

NOTE: This disposition is nonprecedential.

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

EAGLE VIEW TECHNOLOGIES, INC.,
Appellant

v.

NEARMAP US, INC.,
Appellee

2024-1488, 2024-1549

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2022-01009, IPR2022-01090.

Decided: February 3, 2026

LAURA VU, Haynes and Boone, LLP, San Francisco, CA, argued for appellant. Also represented by DEBRA JANECE MCCOMAS, Dallas, TX; GREGORY P. WEBB, Plano, TX; ADAM LLOYD ERICKSON, ANGELA M. OLIVER, Washington, DC.

MEGAN FREELAND RAYMOND, Groombridge, Wu, Baughman & Stone LLP, Washington, DC, argued for appellee. Also represented by JON STEVEN BAUGHMAN; MICHAEL F. MILEA, New York, NY; LAUREN ANN DEGNAN, BENJAMIN JOSEPH CHRISTOFF, CHRISTOPHER DRYER,

WALTER KARL RENNER, Fish & Richardson PC, Washington, DC.

Before MOORE, *Chief Judge*, CHEN and STARK, *Circuit Judges*.

CHEN, *Circuit Judge*.

Eagle View Technologies, Inc. (Eagle View) appeals two *inter partes* review final written decisions by the Patent Trial and Appeal Board (Board), holding that claims 1, 2, 7, 8, 21–22, 24–25, 27, and 29 of U.S. Patent No. 8,670,961 ('961 patent) and claims 1–42 and 46–66 of U.S. Patent No. 8,078,436 ('436 patent) are unpatentable under 35 U.S.C. § 103. *See Nearmap US, Inc. v. Eagle View Techs., Inc.*, No. IPR2022-01009, 2023 WL 8651434 (P.T.A.B. Dec. 14, 2023) ('961 Decision); *Nearmap US, Inc. v. Eagle View Techs., Inc.*, IPR2022-01090, 2024 WL 100923 (P.T.A.B. Jan. 9, 2024) ('436 Decision). For the following reasons, we *affirm*.

BACKGROUND

The '961 and '436 patents, which are both titled “Aerial Roof Estimation Systems and Methods” and share a common specification, “relate[] to . . . systems and methods that allow estimates involving roofs on buildings to be created remotely.” '961 patent col. 1 ll. 18–21. The patents teach remotely generating a roof estimate report by analyzing multiple aerial images of a building to determine the area, shape, and slope of the roof. *See, e.g., id.* col. 1 l. 64 – col. 2 l. 14.

Claim 1 of the '961 patent, representative for appeal, recites:

1. A computing system for generating a roof report, the computing system comprising:
a memory; and

a roof estimation module that includes a calibration module, the roof estimation module being stored on the memory and being configured, when executed, to:

receive a plurality of aerial images of a building having a roof, the plurality of aerial images having been taken independent of each other, at different times and on different dates, the aerial images providing different views from each other of the roof of the building, the plurality of aerial images including at least a first aerial image that is a top plan view of the roof and a second aerial image that is an oblique perspective view of the roof wherein at least one of the first and/or second aerial images is calibrated using calibration information received from the calibration module;

perform image analysis on at least two of the plurality of aerial images;

calculate a pitch for each one of a plurality of roof sections of the roof based on the image analysis;

generate a roof report that includes the pitch of each of the plurality of roof sections based on the calculated pitch; and

output the roof report, wherein the roof report includes one or more top plan views of a model of the roof annotated with numerical values that indicate a corresponding pitch, area, and length of edges of at least some of the plurality of roof sections using at least two different indicia for different types of roof properties.

Id. at claim 1 (emphasis added).

Claim 1 of the '436 patent similarly recites top plan view and oblique images but further specifies that such images "are not a stereoscopic pair." *See* '436 patent at claim 1.

Nearmap US, Inc. (Nearmap) petitioned for *inter partes* review that challenged the validity of certain claims of the '961 and '436 patents based on the combination of (1) an article titled "Three-Dimensional Mapping and As-Built Computer Modelling by Analytical Photogrammetry" by R.M. Littleworth, et al., (Littleworth); (2) a textbook titled "Digital Photogrammetry Theory and Applications" by Wilfried Linder (Linder); and (3) another textbook titled "AutoCAD 2005 for Dummies" by Mark Middlebrook (Middlebrook). Based on this combination, the Board found claims 1, 2, 7, 8, 21–22, 24–25, 27, and 29 of the '961 patent unpatentable under 35 U.S.C. § 103(a). Further, based on the same references (coupled with two other references that are not relevant to the analysis in this appeal), the Board found claims 1–42 and 46–66 of the '436 patent unpatentable under 35 U.S.C. § 103(a).

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

DISCUSSION

I

Claim construction is ultimately a question of law, decided *de novo* on review, as are the intrinsic aspects of a claim-construction analysis. *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 808 (Fed. Cir. 2021). Claims are generally construed according to their plain and ordinary meaning as understood by a person having ordinary skill in the relevant art in view of the specification. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). The Court departs from this meaning, however, when the specification evinces a clear intent—through either disavowal or lexicography—that a different meaning should

govern. *Id.* at 1316; *Trs. of Columbia Univ. in City of New York v. Symantec Corp.*, 811 F.3d 1359, 1364 (Fed. Cir. 2016).

Obviousness is ultimately a question of law reviewed *de novo* based on underlying questions of fact reviewed for substantial evidence. *St. Jude Med., LLC v. Snyders Heart Valve LLC*, 977 F.3d 1232, 1238 (Fed. Cir. 2020). “[W]hether there is a reason to combine prior art references is a question of fact.” *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1367 (Fed. Cir. 2012).

II

Eagle View argues that the Board erred by construing “calculate a pitch” and “determining a pitch” as encompassing inaccurate or unreliable calculations.¹ Eagle View asserts that the terms “calculat[ing]” and “determining” require greater accuracy than mere approximation or estimation. At a minimum, Eagle View contends, the specification confirms that the claimed calculation steps must be faithful enough to the real-life structure to aid practitioners in planning roof construction or repair services. In levying this challenge, Eagle View does not contend that “calculate” and “determining” should be afforded different constructions or that the terms correspond to different levels of accuracy.

Nearmap argues that Eagle View forfeited its claim construction arguments by failing to raise them before the Board. On the merits, Nearmap argues that the plain meaning of the terms “calculation” and “determination” do not require a particular level of accuracy, and the specification, which chiefly concerns estimating the dimension

¹ Several of the challenged claims recite “determining a pitch” or “determine a pitch” in lieu of “calculate a pitch.” *See, e.g.*, ’961 patent at claim 29 (reciting “determining a pitch for a plurality of roof sections”).

and slopes of roofs, does not require a different construction.

Assuming that Eagle View preserved its claim construction challenge,² we are not convinced that the terms “calculate” or “determining”—when read in view of the specification—denote a particular accuracy requirement. The specification confirms that the term “determining” allows for estimations. *See* ’961 patent col. 4 ll. 19–30 (indicating that “determin[ing] the dimensions and slopes of the roof sections” may be based on “closely estimat[ing] the dimensions and slopes of the roofs”). Moreover, embodiments in the specification describe “accurately determin[ing] the pitch,” indicating that accuracy is not built into the meaning of “determining.” *See id.* col. 9 l. 35. Accordingly, Eagle View’s argument that the term “determine” excludes approximation, estimation, or “near calculation” lacks merit. *See* Appellant’s Br. 27.

Likewise, with respect to the “calculat[ing]” claim term, we find no evidence in the specification to suggest that “calculate” requires a certain level of accuracy. Instead, the specification indicates that the term “calculate” refers to obtaining a result via the performance of mathematical steps. *See* ’961 patent col. 6 ll. 5–6 (“The slope can be easily calculated from such a representation using basic trigonometry.”).

² It is not clear that Eagle View preserved its claim construction challenge. Neither party argued for a specialized construction of either the term “calculate” or “determining.” Moreover, Eagle View’s arguments before the Board appear to concern the *application* of these terms to the prior art rather than the actual meaning and scope of the terms themselves. And, generally, arguments not presented to the Board are forfeited. *In re Google Tech. Holdings LLC*, 980 F.3d 858, 863 (Fed. Cir. 2020).

For these reasons, we conclude the specification does not support Eagle View’s position that “determining” and “calculat[ing]” do not encompass estimations or approximations. Accordingly, we affirm the Board’s implicit construction.

III

Eagle View argues that Nearmap’s petition relies on Littleworth’s disclosure alone to meet the claimed “calculate a pitch” and “determining a pitch” limitations. According to Eagle View, because Littleworth does not expressly disclose calculating or determining a pitch, the petition relies on the theory that Littleworth inherently discloses the calculation limitation. The Board erred, Eagle View contends, by concluding that Littleworth disclosed calculating a pitch without demonstrating that a pitch calculation was necessarily present in Littleworth’s system.

As an initial matter, we identify no error in the Board’s interpretation of the petition as arguing that a skilled artisan would have understood that Littleworth determines and calculates a pitch from its statement that “roof detail was digitized ‘indicating their pitch.’” *’961 Decision*, 2023 WL 8651434, at *27. In an unpatentability challenge, assessing the scope of a prior art reference’s disclosure may involve determining how a skilled artisan would understand or interpret what is explicitly stated. *See Sage Prods., LLC v. Stewart*, 133 F.4th 1376, 1384–85 & n.5 (Fed. Cir. 2025) (holding that expert testimony may be relied upon in an anticipation analysis to ascertain how a skilled artisan “would have understood” a particular disclosure in the prior art reference). Here, the Board credited Nearmap’s expert’s testimony that “[t]he inclusion of a pitched roof in Littleworth’s three-dimensional model of the roof indicates that Littleworth’s system made a determination of the pitch of the roof shown in the aerial images from which the model was generated.” *’961 Decision*, 2023 WL 8651434, at *26; J.A. 1433–34. Accordingly, the Board

correctly interpreted the petition and reasonably found that a skilled artisan would find the “calculating” limitations obvious in view of Littleworth.

Additionally, we agree with the Board that the petition does not rely solely on Littleworth for meeting the “calculating a pitch” limitation but, instead, also presents a theory based on the combination of Littleworth’s and Middlebrook’s teachings. *See '961 Decision*, 2023 WL 8651434, at *26 (“We determine that Petitioner has sufficiently proven that [the calculate limitation] would have been obvious over the proposed combination.”); J.A. 341–42 (“Additionally or alternatively, in the combination, Middlebrook teaches automatically ‘calculat[ing] distances and dimensions’ from a three-dimensional model.”). Specifically, the Board understood Nearmap’s combination as incorporating Littleworth’s teachings regarding generating a three-dimensional model based on image analysis with Middlebrook’s disclosure of “calculat[ing] . . . angular dimensions (i.e., pitch)” associated with such models. *'961 Decision*, 2023 WL 8651434, at *25–26 (citation modified). While Eagle View argues that this confirms that Nearmap’s combination at most calculates the pitches of models rather than the required roof section, the claims do not require the pitch calculation to be performed directly from the image analysis. *See '961 patent* at claim 1 (reciting “calculat[ing] a pitch for each one of a plurality of roof sections of the roof based on the image analysis”). And the Board reasonably found that, in Nearmap’s combination, the pitch calculations are based on the image analysis given that they “are calculated as part of the three-dimensional model generation, which is based on the image analysis.” *'961 Decision*, 2023 WL 86551434, at *28. In short, the Board correctly construed the petition as arguing that the “calculat[ing] a pitch” limitations were met based on the combination of Littleworth and Middlebrook, and substantial evidence supports the Board’s finding.

IV

Eagle View also alleges that the Board failed to adequately explain its rejection of Eagle View’s argument that a skilled artisan would not have combined Linder’s stereoscopic imaging techniques with Littleworth’s non-stereoscopic images because stereoscopic images are a prerequisite for obtaining accurate results with Linder’s techniques. Specifically, Eagle View contends that a Technical Note issued by the Bureau of Land Management confirms that accurate 3D modelling requires “*stereoscopic overlap.*” Appellant’s Br. 56 (citing J.A. 4620). Eagle View argues that the Board discounted this evidence based on Nearmap’s expert’s testimony that only “sufficient ‘overlap’” is needed for stereoscopic viewing to be applied, but the Board never explained the degree of overlap required to resolve the accuracy concerns Eagle View identified. *Id.* at 56–57.

We disagree. The Board’s finding that a skilled artisan would have reason to combine Littleworth and Linder is adequately explained and supported by substantial evidence. The Board framed the relevant reason to combine inquiry as whether a skilled artisan would have found the teachings of Linder pertinent to those of Littleworth. The Board reasonably answered in the affirmative, finding that Littleworth identifies suitable control points within the aerial images that it later coordinates to generate three-dimensional models and, while Littleworth does not provide detail regarding how to use such control points, Linder does. *See Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1380 (Fed. Cir. 2023) (“[I]f there’s a known technique to address a known problem using prior art elements according to their established functions, then there is a [reason] to combine.” (citation modified)). While Eagle View presented evidence indicating that accurate imaging could not be performed without using stereoscopic viewing, the Board found that Littleworth is not limited to the correlation of non-stereoscopic image pairs. *’961 Decision*, 2023

WL 8651434, at *22. Indeed, Littleworth notes that for one project discussed in Littleworth “[s]uitable vertical aerial photography . . . was located” whereas oblique photography was used as a supplement in other projects. *See* J.A. 1488–89. Thus, at a minimum, a fact finder could reasonably determine that a skilled artisan would have reason to apply Linder’s teachings regarding correlating control points with Littleworth’s vertical aerial images. Moreover, the Board found that Linder’s teachings are not limited to applications involving stereoscopic image pairs. Instead, the Board found that the portions of Linder upon which Eagle View relied merely suggest that there needs to be sufficient overlap, and these teachings are consistent with Littleworth’s overlapping images. The record supports this finding; Littleworth discloses using top and oblique view images of the same building to generate building models. And the Board credited Nearmap’s expert’s testimony, which explains that nothing in Linder suggests that its teachings would not apply to vertical and oblique aerial images. *’961 Decision*, 2023 WL 8651434, at *23; J.A. 2764–65 ¶ 35. Accordingly, we conclude that the Board adequately explained and supported its finding of a reason to combine Littleworth and Linder and find no error in its rejection of Eagle View’s rebuttal arguments.

CONCLUSION

We have considered Eagle View’s other arguments but find them unpersuasive. For these reasons, we *affirm*.

AFFIRMED