UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ASCENTCARE DENTAL PRODUCTS, INC.,

Petitioner

v.

SOLMETEX, LLC
Patent Owner

Patent No. 12,011,329

Case No. IPR2025-01104

PATENT OWNER'S DISCRETIONARY DENIAL BRIEF

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LISTING OF EXHIBITS

Exhibit No.	Description
2001	U.S. Patent Publication No. 2009/0274991 to Black
2002	U.S. Patent No. 1,731,322 to Riddle ("Riddle")
2003	U.S. Patent No. 3,802,081 ("Rogers")
2004	U.S. Patent No. 3,758,950 ("Krouzian")
2005	U.S. Patent Publication No. 2006/0063129 to Hirsch ("Hirsch '129")
2006	RESERVED
2007	First Case Management Order, *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954-RJJ-MV, ECF No. 20 (Apr. 22, 2025)
2008	Defendant/Counter-Plaintiff Ascentcare Dental Products, Inc.'s Brief in Support of Motion to Stay, *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954-RJJ-MV, ECF No. 38 (Jul. 11, 2025)
2009	Declaration of Nathan P. Sportel in Support of Defendant/Counter-Plaintiff's Motion to Stay, *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954-RJJ-MV, ECF No. 39 (Jul. 11, 2025)
2010	Plaintiff/Counter-Defendant Solmetex, LLC's Opposition to Ascentcare's Motion to Stay, *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954-RJJ-MV, ECF No. 41 (Jul. 25, 2025)
2011	Defendant/Counter-Plaintiff Ascentcare Dental Products, Inc.'s Invalidity Contentions Cover Pleading, *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954-

	RJJ-MV, served July 18, 2025
2012	Defendant/Counter-Plaintiff Ascentcare Dental Products, Inc.'s Invalidity Contentions Claim Chart for the '329 Patent, *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954-RJJ-MV, served July 18, 2025
2013	Docket Navigator Statistics, Western District of Michigan
2014	RESERVED
2015	Defendant/Counter-Plaintiff Ascentcare Dental Products, Inc.'s Non-Infringement Contentions, *Solmetex, LLC v. Ascentcare Dental Products, Inc.*, Case No. 1:24-cv-00954-RJJ-MV, served July 18, 2025
2016	Excerpts of the Prosecution History of U.S. Patent No. 11,589,969 (Ex. 1002 in IPR2025-01020)
2017	Excerpts of the Prosecution History of U.S. Patent No. 11,589,969 (Ex. 1020 in IPR2025-01020)
2018	Excerpts of the Prosecution History of U.S. Patent No. 11,589,969 (Ex. 1021 in IPR2025-01020)
2019	Excerpts of the Prosecution History of U.S. Patent No. 11,589,970 (Ex. 1002 in IPR2025-01057)
2020	Excerpts of the Prosecution History of U.S. Patent No. 11,589,970 (Ex. 1020 in IPR2025-01057)
2021	Excerpts of the Prosecution History of U.S. Patent No. 11,589,970 (Ex. 1021 in IPR2025-01057)
2022	Petition for *Inter Partes* Review of U.S. Patent No. 11,589,969, IPR2025-01020, Paper No. 2 (May 20, 2025)
2023	Defendant/Counter-Plaintiff Ascentcare Dental Products, Inc.'s Stipulation of Invalidity Contentions, *Solmetex, LLC v.*

	Ascentcare Dental Products, Inc., Case No. 1:24-cv-00954-RJJ-MV (W.D. Mich. Aug. 20, 2025)
2024	Zyris, Inc. Virtual Patent Marking, https://www.zyris.com/patents/ (last accessed Aug. 25, 2025)
2025	Excerpts of the Prosecution History of U.S. Patent No. 11,744,686 (Ex. 1002 in IPR2025-01059)
2026	Excerpts of the Prosecution History of U.S. Patent No. 11,744,686 (Ex. 1020 in IPR2025-01059)
2027	Excerpts of the Prosecution History of U.S. Patent No. 11,744,686 (Ex. 1021 in IPR2025-01059)
2028	Petition for *Inter Partes* Review of U.S. Patent No. 11,744,686, IPR2025-01059, Paper No. 2 (May 28, 2025)

Pursuant to the Interim Processes for PTAB Workload Memorandum ("Director Memo"), Patent Owner Solmetex, LLC ("Patent Owner") hereby submits its discretionary denial brief for Director review.[1]

I. INTRODUCTION

There are four independent reasons why the Director should exercise her discretion and deny institution pursuant to 35 U.S.C. § 314(a). First, the Petition presents a classic case for discretionary denial under 35 U.S.C. § 325(d). Nearly all of the references in the Petition were already considered by the Office. The only "new" references in the Petition (Park and Zheng) are cumulative. Indeed, in district court, Petitioner admitted that it has "applied the prior art cited during the prosecution in the exact same manner in the IPRs as the Examiner did during prosecution." EX2008, 10. Petitioner's suggestion that Patent Owner somehow misled the Examiner when presenting claims reciting a "connecting wall" rather than a "sidewall" is a red herring and does not demonstrate any error by the Office.

Second, the parties are engaged in litigation concerning the '329 Patent in *Solmetex, LLC v. Ascentcare Dental Products, Inc*., Case No. 1:24-cv-00954, in the Western District of Michigan ("the Parallel Litigation"), which also involves six other utility patents, three design patents, and Petitioner's Lanham Act counterclaim.

[1] The Board authorized an additional 3 pages for this brief. EX3101.

As set forth below, Petitioner is seeking to initiate seven proceedings in the Office:

Patent No.	Case No.	Discretionary Denial Brief	Institution Deadline
11,589,969	IPR2025-01020	Aug. 18, 2025	Dec. 18, 2025
11,589,970	IPR2025-01057	Aug. 25, 2025	Dec. 23, 2025
11,744,686	IPR2025-01059	Aug. 25, 2025	Dec. 24, 2025
11,826,217	IPR2025-01065	Sept. 2, 2026	Jan. 1, 2026
12,011,329	***IPR2025-01104***	***Sept. 2, 2026***	***Jan. 1, 2026***
12,167,948	PGR2025-00058	Sept. 8, 2026	Jan. 8, 2026
12,290,418	IPR2025-01175	Sept. 8, 2026	Jan. 8, 2026

The Director should exercise her discretion to deny these petitions because even if the Board instituted and issued seven final written decisions ("FWD") in Petitioner's favor, this would not resolve all of the parties' disputes. It would be far more efficient for the Government to conduct one proceeding—the Parallel Litigation—to resolve ***all*** of the parties' disputes, rather than seven proceedings in the Office which cannot afford such relief

Third, each of the factors in the Board's precedential *Fintiv* decision weigh in favor of denying institution in view of the Parallel Litigation. While the court has not set a trial date yet, the parties have already exchanged infringement, non-infringement, and invalidity contentions and are engaged in discovery. By the time the Board decides whether to institute in January 2026, the parties will have already completed claim construction and will be just weeks away from the fact discovery cutoff. The Parallel Litigation will therefore likely proceed to trial before the Board would issue a FWD concerning the '329 Patent in January 2027.

Fourth, the Director's Memo indicates that the extent to which the Petition relies on expert testimony is a relevant consideration for discretionary denial. Director Memo at 2. Here, Petitioner proffers testimony from Dr. Brian Black, but his testimony is flawed because he is not a POSITA under Petitioner's definition.

II. THE DIRECTOR SHOULD DENY INSTITUTION UNDER § 325(D)

Discretionary denial is warranted when "the same or substantially same prior art or arguments previously were presented to the Office." 35 U.S.C. § 325(d). The Board applies a two-part test for § 325(d): (1) whether the same or substantially the same art or arguments were previously presented to the Office; and (2) "whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims." *Advanced Bionics, LLC v. Med-EL Elktromedizinische Gerate GmbH*, IPR2019-01469, Paper 6 at 7 (PTAB Feb. 13, 2020) (precedential).

The Board has enumerated the following factors to consider in exercising discretion under § 325(d):

> (a) the similarities and material differences between the asserted art and the prior art involved during examination;
> (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
> (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;

> (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;
>
> (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and
>
> (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first paragraph). These factors favor discretionary denial under § 325(d). Nearly all of the references in Grounds 1-10 (Black, Hirsch, Baughan, and Johnson) were already considered by the Office. Park and Zheng are cumulative. Petitioner has not shown how the Office allegedly erred in allowing the claims over these references.

A. Petitioner's References Were Considered or Are Cumulative

1. Black was Considered (Grounds 1-2, 4, 6-7, and 9)

Black and its corresponding publication (EX2001) were cited and considered during prosecution. EX1002, 128. This satisfies the first part of the *Advanced Bionics* test. *Ecto World, LLC v. RAI Strategic Holdings, Inc.*, IPR2024-01280, Paper 13 at 4 (PTAB May 19, 2025) (citation on an IDS "is sufficient to satisfy the first part of the *Advanced Bionics* framework").

During prosecution of the '329 Patent's parent application (which issued as Pat. No. 11,744,686), the Examiner asserted that Black's transverse walls 48c were

a "bridge structure," and that it would have been obvious to form "bridge/transverse walls therein the interior of the intraoral device as taught by Black et al. in order to reinforce the device while still allowing effective suction." EX2025, 186-87. The Examiner later applied Black in a § 102 rejection and alleged that Black discloses a "bridge structure 448c . . . wherein the protrusions of the bridge structure 448c protrude in a wave shape comprising one or more crests and one or more troughs (Figs. 24A and 26A)." *Id*., 310. In response, the Applicant explained that "Black cannot teach 'wherein the bridge structure is not attached [to] the first wall' as claimed" and that "the walls 448c of Black are rectangular columns and do not 'protrude in a wave shape comprising one or more crests and one or more troughs' that protrude from 'an interior surface of the second wall' as claimed." *Id*., 369-70. The Examiner agreed and withdrew the rejections. *Id*., 384.

The Office also applied Black in rejections in five Office Actions during prosecution of the related '969 Patent. EX2016, 247, 346-49, EX2017, 15-18, 123-27, 169-72. The Office also applied Black in five Office Actions during prosecution of the related '970 patent. EX2019, 186, 246, 391; EX2020, 175-76, 226-27. Black was also applied in rejections during prosecution of the grandparent '232 Patent. The Office Actions applying Black from the related '232, '686, '969, and '970 Patents were cited and considered by the Examiner during prosecution of the '329 Patent. EX1002, 131-36. The Office's repeated use of Black in multiple rejections is

important because, as discussed below, Petitioner's primary "new" reference (Park) is cumulative of Black.

2. Hirsch was Considered (Grounds 2, 7 and 10)

Hirsch was cited in an IDS and was considered. EX1002, 128; *Ecto World*, IPR2014-01280, Paper 13 at 4. In fact, Hirsch was used in a § 102 rejection of claims 1-3, 6-7, 16, and 20 during prosecution, and the issued patent version of Hirsch was used in a § 103 rejection of claims 9, 21-30, 32-37, 39 and 40. EX1002, 157-85.

The Office also applied Hirsch or a substantively identical version[2] thereof it in **eight** office actions during prosecution of the parent '686 Patent. EX2025, 383-86, EX2026, 7-10, 100-02, 138-40, 175-80, 215-20, 313-14, 379-384. Hirsch (or a similar version) was also applied during prosecution of the grandparent '232 Patent (EX1015, 108-11), during prosecution of the related '969 Patent (EX2016, 428-30; EX2017, 221-24, 287-89, 479), and during prosecution the related '970 Patent in which the Examiner applied Hirsch in six Office Actions (EX2019, 387-90; EX2020, 30-33, 129-33, 175-76, 226-27, 324-330). The Office's repeated use of Hirsch in multiple rejections is important because, as discussed below, Petitioner's primary "new" reference (Park) is cumulative of Hirsch.

[2] For example, U.S. Pat. Pub. No. 2006/0063129 ("Hirsch '129," EX2005) is a CIP of Hirsch that contains the same FIGS. 1-20 as Hirsch.

3. Johnson was Considered (Grounds 3-5 and 8-10)

Johnson was cited in an IDS and considered. EX1002, 128; *Ecto World*, Paper 13 at 4.

4. Baughan was Considered and/or is Cumulative (Grounds 3-5 and 8-10)

While not cited on the face of the '329 Patent, Baughan was considered by the Office during prosecution of the related '969 Patent. The Examiner applied Baughan to reject the claims during an interview. EX2017, 424. Here, Petitioner similarly relies on Baughan for the "bridge structure" in the challenged claims. Pet., 92-95.

To the extent Petitioner argues that the Office's prior consideration of Baughan for the related '969 Patent is insufficient, Baughan is cumulative. *Becton*, Paper 8 at 17-18; *Intel Corp. v. InterDigital, Inc.*, IPR2024-01441, Paper 13 at 15-16 (PTAB Apr. 1, 2025) (reference was cumulative where it did "not add anything new"); *Helena Labs. Corp. v. Sebia*, IPR2024-00801, Paper 10 at 12 (PTAB Oct. 23, 2024) (reference was cumulative because any "differences do not affect . . . [the] analysis of the independent claims"). Petitioner relies on Baughan for allegedly teaching "a mechanical element that prevents collapse under suction," specifically, "projecting discs 17 that prevent collapse under suction when a sleeve is inserted over a tube 15." Pet., 92. This "anti-collapse structure" in Baughan is cumulative of at least four references that were considered.

First, Petitioner has admitted that Baughan is cumulative of Black. Petitioner alleges that Baughan discloses "a plurality of spaced-apart projections . . . to prevent collapsing," Pet., 93-94. In the IPR challenging the parent '686 Patent, Petitioner identically alleged that Baughan discloses "a plurality of spaced-apart projections . . . to prevent collapsing," and then admitted that "Black taught this same concept." EX2028, 41-42. Petitioner further admitted that "the concept of using perpendicularly projecting structures to prevent collapse of parallel walls under suction was demonstrated by ***Black and Baughan***." *Id*., 42. Hence, by Petitioner's own admissions, Baughan teaches nothing more than Black for this claim feature. This is consistent with Petitioner's argument in Ground 1 that Black discloses a "bridge structure." Pet., 46-47. Thus, by Petitioner's own admissions, Baughan is cumulative of Black.

Second, Baughan is cumulative of U.S. Pat. No. 3,802,081 ("Rogers"), which was cited and considered (EX1002, 127), and also applied in rejections in the parent '686 Patent. EX2025, 252-55. With regard to Rogers, the Office found that:

> Rogers discloses a bridge structure 18/19 (Fig. 4) which comprises a plurality of protrusions 18, 19, protruding from an interior surface of the posterior/upper wall and substantially extending a distance between the opposite anterior/lower wall and the posterior/upper wall …

Id., 253-54. Petitioner's reliance on Baughan's discs as protrusions is therefore cumulative of Rogers.

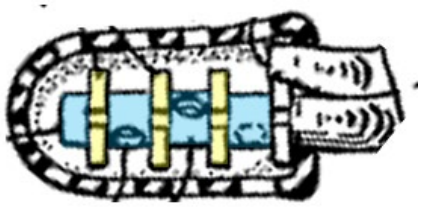
Third, Baughan is further cumulative of U.S. Pat. No. 3,758,950 ("Krouzian"), which was cited in an IDS and considered. EX1002, 127. Baughan is cited as prior art on the face of Krouzian. EX2004, Cover. During prosecution of the related '970 Patent, the Office rejected claims reciting a "bridge structure" based on Krouzian and explained Krouzian as follows:

> The second wall 21/22 comprising a bridge structure 21 that includes a plurality of protrusions 24 integral with and protruding from the interior surface of the second wall 21 and substantially extending a distance between the first wall 27 and the second wall 21/22. The bridge structure 24 is not attached to the first/outer wall 27, wherein the protrusions 24 of the bridge structure protrude from the interior surface of the second wall in a wave shape comprising one or more crests (bars 24) and one or more troughs (between bars 24).

EX2020, 367 (citing EX2004, FIGS. 5-6, 4:3-14). In response, Applicant argued that Krouzian does not disclose the claimed "wave shape comprising one or more crests and one or more troughs," and the Office subsequently allowed the claims. EX2020, 439-40; EX2021, 124-25.

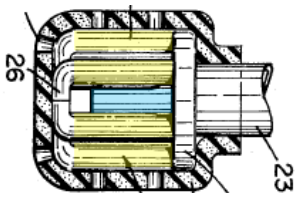
Baughan and Krouzian are both directed to a dental saliva ejector. EX1007, 1:7-8; EX2004, 5:45-47. Both show protrusions (yellow) extending under an outer sleeve that fits around a central cylindrical tube (blue):

Baughan



EX1007, FIG. 3 (excerpted, rotated, and annotated)

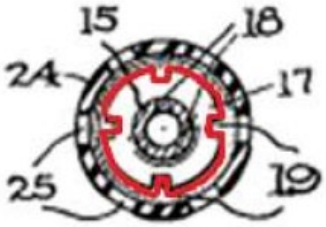
Krouzian



EX2004, FIG. 6 (annotated)

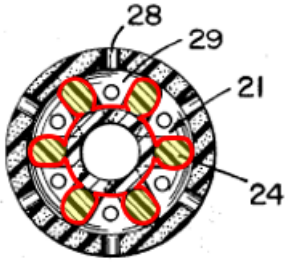
Even if Petitioner's argument about Baughan is correct (which it is not), then Krouzian similarly teaches a bridge structure with a wave shape comprising one or more crests and one or more troughs.

Baughan



EX1007, FIG. 5 (annotated by Petitioner)

Krouzian



EX2004, FIG. 5 (annotated)

Baughan is therefore substantially similar to and cumulative of Krouzian.

Fourth, Baughan is cumulative of U.S. Patent No. 1,731,322 ("Riddle," EX2002), which was considered. EX1002, 127. During prosecution of the related '969 Patent, the Office applied Riddle in multiple rejections and asserted:

> Riddle discloses a saliva ejector tube having a bridge structure 5 protruding from an interior surface of a wall thereof and unattached to the opposite wall. The protruding bridge comprises a plurality of protrusions (waved wire) to keep the walls separated from one another during section (Fig. 1). It would have been obvious to one having ordinary skill in the art

> at the time the invention was made to incorporate such bridge into Maycher/Black's device in order to prevent collapse when under suction pressure as explicitly taught by Riddle.

EX2016, 247; *see also* EX2017, 127, 172-73. Petitioner similarly relies on Baughan for teaching "a mechanical element that prevents collapse under suction" and argues that it would have obvious to incorporate this in Park "to prevent collapse of the posterior and anterior walls." Pet., 92-95. Petitioner's argument is effectively the same as how the Office applied Riddle during prosecution of the '969 Patent, rendering Baughan and Petitioner's obviousness theory cumulative.

5. Park is Cumulative (Grounds 3-5 and 8-10)

Park is the ***only*** primary reference Petitioner relies on that was not already considered by the Office. But that is immaterial because Petitioner has admitted that Park is cumulative of the references that were considered. *Becton*, Paper 8 at 17-18; *see also Intel*, Paper 13 at 15-16; *Helena Labs.*, Paper 10 at 12.

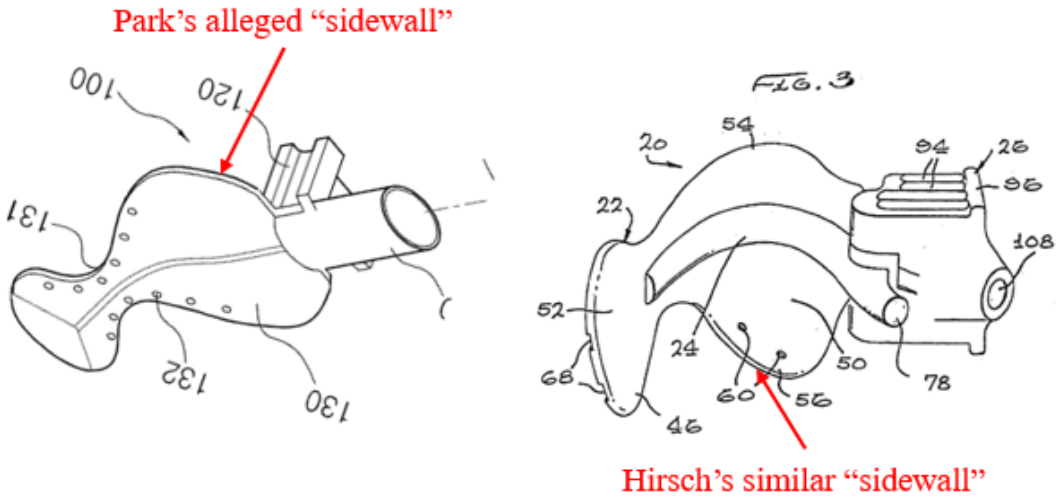
Petitioner and its expert admit to the cumulative nature of Park by noting that Park has "the same basic structure of conventional isolation mouthpieces," including Black and Hirsch. Petition, 26. For example, Petitioner's expert testifies:

> It must be noted that all four mouthpieces I considered for this report (the '329 Patent, Hirsch, Park, Black) have similar shapes and structure due to their function.

EX1003, ¶27. Petitioner goes on to explain that Hirsch and Park "perform the same function and have very similar designs" and that the only difference is "Hirsch

simply lacks sidewalls." Pet., 113. This alleged distinction is a red herring. **None** of the challenged claims recite a "sidewall." Instead, they recite a "connecting wall" (claim 1), "a third wall" (claims 9 and 30), or neither (claim 21). Indeed, Petitioner acknowledges that the '329 Patent is not "limited to claims having 'sidewalls.'" *Id*., 21. Petitioner acknowledges that "connecting wall" or "third wall" are ***broader*** than "sidewall" in arguing that "almost all prior art dental isolation mouthpieces disclose a connecting wall that satisfies Patent Owner's new interpretation of the '329 Patent's claim language." Pet., 21. Whether Park discloses "sidewalls" is not material to patentability and Petitioner's reliance on this purported distinction does not render Park non-cumulative of Hirsch. *Helena Labs.* Paper 10 at 12.

Moreover, as shown below, Petitioner's suggestion that Hirsch does not disclose the same "sidewalls" as Park is wrong:



EX1006, FIG. 2 (rotated and annotated); EX1012, FIG. 3 (annotated)

Indeed, the Office found that Hirsch discloses a "sidewall" twice 'during prosecution of the parent 686 Patent. EX2025, 383; EX2026, 8.

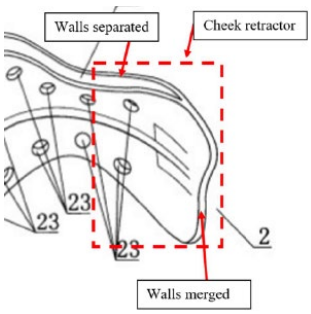
Moreover, Petitioner's expert admits that Park fails to expressly teach anything about any internal structures within the mouthpiece 100:

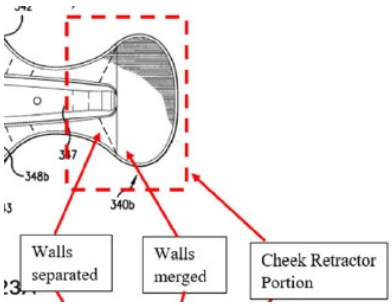
> Park fails to expressly describe or illustrate whether the mouth prop 100 includes any internal features that assist with suction or preventing collapse under suction.

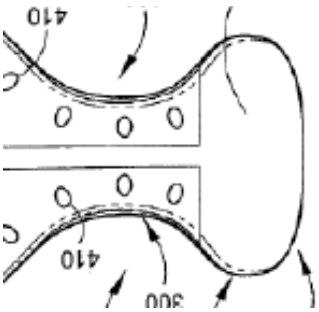
EX1003, ¶¶233, 268. Petitioner and its expert are then forced to rely on Johnson and Baughan as allegedly teaching the "bridge structure" in independent claims 1 and 21. Pet., 89-95 (Ground 3), 115-17 (Ground 5). In Grounds 1-2, Petitioner argues that Black alone discloses the "bridge structure" in claims 1 and 21. Pet., 46-47 (Ground 1), 70-71 (Ground 2). In other words, according to Petitioner, Black teaches ***more*** of the claimed features than Park, confirming Park is cumulative.

6. Zheng is Cumulative (Grounds 6-10)

While Zheng is another "new" reference, Petitioner's analysis confirms that it is cumulative. Petitioner relies on Zheng in Grounds 6-10 for "a cheek retractor … that connects the first wall and second wall part way through the cheek retractor." Pet., 38. Petitioner admits, however, that Zheng is "similar in design to Hirsch" and argues that Black and Hirsch have the same feature, rendering Zheng cumulative.







Zheng Black Hirsch

Pet., 38, 49; EX1003, ¶71. Petitioner does not argue that Zheng discloses anything material that is not already present in Black and Hirsch (which were considered).

B. Petitioner Has Not Shown Any Material Error

Because the first part of the *Advanced Bionics* test is satisfied for the reasons discussed above, Petitioner "must demonstrate that, for example, the previously presented art teaches the limitations of the challenged claims, and that no reasonable examiner could have found otherwise." *Ecto World*, Paper 13 at 5-6; *Advanced Bionics*, Paper 6 at 9 ("If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability"). To the extent the Petition's characterizations of the prosecution history are meant to address the second part of the *Advanced Bionics* test, Petitioner identifies no material error.

1. Petitioner's Arguments about the Term "Connecting Wall" are Irrelevant

In an attempt to identify an error by the Office, Petitioner emphasizes that the challenged claims recite a "connecting wall" rather than a "sidewall," with the

former being broader than the latter. Pet., 20-23. Petitioner claims that the Applicant argued "the importance of enclosing sidewalls in a co-pending application overseen by the same Examiner" and that "the Examiner does not appear to have appreciated the impact of Patent Owner's broadening effort." *Id*., 23. Petitioner argues "almost all prior art dental isolation mouthpieces disclose a connecting wall that satisfies Patent Owner's new interpretation." *Id*., 21.

Petitioner's argument on the difference between "sidewall" and "connecting wall" is a red herring. As an initial matter, "connecting wall" is only recited in claim 1. None of the grounds in the Petition are based on a broad claim construction for this term that would have allegedly changed the outcome of prosecution. In other words, this is not a situation where the Petition presents an alleged anticipatory reference that the Examiner could have applied with the understanding that "connecting wall" is broader that "sidewall." With respect to Grounds 1-2 (based on Black), the Office repeatedly found throughout prosecution of this patent family that Black does not disclose the claimed "bridge structure" in claims 1 and 21. *Supra*, § II.A.1. The difference between "connecting wall" and "sidewall" had no bearing on the Office's reasoning for allowing the claims over Black.

With respect to Grounds 3-5 (based on Park), Park's alleged disclosure of "sidewalls" is not material to patentability because none of the challenged claims recite a "sidewall." Petitioner does not propose construing "connecting wall"

narrowly to mean "sidewall." Pet., 32-33. Park is cumulative of Hirsch and Black for the reasons discussed above, and the presence or absence of a "sidewall" in either of those references had no bearing on patentability. *Supra*, § II.A.5.

Even if the difference between "sidewall" and "connecting wall" were relevant (which it is not), Petitioner's suggestion that the Examiner did not appreciate "the impact of Patent Owner's broadening effort" is belied by the record. Pet., 23. The Examiner specifically called out the "connecting wall" term during prosecution of the parent '686 Patent and issued a § 112 rejection. EX2026, 375, 378-80. The Examiner addressed the "connecting wall" when rejecting the claims during prosecution of the '329 Patent. EX1002, 161. Contrary to Petitioner's suggestion, the Examiner was aware of the transition from "sidewall" to "connecting wall" and yet still allowed the claims.

2. Petitioner's Characterizations of the Parent '232 Patent's Prosecution History are Wrong and Irrelevant

In another effort to identify an alleged error, Petitioner offers a discussion of prosecution of the grandparent '232 Patent and certain rejections based on Black. Pet., 29-31. Specifically, Petitioner notes that during prosecution of the grandparent '232 Patent, the Examiner found in a first office action that Black discloses a wave-shaped bridge structure, and that the Applicant did not address this in its response. *Id*., 29-30 (citing EX1015, 51-52). Yet, Petitioner fails to consider the Applicant's

subsequent arguments to the Office that overcame several different §§ 102 and 103 rejections based on Black in the grandparent '232 Patent and the parent '686 patent. In fact, though Petitioner explains the file histories of the grandparent '232 Patent and the '329 Patent (Pet. 29-31), the Petition mentions ***nothing*** about the 9-year file history of the parent '686 Patent in which Black was used in multiple rejections ***that were overcome by the Applicant***. Petitioner's suggestions that the Office did not fully understand Black's teachings or that Petitioner somehow acquiesced to statements made about Black are belied by the file histories of the'329 Patent, the parent'232 Patent, and the grandparent'232 Patent.

Petitioner has not met its heavy burden to show a material error by the Office. *Advanced Bionics*, Paper 6 at 9 ("If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred").

III. THE PARALLEL LITIGATION WILL MOST EFFICIENTLY RESOLVE THE PARTIES' ENTIRE DISPUTE

As noted above, this IPR is one of seven IPR/PGR challenges to the seven utility patents that are asserted by Patent Owner in the Parallel Litigation, along with three design patents and Petitioner's Lanham Act claim. If each of the 7 petitions is instituted, the Board will need to issue 7 FWDs, which will only resolve the parties' disputes for these patents if the Board finds that all asserted claims unpatentable.

By contrast, the Parallel Litigation will resolve not just the parties' dispute

regarding the '329 Patent but ***all*** of the parties' disputes for all 7 patents in a single proceeding. It will also resolve the parties' other disputes. Congress designed IPRs "to provide an effective and efficient ***alternative*** to district court litigation." *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19, 16-17 (Sept. 6, 2017) (precedential) (emphasis added). In this case, instituting an IPR of the'329 Patent would merely result in the creation of an ***additional*** proceeding.

It would be far more efficient for the Government to conduct 1 proceeding (the Parallel Litigation) to resolve the parties' disputes rather than to strain the Offices' limited resources in conducting 7 proceedings that would only potentially resolve some of the parties' disputes. Patent Owner submits that the Office should decline Petitioner's request to initiate piecemeal and duplicitous litigation.

IV. THE *FINTIV* FACTORS FAVOR DENIAL

The *Fintiv* factors favor denying institution in view of the Parallel Litigation. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5-6 (PTAB Mar. 20, 2020).

Factor 1: Petitioner has moved to stay the Parallel Litigation. EX2008; EX2010. While that motion remains pending, the court will unlikely grant a stay because when recently faced with a similar request, the presiding judge declined because "the PTAB has not yet granted" IPRs "and may never do so." *DeJule v. MillerKnoll, Inc.*, 2024 WL 5680071, at *1 (W.D. Mich. Feb. 2, 2024). A stay is also unlikely because (1) there are other claims in the Parallel Litigation (*supra*, §

III); (2) the parties are direct competitors (EX2010, 11-13; *DeJule*, 2024 WL 5680071, at *2); and (3) by the time the Board issues an institution decision in January 2026, the parties will have completed claim construction and will be just weeks away from the fact discovery cutoff. EX2007, 2-3.

Factor 2: "If the court's trial date is earlier than the projected statutory deadline, the Board generally has weighed this [second] factor in favor of exercising authority to deny institution." *Fintiv*, Paper 11 at 9. In the Parallel Litigation, the court has set a *Markman* hearing for December 15, 2025, December 3, 2025 for the substantial completion of document production, and January 21, 2026 for the fact discovery cutoff. EX2007, 2-3.

If an IPR is instituted, the Board would issue its FWD by January 8, 2027. 35 U.S.C. § 316(a)(11). While a trial date is not scheduled yet, with fact discovery set to close in Jan. 2026, trial will likely occur before the Board's FWD deadline in Jan. 2027. Patent Owner expects that the court will set deadlines for expert disclosures/discovery and dispositive motions in its February 2026 status conference. Given that the current fact discovery period is 9 months (between Apr. 2025 and Jan. 2026), it is likely that the case will go to trial before the end of 2026.

According to Docket Navigator, the median time to trial in the Western District of Michigan in patent cases is 48 months. EX2013. That said, this is based on a small sample size of only 4 cases, and 2 of those reached a jury trial within 2

years. *Id*. Given the current schedule, it is likely that trial will similarly occur within approximately 2 years of the complaint (filed in Sept. 2024), i.e., before the FWD. The Board has denied petitions without a set trial date. *Samsung Bioepis Co, Ltd. v. Regeneron Pharmas., Inc.*, IPR2025-00176, Paper 12 at 13-14 (PTAB Jun. 2, 2025).

Factor 3: The third factor concerns "the amount and type of work already completed in the parallel litigation by the court and the parties and the time of the institution decision." *Fintiv*, Paper 11 at 9. Here, the parties have invested substantial time and resources in the Parallel Litigation and will continue to do so before institution. The parties are engaged in fact discovery, including serving and responding to dozens of interrogatories and hundreds of requests for production. EX2018, 1-2. The parties have exchanged initial infringement, non-infringement, and invalidity contentions. EX2011; EX2012; EX2015. By the time the Board issues an institution decision, even more work will have been done: the parties will have completed claim construction, substantially completed document production, and will be weeks from the fact discovery cutoff. EX2007, 2-3.

Factor 4: The "concerns of inefficiency and the possibility of conflicting decisions [are] particularly strong" where a petition "includes the same or substantially the same claims, grounds arguments, and evidence as presented in the parallel proceeding." *Fintiv*, Paper 11 at 12. Petitioner's invalidity contentions rely on the same references and combinations as the Petition. EX2011, 12-17, 28-29, 89-

93; EX2012. In an apparent effort to avoid discretionary denial, Petitioner recently filed a *Sotera* stipulation, but this is not dispositive. EX2023.

Petitioner's invalidity contentions are far more expansive than the Petition and assert (1) products called "Isolite Mouthpiece" and "Mr. Thirsty" and (2) a host of § 112 arguments. EX2011, 12-17, 28-29, 89-93, 102-11; EX2012. This weighs against institution. *Motorola Sols., Inc. v. Stellar, LLC*, IPR2024-01205, Paper 19 at 3-4 (PTAB Mar. 28, 2025) (no institution despite *Sotera* stipulation because "Petitioner's invalidity arguments … are more expansive and include combinations … with unpublished system prior art"); *Shenzen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-000354, Paper 11 at 2-3 (PTAB Jun. 12, 2025).

The mouthpiece in Black is sold as "Mr. Thirsty." EX1003, ¶17. Hirsch corresponds to the "Isolite" product. *Id*., ¶¶9-16; EX2024 (listing patented version of Hirsch on virtual marking page). Petitioner's stipulation is limited to "ground[s] that could be raised … on the basis of prior art patents or printed publications." EX2016, 4. This does not foreclose Petitioner from relitigating the same issues with respect to Hirsch and Black by substituting those prior art patents for the Mr. Thirsty and Isolite products. Indeed, the Federal Circuit recently held that "IPR estoppel does not preclude a petitioner from relying on the same patents and printed publications as evidence in asserting a ground that could not be raised during the IPR." *Ingenico Inc. v. IOENGINE, LLC*, 136 F.4th 1354, 1366 (Fed. Cir. 2025).

Factor 5: This factor weighs against institution because Petitioner and Patent Owners are the parties in the Parallel Litigation. EX1009; *Fintiv*, Paper 11 at 13-14.

V. PETITIONER'S EXPERT TESTIMONY IS FLAWED

"The extent of the petition's reliance on expert testimony" is relevant to discretionary denial. Director Memo at 2. Petitioner proffers testimony from Dr. Brian Black, but he is ***not*** a POSITA under Petitioner's definition of "at least a B.S. degree in mechanical engineering or a related field with at least two years' experience designing medical devices." Pet., 23; EX2011, 42; EX2015, 7. Dr. Black does not have an engineering degree and admits that "some knowledge of mechanical engineering is probably required." EX1004, 3; EX1003, ¶40. Petitioner does not argue mechanical engineering and dentistry are related fields. Pet., 21. An expert must possess the minimum level of skill in the art, and Dr. Black does not. *Kyocera Senco Indus. Tools Inc. v. ITC*, 22 F.4th 1369, 1376 (Fed. Cir. 2022); *Extreme Networks, Inc. v. Enterasys Networks, Inc.*, 395 F. App'x 709, 715 (Fed. Cir. 2010).

Additionally, Dr. Black improperly attempts to fill gaps in Black by purporting to testify as to his intent as its named inventor. EX1003, ¶¶87 ("I know there is a connected wall formed at that spot. I invented it"), 124 ("I invented Black, and I did envision holes on any of the embodiments"), 157 ("I foresaw such an embodiment before the priority date"). This testimony is entitled to no weight

because it is not from the perspective of an objective POSITA. *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112, 1126 (Fed. Cir. 1996) ("an inventor's after-the-fact testimony is of little weight"); *Bell & Howell Document Mgmt. Prods. Co. v. Altek Sys.*, 132 F.3d 701, 706 (Fed. Cir. 1997) (inventor testimony "often is a self-serving, after-the-fact attempt to state what should have been part of his or her patent application"); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 985 (Fed. Cir. 1995) ("The subjective intent of the inventor … is of little or no probative weight").

VI. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Director exercise her discretion and deny institution.

Respectfully submitted,

Dated: September 2, 2025 By: /s/ *Angelo J. Christopher*

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **Patent Owner's Discretionary Denial Brief** was served on September 2, 2025, by email:

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