

United States Court of Appeals for the Federal Circuit

DENTAL MONITORING SAS,
Appellant

v.

ALIGN TECHNOLOGY, INC.,
Appellee

2025-1752

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. IPR2023-
01369.

Decided: August 10, 2026

MICHAEL P. SANDONATO, Venable LLP, Los Angeles,
CA, argued for appellant. Also represented by JOSHUA
DANIEL CALABRO, New York, NY.

NATHAN K. KELLEY, Ashurst Perkins Coie LLP, Wash-
ington, DC, argued for appellee. Also represented by DAN
L. BAGATELL, Hanover, NH; TARA LAUREN KURTIS, HARI
SANTHANAM, Chicago, IL.

Before LOURIE, SCHALL, and TARANTO, *Circuit Judges*.

LOURIE, *Circuit Judge*.

Dental Monitoring SAS (“Dental Monitoring”) appeals from an *inter partes* review (“IPR”) final written decision of the United States Patent Trial and Appeal Board (“the Board”) determining that claims 1–15 of U.S. Patent 10,755,409 (“the ’409 patent”) had been shown to be unpatentable as obvious. *Align Tech., Inc. v. Dental Monitoring SAS*, IPR2023-1369, 2025 WL 676732 (PTAB Mar. 3, 2025), J.A. 1–84 (“*Decision*”). For the following reasons, we vacate the Board’s decision and remand for further consideration in accordance with this opinion.

BACKGROUND

Dental Monitoring owns the ’409 patent, which is directed to a method for acquiring and analyzing an image of a dental arch of a patient. *See* ’409 patent, Abstract. The steps of the claimed method comprise (1) acquiring an image of a dental arch; (2) analyzing the image using a “deep learning device”;¹ (3) determining a “value for an image attribute”; (4) comparing the image attribute with a “set-point”; and (5) sending a message regarding the comparison to, if needed, guide the operator to acquire a new image. *Id.* at col. 32 ll. 13–33 (claim 1).

Align Technology, Inc. (“Align”) filed a petition for an IPR at the United States Patent and Trademark Office, challenging claims 1–15 of the ’409 patent. *Decision*, 2025 WL 676732, at *3. Before the Board, the parties disputed the patentability of, *inter alia*, the claim 1 term “analysis of the analysis image by means of a deep learning device trained by means of a learning base.” *See id.* at *14–24. The Board determined that the challenged claims were unpatentable as obvious over the combination of three

¹ A “deep learning device” is a device that uses deep learning to “progressively learn[] to recognize patterns on an image.” ’409 patent, col. 16 ll. 46–48.

prior art references: (1) WIPO Patent Application Pub'n WO 2016/066651 A1 ("Salah"); (2) U.S. Patent Application Publ'n 2021/0068923 A1 ("Carrier"); and (3) a published paper on convolutional neural networks ("Maninis"). *Decision*, 2025 WL 676732, at *3, *34.

Importantly here, the Board found that the effective filing date of the '409 patent, based on a foreign priority application, fell between the filing date of Carrier's provisional application and the filing date of Carrier's non-provisional application. *See id.* at *10–11 & nn.3–6. Accordingly, whether Carrier qualified as prior art depended on whether it was entitled to the filing date of its provisional application under AIA 35 U.S.C § 102(d)(2), rather than only to the filing date of its non-provisional application.

The Board rejected Dental Monitoring's argument that, under *Dynamic Drinkware, LLC v. National Graphics, Inc.*, 800 F.3d 1375 (Fed. Cir. 2015), Carrier could rely on its provisional filing date only if at least one claim of the non-provisional patent was supported by the provisional application's written description. *Decision*, 2025 WL 676732, at *10–11. Relying instead on its precedential decision in *Penumbra*, the Board concluded that *Dynamic Drinkware's* written description analysis applies only to pre-AIA law and does not govern prior art determinations under AIA § 102. *Id.* at *11 (citing *Penumbra Inc. v. RapidPulse, Inc.*, IPR2021-01466, 2023 WL 2605070 (PTAB Mar. 10, 2023), Paper 34 at 32).

Applying *Penumbra*, the Board held that, for purposes of AIA § 102(d)(2), a reference patent receives the filing date of an earlier application as long as it satisfies the "ministerial requirements" of §§ 119 and 120 and the earlier application "describes the subject matter relied upon in the reference patent." *Id.* (cleaned up). Because the Board found that Carrier's provisional application described the subject matter on which the petition relied, it concluded

that Carrier qualified as prior art as of the provisional application's filing date. *Id.*

It is worth emphasizing that the relevance of the Carrier provisional application date here is not to give the Carrier patent any earlier priority over a competing application or patent, but to serve Align's goal of creating earlier prior art against the '409 patent.

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

DISCUSSION

The central dispute that we resolve on appeal centers on whether Carrier is prior art under 35 U.S.C. § 102(d)(2). *See* Open. Br. 30–32; Resp. Br. 24–31. Specifically, the parties dispute whether Carrier's provisional application needed to provide written description support for one of Carrier's published claims for Carrier to obtain the benefit of its provisional date and thus antedate the '409 patent, or whether Carrier need only comply with certain “ministerial” requirements of claiming priority for Carrier. *See* Reply Br. 3–9; Resp. Br. 24–31.

“Whether a reference qualifies as a printed publication under [§] 102 is a legal conclusion based on underlying factual findings.” *Valve Corp. v. Ironburg Inventions Ltd.*, 8 F.4th 1364, 1372 (Fed. Cir. 2021) (internal quotation marks and citations omitted). “We review the Board's legal determinations *de novo*, but we review the Board's factual findings underlying those determinations for substantial evidence.” *Id.* at 1372–73 (internal quotation marks and citations omitted).

Carrier's qualification as prior art is a legal question requiring statutory interpretation. “When interpreting a statute, we start with the language of the statute itself.” *Xianli Zhang v. United States*, 640 F.3d 1358, 1364 (Fed. Cir. 2011) (citing *Williams v. Taylor*, 529 U.S. 420, 431 (2000)). “In reviewing the statute's text, we give the

words their ordinary, contemporary, common meaning, absent an indication Congress intended them to bear some different import.” *Id.* (internal quotation marks and citations omitted).

AIA § 102(a)(2) provides that a patent or published patent application may be prior art as of the date it was “effectively filed.” And AIA § 102(d)(2) provides:

(d) For purposes of determining whether a patent or application for patent is *prior art* to a claimed invention under subsection (a)(2), such patent or application shall be considered to have been effectively filed, with respect to any subject matter described in the patent or application—

...

(2) if the patent or application for patent is entitled to claim a right of priority under [§] 119 . . . or to claim the benefit of an earlier filing date under [§] 120 . . . based upon 1 or more prior filed applications for patent, as of the filing date of the earliest such application that describes the subject matter.

35 U.S.C. § 102(d)(2) (emphasis added). Section 119(e), regarding priority for provisional applications for patent, requires “disclos[ure] in the manner provided by [§] 112(a).” 35 U.S.C. § 119(e)(1).

I

With that statutory framework in mind, we turn to whether Carrier satisfies the requirements of § 102(d)(2). First, the plain language of §§ 102(d)(2) and 119(e)(1) resolves the parties’ dispute by conditioning entitlement to an earlier prior art date on compliance with § 112(a). As relevant here, AIA § 102(d)(2) provides that a patent is prior art as of an earlier effective filing date only “if the

patent or application for patent is entitled to claim a right of priority under [§] 119.” 35 U.S.C. § 102(d)(2). Section 119(e)(1), in turn, makes clear that an application for patent is entitled to claim priority from a provisional application only if the invention disclosed in the later filed application is “disclosed [in the provisional application] in the manner provided by [§] 112(a).” Thus, the statutory text expressly conditions entitlement to priority on satisfaction of § 112’s written description requirement. Section 102(d) therefore incorporates that substantive requirement, and there is nothing in its text that exempts prior art determinations from § 119(e)(1)’s entitlement requirements or otherwise creates a different, less demanding “ministerial” standard for prior art purposes. See *Bostock v. Clayton Cnty., Ga.*, 590 U.S. 644, 654–55 (2020) (“[O]nly the words on the page constitute the law adopted by Congress and approved by the President.”).

Our reading is further supported by Congress’s use of the phrase “entitled to claim a right of priority” in § 102(d)(2). That language naturally refers to substantive entitlement under § 119, not merely the procedural act of claiming priority. An applicant becomes “entitled to claim priority” only by satisfying the statutory prerequisites, including § 112’s written description requirement. In contrast, the Board’s interpretation would effectively treat § 102(d)(2) as though it referred simply to a patent that “claims a right of priority” or “asserts a right of priority” loosely in general terms. Congress chose language requiring the satisfaction of statutory-based substantive requirements, not language merely permitting an applicant to invoke priority. We generally presume that choice was intentional and should not construe § 102(d)(2) in a manner that renders the phrase “entitled to” superfluous. See *TRW Inc. v. Andrews*, 534 U.S. 19, 31 (2001) (applying the “cardinal principle of statutory construction” that “no clause, sentence, or word shall be superfluous, void, or insignificant” (citation omitted)).

Align makes two primary arguments to support the Board's interpretation. First, it argues that *Dynamic Drinkware* does not apply because its analysis was limited to the pre-AIA version of § 102. *See* Resp. Br. 24–26. Second, it argues that the AIA distinguished a claimed invention's effective filing date under § 100(i) from a reference's effective prior art date under § 102(d), and that this distinction means that § 102(d) requires only “ministerial” requirements for claiming priority under §§ 119 and 120, rather than entitlement to priority supported by § 112. *See id.* at 26–30. We disagree and address each argument below.

We take the *Dynamic Drinkware* argument first. Align contends that *Dynamic Drinkware* does not apply to AIA patents because that decision confined its analysis to pre-AIA § 102(e). *Id.* at 24–26. Align confuses a reservation of decision with a holding on the merits. In *Dynamic Drinkware* we noted that we were not addressing “newly designated § 102(d),” 800 F.3d at 1381 n.2, because that question was not before us—not because we determined that § 102(d) abrogated the written description requirement. The concern in *Dynamic Drinkware*—that a patent challenger should not be able to backdate prior art by claiming priority from an earlier application that would not have supported a patent on the claimed invention—still remains valid. *See id.* at 1381–82. Allowing a patent to claim an earlier priority date based on a provisional that does not support the patent's claims would frustrate these goals by creating uncertainty about what constitutes prior art. Thus, even assuming *Dynamic Drinkware* did not control because it addressed pre-AIA § 102(e), that conclusion does not suggest that the AIA altered the underlying principle that a reference cannot receive the benefit of an earlier filing date for subject matter not supported in an earlier application.

We now turn to Align’s argument, relying on *Penumbra*,² that the AIA’s distinction between a claimed invention’s effective filing date under § 100(i) and a reference’s effective filing date under § 102(d) eliminates any requirement that the earlier application provide § 112 support for the subject matter relied upon as prior art.

Section 100(i) determines what effective filing date for a claimed invention means; it does not alter the requirements for determining when a reference is entitled to an earlier effective filing date under § 102(d). The principal flaw in Align’s reasoning is that it treats Congress’s decision to distinguish effective filing dates of inventions from effective prior art dates as though that distinction answers the meaning of the phrase “entitled to claim a right of priority under [§] 119” in § 102(d). It does not. The distinction identifies which statutory inquiry is being performed, but it does not determine what substantive requirements “entitled” incorporates. That is, nothing in § 100(i) suggests that Congress intended § 102(d) to dispense with those substantive requirements when determining a reference’s effective filing date for prior art purposes.

As discussed above, § 102(d)(2) provides that a patent or published application is effectively filed for prior art purposes as of the earliest application if the patent or application for patent “is entitled to claim a right of priority under

² We affirmed the Board’s *Penumbra* decision by Rule 36 judgment without opinion. *See RapidPulse, Inc. v. Penumbra, Inc.*, No. 2024-1130, 2025 WL 2911056 (Fed. Cir. Oct. 14, 2025). We note that a Rule 36 affirmance establishes only that the judgment below was correct; “[i]t does not endorse or reject any specific part of the [Board’s] reasoning,” and “has no precedential value and cannot establish applicable Federal Circuit law.” *See Rates Tech., Inc. v. Mediatrix Telecom, Inc.*, 688 F.3d 742, 750 (Fed. Cir. 2012) (cleaned up).

[§] 119.” 35 U.S.C. § 102(d)(2). Section 119, in turn, provides that entitlement exists only when its statutory requirements are satisfied. For provisional applications, that includes that the invention disclosed in the later filed application is disclosed in the provisional application “in the manner provided by [§] 112(a).” 35 U.S.C. § 119(e)(1). Thus, the statutory text requires § 112(a) support for at least one of the prior art patent’s published claims before that reference may obtain an earlier filing date for prior art purposes.

Align further argues that the legislative history for § 102(d) “confirms that [it] does not turn on whether any issued claim was actually entitled to priority.” Resp. Br. 29. We disagree. Align specifically points to floor statements that § 102(d) required only “ministerial” priority requirements, rather than written description support. *Id.* (citing 157 Cong. Rec. S1369–70 (daily ed. Mar. 8, 2011)). But “the authoritative statement is the statutory text, not the legislative history or any other extrinsic material.” *Exxon Mobil Corp. v. Allapattah Servs., Inc.*, 545 U.S. 546, 568 (2005). Here, the statutory text is clear that a claim of priority must comply with § 119, which in turn requires written description support under § 112(a). The legislative history accordingly has no role in our analysis. *See id.* (“Extrinsic materials have a role in statutory interpretation only to the extent they shed a reliable light on the enacting Legislature’s understanding of otherwise ambiguous terms.”).

II

Lastly, the parties dispute whether the Board’s error regarding the Carrier provisional warrants reversal or remand. *See* Open. Br. 32 (Dental Monitoring arguing for reversal); Resp. Br. 30–31 (Align arguing for remand). Here, the Board did not determine whether the Carrier provisional provides sufficient written description support for Carrier. *See Decision*, 2025 WL 676732, at *10–11. The

Board must make such factual findings, and thus remand is the most appropriate route. *See L.A. Biomed. Rsch. Inst. at Harbor-UCLA Med. Ctr. v. Eli Lilly & Co.*, 849 F.3d 1049, 1068 n.9 (Fed. Cir. 2017).

CONCLUSION

Accordingly, to establish Carrier as prior art to the '409 patent, Align must show that Carrier's provisional application provides written description support for at least one claim of Carrier.³ The requirement to do so is not merely "ministerial." We therefore vacate the Board's decision and remand for further proceedings consistent with this opinion.⁴

VACATED AND REMANDED

COSTS

Costs to Appellant.

³ In a related decision, we concluded that claims 1, 7, and 12 of the '409 patent were directed to ineligible subject matter. *See Dental Monitoring SAS v. Align Tech., Inc.*, No. 2024-2270, 2026 WL 1959297, at *6 (Fed. Cir. July 7, 2026). Accordingly, the Board on remand need not make a determination as to those claims. *See id.*

⁴ In a related decision, we concluded that the Board's determination that Maninis was publicly accessible was supported by substantial evidence. *Dental Monitoring SAS v. Align Tech., Inc.*, No. 2025-1879, 2026 WL 2093811, at *4 (Fed. Cir. July 21, 2026). Given the parties briefed the same issue before us in this case, *see* Open. Br. 32–33; Resp. Br. 31–33, that same conclusion applies here such that the Board need not reconsider it on remand.