

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Beatbot Technology (USA) Co. LTD.,
Petitioner

v.

Zodiac Pool Systems LLC
Patent Owner

Case No. IPR2026-00202
Patent No. 11,003,191

PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBIT LIST

No.	Description
2001	Complaint, <i>Beatbot Tech. (USA) Co. Ltd. v. Zodiac Pool Sys. LLC</i> , No. 3:25-cv-01946 (Dkt. 1) (S.D. Cal. July 31, 2025) (“Petitioner DJ”)
2002	Beatbot’s Answer to Counterclaims, <i>Beatbot Tech. (USA) Co. Ltd. v. Zodiac Pool Sys. LLC</i> , No. 3:25-cv-01946 (Dkt. 15) (S.D. Cal. filed Oct. 14, 2025)
2003	Motion to Dismiss, <i>Beatbot Tech. (USA) Co. Ltd. v. Zodiac Pool Sys. LLC</i> , No. 3:25-cv-01946 (Dkt. 32) (S.D. Cal. filed Mar. 6, 2026)
2004	(Intentionally omitted.)
2005	Invalidity Contentions, <i>Beatbot Tech. (USA) Co. Ltd. v. Zodiac Pool Sys. LLC</i> , No. 3:25-cv-01946 (S.D. Cal. served Feb. 9, 2026)
2006	(Intentionally omitted.)
2007	Complaint, <i>Zodiac Pool Sys. LLC v. Wybotics, Co. Ltd.</i> , No. 2:25-cv-582-JRG-RSP (E.D. Tex. filed May 23, 2025) (the “Texas Litigation”)
2008	First Amended Scheduling Order in the Texas Litigation, <i>Zodiac Pool Sys. LLC v. Wybotics, Co. Ltd.</i> , No. 2:25-cv-582-JRG-RSP (E.D. Tex. filed Dec. 17, 2025)
2009	First Amended Complaint, <i>Wybotics Inc. v. Zodiac Pool Sys. LLC</i> , No. 2:25-cv-08526 CAS (AGRx) (C.D. Cal. filed Sept. 24, 2025) (the “Wybotics DJ”)
2010	Petition for <i>Inter Partes</i> Review under 37 C.F.R. § 42.100, <i>Wybotics Co. Ltd. v. Zodiac Pool Sys., LLC</i> , IPR2026-00158, Paper 2 (P.T.A.B. Nov. 25, 2025) (“Wybotics Petition”)
2011	Memorandum from Coke Morgan Stewart to All PTAB Judges, <i>Interim Processes for PTAB Workload Management</i> (Mar. 26, 2025) (the “Interim Processes Memo”)

2012	Motion to Stay, <i>Beatbot Tech. (USA) Co. Ltd. v. Zodiac Pool Sys. LLC</i> , No. 3:25-cv-01946 (Dkt. 27) (S.D. Cal. filed Jan. 28, 2026)
2013	Prosecution History of U.S. Patent No. 9,388,595, U.S. Patent Application No. 13/545,918
2014	36Kr English, <i>Beatbot secures funding from Meituan and co to take premium pool cleaning robots global</i> , KrAsia (Sept. 24, 2025)
2015	<i>Beatbot completed 1 billion yuan financing round, with Long-Z Investments as the sole lead investor</i> , CMRA Mobile Robot Alliance (Sept. 22, 2025)
2016	Texas Secretary of State, Beatbot Technology (USA) Co. LTD.
2017	Nathanael Greene, <i>Why the Beatbot AquaSense 2 Series Dominates High-End Pool Cleaning</i> , Beatbot (Mar. 12, 2025)
2018	Declaration of Misty Madrid
2019	<i>Nothing Beats a Beatbot</i> , Beatbot, https://beatbot.com/pages/our-story (last visited Mar. 19, 2026)
2020	FAQs for Interim Processes for PTAB Workload Management (“FAQs”)
2021	Chart Comparing the Petition to the Declaration
2022	Letter from Zodiac to Beatbot (July 17, 2025)
2023	U.S. Patent Application No. 19/343,629
2024	Order Granting Plaintiffs’ Motion to Stay, Denying Plaintiffs’ Motion to Dismiss, <i>Beatbot Tech. (USA) Co. Ltd. v. Zodiac Pool Sys. LLC</i> , No. 3:25-cv-01946 (Dkt. 37) (S.D. Cal. Mar. 30, 2026)
2025	U.S. Patent Publication No. 2010/0299016 A1 (“Benzler”)
2026	USPTO, <i>FY21 Pendency Stats Review</i> , at 6–7 (available at https://www.uspto.gov/sites/default/files/documents/20211115-PPAC-FY21-pendency-stats-review.pdf)

2027	Prosecution History of U.S. Patent No. 10,739,785, U.S. Patent Application No. 16/416,840
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I. INTRODUCTION

Zodiac Pool Systems LLC (“Zodiac” or “Patent Owner”) submits this Preliminary Response to Petitioner Beatbot Technology (USA) Co. Ltd.’s (“Beatbot” or “Petitioner”) petition for inter partes review of U.S. Patent No. 11,003,191 (“the ’191 Patent” or “the Challenged Patent”).

The Petition relies on prior art that either the Examiner considered, or that is cumulative of prior art the Examiner considered, during prosecution of the application that led to the Challenged Patent. Yet despite relying on prior art cited on the face of the Challenged Patent, the Petition never identifies, much less *explains*, any error by the Office during prosecution of the application or its parent applications. Petitioner does not do so, because there was no error. The claims are valid.

Petitioner separately asserts that the Challenged Patent is not entitled to its priority date, and based on this faulty assertion contends that the publication of the application is, itself, an appropriate prior art reference. Doing so is factually and legally improper, and in effect undoes Petitioner’s purported *Sotera*-stipulation. In any event, the specification of the Challenged Patent fully supports all claim elements and is necessarily not prior art to itself.

Petitioner also improperly contends at District Court that claims are indefinite, but, without explanation, in this proceeding contends that the same claims are shown

in the prior art. Further, Petitioner presents multiple “obviousness” grounds that are legally improper as they rely on a single reference without any explanation of any purported modification. These errors notwithstanding, the “expert” declaration Petitioner submits purporting to be from Dr. Janét is largely just a word-for-word copy of the Petition itself, confirming that no reliable expert testimony supports the Petition’s faulty conclusions. Institution should be denied.

II. BACKGROUND

A. Pool Cleaner Technology.

Maintaining the cleanliness of swimming pools has historically posed significant challenges. Ex. 1001, 1:23–28. Manual cleaning of the floor and sides of a swimming pool is often tedious, time-consuming, and labor-intensive. As a result, automated robotic pool cleaners were developed to alleviate this burden and improve the efficiency of pool maintenance. *Id.* While such automated pool cleaners offered improvements over manual methods, ensuring that all portions of a pool’s submerged surfaces were satisfactorily cleaned remained a challenge. *Id.* Moreover, these systems lacked the ability to provide monitoring to verify cleaning coverage, making it difficult for users to determine whether additional cleaning was necessary. *Id.*

The Challenged Patent addresses these challenges and claims a novel and nonobvious pool cleaning system using “a self-propelled pool cleaner” with a “filter

configured to retain the debris collected from the submerged surface,” and “at least one camera to capture imagery of the pool surface.” *Id.* at 1:32–42.

A controller, which may be included in the pool cleaning robot (Ex. 2013, ¶¶ [0020]–[0021]), is in electronic communication with the camera, processes the captured imagery and generates control signals to direct the movement of the pool cleaner. *Id.* In some embodiments, the controller determines cleanliness characteristics of the surfaces. *Id.*, ¶ [0023]. Based on this analysis, the controller generates control signals to direct the movement of the pool cleaner, ensuring thorough coverage and enabling re-cleaning of areas that do not meet predefined cleanliness thresholds. *Id.* In other embodiments, the controller identifies debris and directs movement of the pool cleaner toward the debris. In further embodiments, the controller identifies objects or areas of the pool and directs movement of the pool cleaner away from those identified objects or areas. *Id.*, ¶¶ [0020]–[0023].

The many advantages and benefits of the claimed pool cleaning system demonstrate that the USPTO’s decision to grant the Challenged Patent is consistent with the primary goal of the patent system: rewarding innovation for the benefit of society.

B. Person of Ordinary Skill in the Art.

For the limited purpose of this Preliminary Response, Patent Owner does not dispute Petitioner’s definition of a POSITA as having a bachelor’s degree in

electrical engineering, mechanical engineering, physics, or computer engineering, with at least two years of experience with autonomous camera-based robotic cleaning systems. Pet. at 18.

C. The '191 Patent Underwent Thorough Prosecution Addressing Similar Prior Art as the Petition.

Patent Owner filed the Application that became the Challenged Patent on July 2, 2020. Ex. 1002 at 1. The Application claimed priority to U.S. Patent No. 9,388,595 (“the ’595 Patent”), filed July 10, 2012, and incorporated the ’595 Patent by reference in its entirety. *Id.* at 3. The Application also noted that it was a continuation of U.S. Patent No. 10,739,785 (“the ’785 Patent”), U.S. Patent No. 10,338,599 (“the ’599 Patent”), and U.S. Patent No. 9,995,051 (“the ’051 Patent”) and incorporated those Patents by reference in their entirety. *Id.*

During prosecution of the Challenged Patent, the Examiner considered CN Patent Application 101139007 to Fu (“Fu-007”) (Ex. 1007) and U.S. Patent Application No. 2010/0299016 to Benzler (“Benzler”) (Ex. 2025), among others. *Id.* at 96; *see also* Ex. 1001, Cover. Further, the Examiner had already considered Fu-007 and Benzler during the prosecution of the ’595 Patent. Ex. 2013 at 484, 490.

During the prosecution of the ’595 Patent, the Examiner rejected certain claims as anticipated by WO 2012/023676 (“Hong”) and as obvious over Hong in view of secondary references. Ex. 2013 at 117–24. The Examiner made rejections based on Hong’s disclosure of a cleaning robot that had cameras obtaining location

information from the cleaning robot and controlling the location of the cleaning robot in the pool. Ex. 2013 at 114–15.

Patent Owner overcame all of these rejections, explaining that “the cleaner of Hong is responsive to blockages along it[s] travel path, as opposed to seeking out and identifying unclean portions of the pool that the cleaner has previously traversed. [Thus,] Hong fails to teach, disclose or even suggest the claimed limitations of . . . ‘identify portions of the water containing surfaces of the pool that have not been cleaned by the pool cleaning vehicle to satisfy a predefined threshold; and automatically generate second control signals to steer the robotic pool cleaning vehicle to reclean the identified portions of the water containing surfaces based upon the signals from the camera.’” Ex. 2013 at 206.

Patent Owner also argued that “although the Hong cleaner may repeatedly drive over portions of it[s] cleaning path, such movement is because of obstructions that are sensed by current load sensors,” and it “does not look back over the path it already traversed.” Ex. 2013 at 204. Thus Hong, alone or in combination with the secondary references, did not teach, suggest, or predict the limitation of “a controller in electronic communication with the camera to generate control signals to steer the vehicle, wherein the controller automatically steers the robotic pool cleaning vehicle to reclean identified portions of the water containing surfaces still having debris based on the signals from the camera.” Ex. 2013 at 212.

The Examiner accepted these arguments and thereafter issued the Notice of Allowance. Ex. 2013 at 473.

III. THE BOARD SHOULD DENY INSTITUTION OF THE PETITION.

A. The Prosecution History, Including Very Similar Art, Weighs in Favor of Denial Under § 325(d).

Institution should be denied under § 325(d) because the Petition presents “the same or substantially the same prior art or arguments previously . . . presented to the Office,” 35 U.S.C. § 325(d), and because Petitioner failed to meet its burden to show material error with respect to such art or arguments. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020) (precedential) (“*Advanced Bionics*”); *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (P.T.A.B. Dec. 15, 2017) (precedential as to Section III.C.5, first paragraph) (“*Becton*”).

Under *Advanced Bionics*, the Board first considers “whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office.” IPR2019-01469, Paper 6 at 7–8. If “either condition of [the] first part of the framework is satisfied,” the Board then considers “whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.” *Id.* at 8. If the petitioner fails to show that the Office erred, then denial is appropriate. *Id.* (citing *Becton*, IPR2017-01586, Paper 8 at 24).

Institution should be denied because the same or substantially the same prior art and arguments were previously presented to the Office, the Examiner correctly resolved them, and Petitioner does not even attempt to shoulder its burden of establishing errors in the Examiner’s analysis in this and prior applications.

1. Part 1 of *Advanced Bionics*: During Prosecution of the Challenged Patent and Its Parent the ’595 Patent the Office Considered Substantially the Same Prior Art and Arguments Petitioner Presents.

As explained in further detail above, the Challenged Patent is a continuation of the ’595 Patent, prosecution of which began in 2012. During this time the Examiner considered two of the references relied upon in the Petition: Fu-007 (Ex. 1007) and the ’191 Patent’s specification—which the Petitioner refers to as “Durvasula” (Ex. 1014)¹, and additional references that are cumulative of other art cited in the Petition.

The prosecution history of the ’595 Patent is relevant under § 325(d) for determining whether to institute a petition for IPR of its child, the ’191 Patent. *Edge Endo, LLC v. Michael Scianamblo*, IPR2018-01321, Paper 15 at 15–16 (P.T.A.B. Jan. 14, 2019) (denying institution under § 325(d), and “find[ing] that the respective prosecutions of the related [patents] are pertinent for consideration of whether

¹ As discussed in Section III(B)(2) *infra*, the Petitioner’s arguments regarding support in the specification were already considered and rejected during prosecution.

to . . . deny institution under Section 325(d)"); *Microsoft Corp. v. Koninklijke Philips N.V.*, IPR2018-00279, Paper 11 at 9–19 (P.T.A.B. June 8, 2018).

Further, there are similarities between the art in this Petition and the art in the '595 Patent's prosecution. This is another factor that weighs against institution. *See Juniper Networks, Inc. v. Mobile Telecomms. Techs., LLC*, IPR2017-00642, 2018 WL 1358386, at *4 (P.T.A.B. Mar. 14, 2018); 35 U.S.C. § 325(d) ("In determining whether to institute . . . the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.").

Fu-007 (Ex. 1007) is cited on the face of the '191 Patent and was already considered by the Examiner. Ex. 1001, Cover. Similarly, Benzler is cited on the face of both the '191 Patent and its parent the '595 Patent. Benzler describes a robotic vehicle with a drive means having a steering device for steering the robotic vehicle. Ex. 2025, ¶ [0037] ("robotic vehicle 2 comprises . . . drive means, in particular a drive motor and a steering device for steering the robotic vehicle 2 or two drive units, which both together create a differential drive").

Like Benzler, Petitioner's primary reference in Ground 3, German Publication No. DE2007053310A1 (Ex. 1006, "Knoll"), relates to a robotic vehicle with a drive means for driving and steering the robotic vehicle on a working area. Ex. 1006, Claim 1. Both Benzler and Knoll similarly describe robotic vehicles in which a

control unit processes distance information based on a boundary line or surface and then uses that information to drive and steer the vehicle. *Compare* Ex. 2025, ¶ [0026] (“As an improvement of the invention it is advantageously provided that the logic unit calculates the driving instructions depending on distance information that is determined from the image data of the camera, due to which the control unit activates the drive means, in such a way that the robotic vehicle drives along the work area in several rounds, which means ring tracks, whereby the round contours are oriented at the internal or external border contour.”), *with* Ex. 1006, ¶ [0007] (“The boundary surface is the peripheral wall of a pool, for example, or the walls of a room or a courtyard, or a curb, or the like. The distance-determining device supplies, preferably continuously, distance information about the distance, in particular the smallest distance, of a reference point of the robotic vehicle to the boundary line and/or boundary surface. The control unit processes this distance information and uses it to drive and steer the robotic vehicle in a controlled manner, for example in such a way that the robotic vehicle maintains a constant distance from the boundary line and/or boundary surface during forward travel.”).

Thus, both Benzler and Knoll relate to robotic vehicles that determine distance to a boundary line or surface and based on that distance information, control driving and steering so as to navigate along the boundary. The Petition wholly ignores the similarity between Benzler and Knoll. Similarly, the Petition ignores that it relies

upon art cited on the face of the Challenged Patent. Thus, the Petition fails to establish that the prior art cited therein is different than the art cited during prosecution. Further, the Petition never even attempts to establish some error by the Office in its analysis of this art prior to issuing the Challenged Patent.

Not only has the Office already considered the same or substantially the same art, the Examiner also already considered similar arguments during the prosecution of the '595 Patent. Petitioner claims that “a controller positioned on or in the body, in electronic communication with the at least one camera, and configured to generate, in response to the captured image, at least one control signal to cause movement of the body within the swimming pool to, or away from, the first portion of the submerged surface” is obvious. *See* Pet. at 37–38, 62–65, 84–85. The Examiner considered these same arguments during prosecution of the '595 Patent. As explained above, the Examiner first rejected claims based on the similar argument that “the system receives signals as to the location information and controlling the said location of the cleaning robot . . . as it traverses the water containing surfaces.” Ex. 2013 at 118. Patent Owner overcame this rejection. Ex. 2013 at 204. This is the same argument Petitioner makes. Pet. at 24 (“Specifically, both use a controller to generate . . . control signals to cause movement of the pool cleaning body within the swimming pool.”).

Patent Owner distinguished the prior art from the claimed invention because the prior art did not disclose “a controller in electronic communication with the camera to generate control signals to steer the vehicle, wherein the controller automatically steers the robotic pool cleaning vehicle to reclean identified portions of the water containing surfaces still having debris based on the signals from the camera.” Ex. 2013 at 212. Petitioner makes the same argument as the Examiner and cites prior art already considered by the Examiner, which Patent Owner overcame during prosecution.

The similarity in the art and arguments presented in the petition and addressed by the Examiner further counsels against institution. *See Fox Factory, Inc. v. SRAM, LLC*, IPR2016-01876, Paper 8 at 7 (P.T.A.B. Apr. 3, 2017) (noting “the interests in conserving the resources of the Office and granting patent owners repose on issues and prior art that have been considered previously”); *Kayak Software Corp. v. IMB Corp.*, No. CBM2016-00075, Paper 16 at 10–11 (P.T.A.B. Dec. 15, 2016). Thus, institution should be denied.

2. Part 2 of *Advanced Bionics*: Petitioner Failed to Demonstrate that the Office Erred in a Manner Material to the Patentability of the Challenged Claims.

The second prong of the *Advanced Bionics* test is met because Petitioner completely failed to set forth any evidence of material error committed by the Office.

Petitioner does not even allege “material error” by the Office because there was none.

The Board has declined “to guess or develop its own theory on what error may have been committed in prior proceedings over the [challenged] patent where the now-asserted prior art was at issue.” *Atrium Med. Corp. v. Bard Peripheral Vascular, Inc.*, IPR2021-01197, Paper 11 at 23 (P.T.A.B. Jan. 10, 2022). Accordingly, Petitioner has not, and cannot, meet its burden of establishing that “the Office erred in a manner material to the patentability of challenged claims.” *Advanced Bionics*, IPR2019-01469, Paper 6 at 7–11.

Because Petitioner identifies no material error, the Board should deny institution under § 325(d). *See, e.g., ABS Glob., Inc. v. Cytonome/ST LLC*, IPR2021-00306, Paper 13 at 13–14, 16 (P.T.A.B. June 7, 2021).

B. The '191 Patent is Properly Entitled to a Priority Date of July 10, 2012, and Thus All of Petitioner's Durvasula and Renaud Grounds Fail.

Petitioner's first primary reference, Durvasula, is nothing more than the specification of the Challenged Patent. Petitioner suggests, incorrectly, that the Challenged Patent is not entitled to its claimed priority date, and thus its specification is available as a prior art reference. This is legally wrong, as it is nothing more than an improper collateral challenge to written description, but this aside, the specification of the '595 Patent discloses the two elements Petitioner contends are

missing, “a controller positioned on or in the body” and the controller “configured to generate, in response to the captured image, at least one control signal to cause movement of the body within the swimming pool to, or away from, the first portion of the submerged surface.”

1. Petitioner’s Section 112(a) Challenge is Improper in this Venue and Should be Rejected on this Ground Alone.

Petitioner attempts to raise a collateral Section 112(a) challenge for lack of written description, which is improper in this forum. 35 U.S.C. § 311(b).

The Supreme Court’s decision in *SAS* confirms that the Director has no discretion to deviate from the statutory scope of IPRs laid out in § 311(b). *SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 367 (2018). As noted, “Congress chose to structure a process in which it’s the petitioner, not the Director, who gets to define the contours of the proceeding.” *See id.* at 1355. But § 311(b) also draws clear lines that neither the Director *nor* the petitioner can cross: an IPR may reach no further than “a ground that could be raised under section 102 or 103”—anticipation or obviousness. 35 U.S.C. § 311(b). Under the plain meaning of this statutory limitation, IPRs may not reach grounds that could be raised under section 112—such as written description. *Id.*; *see also id.* § 112.

The limitation makes good sense: in issuing the patent that is being challenged in an IPR, the Patent Office has *already* and *necessarily* considered the written description question and found that the specification contains written description

support sufficient to satisfy § 112, ¶ 1. Excluding § 112 grounds from the proper scope of an IPR thus appears to reflect Congress’s intent that IPRs would not be used as an opportunity for a straightforward “redo” of work the Patent Office has already done. In any event, no matter what policy considerations motivated Congress, the limitation is unmistakable. Indeed, Congress knows how to imbue the Board with power to address grounds under § 112 when it finds such power appropriate. The statute establishing “post-grant review,” for example, expressly provides for such authority in those proceedings. 35 U.S.C. § 321(b). Congress expressly denied that power to the Board in the institution and determination of IPRs. *Id.* § 311(b).

The Board is aware of this statutory limitation on its authority, but has found that challenges raising § 112, ¶ 1 arguments can be permissible when “the issue is *not* whether there is a sufficient written description in the [challenged] Patent, but whether the written description in the earlier application supports Patent Owner’s claim to priority.” *See SAP Am., Inc. v. Lakshmi Arunachalam*, IPR2014-00414, Paper 24 (P.T.A.B. Aug. 17, 2015) (emphasis added). Here, there can be no doubt that the fundamental question presented in this IPR is *precisely* “whether there is a sufficient written description in the [challenged] Patent” for the challenged claims. *See id.*; Pet. at 10–18. That is indisputably a ground raised under § 112, ¶ 1.

Petitioner will likely respond that its petition only contends that so-called “Durvasula” lacks written description support for the relevant claims of the

Challenged Patent, and that using “Durvasula” as prior art allows for obviousness combinations that render those claims unpatentable. Pet. at 6–18. Substantive statutory limits on the Board’s authority, however, should not be evaded by clever naming conventions or manipulative pleading. There is no dispute that the “Durvasula” specification is the same as the specification for the Challenged Patent. *Compare* Ex. 1001, *with* Ex. 2013 at 19–14; 38–41.

Petitioner’s arguments based on “Durvasula” are nothing more than a covert assertion of invalidity for lack of written description under § 112. The Board has no authority under § 311(b) to determine that the challenged claims lack written description support in their respective specifications under § 112, ¶ 1. Petitioner’s 112(a) challenge should be rejected for this reason.

This issue also has broad significance. Continuation patents are subject to heightened scrutiny during examination, as the application to which a continuation claims priority is always subjected to the full review of a patent examiner. 35 U.S.C. §§ 111(b), 131. And continuation patents make up a substantial percentage of the patents being examined and granted by the Patent Office. In 2021, the Patent Office reported that over one in five issued patents gives birth to a continuation, with over 112,000 continuation U.S. patent applications filed in 2021 alone. *See* Ex. 2026 at 6–7. Thus, allowing challenges to the “priority” of continuation claims through covert § 112, ¶ 1 arguments threatens the statutory scheme designed by Congress.

35 U.S.C. §§ 311(b), 325(d). For this additional reason, the Petition should be denied.

2. Petitioner’s Challenge Based on Durvasula Necessarily Conflicts with Petitioner’s Purported *Sotera*-Stipulation.

Furthermore, Petitioner’s § 112 argument is available in district court litigation, and in fact, has already been asserted there. Petitioner’s invalidity contentions in the district court proceeding expressly contend that certain claims lack written description support in the specification, while simultaneously relying on that same specification to argue that the claims are obvious. *See* Ex. 2005 at 14. That § 112 argument is not precluded by Petitioner’s *Sotera* Stipulation. *See* Beatbot Tech. Co. v. Zodiac Pool Sys. LLC, IPR2026-00202, Paper 6. And thus Petitioner seeks to reserve its written description challenge for the district court while at the same time advancing substantively the same challenge in this Petition.

Accordingly, Petitioner’s challenge based on Durvasula conflicts with its *Sotera* stipulation. That stipulation provides that Petitioner will not raise “any other ground that could have reasonably been raised before the PTAB in that instituted proceeding (i.e., any ground that could have been reasonably been raised under 35 U.S.C. §§ 102 or 103 on the basis of prior art patents or printed publications).” *Id.* At a minimum, advancing a challenge that turns on alleged deficiencies in the written description conflicts with the *Sotera*-stipulation. Indeed, Petitioner seeks to obtain the benefit of both forums for a single underlying challenge. Such gamesmanship is

precisely what *Sotera*-style stipulations are intended to prevent, and it further underscores why Petitioner's Durvasula-based challenge falls outside the proper scope of this proceeding.

3. The Office Already Addressed Written Description Support During Prosecution and Should Not Reconsider It Now.

Additionally, the Office agreed that the claims were supported by the original filing and that the Challenged Patent was entitled to the July 10, 2012 effective filing date during the prosecution of U.S. Application No. 16/416,840.²

This application is the fourth in a series of applications ultimately claiming priority to U.S. Patent No. 9,388,595 (the "Great Grandparent Patent"), whose application was filed *July 10, 2012*. All subsequent applications in the series are continuations of the Great Grandparent Patent and neither add subject matter to the original application nor claim any such added subject matter. Further, no rejection for lack of written description ever issued as to any claim of any of the Grandparent Patent, the Great Grandparent Patent, or U.S. Patent No. 10,338,599 (the "Parent Patent"). Consequently, claim 20 of this application is entitled to an effective filing date of July 10, 2012, a date prior to implementation of the America Invents Act (the "AIA"). *See, e.g.*, M.P.E.P. § 2159. Hence, examination of claim 20 is governed by *pre-AIA* 35 U.S.C. § 102, contrary to the Examiner's contention on page 2 of the Office Action.

Ex. 2027 at 119.

² Now U.S. Patent No. 10,739,785. This patent is the direct parent of the Challenged Patent.

The Office found this argument persuasive. *Id.* at 127. (“Applicant's arguments, see pages 1-2, filed 2/18/20, with respect to claim 20 have been fully read and considered and are persuasive. The 35 USC 102(a)(2) rejection of claim 20 has been withdrawn.”).

Response to Arguments

Applicant's arguments, see pages 1-2, filed 2/18/20, with respect to claim 20 have been fully read and considered and are persuasive. The 35 USC 102(a)(2) rejection of claim 20 has been withdrawn. However, the double patenting rejection to claim 20 is now rejected on the ground of non-statutory double patenting as being unpatentable over claim 1 of US Patent Number 9,995,051 in view of Hui (US 2011/0049023). The Hui reference has a US pre-grant publication date of March 3, 2011, which is before the US filing date of July 10, 2012 of US Application Number 13/545,918, now US Patent Number 9,388,595. A terminal disclaimer is required to overcome the double patenting rejection.

In short, the Office considered, and rejected, some of the same arguments the Petition now puts forth. It is a waste of resources, and unfair to Patent Owner, for the Office to reconsider these prior well-founded decisions. 35 U.S.C. § 325(d); *Juniper Network*, 2018 WL 1358386, at *4; *Fox Factory*, IPR2016-01876, Paper 8 at 7.

4. The Specification Fully Supports the Issued Claims of the Challenged Patent, and Thus the Durvasula Grounds Fail.

The disclosure of the specification is read from the perspective of what a POSITA would understand. 35 U.S.C. § 112(a); *Magnivision, Inc. v. Bonneau Co.*, 250 F.3d 758 (Fed. Cir. 2000) (“To determine the adequacy of the disclosure, this

court views the disclosure through the lens of one of ordinary skill in the art.”). A person at the level of skill the Petition proposes, i.e., “a bachelor’s degree in electrical engineering, mechanical engineering, physics, or computer engineering, with at least two years’ experience in autonomous camera-based robotic cleaning systems” would recognize support in both the specification and the ultimate parent application—filed in 2012—for every element that Petitioner contends is somehow missing.

a. The Specification Fully Supports “a controller positioned on or in the body.”

The specification of the ’595 Patent discloses a controller in various implementations, some of which may include a controller on the body. Ex. 2013, ¶ [0021] (“In one implementation, controller 42 communicates with vehicle 30 and cameras 32 entirely across a wired connection.”); *id.*, ¶ [0020] (“controller 42 may be embodied as part of one or more application-specific integrated circuits (ASICs)”; *id.*, ¶ [0029] (“dry station 246 further provides part of vehicle 30 across a wired cable or wired connection” (emphasis added)). A POSITA would recognize that “controller 42 communicat[ing] with vehicle 30 and cameras 32 entirely across a wired connection,” may be doing so with the controller “positioned on or in the body” of the vehicle.

Contrary to Petitioner’s apparent position, the specification does not have to include literal support for each term used in the claims. MPEP § 2163 (first citing

Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563 (Fed. Cir. June 7, 1991); and then citing *Martin v. Johnson*, 454 F.2d 746, 751 (C.C.P.A. Jan. 27, 1972) (stating “the description need not be in *ipsis verbis* [i.e., ‘in the same words’] to be sufficient”). Rather, “[i]f a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate description requirement is met.” MPEP § 2163.

b. The Specification Fully Supports “at least one control signal to cause movement of the body within the swimming pool to, or away from, the first portion of the submerged surface.”

A lay person, much less a POSITA, would recognize that moving toward something is necessary also moving away from something else, i.e., moving toward dirt is the same as moving away from clean areas. The '595 Patent discloses “movement . . . away from.” Patent Owner addressed this claim during the prosecution of the Challenged Patent. Ex. 1002 at 42. This claim element is disclosed in the '595 Patent: to determine whether a portion is clean or not clean, the controller signals to move away from clean areas and toward areas that are not clean yet. Ex. 2013, at 24 ¶ [0023] (“In such circumstances, controller 42 uses signals from cameras 32 to steer vehicle 34 such areas to re-clean such portions until such portions have been satisfactorily cleaned such that the portions have a cleanliness characteristic satisfying a predefined threshold.”).

The '595 specification does not limit the movement to only moving forward: “the path or route of vehicle 30 may be changed.” *Id.* at 28, ¶ [0036]. Thus, Durvasula is not prior art, and all of the Grounds in the Petition based on Durvasula must necessarily fail.

c. Petitioner Acknowledges that Durvasula Supports Every Claim Element by Citing it as Prior Art to Claim 3.

Petitioner’s stance regarding Durvasula is contradictory. First, Petitioner argues that the Challenged Patent is not entitled to the priority date of the Durvasula reference. Petition at 10–18. Then, Petitioner argues that Durvasula is prior art and discloses *every element* of Claim 3, which includes one of the elements that Petitioner contends is not disclosed by Durvasula. Pet. at 41.

Specifically, Petitioner initially states that Durvasula “fails to describe that its controller is configured to ‘generate, in response to the captured image, at least one control signal to cause movement of the body . . . *away from* . . . the first portion of the submerged surface,’ as recited in Claim 1 and similarly recited in Claims 2-3 of the '191 Patent. Janét, ¶87.” Pet. at 16. And then later on in the Petition, Petitioner claims that

Durvasula discloses or suggests 3[b][ii]. Janét, ¶¶149-150. Durvasula’s controller 42 generates control signals “in response to the captured image” because controller 42 identifies a portion requiring cleaning or recleaning based on “signals from camera 32,” and steers vehicle 30

accordingly. Durvasula, [0022]-[0023]; Janét, ¶150. Durvasula further discloses generating control signals to cause movement “to...the first portion of the submerged surface” because Durvasula’s controller 42 steers vehicle 30 to “cover such missed portions” and to “re-clean such portions until such portions have been satisfactorily cleaned”—i.e., to the first portion identified from the captured image. Durvasula, [0023]; *see also id.*, [0026], [0044]; Janét, ¶150.

Pet. at 41–42. Thus, in-effect, Petitioner acknowledged that Durvasula fully supports every element of Challenged Claim 3. In doing so, Petitioner’s Durvasula-based challenges are fatally flawed and institution should be denied.

5. Renaud Is Not Prior Art, and Thus Ground 4 Similarly Fails.

Renaud (Ex. 1015) published in 2014 and does not claim priority to any application antedating the claimed priority date of the Challenged Patent. Thus, Renaud is not prior art, and Ground 4 necessarily fails for this additional reason.

C. The Petition’s Single Reference Obviousness Challenges in Grounds 2B, 3, and 4 Are Legally Insufficient, and Unsupported By Appropriate Expert Testimony.

Petitioner characterizes certain grounds as obviousness challenges and yet fails to complete a full obviousness analysis. Petitioner specifically fails to identify any claim element that is missing from the references it cites for Grounds 2B, 3, and 4.

This is legally insufficient. Obviousness challenges require Petitioner to “ascertain[] the difference[] between the claimed invention and the prior art,” which is one of the *Graham* factors. MPEP § 2141. The Federal Circuit has repeatedly held that a “determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016); *Luv n’ Care, Ltd. v. Laurain*, 98 F.4th 1081, 1100 (Fed. Cir. 2024) (same); *Anderson’s-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62, (1969) (“Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. We admonished that ‘strict observance’ of those requirements is necessary.” (internal citations omitted)).

Here, Petitioner does not identify any differences between the Challenged Patent and the cited prior art. *See* Ground 2B, 3, and 4. Instead, Petitioner repeatedly asserts that a single reference “discloses or suggests” each claim element, without identifying any gap in the reference that would need to be addressed or explaining how a POSITA would know to bridge such a gap. Although Petitioner asserts that a “POSITA would have understood” that the prior art discloses the claim elements, Petitioner never explains how that understanding fills any missing information, because Petitioner never identifies one. In doing so, Petitioner plainly skips the

threshold requirement of ascertaining differences between the claims and the prior art as required by *Graham*.

This deficiency is not cured by Petitioner's reliance on an expert declaration. An expert cannot supply an obviousness analysis where the Petition itself fails to identify what is missing from the prior art. Without first articulating a gap between the challenged claims and the cited reference, there is nothing for an expert to bridge.

Further, even if there were a gap disclosed, as explained in detail below, Petitioner's expert merely opines that a POSITA would have "understood" the reference to disclose the claimed elements. Such testimony does not substitute the required identification of differences or a reasoned explanation for modification or combination. Absent a clearly identified gap and a supported rationale for filling it, the expert declaration amounts to little more than parroting the Petition and does not acknowledge, much less satisfy, Petitioner's burden under § 103.

D. Petitioner's Inconsistent Claim Construction Positions Before the Board and District Court Amount to Abuse of Process.

The Board retains discretion to deny institution for a multitude of factors. Ex. 2011 at 4–5. The Board should deny institution here.

As one example, Petitioner takes inconsistent positions regarding the scope of the Challenged Claims in different forums. *Cf. ResMed Corp. v. Cleveland Med. Devices Inc.*, IPR2023-00565, Paper 13 at 17 (P.T.A.B. Sept. 25, 2023) ("We agree with Patent Owner that on the facts of this case, by providing inconsistent positions

regarding the proper construction of the claims, Petitioner is not being transparent. . . . The potential for conflicting decisions favors denial.”); *Kiosoft Techs., LLC v. PayRange, Inc.*, IPR2021-00086, Paper 12 at 16 (P.T.A.B. Mar. 22, 2021) (“Thus, regardless of the Petition’s merits, the potential problems inherent in the inconsistent claim constructions set forth by Petitioner between the Petition and its proposals at the district court warrant us to find that factor 6 weighs in favor of denying institution.”); *Comcast Cable Comm’n’s, LLC v. Promptu Sys. Corp.*, CBM2018-00033, Paper 9 at 10-11 (P.T.A.B. Oct. 10, 2019) (Petitioner’s reliance on “competing claim construction arguments that impact *central aspects* of both trials” weighs against institution because the Board would risk a decision contradicting the claim construction adopted in the other case or having to abandon its own case to be consistent with the claim construction advocated in the other trial); *Facebook, Inc. v. Sound View Innovations, LLC*, IPR2017-00998, Paper 13 at 8, 17 (P.T.A.B. Sept. 5, 2017) (denying institution where the Petitioner “did not inform the panel that Petitioner had taken a very different claim construction position before the district court, it did not inform the panel that the different position was then under consideration by the district court, nor did it explain the reason for Petitioner’s change of heart”); *id.* at 17–18 (“At the very least, Petitioner’s failure to inform us of its differing claim construction arguments before the district court raises the specter of lack of candor.”).

Indeed, Petitioner's positions in the parallel district court proceeding conflict with its positions in the Petition regarding the scope of the Challenged Claims (*see, e.g.,* Pet. at 18–19). Petitioner seeks to have the terms of the '191 Patent applied as broadly as possible in attempting to invalidate the Challenged Claims before the Board, while simultaneously arguing that the Asserted Claims are indefinite under 35 U.S.C. § 112 in the district court.

In particular, Petitioner represents that no terms, other than one “mean-plus-function” claim, in the Challenged Claims require construction. Pet. at 18. And, in setting forth its grounds in the Petition, Petitioner necessarily understands the definite meaning of those claims and contends that the asserted prior art references disclose the various claim elements based solely on their plain language, as opposed to any specific construction. *See* Pet. at 18–103. Likewise, Petitioner's expert, Dr. Janét, was advised by Petitioner that no terms of the Challenged Claims require construction other than the “mean-plus-function (MPF) limitation.” Ex. 1003, ¶ 93. In the district court, however, Petitioner contends that “[b]ased on Beatbot's apparent claim interpretations, Beatbot's claims are invalid under 35 U.S.C. § 112.” Ex. 2005 at 14.

Just as “claims are construed the same way for both invalidity and infringement,” *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003), a Petitioner must take consistent positions regarding claim

construction before the Board and in any parallel proceeding, including district court litigation. *See Facebook*, IPR2017-00998, Paper 13 at 17–18 (noting Petitioner’s “differing claim construction arguments before the district court raises the specter of lack of candor”).

It is impossible to reconcile Petitioner’s apparent position that it cannot understand these terms in a different venue, yet that these terms are met by prior art in this venue.³ Nor does the Patent Office tolerate such conflicting positions. Indeed, as Director Squires has recently explained in a precedential decision, “when a petitioner takes alternative positions before the Board and a district court that petitioner should, *at a minimum*, explain why alternative positions are warranted.” *Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc.*, IPR2025-00632, Paper 20 at 3–4 (Dir. Squires Nov. 3, 2025) (precedential) (emphasis added).

That Petitioner advances indefiniteness is similarly insufficient. *Generac Power Sys., Inc. v. Champion Power Equip., Inc.*, IPR2025-00805/IPR2025-00951, Paper 40 at 4 (Dir. Squires Feb. 3, 2026) (denying institution in view of “Generac’s . . . inconsistent claim construction positions.”); *Tesla, Inc. v. Intell. Ventures II*,

³ The Director should discount Petitioner’s *Sotera* stipulation in view of Petitioner’s indefiniteness positions, none of which the stipulation precludes. As noted, on March 6, 2026, *after* it submitted its purported *Sotera* stipulation, Petitioner filed a motion for judgment on the pleadings challenging the validity of the claims under 35 U.S.C. § 101. Ex. 2003. The Court denied this motion, without prejudice, pending the outcome of this IPR. Ex. 2024. Thus, regardless of whether this proceeding is instituted, Petitioner may re-raise its invalidity defense in the district court.

LLC, IPR2025-00340, Paper 18 at 3 (Dir. Squires Nov. 5, 2025) (denying institution and observing “Petitioner’s statement that it cannot raise indefiniteness challenges in an *inter partes* review is not a sufficient explanation. Indeed, the statement amounts to an assertion that a petitioner should be permitted to raise inconsistent invalidity challenges in the two forums”); *see also Am. Airlines, Inc. v. Intell. Ventures I LLC*, IPR2025-01055, Paper 11 at 12 (P.T.A.B. Nov. 21, 2025) (denying institution where “[c]ontrary to its position in this case, in district court, Petitioner argues that several limitations in the Challenged Claims . . . are indefinite, and not subject to reasonable interpretation”).

Petitioner fails to shoulder its burden. Indeed, Petitioner does not even acknowledge the inconsistency in its position, much less explain why it has raised inconsistent claim constructions in the two forums. This favors denial. *See Tesla*, IPR2025-00340, Paper 18 at 3–4. Indeed, Petitioner’s gamesmanship regarding the proper construction of the Challenged Claims is reason alone to deny its Petition. *See ResMed Corp.*, IPR2023-00565, Paper 13 at 17; *Kiosoft Techs.*, IPR2021-00086, Paper 12 at 16; *Comcast*, CBM2018-00033, Paper 9 at 10–11; *Facebook*, IPR2017-00998, Paper 13 at 8, 16–18.

E. Petitioner’s Expert’s Declaration Parrots the Petition and Thus the Testimony Provided Therein Should Be Given No Weight.

As noted above, in support of its Petition, Petitioner submits a declaration from its expert, Dr. Janét. *See* Ex. 1003, (the “Janét Declaration”). The Janét

Declaration simply parrots the Petition, as opposed to providing any insightful expert opinions and analysis. For all these reasons, the Janét Declaration should not be entitled to any weight—and, as such, Petitioner has necessarily failed to carry its burden with respect to institution.

As the Board has consistently recognized, a declaration that repeats the petition verbatim “is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.” *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, 2022 WL 3648989, at *6 (P.T.A.B. Aug. 24, 2022) (precedential) (denying institution where Petitioner’s expert “offers only a *verbatim* restatement of the assertion being supported, without any supporting evidence or technical reasoning”). Simply put, an expert declaration that “merely parrots the Petition” is entitled to “little to no weight.” *E.g.*, *MarkForged Inc. v. Continuous Composites, Inc.*, IPR2022-01431, Paper 7 at 14 (P.T.A.B. Jan. 18, 2023) (“[Expert’s] declaration testimony on this point is entitled to little to no weight as it merely parrots the Petition.”); *LG Elecs. Inc. v. Jawbone Innovations, LLC*, IPR2023-01111, Paper 10 at 15 (P.T.A.B. Jan. 9, 2024) (“Petitioner’s expert merely parrots the Petition. Thus, Petitioner’s conclusory assertion is unpersuasive.”); *see Content Square SAS v. Medallia Inc.*, IPR2022-00316, Paper 13 at 38 (P.T.A.B. July 14, 2022) (“Merely repeating an argument from the Petition in the declaration of a proposed expert, does not give that argument

enhanced probative value.”); *Man Wah Holdings Ltd. v. Rafeel Sys., LLC*, IPR2019-00616, Paper 7 at 15-16 (P.T.A.B. Aug. 21, 2019) (same).

Such is the case here with respect to the Janét Declaration. Indeed, with respect to issues such as the alleged disclosures of the prior art and the purported motivation(s) to combine the disparate prior art references asserted by Petitioner—areas on which expert testimony may be critical—the Janét Declaration simply restates the attorney argument set forth in the Petition itself, without any meaningful discussion or elaboration, let alone expertise. *Compare* Ex. 1003, ¶¶ 105–11, *with* Pet. at 23–27; *see also* Ex. 2021.

One example highlighting the similarity is Dr. Janét’s purported testimony addressing element 1[e][i]. As shown below, Dr. Janét does not even attempt to conceal that his opinion is nothing more than a copy-paste of the same analysis in the Petition. Such expert “testimony” does nothing to help the Board address the prior art or the purported motivations to make the modifications that Petitioner proposes:

Ex. 1003, ¶¶ 124–28	Petition at 34–36
124. In my opinion, the Durvasula-Fu-007 combination discloses or suggests 1[e][i].	The Durvasula-Fu-007 combination discloses or suggests 1[e][i]. Janét, ¶¶124-128.
125. Durvasula discloses a controller. Specifically, Durvasula describes controller 42 that “is in communication with vehicle 30 and cameras 32” and “is	Durvasula discloses a controller. Janét, ¶125. Specifically, Durvasula describes controller 42 that “is in communication with vehicle 30 and cameras 32” and “is

configured to generate control signals for steering vehicle 30.” Durvasula, [0020], [0022]. Durvasula further describes that controller 42 “utilizes signals from camera 32 to steer vehicle 30” to “cover such missed portions” and “to re-clean such portions until such portions have been satisfactorily cleaned.” Durvasula, [0023]. 126. As explained in §VI.C.1 regarding the relationship between the ’918 Application and the ’191 Patent in connection with the claimed priority to the ’918 Application, Durvasula, the patent publication of the ’918 Application, fails to disclose that its controller is “positioned on or in the body.” 127. Like Durvasula, Fu-007 discloses an underwater cleaning robot for swimming pools using camera-based control. <i>See</i> §VII.A.2. Like Durvasula, Fu- 007 uses a controller to generate, in response to the captured image, at least one control signal to cause movement of the pool cleaning body within the swimming pool. Specifically, Fu-007’s system includes monitoring camera 2, image acquisition card, central processing unit (controller) housed in control system enclosure 8, and cleaning and moving platform with independently controllable cleaning drive wheels 3 and drainage devices. Fu-007, pp.12-14, Claims 1, 3, FIGS.1-2 (annotated below). Similar to the teaching in Durvasula for moving the pool cleaning vehicle, Fu-007 teaches	configured to generate control signals for steering vehicle 30.” Durvasula, [0020], [0022]. Durvasula further describes that controller 42 “utilizes signals from camera 32 to steer vehicle 30” to “cover such missed portions” and “to re-clean such portions until such portions have been satisfactorily cleaned.” Durvasula, [0023]. As explained in §III.C.1 regarding the relationship between the ’918 Application and the ’191 Patent in connection with the claimed priority to the ’918 Application, Durvasula, the patent publication of the ’918 Application, fails to disclose that its controller is “positioned on or in the body.” <i>See also</i> Janét, ¶126. Like Durvasula, Fu-007 discloses an underwater cleaning robot for swimming pools using camera-based control. <i>See</i> §IV.A.2. Like Durvasula, Fu-007 uses a controller to generate, in response to the captured image, at least one control signal to cause movement of the pool cleaning body within the swimming pool. Janét, ¶127. Specifically, Fu-007’s system includes monitoring camera 2, image acquisition card, central processing unit (controller) housed in control system enclosure 8, and cleaning and moving platform with independently controllable cleaning drive wheels 3 and drainage devices. Fu-007, pp.12-14, Claims 1, 3, FIGS.1-2 (annotated below); Janét, ¶127. Similar to the teaching in Durvasula for moving the pool cleaning vehicle, Fu-
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the use of cleaning drive wheels, synchronous belt gears, and synchronous drive belts as part of a cleaning and moving platform to cause and control the movement of the platform during the pool cleaning operation. Fu-007, pp.8-9, 12-14, Claims 1, 3. 128. For the reasons explained in §VII.A.3, a POSITA would have been motivated to modify Durvasula by substituting Durvasula's external controller with Fu-007's onboard controller structure. The modified system incorporates Fu-007's central processing unit (controller), which is housed in the "sealed drive control enclosure" inside Durvasula's vehicle. In such modified system, Fu-007's onboard controller within the cleaning and moving platform would be in electronic communication with Durvasula's camera mounted to the vehicle body via onboard connection (per Fu-007's image acquisition card; pp.12-14), powered by an onboard power source (per Fu-007's rechargeable battery box; pp.12-14), and generates control signals for steering the vehicle based on camera-captured images to clean or re-clean portions of the pool (per Durvasula's control logic).	007 teaches the use of cleaning drive wheels, synchronous belt gears, and synchronous drive belts as part of a cleaning and moving platform to cause and control the movement of the platform during the pool cleaning operation. Fu-007, pp.8-9, 12-14, Claims 1, 3. For the reasons explained in §IV.A.3, a POSITA would have been motivated to modify Durvasula by substituting Durvasula's external controller with Fu-007's onboard controller structure. Janét, ¶128. The modified system incorporates Fu-007's central processing unit (controller), which is housed in the "sealed drive control enclosure" inside Durvasula's vehicle. <i>Id.</i> In such modified system, Fu-007's onboard controller within the cleaning and moving platform would be in electronic communication with Durvasula's camera mounted to the vehicle body via onboard connection (per Fu-007's image acquisition card; pp.12-14), powered by an onboard power source (per Fu-007's rechargeable battery box; pp.12-14), and generates control signals for steering the vehicle based on camera-captured images to clean or re-clean portions of the pool (per Durvasula's control logic). Janét, ¶128.
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Put another way, the Janét Declaration is almost identical to the Petition. But a purported expert merely parroting the Petition cannot give any insight into what a

POSITA may or may not be motivated to do. *See LG Elecs.*, IPR2023-01111, Paper 10 at 15; *Content Square*, IPR2022-00316, Paper 13 at 38.

There are numerous other instances where the Janét Declaration is a near exact copy of the Petition, and the Petition purports to rely on those conclusory arguments. As one of many examples, compare Dr. Janét’s purported testimony at paragraphs 165–68 claiming to analyze the preamble of claim 1 by comparison to Cui, with the analysis of that claim element at pages 49–51 of the Petition:

Ex. 1003, ¶¶ 165–68	Petition at 49–51
165. It is my opinion that Cui discloses or suggests 1[pre].	Cui discloses or suggests 1[pre]. Janét, ¶¶165-168.
166. Cui discloses a system designed for “professional or commercial swimming pools,” including an underwater cleaning vehicle with track-type crawling mechanisms 10 powered by hybrid stepper motors 15 and a computer 7 that processes sensor data and controls the vehicle. Cui, Abstract, Claim 1, pp.5-7, FIGS. 1-2, 6 (annotated below).	Cui discloses a system designed for “professional or commercial swimming pools,” including an underwater cleaning vehicle with track-type crawling mechanisms 10 powered by hybrid stepper motors 15 and a computer 7 that processes sensor data and controls the vehicle. Cui, Abstract, Claim 1, pp.5-7, FIGS. 1-2, 6 (annotated below). Janét, ¶166.
[omitted images]	[omitted images]
167. Cui’s cleaning vehicle is self-propelled because under the control of computer 7, motors 15 drive track-type crawling mechanisms 10 to move it autonomously across pool surfaces. Cui, Claim 1, pp.5-6.	Cui’s cleaning vehicle is self-propelled because under the control of computer 7, motors 15 drive track-type crawling mechanisms 10 to move it autonomously across pool surfaces. Cui, Claim 1, pp.5-6. Janét, ¶167.

168. Cui’s system detects debris by capturing images with camera 5 and comparing them (via computer 7) with “pre-stored standard image information of a clean pool bottom”—“when there is a lot of sediment at the pool bottom, the grayscale level of the real-time captured image(s) is greatly different from the grayscale level of the original standard image(s).” Cui, Abstract, pp.4-7. Cui’s system collects and cleans debris using “roller brush (11),” “brushless DC water pump motor (2),” and “filter bag (6).” Cui, Claim 1, pp.5-7.	Cui’s system detects debris by capturing images with camera 5 and comparing them (via computer 7) with “pre-stored standard image information of a clean pool bottom”—“when there is a lot of sediment at the pool bottom, the grayscale level of the real-time captured image(s) is greatly different from the grayscale level of the original standard image(s).” Cui, Abstract, pp.4-7. Cui’s system collects and cleans debris using “roller brush (11),” “brushless DC water pump motor (2),” and “filter bag (6).” Cui, Claim 1, pp.5-7; Janét, ¶168.
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Above, the two statements are entirely the same. This issue continues throughout the claim set, including for example, the passage below addressing claim 2:

Ex. 1003, ¶¶ 195–95	Petition at 65–67
195. In my opinion, Cui and Fu-007 render Claim 2 obvious.	Cui and Fu-007 render Claim 2 obvious. Janét, ¶¶195-200.
a. 2[pre] “A system for cleaning debris from a submerged surface of a swimming pool, comprising”	a. 2[pre]
196. It is my opinion that Cui discloses or suggests 2[pre].	Cui discloses or suggests 2[pre]. Janét, ¶¶ 196-198.
197. Cui discloses a system designed for “professional or commercial swimming pools,” including an underwater cleaning vehicle with track-type crawling mechanisms 10 powered by hybrid stepper motors 15 and a computer 7 that processes sensor data	Cui discloses a system designed for “professional or commercial swimming pools,” including an underwater cleaning vehicle with track-type crawling mechanisms 10 powered by hybrid stepper motors 15 and a computer 7 that processes sensor data

and controls the vehicle. Cui, Abstract, Claim 1, pp.5-7, FIGS. 1-2, 6 (annotated below).	and controls the vehicle. Cui, Abstract, Claim 1, pp.5-7, FIGS. 1-2, 6 (annotated below).
[omitted images]	[omitted images]
198. Cui’s system detects debris by capturing images with camera 5 and comparing them (via computer 7) with “pre-stored standard image information of a clean pool bottom”—“when there is a lot of sediment at the pool bottom, the grayscale level of the real-time captured image(s) is greatly different from the grayscale level of the original standard image(s).” Cui, Abstract, pp.4-7. Cui’s system collects and cleans debris using “roller brush (11),” “brushless DC water pump motor (2),” and “filter bag (6).” Cui, Claim 1, pp.5-7.	Cui’s system detects debris by capturing images with camera 5 and comparing them (via computer 7) with “pre-stored standard image information of a clean pool bottom”—“when there is a lot of sediment at the pool bottom, the grayscale level of the real-time captured image(s) is greatly different from the grayscale level of the original standard image(s).” Cui, Abstract, pp.4-7. Cui’s system collects and cleans debris using “roller brush (11),” “brushless DC water pump motor (2),” and “filter bag (6).” Cui, Claim 1, pp.5-7; Janét, ¶198.

Indeed, parroting such as this is “particularly problematic in cases where, like here, expert testimony is offered not simply to provide a motivation to combine prior-art teachings, but rather to supply a limitation missing from the prior art.” *Xerox*, 2022 WL 3648989, at *6. In the charts above, Dr. Janét does exactly that—attempt to supply a limitation missing from the prior art by merely parroting the Petition.

The Petition and Dr. Janét’s purported expert testimony are replete with other similar examples of Dr. Janét’s parroting the Petition. *See* Ex. 2021.

Dr. Janét’s declaration is thus nothing more than a copy of the Petition itself, with almost the exact same words in the exact same order. And “merely repeating

conclusory arguments does not help the Board, the trier of fact in this proceeding, understand the evidence or to determine a fact in issue.” *Man Wah Holdings Ltd.*, IPR2019-00616, Paper 7 at 15–16. Dr. Janét’s unhelpful declaration should therefore be given no weight. *See, e.g., MarkForged*, IPR2022-01431, Paper 7 at 14 (“[Expert’s] declaration testimony on this point is entitled to little to no weight as it merely parrots the Petition.”); *Xerox*, 2022 WL 3648989, at *6. And without expert testimony, Petitioner cannot satisfy its burden of demonstrating a reasonable likelihood that its purported prior art discloses the elements of the challenged claims or that a person of ordinary skill in the art would be motivated to combine the prior art at issue.

Petitioner’s heavy reliance on expert testimony—including to “gap fill” holes with the supposed understanding, motivations, and expectations of a POSITA—is further indication that its invalidity challenges are more suitable for district court litigation than for the expedited review provided by an IPR. *See* Pet. at 31, 52, 53, 54, 55, 57, 64, 75, 76, 77, 78, 79, 80, 82, 83, 84, 85, 87, 91, 92, 96, 98, 99, 100, 102 (“A POSITA would have understood . . .”). “[T]he Petition’s extensive reliance on conclusory expert testimony to gap-fill holes in the prior art demonstrates . . . denial is appropriate.” *Google LLC v. Cerence Operating Co.*, No. IPR2024-01465, 2025 WL 1182608, at *6 (P.T.A.B. Apr. 23, 2025).

In addition, the repetitive testimony presented by Petitioners' Expert, which lacks further analysis or reasoning beyond that set forth in the Petition, is insufficient to fill the gaps. Thus, Petitioner's overreliance on expert testimony weighs in favor of denial.

F. Petitioner Failed to Shoulder Its Burden with Respect to Multiple Elements of the Independent Claims.

Notwithstanding the similarity of the art and arguments presented in the Petition and during prosecution of the '191 Patent, Petitioner also failed to meet its burden to show 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. Petitioner does not shoulder its burden, including in view of its reliance upon (1) the Challenged Patent's specification as a primary prior art reference, and (2) an expert declaration that, other than boilerplate, parrots the Petition. *See* III.E, *supra*. Institution should be denied.

G. This Petition Should Be Denied as Duplicative if the Board Institutes the Earlier Wybotics IPR of the Challenged Patent.

If the Board institutes the Wybotics IPR regarding the same Challenged Patent, then this Petition should be denied as it would be a parallel petition regarding the same patent at the same time.

The Patent Trial and Appeal Board states that "[t]wo or more petitions filed against the same patent at or about the same time (e.g., before the first preliminary

response by the patent owner) may place a substantial and unnecessary burden on the Board and the patent owner and could raise fairness, timing, and efficiency concerns.” Patent Trial & Appeal Bd., Consolidated Practice Guide (Nov. 2019). In the case of parallel petitions, the Board considers the “substantial and unnecessary burden on the Board and the patent owner” as well as “fairness, timing, and efficiency concerns.” *Id.* In this case, the presence of parallel petitions places an unnecessary burden on the Board and the Patent Owner and strongly implicates fairness and efficiency concerns.

And while the Board acknowledges limited circumstances where parallel petitions may be necessary “including, for example, when the patent owner has asserted a large number of claims in litigation,” none of these circumstances are present in this case. *Id.* Indeed, the Petition here and in the Wybotics IPR both found more than sufficient space to challenge every claim in view of multiple grounds.

Accordingly, the “volume of claims” clearly does not require the parallel petitions. Nor does the fact that different references are asserted in this proceeding and the Wybotics IPR provide justification for a parallel petition here. *Shenzhen Root Tech. Co., Ltd. v. Chiaro Tech. Ltd.*, IPR2024-00953, Paper 18 (P.T.A.B. Dec. 16, 2024). Institution should be denied for this additional reason.

IV. CONCLUSION

For all the foregoing reasons, the Petitioner fails to carry its burden, and no proceeding should be instituted.

Dated: April 28, 2026

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Preliminary Response contains 9,258 words according to the word-processing program used to prepare this paper. The foregoing word count complies with the 14,000 word type-volume limit specified by 37 C.F.R. § 42.24(b)(1).

Dated: April 28, 2026

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing Patent Owner's Mandatory Notice Pursuant to 37 C.F.R. § 42.8 has been served electronically via email upon the following:

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