s petition arguments, which focused on comparing signals to thresholds, and the identifying limitation as construed, which focused on recognizing or establishing objects to be particular things. J.A. 51–52.

Apple timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

STANDARD OF REVIEW

We review the Board’s ultimate claim construction *de novo*. *Google LLC v. EcoFactor, Inc.*, 92 F.4th 1049, 1054 (Fed. Cir. 2024). We review any underlying fact findings for substantial evidence. *Id.* We review for abuse of discretion the Board’s decision to disregard a reply argument as exceeding the proper scope. *Axonics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374, 1380 (Fed. Cir. 2023).

DISCUSSION

I

We begin with claim construction. While the Board could have done more to justify its reasoning, we nevertheless uphold its construction on appeal. “We review the Board’s claim construction based on intrinsic evidence *de novo* . . .” *Dionex Softron GmbH v. Agilent Techs., Inc.*, 56 F.4th 1353, 1358 (Fed. Cir. 2023). Under this standard, and based on the intrinsic evidence before us, we affirm the Board’s construction of the claim limitation “identify an object” as “to recognize or establish an object as being a particular thing.”

Well-settled claim construction principles govern this dispute. “Different claim terms are presumed to have different meanings.” *Bd. of Regents of the Univ. of Tex. Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1371 (Fed. Cir. 2008). A party, however, can rebut that presumption in the context of a particular patent. *See, e.g., Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1231–32 (Fed. Cir. 2011). For example, in the past we have found that different terms in the same patent have the same meaning because they have been used interchangeably. *See, e.g., Baran v. Med. Device Techs., Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010); *Tehrani v. Hamilton Med., Inc.*, 331 F.3d 1355, 1361 (Fed. Cir. 2003).

Here, Apple argues that the Board erred in construing the limitation “identify an object” in claims 3 and 8 as “to recognize or establish an object as being a particular thing.” Appellant Br. 30. According to Apple, this claim limitation should have the same meaning as claim 16’s “detect an object” limitation, which is “to discover or determine the existence, presence, or fact of an object.” Appellant Br. 26. According to Apple, the patent uses the terms “identify” and “detect” interchangeably, and thus this evidence rebuts the presumption that different claim terms have different meaning. Apple’s attempts to rebut this presumption, as discussed below, fail.

First, Apple argues that because claims 3 and 8 parallel claim 16 except for using “identify” versus “detect,” these terms are interchangeable. But that turns the presumption of different meanings on its head. It was within the patentee’s power to draft claims 3, 8, and 16 to all claim “detecting an object.” *Cf. Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012) (“The fact that the two adjacent claims use different terms in parallel settings supports the district court’s conclusion that the two terms were not meant to have the same meaning . . .”). They did not do so. Thus, we reject Apple’s argument.

Second, Apple argues that claims 3 and 8, like claim 16, only require the claimed wearable device to discover or determine the existence, presence, or fact of an object—*i.e.*, detecting said object. Appellant Br. 33. According to Apple, nothing in claims 3 and 8 requires the claimed wearable device to act based on the determined identity of an object. *Id.* But “identify” must be given the full scope of its plain and ordinary meaning absent lexicography or disclaimer, neither of which Apple alleges. *See Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Accordingly, when claims 3 and 8 require the claimed device to “identify an object,” the claims require a determination of the identity of an object, even if the claims

never do anything with that identity. For these reasons, claims 3 and 8’s limitation “identify an object” is not interchangeable with the “detect an object” limitation in claim 16, no matter what the other limitations of claims 3 and 8 do.

Apple next argues that the specification uses the terms “identify” and “detect” interchangeably. Appellant Br. 33. We reject Apple’s position. Apple refers to the various blood constituents discussed in the specification as the claimed “objects” that claims 3 and 8 “identify” and that claim 16 “detects.”³ Apple notes that these constituents are “identif[ied]” in some sections and “detect[ed]” in others through the same technique: measuring reflected light and comparing the results against known spectra. Apple emphasizes a paragraph on cholesterol that discusses “detect[ing]” it in the first sentence and “identify[ing]” its concentration in the last sentence. ’484 patent, 15:31–48. The problem with Apple’s argument is that it is a cobbled together generalization of various sections of the specification, and one that often ignores distinctions in language at that. For example, the discussion of “detect[ing]” glucose that Apple highlights is actually about detecting glucose *lines* in a spectrum. *Id.* at 18:46–52. Overall, we reject Apple’s argument that the specification *consistently* and interchangeably refers to “identify” and “detect” in a manner sufficient to overcome the usual presumption that those different terms have different meanings.

³ Omni challenges Apple’s specification citations as improper new evidence on appeal. Appellee Br. 19–20. We reject this challenge, for “[t]he doctrine of waiver does not preclude a party from supporting its original claim construction with new citations to intrinsic evidence of record.” *Seabed Geosolutions (US) Inc. v. Magseis FF LLC*, 8 F.4th 1285, 1289 (Fed. Cir. 2021).

Finally, Apple separately argues that the Board’s claim construction is erroneous because it does not track the law. According to Apple, the Board improperly relied on extrinsic dictionary definitions rather than intrinsic evidence when construing the “identify an object” limitation. Appellant Br. 34. Apple cites the well-known principle that extrinsic evidence, such as dictionary definitions, is less significant than and cannot be used to contradict intrinsic evidence. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317, 1322–23 (Fed. Cir. 2005) (en banc). While that is a correct recitation of the law, it is beside the point. As previously noted, we determine that the Board’s construction of the “identify an object” limitation is correct based on the intrinsic evidence.

In conclusion, we affirm the Board’s construction that “identify an object” in claims 3 and 8 means “to recognize or establish an object as being a particular thing.” Apple has not rebutted the presumption that “identifying an object” and “detecting an object” have different meanings. Because that is Apple’s only claim construction challenge, we affirm the Board’s construction.

II

We turn next to Apple’s procedural argument. Apple argues that the Board abused its discretion when it refused to consider Apple’s arguments in its reply brief. Appellant Br. 38. Specifically, Apple’s arguments in its reply brief concerning the Lisogurski, Carlson, and Tran references were made in response to Omni’s newly raised claim construction of “identify an object” in its patent owner response. Appellant Br. 38–40. We agree with Apple.

After briefing in this appeal was completed, we decided *Axonics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374 (Fed. Cir. 2023). That opinion crystallized and distilled principles already inherent in our past decisions. The rule the *Axonics* court stated squarely governs. Accordingly, we find the

Board abused its discretion in refusing to consider Apple's alternative argument.

In *Axonics*, this Court held that “where a patent owner in an IPR first proposes a claim construction in a patent owner response, a petitioner must be given the opportunity in its reply to argue and present evidence of anticipation or obviousness under the new construction, at least where it relies on the same embodiments for each invalidity ground as were relied on in the petition.” 75 F.4th at 1384. The *Axonics* Court derived support for this rule from a discussion of past Federal Circuit precedent. *See id.* at 1381–83. Two cases are of particular importance here. First, *SAS Institute, Inc. v. ComplementSoft, LLC*, 825 F.3d 1341, 1351 (Fed. Cir. 2016), *rev'd on other grounds sub nom. SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018), held that the PTAB may not change a claim construction between institution and Final Written Decision without giving the parties reasonable notice and an opportunity to argue under the new construction. Second, *Hamilton Beach Brands, Inc. v. f'real Foods LLC*, 908 F.3d 1328, 1338–39 (Fed. Cir. 2018), rejected a challenge to a Final Written Decision's adoption of constructions first proposed in a patent owner response because the petitioner had an opportunity to respond. *See Axonics*, 75 F.4th at 1382 (“[W]e reiterated the rule that, under the APA, the Board cannot adopt a new claim construction without giving the petitioner an opportunity to respond. But we held that those requirements had been met because the petitioner was able to respond in its reply . . .”). In light of these and other cases, the *Axonics* Court held that the PTAB was required to consider the petitioner's new argument and evidence on anticipation and obviousness raised in the reply, since the patent owner had advanced a new claim construction position in its patent owner response and the new patentability argument was responsive to the construction. *See id.* at 1378–79, 1383–84.

Under both *Axonics* and earlier precedents, the Board abused its discretion here in refusing to consider Apple's reply argument. Omni's patent owner response offered specific proposed constructions for the identifying and detecting limitations for the first time. *Compare* J.A. 5242–45, *with* J.A. 4761–62. Apple responded to this argument by citing embodiments relied on by the Lisogurski/Carlson/Tran ground in the petition. *See* J.A. 5383; 276. And the Board, after having said nothing about the identifying limitation's construction in the institution decision, adopted Omni's proposed construction. *See* J.A. 10, 5169–70. As in *Axonics*, the patent owner here proposed a new construction for the first time in the patent owner response. *See* 75 F.4th at 1378, 1384. As in *Hamilton Beach*, the parties and the Board did not discuss the construction of the relevant limitation during the institution phase. *See* 908 F.3d at 1335. And as in *SAS*, the Board adopted a different claim construction in its Final Written Decision without giving the petitioner an opportunity to present argument under that construction. *See* 825 F.3d at 1351. The Board therefore disregarded our consistent caselaw when disposing of the alternative argument.

Omni's attempts to defend the Board's decision are unpersuasive. In the briefs, Omni relied on two main precedential cases: *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765 (Fed. Cir. 2018), and *Wasica Finance GmbH v. Continental Automotive Systems, Inc.*, 853 F.3d 1272 (Fed. Cir. 2017). Both cases are distinguishable. While the petitioner in *Acceleration Bay* raised new evidence of obviousness in response to patent owner's construction of a term, there were no indicators that said construction was proposed for the first time in a patent owner response. *See* 908 F.3d at 775. *Wasica* involved a reply that "effectively abandoned its petition in favor of a new [obviousness] argument." 853 F.3d at 1286–87. Apple has done nothing so dramatic here. *Compare* J.A. 275–276, *with* J.A. 5383.

At oral argument, Omni claimed it has always maintained that “identifying” should have its plain and ordinary meaning: the dictionary-based definition in the patent owner’s response. But the patent owner in *Axonics* also argued that its two-input construction was the plain and ordinary meaning of the relevant limitations. Patent Owner’s Response at 2, *Axonics Modulation Techs., Inc. v. Medtronic, Inc.*, No. IPR2020-00680 (P.T.A.B. Dec. 22, 2020) (“[T]he language of the claims and the teaching of the ’758 patent specification . . . compel the plain meaning of these claims as requiring two separate inputs . . .”). And it did so after failing to discuss the construction of those limitations in the patent owner’s preliminary response, just like Omni. *See Axonics*, 75 F.4th at 1378. Omni also lays blame at Apple’s feet, claiming that Apple’s reply sought to fix an error in the petition’s treatment of claim 16 and thereby started this dispute. But Omni’s focus on Apple’s actions is misplaced. *Axonics* instead puts the focus on what patent owners have done. *See id.* at 1384. At the preliminary response stage, Omni did not propose a construction for “identify an object.” Post-institution, Omni proposed that “identify an object” should mean “to recognize or establish an object as being a particular thing.” That constituted a claim construction first proposed in the response, so Apple was entitled to respond to it. Finally, Omni warns of petitioners sandbagging patent owners with new claim constructions. This is ironic, given that *Axonics* was decided based on concerns of patent owners sandbagging petitioners. *Id.* Omni’s fears are unfounded. Petitioners who hold their best claim construction arguments back for reply don’t just need to worry about the Board disregarding them as procedurally improper—they also worry about the Board refusing to institute the petition. We therefore reject Omni’s arguments.

We conclude that the Board abused its discretion in not considering Apple’s argument properly raised in reply in response to Omni’s construction for the identifying

limitation. We do not address the merit of this argument on this record. We leave such issues for the Board to consider on remand.

III

Apple also appeals the Board's finding that Apple failed to show that claims 4–6 and 9–14 were unpatentable. The sole reason for this holding was that Apple had not shown the unpatentability of claims 3 and 8, on which claims 4–6 and 9–14 depend.⁴ *See* J.A. 49, 52, 55, 59. Because we find the Board abused its discretion in its analysis of claims 3 and 8, we also find the Board's analysis of claims 4–6 and 9–14 to contain the same error.

CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. While we affirm the Board's construction of the limitation "identify an object" in claims 3 and 8, we vacate the Board's Final Written Decision regarding claims 3–6 and 8–14 of the '484 patent, and remand for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, VACATED-IN-PART AND REMANDED

COSTS

No costs.

⁴ Some of these claims were subject to different grounds with additional prior art. *See* J.A. 220. However, because Apple had not alleged that the additional prior art disclosed the identifying limitation, the Board nevertheless hinged its holding on Apple's failure to show the unpatentability of claims 3 and 8. *See* J.A. 55, 59.