

NOTE: This disposition is nonprecedential.

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

QUANTIFICARE S.A.,
Appellant

v.

CANFIELD SCIENTIFIC, INC.,
Appellee

2023-1917, 2023-1918, 2023-1919

Appeals from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in Nos. IPR2021-
01511, IPR2021-01518, IPR2021-01519.

Decided: March 25, 2025

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ISHA S. SHAH, MICHAEL R. WEINER.

Before LOURIE, MAYER, and PROST, *Circuit Judges*.

PER CURIAM.

QuantifiCare S.A. (“QuantifiCare”) appeals final written decisions of the United States Patent and Trademark Office Patent Trial and Appeal Board (“board”) which concluded that all challenged claims of its stereophotogrammetry patents were unpatentable as obvious. *See Canfield Sci., Inc. v. QuantifiCare S.A.*, No. IPR2021-01519 (P.T.A.B. Mar. 17, 2023), J.A. 167–238; *Canfield Sci., Inc. v. QuantifiCare S.A.*, No. IPR2021-01518 (P.T.A.B. Mar. 9, 2023), J.A. 104–66; *Canfield Sci., Inc. v. QuantifiCare S.A.*, No. IPR2021-01511 (P.T.A.B. Mar. 9, 2023), J.A. 34–103. For the reasons discussed below, we affirm.

I. BACKGROUND

QuantifiCare owns three patents—U.S. Patent Nos. 10,070,119 (the “’119 patent”), 10,165,253 (the “’253 patent”), and 10,681,334 (the “’334 patent”)—which are directed to a “preferably portable stereophotogrammetry device equipped with a system to position the subject at, at least, two pre-defined distances for picture taking.” ’119 patent, col. 4 ll. 7–9.¹ The claimed device and method can be used “for reconstructing in 3-Dimensions comprehensive representations of the head and torso of [a] subject.” *Id.* Abstract. The specification explains that “[s]tereophotogrammetry consists in gathering the images of a subject from at least two view[s] with a calibrated camera whose optics are perfectly modeled.” *Id.* col. 1 ll. 24–26.

In March 2022, the board instituted *inter partes* review of: (1) claims 1–4 and 8–11 of the ’119 patent; (2) claims 1–4, 8–12, 15, 16, and 20–23 of the ’253 patent; and (3) claims

¹ The ’119, ’253, and ’334 patents (collectively, “the QuantifiCare patents”) share substantially identical specifications. For ease of reference, we cite only to the specification of the ’119 patent unless otherwise noted.

1–5, 9–12, 15, 16, and 20–23 of the '334 patent. *See* J.A. 35, 105, 168. The board subsequently issued final written decisions concluding that Canfield Scientific, Inc. (“Canfield”) had shown, by a preponderance of the evidence, that the challenged claims were unpatentable. J.A. 101, 165, 236. The board treated claim 1 of each of the QuantifiCare patents as illustrative of the subject matter claimed in that patent. J.A. 38, 109, 171. Claim 1 of the '119 patent recites:

1. A device for stereophotogrammetry comprising a camera body (1) and a double-optics (2) comprising two sub-optics (2*b*) and (2*c*), **configured for a simultaneous acquisition of two views according to two different angles**, wherein the device is comprising a positioning system (34) configured to define a position of a target subject (S) for one of at least two distinct pre-defined point positions (A3, A4) of the target subject (S) relative to the stereophotogrammetry device, the at least two distinct predefined point positions comprising a closer point position (A4) and a farther point position (A3), the closer point position (A4) being closer to the stereophotogrammetry device than the farther point position (A3), and wherein the positioning system (34) is comprising at least two pairs of light beamers (3*b*, 3*c*) and (4*b*, 4*c*) where a first pair of light beamers (3*b*, 3*c*) is converging to the farther point position (A3) and a second pair of light beamers (4*b*, 4*c*) is converging to the closer point position (A4), and wherein the device comprises a switch (5) comprising a first selection position configured to select the farther point position (A3) and a second selection position configured to select the closer point position (A4), wherein the switch (5) is configured to switch on the first pair of light beamers (3*b*, 3*c*) in the first selection position and wherein the switch (5) is configured to

switch on the second pair of light beamers (4*b*, 4*c*)
in the second selection position.

'119 patent, col. 11 ll. 32–57 (disputed claim language in bold).

Claim 1 of the '253 patent recites:

1. A device for stereophotogrammetry comprising a camera body (1) and a double-optics (2) comprising two sub-optics (2*b*) and (2*c*), **configured for a simultaneous acquisition of two views according to two different angles**, wherein the device is comprising a positioning system (34) configured to signal when a target subject (S) is reaching a pre-defined distance position to the camera (1) corresponding to one of at least two distinct pre-defined distance positions (A3, A4) of the target subject (S) relative to the camera body (1) of the stereophotogrammetry device, the at least two distinct predefined distance positions comprising a closer distance position (A4) and a farther distance position (A3), the closer distance position (A4) being closer to the camera body (1) of the stereophotogrammetry device than the farther distance position (A3) to the camera body (1) of the stereophotogrammetry device.

'253 patent, col. 11 ll. 42–57 (disputed claim language in bold).

Claim 1 of the '334 patent recites:

1. A device for stereophotogrammetry **configured for an acquisition of two views according to two different angles**, said acquisition generating a pair of images, with one image corresponding to one of the two views and the other image corresponding to the other of the two views, this pair of images being referred to as a stereo-pair, wherein the device is further comprising a

positioning system (34) configured to signal when a target subject (S) is reaching one of at least two distinct pre-defined distance positions (A3, A4) relative to the stereophotogrammetry device, the at least two distinct predefined distance positions comprising a closer distance position (A4) and a farther distance position (A3), the closer distance position (A4) corresponding to the target subject (S) being closer to the stereophotogrammetry device and the farther distance position (A3) corresponding to the target subject (S) being farther [from] the stereophotogrammetry device.

'334 patent, col. 11 l. 54–col. 12 l. 3 (disputed claim language in bold).

In each final written decision, the board construed the limitation requiring a stereophotogrammetry device configured for the “acquisition of two views according to two different angles.” J.A. 45–56, 112–24, 175–89. The board rejected QuantifiCare’s argument that this limitation requires that the optical axis of each sub-optic in the device be angled differently, therefore excluding configurations where the sub-optics’ optical axes are oriented in parallel. J.A. 55–56, 123–24, 189. Instead, according to the board, the limitation only requires that the sub-optics each view a subject from a different angle. J.A. 55–56, 123–24, 189. Applying this construction, the board determined that all claim limitations in the challenged claims were disclosed in the cited prior art.²

² The board determined that many of the limitations of the challenged claims were disclosed in WO 2010/097572 A2 (“Plassmann”), J.A. 1479–506, a World Intellectual Property Organization publication that describes stereoscopic imaging. *See* J.A. 80–85, 140–45, 196–200.

This appeal followed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. §§ 141(c), 319.

II. DISCUSSION

A. Standard of Review

We review the board’s legal conclusions *de novo* and its factual findings for substantial evidence. *Kamstrup A/S v. Axioma Metering UAB*, 43 F.4th 1374, 1381 (Fed. Cir. 2022); *HTC Corp. v. Cellular Commc’ns Equip., LLC*, 877 F.3d 1361, 1369 (Fed. Cir. 2017). Obviousness is a question of law based on underlying factual determinations. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 427 (2007); *Quanergy Sys., Inc. v. Velodyne Lidar USA, Inc.*, 24 F.4th 1406, 1414 (Fed. Cir. 2022).

B. Claim Construction

The central dispute on appeal is the meaning of claim language requiring a device for stereophotogrammetry with double optics having two sub-optics “configured for a simultaneous acquisition of two views according to two different angles.” ’119 patent, col. 11 ll. 34–35; ’253 patent, col. 11 ll. 44–45.³ QuantifiCare asserts that this “different

³ In both the ’119 and ’253 patents, claim 1 recites a stereophotogrammetry device having two sub-optics “configured for a simultaneous acquisition of two views according to two different angles.” ’119 patent, col. 11 ll. 34–35; ’253 patent, col. 11 ll. 44–45. By contrast, claim 1 of the ’334 patent recites “[a] device for stereophotogrammetry configured for an acquisition of two views according to two different angles.” ’334 patent, col. 11 ll. 54–55. Given that QuantifiCare does not dispute that the “according to two different angles” requirement in claim 1 of each of its three patents should be afforded the same construction, the fact that claim 1 of the ’334 patent does not even refer to sub-

angles” requirement relates to the optical axes of the sub-optics. Specifically, it contends that the optical axes of the sub-optics must be at two different angles, meaning that configurations in which the optical axes of the sub-optics are oriented in parallel are excluded from the scope of the claims.

We find this argument unpersuasive for several reasons. First, the claim language is most reasonably read to mean that the “according to two different angles” requirement relates to the views acquired by the claimed sub-optics rather than the orientations of those sub-optics. “While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.” *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 326 F.3d 1215, 1220 (Fed. Cir. 2003). Because the disputed claim limitation, “according to two different angles,” immediately follows the term “two views,” the board correctly determined that the limitation relates to the views acquired rather than the orientations of the optical axes of the sub-optics. *See* J.A. 46, 114, 179–180; *see also Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016) (explaining that “[c]onstruing individual words of a claim without considering the context in which those words appear is simply not ‘reasonable’”). Rather than hewing to the actual language of the claims, QuantifiCare improperly seeks to redraft those claims to require “*sub-optics configured according to two different angles* for a simultaneous acquisition of two views.”

Second, we are not persuaded by QuantifiCare’s argument that the board erred in determining that the term

optics undermines its argument that the “according to two different angles” limitation requires that the optical axis of each sub-optic in the device be angled differently.

“views” in the challenged claims refers to “viewed subject material” or views of a “target subject.” See J.A. 46 (explaining that “[t]he term ‘view’ implicates the subject”); see also J.A. 180 (explaining that “[t]he claimed ‘views’ refer to viewed subject material (e.g., a desired target subject or merely whatever exists at the viewing plane”)). In this regard, the specification explains that the claimed portable stereophotogrammetry device “is equipped with a double optics enabling the acquisition of two simultaneous views with different angles *of the subject*.” ’119 patent, col. 4 ll. 10–12 (emphasis added). It further states that “[s]tereophotogrammetry consists in gathering *the images of a subject from at least two view[s]* with a calibrated camera whose optics are perfectly modeled.” *Id.* col. 1 ll. 24–26 (emphasis added). We note, moreover, that the phrase “two views according to two different angles” is followed in each of the claims with references to positioning a “target subject” at pre-defined positions relative to the stereophotogrammetry device. *Id.* col. 11 ll. 37, 39; ’253 patent, col. 11 ll. 47, 50; ’334 patent, col. 11 ll. 61, 66. We reject, therefore, QuantifiCare’s assertion that the board incorrectly determined that the limitation requiring “two views according to two different angles” relates to two views of a subject. See J.A. 45–46, 114–15, 180–81.

Third, we do not agree with QuantifiCare’s assertion that embodiments in the specification compel the conclusion that the challenged claims are restricted to sub-optics with inwardly-angled optical axes. Even accepting that the specification contains figures showing sub-optics that are angled inwardly, see J.A. 1020–22, it nowhere states that inwardly-angled sub-optics are an essential feature of the claimed invention. See, e.g., *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“While we read claims in view of the specification, of which they are a part, we do not read limitations from the embodiments in the specification into the claims.”). To the contrary, it indicates that these figures illustrate “possible” or

“exemplary” implementations of the claimed invention. ’119 patent, col. 3 ll. 50, 52 (stating that Figures 2 and 3 each illustrate a “possible implementation” of the invention); *id.* col. 9 ll. 26–27, 34 (stating that Figures 4 and 5 represent “exemplary device[s]”). Indeed, the specification explains that “[t]he double optics of the stereophotogrammetry device *can be manufactured in different ways* without impacting the functionality of the invention, provided that it is characterized by an increased depth of field.” *Id.* col. 4 ll. 20–23 (emphasis added).

Fourth, the prosecution history supports the conclusion that the “according to two different angles” limitation does not exclude sub-optics with parallel optical axes. J.A. 52–54, 120–22, 186–88. During prosecution of the ’119 patent, the examiner rejected claims as obvious over U.S. Patent Pub. No. 2011/0175987 (“Hoffmeier”), J.A. 1462–70, a reference which states that its “two optical systems 8, 9 can be coupled to the [camera system] board 3 such that the respective optical axis of an optical system 8, 9 runs through the center point of the image sensing area 10, 11 of an image detection sensor 1, 2,” J.A. 1469 (emphases omitted), and which contains figures which can reasonably be interpreted to depict optics with parallel optical axes, *see* J.A. 1465–66, 3231. In response to this rejection, QuantifiCare acknowledged that Hoffmeier taught claim 1’s “two different angles” limitation, stating that it discloses “[a] device for stereophotogrammetry comprising a camera body (1) and a double-optics (2) comprising two sub-optics (2b) and (2c), configured for a simultaneous acquisition of two views according to two different angles.” J.A. 1123 (emphasis omitted). QuantifiCare further stated that “8 and 9 in [Figure] 3 of Hoffmeier *exactly correspond* to 2b and 2c [in Figure] 2 of [the ’119 patent].” J.A. 1122 (emphasis added); *see* J.A. 53–54, 121–22, 187–88.

QuantifiCare now argues that Hoffmeier is ambiguous as to whether the optical axes of its system are parallel or angled inwards and that the statements it made during

prosecution regarding Hoffmeier therefore “cannot be deemed a clear and unmistakable admission” that optics with parallel optical axes can acquire their views according to two different angles. Appellant’s Br. 52. As the board correctly determined, however, QuantifiCare’s statements during prosecution regarding Hoffmeier’s disclosure “suggest[ed] to the public that [QuantifiCare] understood that spaced optics with parallel optical axes [could], nonetheless, fall within the scope of claim 1.” J.A. 54; *see also* J.A. 122, 188. As we have previously recognized, “[t]he public-notice function of a patent and its prosecution history requires that we hold patentees to what they declare during prosecution.” *Infinity Comput. Prods., Inc. v. Oki Data Ams. Inc.*, 987 F.3d 1053, 1060 (Fed. Cir. 2021); *see also Hockerson–Halberstadt, Inc. v. Avia Grp. Int’l, Inc.*, 222 F.3d 951, 957 (Fed. Cir. 2000) (rejecting a patentee’s “request for a mulligan that would erase from the prosecution history the inventor’s disavowal of a particular aspect of a claim term’s meaning”).

Finally, extrinsic evidence in the form of statements made by QuantifiCare during district court litigation supports the conclusion that the “two views according to two different angles” limitation should not be construed to require that the optical axes of the sub-optics be angled differently. QuantifiCare argues on appeal that Plassmann does not disclose optics configured to acquire “two views according to two different angles” because its optics are “parallel and thus at the same angle.” Appellant’s Br. 8 (internal quotation marks omitted). During district court litigation, however, QuantifiCare responded to Canfield’s invalidity contentions by admitting that Plassmann teaches the “according to two different angles” limitation. J.A. 2615. Indeed, QuantifiCare stated that Plassmann discloses “a double-optics comprising two sub-optics configured for a simultaneous acquisition of two views according to two different angles.” J.A. 2615. The board thus had ample support for its determination that statements made

by QuantifiCare during district court litigation buttress the conclusion that parallel sub-optics fall within the scope of the challenged claims. *See* J.A. 55, 123, 189.

In sum, after carefully evaluating both the intrinsic and the extrinsic evidence, the board correctly determined that the “acquisition of two views according to two different angles” limitation does not require that the optical axis of each sub-optic be angled differently, but instead only requires that each sub-optic view a subject from a different angle. J.A. 55–56, 123, 189; *see AIA Eng’g Ltd. v. Magotteaux Int’l S/A*, 657 F.3d 1264, 1272 (Fed. Cir. 2011) (“To ascertain the scope and meaning of a claim, we consider the claim language, the specification, the prosecution history, and the relevant extrinsic evidence.”). QuantifiCare does not meaningfully dispute that Plassmann teaches the “acquisition of two views according to two different angles” limitation if the board’s construction of that limitation is affirmed.

C. Objective Indicia

We reject, moreover, QuantifiCare’s argument that the board erred in evaluating its proffered evidence of commercial success. As the board correctly determined, QuantifiCare was not entitled to a presumption of nexus between the claimed invention and the purported commercial success of its LifeViz® Infinity product because it did not demonstrate that the product was coextensive, or nearly coextensive, with the challenged claims. J.A. 58–59, 126–27, 209–10; *see Quanergy*, 24 F.4th at 1417 (“We presume a nexus when the patentee shows that the asserted objective evidence is tied to a specific product and that product embodies the claimed features, and is coextensive with them.” (citation and internal quotation marks omitted)).

We conclude, moreover, that the board correctly rejected QuantifiCare’s argument that sales of Canfield’s Vectra® H2 product were relevant to the commercial success of the claimed invention. *See* J.A. 60–62, 128–30, 222–

23. In this regard, QuantifiCare failed to establish either that the Vectra® H2 product infringed the challenged claims⁴ or that any increase in sales of the product was due to features recited in the challenged claims rather than other possible factors. *See* J.A. 60–62, 128–30, 222–24; *see also* *UCB, Inc. v. Actavis Lab’ys UT, Inc.*, 65 F.4th 679, 695 (Fed. Cir. 2023) (“Simply speaking, there may be many reasons a product is commercially successful; it is only where the success is due to the claimed invention that commercial success can show nonobviousness.”). We have considered QuantifiCare’s remaining arguments but do not find them persuasive.

III. CONCLUSION

Accordingly, the decisions of the United States Patent and Trademark Office Patent Trial and Appeal Board are affirmed.

AFFIRMED

⁴ No court has determined that the Vectra® H2 infringes the challenged claims, and we see no error in the board’s determination that QuantifiCare failed to establish that Canfield did “not contest” that its product infringes. J.A. 61, 129, 223.