

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ASCENTCARE DENTAL PRODUCT, INC.,
Petitioner,

v.

SOLMETEX, LLC,
Patent Owner.

IPR2025-01175
Patent 12,290,418 B2

Before JAMES A. TARTAL, TIMOTHY G. MAJORS, and
CYNTHIA M. HARDMAN, *Administrative Patent Judges*.

TARTAL, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Ascentcare Dental Products, Inc. (“Petitioner”)¹ filed a Petition to institute *inter partes* review of claims 1–9, 11–17, and 19–28 (the “Challenged Claims”) of U.S. Patent No. 12,290,418 B2 (Ex. 1001, “the ’418 patent”). Paper 2 (“Pet.”). Solmetex, LLC (“Patent Owner”)² filed a Preliminary Response. Paper 12 (“Prelim. Resp.”).

“The Director may not authorize an *inter partes* review to be instituted unless . . . the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). However, a petition for *inter partes* review *may not be filed until nine months after the grant of a patent*, or if a post-grant review is instituted, not until termination of the post-grant review, whichever date is later. 35 U.S.C. § 311(c) (emphasis added). Because the filing of the Petition does not comply with 35 U.S.C. § 311(c), we *deny* the Petition, as discussed below.

II. BACKGROUND

A. *The ’418 Patent*

The ’418 patent, titled “Intraoral Device,” issued May 6, 2025, based on U.S. App. No. 18/823,885 (“the ’885 application”), filed September 4, 2024. Ex. 1001, codes (21), (22), (45), (54). The ’418 patent asserts the benefit of a series of continuation applications, the earliest of which is U.S. App. No. 14/100,323 (“the ’323 application”), filed on December 9, 2013, as

¹ Petitioner identifies no additional real parties in interest. Pet. 15.

² Patent Owner identifies no additional real parties in interest. Paper 6 (Patent Owner’s Mandatory Notices), 1.

well as the benefit of Provisional App. No. 61/734,939 (“the ’939 provisional application”), filed on December 7, 2012. *Id.* at codes (60), (63). The ’418 patent discloses “[a] dental mouthpiece” that “may be attached to a high-suction dental adapter for the purpose of assisting the dental staff during dental procedures through chair-side, hands-free suction, and isolation.” *Id.* at code (57).

B. Illustrative Claim

Petitioner challenges claims 1–9, 11–17, and 19–28 of the ’418 patent. Pet. 17. Of these, claims 1, 11, and 20 are independent. Ex. 1001, 6:20–10:30. Claim 1 (*id.* at 6:21–7:16) is illustrative of the claimed subject matter and is reproduced below:

1. An isolation mouthpiece for use with a suction system in a dental procedure, the isolation mouthpiece comprising:

a main body portion having a first end and a second end, the main body portion including:

a first wall having a first shape defined by a first edge and a second edge extending from the first end of the main body portion towards the second end of the main body portion,

a second wall having a second shape defined by third edge and a fourth edge extending from the first end of the main body portion towards the second end of the main body portion, the second wall including a first plurality of perforations extending along a portion of the third edge, and a second plurality of perforations extending along a portion of the fourth edge,

wherein a plurality of crests of a wave-like structure is formed on an interior surface of the second wall to provide contact points with the first wall, and a plurality of troughs of the wave-like structure provides gaps between adjacent ones of the plurality of crests for allowing the suctioning of fluid through the plurality of troughs; and

wherein the first wall and the second wall are shaped such that the first edge of the first wall corresponds in shape to the third edge of the second wall and the second edge of the first wall corresponds in shape to the fourth edge of the second wall; and wherein the first shape of the first wall corresponds to the second shape of the second wall, and a third wall connecting the first wall and the second wall such that the first wall is spaced from the second wall, wherein a portion of the first wall has a first width adjacent to the first end of the main body portion and a second width adjacent to the second end of the main body portion, wherein a portion of the second wall has a third width adjacent to the first end of the main body portion and a fourth width adjacent to the second end of the main body portion, wherein the first width is greater than the second width, and wherein the third width is greater than the fourth width;

a suction connector portion extending from the first end of the main body portion, the suction connector portion including:

a tubular conduit including an opening extending through the conduit and in fluid communication with the plurality of troughs of the wave-like structure, the opening being configured to receive a vacuum portion of the suction system therein, the tubular conduit further including a cutout configured to engage a protrusion on the suction system to aid in coupling the isolation mouthpiece to the suction system, and

a mouth prop including a first side and a second side that are inwardly tapered from a top surface of the mouth prop towards a bottom surface of the mouth prop, the first side and the second side each including a plurality of ridges; and

a cheek retractor portion having a first cheek-retractor end coupled to the second end of the main body portion and a second cheek-retractor end, the first cheek-retractor end and the second cheek-retractor end each having rounded edges.

C. Related Proceedings

Petitioner and Patent Owner identify as a related proceeding *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954 (W.D. Mich). Pet. 16; Paper 6, 1. Patent Owner also identifies *Cincinnati Insurance Company v. Ascentcare Dental Products, Inc.*, Case No: 1:25-cv-00590-JMB-PJG (W.D. Mich.) as related. Paper 6, 2. The parties also identify several petitions for *inter partes* review challenging claims of related patents in IPR2025-01020 (Patent 11,589,969 B2), IPR2025-01057 (Patent 11,589,970 B2), IPR2025-01059 (Patent 11,744,686 B2), IPR2025-01065 (Patent 11,826,217 B2), and IPR2025-01104 (Patent 12,011,329 B2). Pet. 16; Paper 6, 1–2. Patent Owner also identifies PGR2025-00058 (Patent 12,167,948 B2). Paper 6, 2. Patent Owner further identifies several pending patent applications. *Id.*

D. Asserted Prior Art

Exhibit	Reference
1005	U.S. Patent No. 8,029,280 B2, issued Oct. 4, 2011 (“Black”)
1006	Korean Patent No. 10-1082826, published Nov. 11, 2011 (“Park”)
1007	U.S. Patent No. 3,101,543, issued May 15, 1961 (“Baughan”)
1008	U.S. Patent No. 4,017,975, issued Apr. 19, 1977 (“Johnson”)
1012	U.S. Patent App. No. 2003/0134253 A1, published Jul. 17, 2003 (“Hirsch”)
1021	Chinese Patent Application 200420094338.X, Publication No. CN 2748045 Y, published Dec. 28, 2005 (“Zheng”)

E. Asserted Grounds of Unpatentability

Petitioner asserts that the Challenged Claims are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–9, 11–17, 19	103(a)	Black, Hirsch
20–22, 24–28	103(a)	Park, Baughan, Johnson
1–9, 11–17, 23	103(a)	Park, Baughan, Johnson, Hirsch
19	103(a)	Park, Baughan, Johnson, Hirsch, Black
4, 11–17, 19	103(a)	Black, Hirsch, Zheng
4, 11–17	103(a)	Park, Baughan, Johnson, Hirsch, Zheng
19	103(a)	Park, Baughan, Johnson, Hirsch, Black, Zheng

Pet. 22–23. Petitioner relies on the Declaration of Dr. Brian P. Black, dated June 23, 2025, as support for its contentions. Ex. 1003.

III. ANALYSIS

We first consider whether Petitioner has shown that the '418 patent is eligible for *inter partes* review based on the Petition, which Petitioner filed less than two months after the '418 patent issued. For the reasons that follow, we determine that Petitioner has not made the necessary showing of eligibility and deny the Petition.

“A petition for inter partes review shall be filed after the later of either—(1) the date that is 9 months after the grant of a patent; or (2) if a post-grant review is instituted under chapter 32, the date of the termination of such post-grant review.” 35 U.S.C. § 311(c). Our rules likewise require that, for patents described in section 3(n)(1) of the Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (Sept. 16, 2011) (“AIA”) (i.e., patents subject to the AIA first-inventor-to file provisions, which we refer to as “post-AIA patents”), a petition for *inter partes* review must be

filed no earlier than nine months after the date of the grant of the patent. 37 C.F.R. § 42.102(a)(1). Post-AIA patents are those that issue from applications “that contain or contained at any time—

(A) a claim to a claimed invention that has an effective filing date as defined in section 100(i) of title 35, United States Code, that is on or after [March 16, 2013]; or

(B) a specific reference under section 120, 121, or 365(c) of title 35, United States Code, to any patent or application that contains or contained at any time such a claim.”

AIA § 3(n)(1). Accordingly, whether the '418 patent is eligible for *inter partes* review on the date the Petition was filed turns on whether the '418 patent is a post-AIA patent.

The '885 application that led to the '418 patent was filed after the effective date of the AIA. Ex. 1001, code (22). The '418 patent, however, asserts the benefit of both the '323 application, filed *after* the effective date of the AIA, and the '939 provisional application, filed *before* the effective date of the AIA. *Id.* at codes (60), (63). Because the filing date of the second earliest application, the '323 application, is after the effective date of the AIA, the '418 patent is necessarily a post-AIA patent if any claim of the '418 patent does not have priority to the '939 provisional application. If the '418 patent is a post-AIA patent, then Petitioner may not file a petition seeking *inter partes* review earlier than nine months after the '418 patent issued. In short, if the '418 patent is a post-AIA patent, then the filing of the Petition within two months of the patent's issue date was too early and the Petition fails to comply with 35 U.S.C. § 311(c).

As required by our Rules, Petitioner purports to have certified in the Petition that the '418 patent is available for *inter partes* review. 37 C.F.R. § 42.104(a) (2025); Pet. 17. Specifically, Petitioner states as follows:

While the '418 Patent issued just over one month ago, the '418 Patent is eligible for *inter partes* review under 37 C.F.R. § 102(a)(2) because the '418 Patent claims priority to December 7, 2012, and is therefore not a “first to file” or “AIA” patent under Section 3(n)(1) of the Leahy-Smith American Invents Act. Thus, Petitioner hereby certifies the '418 Patent is available for *inter partes* review, and Petitioner is not barred from requesting an *inter partes* review challenging the patent claims on the Grounds identified in the petition.

Pet. 18. Petitioner, however, further states in the Petition that “Petitioner does not concede that all claim limitations are entitled to this priority date [(i.e., December 7, 2012)] *because the provisional application does not support all claim limitations.*” Pet. 21 n. 1 (emphasis added). Petitioner’s declarant, Dr. Black, similarly testifies that he was “told that the '418 Patent has a priority date of December 7, 2012 for *some* claim features,” and that it is his “understanding that the provisional patent application *may not support* all claim limitations in the '418 Patent.” Ex. 1003 ¶ 26 (emphasis added).

Patent Owner argues in its Preliminary Response that “Petitioner’s position that at least one claim is not supported by the pre-AIA provisional application is irreconcilable with its purported certification that the '418 Patent is [*inter partes* review] eligible.” Prelim. Resp. 71; *see also id.* (stating that “[i]f the allegations in the Petition are taken at face value,

then the '418 Patent is not eligible for [*inter partes* review] until February 2026"). We agree with Patent Owner.³

Petitioner represents that the '418 patent was eligible for *inter partes* review when the Petition was filed "because the '418 Patent *claims priority* to December 7, 2012 and is therefore," not a post-AIA patent. Pet. 17 (emphasis added). Contrary to Petitioner's assertion, the '418 patent is a post-AIA patent if any claim of the '418 patent does not have priority to the '939 provisional application, regardless of whether, on its face, the '418 patent "claims priority" to an application filed prior to the effective date of the AIA. *See In re NTP, Inc.*, 654 F.3d 1268, 1276–77 (Fed. Cir. 2011) ("[A] patent's claims are not entitled to an earlier priority date merely because the patentee claims priority.").

In this case, Petitioner asserts that at least some claims of the '418 patent *do not* have priority to any application with "an effective filing date" prior to the effective date of the AIA. Petitioner has asserted that the only-applicable priority application with a pre-AIA filing date—the '939 provisional application—"does not support all claim limitations." Pet. 21 n. 1. If any claim of the '418 patent does not have "an effective

³ Patent Owner also asserted in Patent Owner's Discretionary Denial Brief that Petitioner failed to establish that the '418 patent is eligible for *inter partes* review. Paper 7, 22–23. Petitioner had the opportunity to respond, but did not address the issue in its Response to Patent Owner's Brief on Discretionary Denial. *See generally* Paper 10. Patent Owner's request for discretionary denial was denied without addressing whether Petitioner established that the '418 patent is eligible for *inter partes* review. Paper 11. Regardless of whether it also could have been considered for purposes of discretionary denial, we find that whether Petitioner has sufficiently shown that the '418 patent was eligible as of the date of the Petition is a threshold issue that we must determine for purposes of institution.

filing date” prior to the effective date of the AIA, as Petitioner asserts, then the ’418 patent would be a post-AIA patent. *See* AIA § 3(n)(1).

We determine that Petitioner cannot credibly certify that the ’418 patent is available for *inter partes* review, based on a claim of priority on the face of the ’418 patent to the ’939 provisional application filed prior to the effective date of the AIA, where, as here, Petitioner contradictorily contends in the Petition that the ’939 provisional application “does not support all claim limitations” of the ’418 patent.⁴ *Id.* If Petitioner’s allegation that claims of the ’418 patent are not supported by the ’939 provisional application is correct, then the ’418 patent would be a post-AIA patent for which a petition may not be filed earlier than 9 months after the ’418 patent issued. *See* 35 U.S.C. § 311(c). Thus, based on the arguments and evidence presented by Petitioner, Petitioner fails to show that the ’418 patent is eligible for *inter partes* review when Petitioner filed the Petition less than two months after the ’418 patent issued. 35 U.S.C. § 311(c), 37 C.F.R. § 42.102(a)(1). We, therefore, deny the Petition.

IV. CONCLUSION

For the foregoing reasons, we find that Petitioner has not shown sufficiently that the Petition complies with 35 U.S.C. § 311(c) and, therefore, *deny* the Petition.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is *denied*.

⁴ We do not resolve the issue of whether all claims of the ’418 patent are entitled to priority to the ’939 provisional application, as this Decision is based only on whether Petitioner has made a sufficient showing in the Petition that the ’418 patent is eligible for *inter partes* review.

IPR2025-01175
Patent 12,290,418 B2

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