

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

THERABODY, INC.,

Petitioner

v.

HYPERICE IP SUBCO, LLC,

Patent Owner.

Case No.: PGR2025-00013
U.S. Patent No. 11,938,082

**PATENT OWNER'S PRELIMINARY RESPONSE
PURSUANT TO 37 C.F.R. §42.207**

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	ECF Scheduling Notice entered January 1, 2025 in case 8:24-cv-00098-JWH-DFM
2002	Scheduling Order (Dkt. No. 26) entered June 21, 2024 in case 8:24-cv-00098-JWH-DFM
2003	Defendant Therabody, Inc.'s Disclosure of Invalidity Contentions served October 21, 2024
2004	Statutory Disclaimer of claim 17 of U.S. Patent No. 11,938,082 as filed with the USPTO on March 21, 2025

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I. INTRODUCTION

Patent Owner Hyperice IP Subco, LLC (“Patent Owner”) submits its Preliminary Response to the Petition for Post-Grant Review No. PGR2025-00013 (Paper No. 2, “Petition” or “Pet.”) filed on December 23, 2024, by Therabody, Inc. (“Petitioner”) challenging claims 1-18¹ of U.S. Patent No. 11,938,082 (the “Challenged Claims”). Ex. 1001 (the “’082 Patent”).

Patent Owner respectfully submits that the Board should exercise its discretion and deny institution under 35 U.S.C. § 324 in light of the advanced stage of the underlying district court litigation². To the extent the Board reaches the merits of Petitioner’s asserted Grounds, the Board should deny institution because the Petition presents superficial § 112 arguments contrary to legal precedent, recycles art well-considered by the Examiner in allowing this patent and its parent patent, and fundamentally fails to explain why a person of ordinary skill in the art would have modified the cited art to arrive at the claimed embodiments, or that such a person would have had a reasonable expectation of success with the proposed modifications.

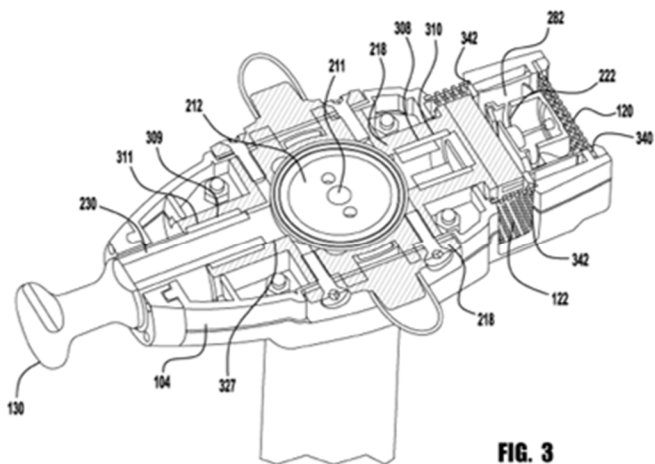
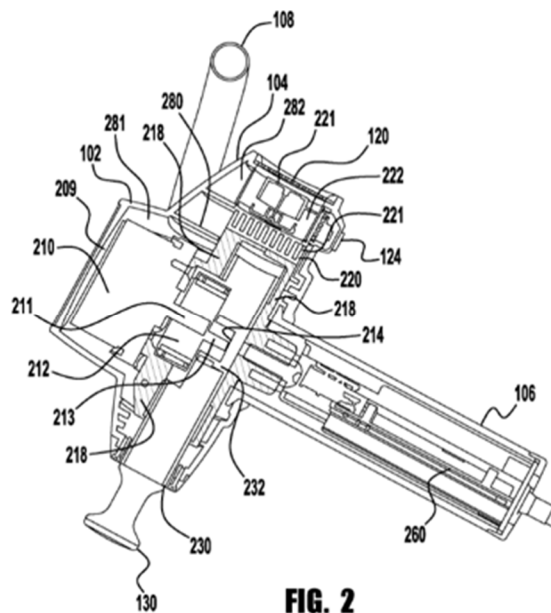
¹ As explained below, Patent Owner has disclaimed claim 17.

² As referred to herein, the “underlying district court litigation” or “underlying litigation” refers to Case No. 8:24-cv-00098-JWH-DFM, titled *Hyper Ice, Inc. and Hyperice IP Subco, LLC v. Joicom Corp.*, pending in the Central District of California, which is the lead case after consolidation with, *inter alia*, 8:24-cv-00390-JWH-DFM, titled *Hyper Ice, Inc. and Hyperice IP Subco, LLC v. Therabody, Inc.*

II. THE '082 PATENT

1. Overview

The '082 Patent is generally directed to a deep muscle-stimulating, percussive massage device. *See* Ex. 1001 at Abstract, 1:25-28, Figs. 1-3. Figures 2 and 3 of the '082 Patent are reproduced below.

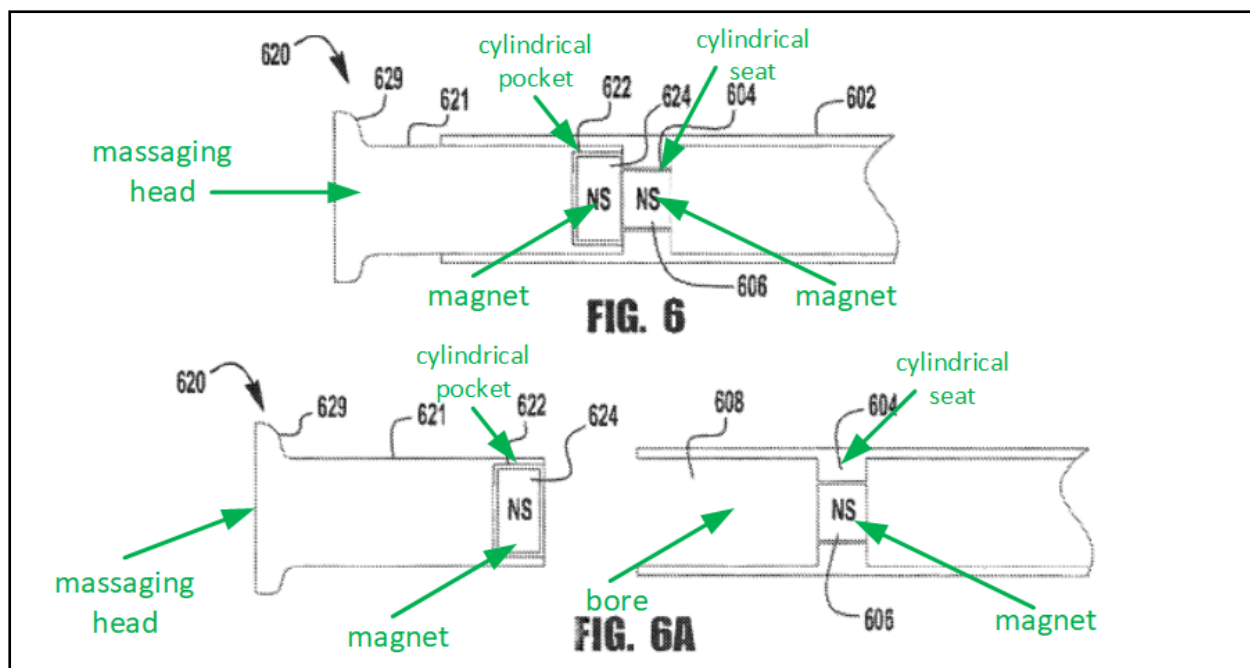


The '082 Patent discloses and claims improvements to deep muscle-stimulating, percussive massage devices. *Id.* at 1:25-33, 6:47-51. One such improvement is “a massaging device [that] includes ... a quick-connection mechanism and one or more massaging heads releasably connectable to the piston by the quick-connection mechanism.” *Id.* at 2:7-12; *see also* 3:42-45, FIGS. 1-3 and 6-6A. One such embodiment of a quick-release connection is the “quick-connect system 600 for connecting a massaging head 620 to a piston 602.” *Id.* at 6:47-49, FIGS. 6-6A; *see also id.* at 2:40-42 (“FIGS. 6, 6A and 6B illustrate an exemplary

quick-disconnect mechanism for connecting one or more massaging heads to a massaging device”).

The '082 Patent explains that, when providing a deep tissue massage using a percussive massage device, it may be desirable to switch massaging heads to work on different muscles or different portions of muscles during the massage. *Id.* at 6:49-53. The disclosed and exemplary quick-connect system allows a user to quickly switch massaging heads without turning off the massaging device. *Id.* at 3:42-45, 6:53-56, FIGS. 1-3, 6-6A.

As illustrated in Figures 6 and 6A (reproduced below with annotations added), one embodiment of the quick-connect system 600 includes a piston 602 that has a hollow-end bore 608 for receiving the shaft 621 of a massaging head 620. *Id.* at 6:57-59. A cylindrical seat 604 is located within the bore 608 of the piston 602. *Id.* at 6:59-60. The cylindrical seat 604 retains a magnet 606, which assists in holding the massaging head in place. *Id.* at 6:60-7:3. Further, the massaging head 620 includes a shaft 621 having a cylindrical pocket 622 at the distal end, and the cylindrical pocket 622 includes a magnet 624. *Id.* at 6:63-65. As disclosed in the '082 Patent, when the shaft 621 of massaging head 620 is slid into the opening in the bore 608, the magnets 606 and 624 are attracted to one another and magnetically hold massaging head 620 firmly in place. *Id.* at 6:67-7:3. Among other features, the inventive design and configuration of the '082 Patent allows “a user to quickly remove and replace the massaging head” during normal use of the percussive massage device, including “even while the piston 608 is moving.” *Id.* at 7:6-13.



2. Relevant Prosecution History

Petitioner contends that the Examiner failed in two material respects when examining the application that matured into the '082 Patent. First, Petitioner argues that “[t]he record contains no discussion of whether challenged Claims 1-17 satisfied the requirements of written description or definiteness under § 112.” Pet. at 75. Second, Petitioner argues that, for purposes of the analysis under § 103, “the two references that satisfy the ‘quick-connect system’ limitation ... were either not disclosed or never discussed. The Clark reference is not of record in the prosecution history. And neither the Examiner nor the Applicants ever discussed the Mabuchi reference.” *Id.* at 76. Besides the bare fact that Clark is not of record, which is a result of it being far afield of the subject matter of the '082 Patent and the other cited art rather than any oversight by the Examiner, Petitioner is mistaken.

First, the Examiner rejected as-filed claim 18 as allegedly being indefinite under 35 U.S.C. § 112(b) during prosecution of the application that would mature

into the '082 Patent. Ex. 1004 at pp. 89-90. Thus, the Examiner clearly did consider the claims against the various requirements of 35 U.S.C. § 112, as every Examiner does, and nevertheless allowed them. There is no requirement that the Examiner “discuss[]” whether claims satisfy the § 112 requirements and, certainly, failing to simply “discuss[]” § 112 is not material error because an allowance confirms that the Examiner found that the claims satisfy the § 112 requirements.

Second, the '082 Patent is a continuation of, *inter alia*, U.S. Patent No. 11,857,482 (the “'482 Patent”). Ex. 1001 at 1:7-21. Petitioner characterizes the '482 Patent as being “related” to the '082 Patent and includes its prosecution history as Exhibit 1013. Pet. at pp. 20, 44. Accordingly, relevant portions of the prosecution history of the '482 Patent are also discussed below and throughout. *See II-VI, Inc. v. Alexander Soto et al.*, IPR2021-01359, Paper No. 10, *19 (Feb. 15, 2022) (“The '723 patent is a continuation of the parent patent, thereby derived from a common initial application, and we agree that the prosecution history of the parent patent may legitimately bear on our assessment [under § 325(d)].”).

a) Relevant Prosecution History of the '082 Patent

The application that would mature into the '082 Patent was filed on November 20, 2023. Ex. 1001, code [22]. Notably, this application was assigned to and examined by Examiner Stanis, the same Examiner that was responsible for examining and allowing the application that matured into the '482 Patent.

Of particular note, on November 20, 2023, prior to any examination on the merits, Applicant filed an Information Disclosure Statement (“IDS”) complying with Applicant’s duty of disclosure and citing the following prior art references

relied upon in the Petition: Mabuchi, Colloca, Harris, and Pivaroff. Ex. 1004 at pp. 40, 43, and 47. The IDS was acknowledged as considered by Examiner Stanis on January 12, 2024. *Id.* at pp. 97-114.

During prosecution of the application that would mature into the '082 Patent, no claim was rejected in view of any prior art. In the single Office action issued during prosecution, the Examiner raised: (1) a § 112(f) interpretation of “a drive mechanism” as recited in claim 18; (2) a § 112(b) rejection of claim 18 regarding “wherein a drive mechanism controls a predetermined stroke length of the piston” and “wherein a quick-connect system comprising the distal end of the piston and a first massaging head is configured to have a proximal end of the first massaging head inserted into or removed from the bore while the piston reciprocates the predetermined stroke length at the first speed,” specifically, whether these limitations were part of a claimed method step or a structural limitation; and (3) a nonstatutory double patenting rejection in view of the '482 Patent. Ex. 1004 at pp. 86-94. In response, Applicant amended claim 18 as suggested by the Examiner “without acquiescing to the merits of the rejection” and submitted a Terminal Disclaimer over the '482 Patent. *Id.* at pp. 117-22.

A Notice of Allowance issued thereafter. *Id.* at pp. 1893-96. In addition to specifically confirming the patentability of claims 1 and 18 in view of the prior art of record, the Examiner identified, *inter alia*, Pivaroff (U.S. Patent No. 6,682,496, Ex. 1007) and Colloca (U.S. Pre-Grant Publication No. 2007/0150004, Ex. 1009) as the closest prior art of record.

With respect to Pivaroff, which is the primary reference cited by Petitioner in its Grounds 5 and 6, the Examiner found that:

Pivaroff does not disclose a quick-connect system configured to allow a massaging head to be secured or connected to the percussive massager **while the piston reciprocates** as required by claims 1 and 18. The quick connect system of Pivaroff uses a threading system between its piston and its massaging head which would prevent the user from inserting or removing the massaging head **while the piston reciprocates**.

Ex. 1004 at p. 1894 (**emphasis** in original).

With respect to Colloca, which is a secondary reference cited by Petitioner in its Grounds 3 and 4, the Examiner found that “Colloca does not disclose the bore as located at the distal end of a *piston*. Additionally, Colloca does not disclose inserting or removing the impact head from the **bore while a piston reciprocates**.” *Id.* at 1895 (**emphasis** in original).

b) Relevant Prosecution History of the ‘482 Patent

The application that matured into the ‘482 Patent was filed on February 25, 2022, as a continuation of U.S. Patent No. 11,285,075, which was a continuation application of U.S. Patent No. 9,889,066. Ex. 1013 at pp. 31, 48.

The prosecution of the ‘482 Patent included four Office Actions (02/07/2023 (Non-Final) - *see* Ex. 1013 at 2227-2247; 03/07/23 (Final) - *see* Ex. 1013 at 2323-2341; 05/15/2023 (Non-Final) - *see* Ex. 1013 at 2397-2413; and 07/06/2023 (Final)- *see* Ex. 1013 at 2455-2473), four Examiner interviews (03/21/2023; 06/07/2023; 07/25/23; and 08/10/2023) - *see* Ex. 1013 at 2362-2363; 2452-2453; 2502-2503;

2562-2563), and the Notice of Allowability (09/13/2023 - *see* Ex. 1013 at 2587-2595).

For each Office Action and the Post-Allowance amendment, the assigned Primary Examiner, Examiner Stanis, conducted detailed keyword searches against the references cited in the IDS (including Mabuchi, Pivaroff, and Harris) using the Patent Office's electronic searching tool. *See* Ex. 1013 at 2248-2265, 2343-2344, 2414-2417, 2477-2488, and 2582-2585. For example, in support of the first Office Action (02/07/2023), Examiner Stanis generated 18 pages of search queries run against all the cited references, including specifically the teachings of Mabuchi. *See* Ex. 1013 at 2248-2265. Additionally, as the claims of the '482 Patent were amended and arguments presented, Examiner Stanis conducted supplemental keyword searching against the same set of cited references (including Pivaroff, Harris, and Mabuchi) and specifically chose to rely on the teachings of other prior art references, namely, Colloca, Rhoades, Noble and Elman over the other art of record (including Mabuchi). *See* Ex. 1013 at 2323-2341, 2392-2453, and 2455-2473.

The claimed subject matter of the '482 Patent is directed to a “quick release connector” of the percussive massager. Throughout the prosecution history, the Examiner relied on the teachings of various prior art references for the “quick release connector.”

For example, in the March 7, 2023, Final Office Action, the Examiner addressed the added recitation of a “quick release connector” by stating that “it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to design the modified device of Meyer to have

multiple interchangeable impact heads that can be coupled to the reciprocating piston via a quick release connector as taught by Miller.” *See* Ex. 1013 at 2329-2330.

Similarly, in the March 15, 2023 Office Action, in response to Respondent’s arguments distinguishing the teachings of Miller, the Examiner considered the additional teachings of Colloca with regard to the “quick release connector”:

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to design the modified device of Meyer to have multiple interchangeable impact heads that can be coupled to the reciprocating piston via a quick release connector as taught by Colloca to allow a user to select different types of massage heads as dictated by the user’s therapy needs.

See Ex. 1013 at 2405-2406.

Most importantly, in the July 6, 2023, Office Action, the Examiner cited the previously relied-upon teachings of Pivaroff (as a primary reference) but then added the teachings of Rhoades to address not only the teachings of a “quick release connector” in general, but also the use of magnetic attractive forces for such connection mechanisms. *See* Ex. 1013 at 2458-2459.

In successfully distinguishing the claims of the ’482 Patent over all the cited and applied references, including the last proposed combination of the Pivaroff and Rhoades, Applicant submitted arguments related to the individual deficiencies in the teachings of each respective reference and their purported combinations. *See* Ex. 1013 at 2532-2539. This included arguments highlighting the significant challenges associated with the proposed combination of references corresponding to a deep

tissue massager (Pivaroff) and a cosmetic massager (Rhoades). *See* Ex. 1013 at 2536.

The resulting Notice of Allowability issued by Examiner Stanis encompasses the key point that is not addressed by the Petition:

Pivaroff does not disclose a quick-connect system configured to allow a massaging head to be secured or connected to the percussive massager while the piston reciprocates as required by ... Claim 38. While Rhoades discloses a quick-connect system that uses magnetic coupling that *might* allow for a massage head to attach to a piston while the piston reciprocates, Rhoades does not disclose the **claimed structure** of the quick release connection system – namely ... a substantially cylindrical pocket at the first massaging head to receive a quick release connector (claim 38).

See Ex. 1013 at 2593-2594 (emphasis added).

III. PRIOR ART

Petitioner's cited prior art references encompass disparate types of mechanical devices, which Petitioner attempts to combine to arrive at the claimed embodiments but that are the result of improper hindsight reconstruction. Specifically, with respect to Ground 3, Petitioner relies upon Mabuchi (Ex. 1005), which is directed to a first category of mechanical devices associated with a beauty treatment device configured to provide a gentle patting force on a user's face, and Colloca (Ex. 1009), which is directed to a second category of mechanical devices associated with chiropractic adjustment and muscle stimulation. And with respect to Ground 5, Petitioner relies on Pivaroff (Ex. 1007), which is directed to the second category of

mechanical devices (*i.e.*, chiropractic devices), and Clark (Ex. 1014), which is directed to a third category of mechanical devices associated with holding and driving screws (*i.e.*, a screwdriver).

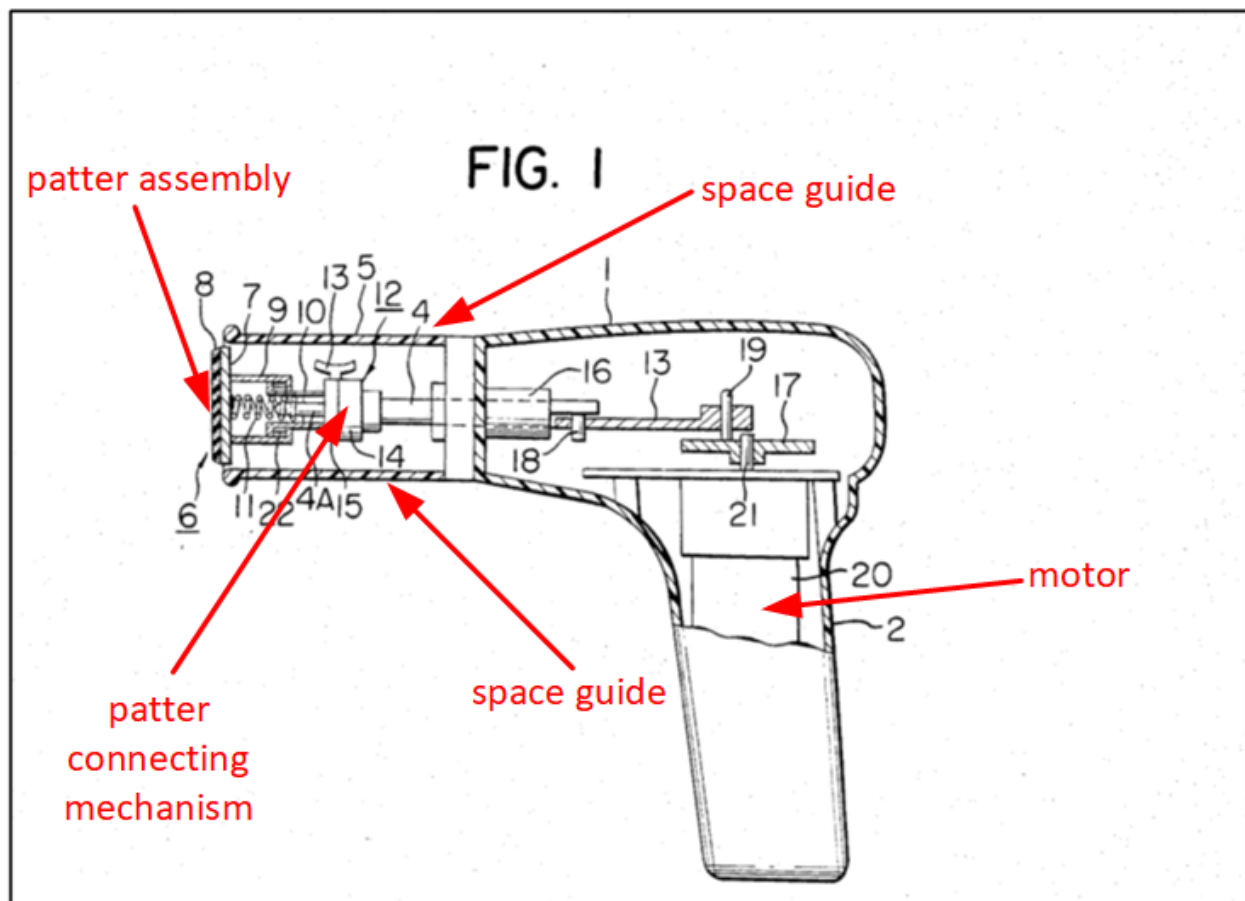
As explained below, the prior art references, individually or in combination, fail to teach or suggest at least “a quick-connect system comprising the distal end of the piston and a first massaging head, wherein the quick release connector is configured to have a proximal end of the first massaging head inserted into or removed from the bore while the piston reciprocates the predetermined stroke length at the first speed” as recited in claim 1 and the similar features recited in claim 18. Further, Petitioner’s alleged motivation to combine these unrelated references, and suggestion that a POSITA would have a reasonable expectation of success with such combinations, lack any rationale underpinning or critical analysis.

A. Mabuchi (Ex. 1005)

The teachings of U.S. Patent No. 4,513,737 to Mabuchi (Ex. 1005), relied on in Grounds 3 and 4 of the Petition, are specifically directed toward a “beauty treatment device” including “a padder, or padder assembly removably fitted to the actuator, a space guide fitted to the device body to control the reciprocating motion of the padder assembly, and a resilient member fitted to either or both of the padder assembly and the actuator.” Ex. 1005 at Abstract. Mabuchi distinguishes its disclosed device for “beauty treatment to repeatedly tap or pat the skin surface” from a vibrating device that “only presses and/or kneads the skin” and, notably, from a “conventional patting device, which is intended mainly for the massage of muscular

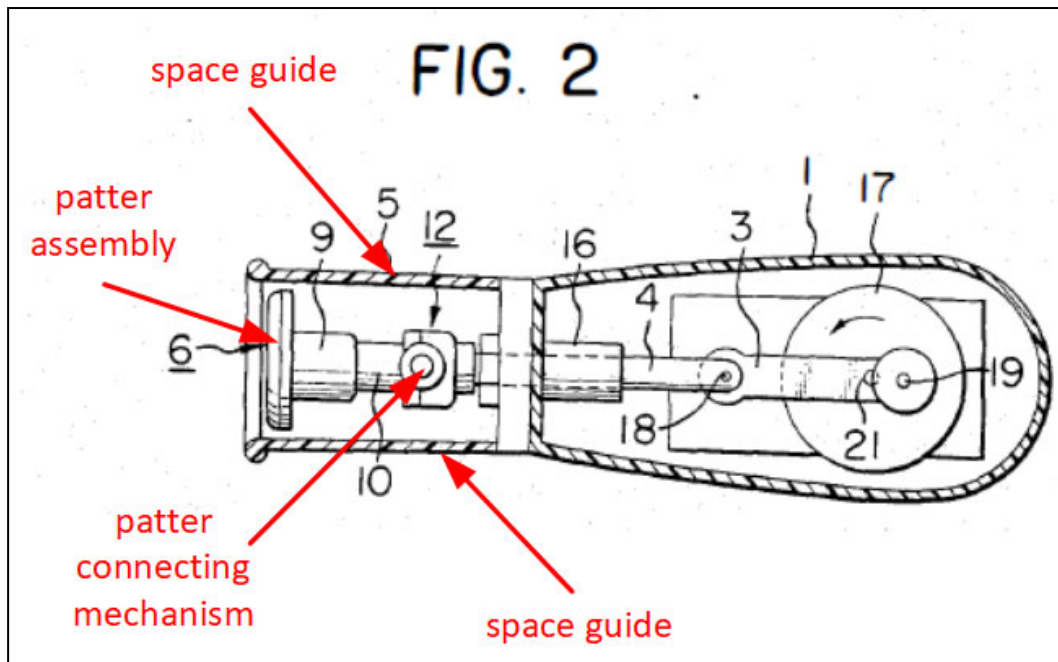
tissues³,” in other words a “massager” for muscle fibers. *See* Ex. 1005 at 1:13-29. In other words, Mabuchi expressly distinguishes its disclosed “beauty treatment device” from a “massager” “intended mainly for the massage of the muscular tissues.”

Figure 1 of Mabuchi (reproduced below with annotations) illustrates the fully assembled version of the beauty treatment device disclosed in Mabuchi.



³ The muscular system is composed of muscle fibers. *See* <https://training.seer.cancer.gov/anatomy/muscular/> (accessed April 8, 2025). Thus, Mabuchi’s reference to muscular tissue is equivalent to muscle fibers.

Mabuchi discloses various connection mechanisms for allowing interchangeability of the padder assembly 6. *See* Ex. 1005 at 5:65-67. Mabuchi teaches that interchangeability of the padder assembly 6 requires some form of physical access to the connection mechanism, regardless of the embodiment of the connection mechanism. *See id.* However, Mabuchi illustrates that the space guide 5 fully encompasses the padder assembly 6 in all embodiments and is required for operation of the disclosed beauty treatment device because it “maintain[s] a distance between a device body and the skin surface being padded” and “[i]n the absence of the space guide 5, the patting intensity of the padder assembly 6 would become unstable due to the variability of the distance with service conditions ... [which] would cause both the plate member 7 and the cushion member 8 to be kept in contact with the skin surface at all times to exert a pushing force onto the skin surface, rather than patting the skin. *Id.* at 1:36-39, 5:39-51. Because the space guide 5 encompasses the padder connection mechanism 12, the space guide 5 must be removed for a user to access the padder connection mechanism 12. *See* Ex. 1005 at 2:53-67 and Figure 2 (reproduced below with annotations).



The padder connection mechanism 12 of Mabuchi is not intended to be operated outside of being fully encompassed within the space guide 5, and the padder assembly 6 reciprocates into and only momentarily out of the space guide 5 during use. Therefore, the padder assembly 6 cannot be changed while the device is operating.

B. Pivaroff (Ex. 1007)

Petitioner relies on U.S. Patent No. 6,682,496 to Pivaroff (Ex. 1007) in Grounds 5 and 6. Pivaroff discloses a therapeutic massaging device for muscle stimulation. *See* Ex. 1007 at 1:18-27. The teachings of Pivaroff were extensively considered and eventually overcome during prosecution of the application that matured into the '482 Patent. *See, e.g.,* Ex. 1013 at pp. 2587-2595. As the Examiner concluded during prosecution of the '482 patent, Pivaroff fails to teach or suggest a quick release connector. *Id.* at 2593-2594. Similarly, in allowing the application that would mature into the '082 Patent, the Examiner listed Pivaroff as the closest

prior art of record while conceding that “Pivaroff does not disclose a quick-connect system configured to allow a massaging head to be secured or connected to the percussive massager **while the piston reciprocates** as required by claims 1 and 18.” Ex. 1004 at 1894. Petitioner does not dispute this conclusion.

Pivaroff discloses a treatment device with a hollow head 44 into which grains of various precious gems, metals, or minerals must be inserted as part of the therapeutic process. *See* Ex. 1007 at 2:55-3:30. According to the teachings of Pivaroff, the hollow head and grain design is critical to the function of the disclosed device for deep muscle stimulation. *See id.* at 3:20-29. As discussed in detail below, not only does Pivaroff lack a quick-connect system, but it also requires significant redesign in order to receive any type of connection mechanism as proposed in the Petition.

C. Colloca (Ex. 1009)

Petitioner relies on Colloca to modify Mabuchi in Grounds 3 and 4. Colloca discloses a chiropractic adjusting instrument designed for “bone movement.” Ex. 1009 at Abstract, ¶¶[0002]-[0003] and [0009]. Colloca also criticizes prior art devices because “they do not have trigger system and pulse system including an interlock such that the device cannot be activated with an appropriate preload” and discloses “a switch 310” that “acts as an interlock or safety device such that pulse system 200 can not be activated unless the switch 310 activated.” *Id.* at ¶¶[0006], [0008], and [0054]. As described in Colloca, the drive mechanism must be preloaded “by placing the impact head on a body or surface” to activate the switch

310 such that the “that chiropractic adjusting instrument 10 may be fired by depressing the trigger 330.” *Id.* at ¶[0055].

In allowing the '082 Patent, the Examiner stated that “Colloca does not disclose the bore as located at the distal end of a piston” and that it “does not disclose inserting or removing the impact head from the bore while a piston reciprocates.” Ex. 1004 at p. 1894.

D. Clark (Ex. 1014)

Petitioner relies on Clark to modify Pivaroff in Grounds 5 and 6. Clark “relates to magnetic tools, and more particularly to tools adapted to magnetically hold and drive a multiplicity of different types of screws and the like.” Ex. 1014 at 1:8-10. In short, Clark is directed to a device that magnetically retains a screw prior to it being attached to (*i.e.*, screwed into) material by rotation. *See id.* at 3:35-48. In other words, Clark discloses a screwdriver.

IV. LEVEL OF ORDINARY SKILL IN THE ART

The relevant field of art is devices for applying percussive massage to a selected portion of the body. A person of ordinary skill in the art (“POSITA”) as of the effective filing date of the Challenged Claims would have a working knowledge of product development and would likely have a degree in engineering and/or industrial design and/or at least three to five years of experience in conceiving, designing, engineering, and/or modifying such products and devices.

V. CLAIM CONSTRUCTION

As noted in the Petition, both Petitioner and Patent Owner are seeking certain constructions in the underlying litigation. Exs. 1015 and 1016. However, at this

stage of the proceeding and in view of the manifold deficiencies in Petitioner's grounds of unpatentability, Patent Owner submits that no claim construction is necessary. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy); *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (applying *Vivid Techs.* in the context of an *inter partes* review).

VI. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION

Under the precedential guidance set forth in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 20, 2020) (designated precedential May 5, 2020)⁴, the Board considers the following factors in determining whether to institute an AIA post-grant proceeding where there is parallel district litigation:

1. Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. Proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. Investment in the parallel proceeding by the court and the parties;

⁴ On February 28, 2025, the USPTO rescinded its June 21, 2022, memorandum entitled "Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation". *See* <https://www.uspto.gov/about-us/news-updates/uspto-rescinds-memorandum-addressing-discretionary-denial-procedures>.

4. Overlap between issues raised in the petition and in the parallel proceeding; and
5. Whether the petitioner and the defendant in the parallel proceeding are the same party; and other circumstances that impact the Board's exercise of discretion, including the merits.

The Board should exercise its discretion and deny institution of this Post Grant Review based on a holistic consideration of the *Fintiv* factors.

First, Petitioner has not sought a stay in the underlying district court litigation, the Court has not granted a stay, and no evidence exists that a stay may be granted if this Post-Grant Review is instituted. On or about June 18, 2024, Petitioner learned that Patent Owner contended that Petitioner infringed the '082 Patent; however, Petitioner delayed over six months, until December 23, 2024, to file the instant petition for Post-Grant Review. Accordingly, this factor favors denial.

Second, the trial date in the district court action will likely occur before the Board's projected statutory deadline for a final written decision. The claim construction hearing is scheduled for April 16, 2025. Ex. 2001. Judge Holcomb's standing practice is to issue a trial scheduling order after the claim construction process is completed. Ex. 2002 at p. 2. For example, in *Gene Pool Technologies, Inc. v. Costal Harvest, LLC*, Case No. 5:21-cv-01328-JWH-SHK, Judge Holcomb issued a claim construction order on October 23, 2022 (Dkt. 87) and then, one month later, on November 23, 2022, issued a civil trial scheduling order (Dkt. 94)

scheduling trial. Patent Owner anticipates that the trial date will be set for early 2026.⁵ The projected statutory deadline for a final written decision in this matter, if instituted, is July 2026. As such, the anticipated trial date will predate any final written decision in this matter, favoring denial.

Third, the parties have made a substantial investment in the underlying district court litigation. Patent Owner initiated the district court litigation in February 2024. Since that time, the parties have engaged in extensive pleading practice, prepared and served infringement contentions and invalidity contentions, served and responded to written discovery, reviewed and produced documents, and prepared additional documents for production. In addition, the parties have filed opening and responsive claim construction briefs and are in preparation for the claim construction hearing set for April 16, 2025. Ex. 2001. This substantial and ongoing investment by both the parties and the Court favors denial.

Fourth, there is a substantial overlap between issues raised in the Petition and in the underlying district court proceeding. In its invalidity contentions, Therabody (Petitioner) contends that the asserted claims of the '082 Patent are invalid based on many of the same prior art references asserted in the Petition. Ex. 2003 at pp. 37⁶,

⁵ Patent Owner anticipates requesting leave to submit the district court order setting the trial date when it is issued.

⁶ Page citations are to the page numbers added after the Exhibit label.

40-41 (citing Mabuchi, Pivaroff, and Colloca as both primary and secondary references in various alleged obviousness combinations). In addition, Therabody (Petitioner) also contends in its invalidity contentions that the “quick-connect system” and the “substantially cylindrical bore” limitations are not enabled or lack written description support under § 112(a) and that the “substantially cylindrical bore” limitation is indefinite under § 112(b), just as Therabody does in its Petition. *Id.* at 58-61. This favors denial.

Fifth, the parties in the parallel proceeding are the same in this proceeding, which also favors denial.

Finally, to the extent the merits of Petitioner’s Grounds are considered, they are exceedingly weak and, as explained below, independently insufficient to meet the statutory standard to institute this Post Grant Review. This favors denial.

Accordingly, because all *Fintiv* factors favor denial, Patent Owner respectfully requests that the Board exercise its discretion and deny institution of this Post Grant Review based on *Fintiv*.⁷

VII. DEFECTS IN GROUNDS OF UNPATENTABILITY

The Board should deny institution on the merits because Petitioner fails to

⁷ Petitioner declined to address the *Fintiv* factors in its Petition, despite having over 4,000 words remaining before reaching the word limit in its Petition. Pet. at 78.

meet its burden to show at least one challenged claim is more likely than not⁸ to be non-compliant with the statutory requirements of 35 U.S.C. § 112 or obvious under 35 U.S.C. § 103⁹. *See* 35 U.S.C. § 324(a). The individual Grounds suffer from flawed applications of the statutory bases for invalidity, flawed technical analyses of the prior art, and failure to set forth any reason why a POSITA would have modified the various references to arrive at the claimed embodiments and explain why a POSITA would have a reasonable expectation of success with the various modifications.

A. Defects in the § 112 Grounds

To satisfy the written description requirement under 35 U.S.C. § 112(a), the specification must “reasonably convey[] to those skilled in the art that the inventor had possession” of the claimed invention as of the filing date. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). An adequate description does not require any particular form of disclosure or that the specification recite the claimed invention *in haec verba*. *Id.* at 1352. In

⁸ “Comparing the two [AIA trial institution] standards, the ‘reasonable likelihood’ standard is lower than the ‘more likely than not’ standard. The reasonable likelihood standard allows for the exercise of discretion but encompasses a 50/50 chance whereas **the ‘more likely than not’ standard requires greater than a 50% chance of prevailing.**” <https://www.uspto.gov/patents/laws/america-invents-act-ai/a/message-chief-judge-james-donald-smith-board#heading-1> (accessed March 25, 2025) (**emphasis added**).

⁹ Petitioner does not raise any anticipation grounds under 35 U.S.C. § 102 and, thus, concedes that the claimed inventions are novel.

fact, “drawings may suffice to satisfy the ‘written description’ requirement of § 112.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991). In evaluating the adequacy of the written description, a court may also consider “the existing knowledge in the particular field, the extent and content of the prior art, the maturity of the science or technology, [and] the predictability of the aspect at issue.” *Capon v. Eshhar*, 418 F.3d 1349, 1359 (Fed. Cir. 2005) (cited with approval in *Ariad*, 598 F.3d at 1352); *see also Boston Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011) (holding that because assessment for written description is made from perspective of person of ordinary skill in the art, in some instances, a patentee can rely on information that is “well-known in the art” to satisfy written description). “A patent need not teach, and preferably omits, what is well known in the art.” *Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1365 (Fed. Cir. 2006).

1. Ground 1A: The “quick-connect system” Limitation

Petitioner fails to clearly identify the § 112(a) basis for this Ground, contrary to its statutory burden to identify “the grounds on which the challenge to each claim is based” “with particularity.” 35 U.S.C. § 322(a)(3). In particular, Petitioner’s Section XI.A refers to “lack of written description support” but Section XI.A.1, which addresses Ground 1A, alleges “fail[ure] to enable.” Pet. at pp. 15-16. Petitioner concludes its Ground 1A argument by simply stating that “[t]hus, the challenged claims are unpatentable under § 112(a)” without clarifying whether Petitioner is relying on the enablement or written description requirements of § 112(a).

It is black letter law that “[t]he written description requirement is separate and distinct from the enablement requirement.” MPEP § 2161(II) (quoting *Ariad Pharm., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1341, 94 USPQ2d 1161, 1167 (Fed. Cir. 2010) (*en banc*)). The primary case relied upon by Petitioner—*Forte Biosciences, Inc. v. Univ. of Mass.*, PGR2023-00014, Paper 45 (June 24, 2024)—fails to quell this confusion because it separately (and properly) addresses both written description and enablement of the same claims. *See id.* at *8-21 (addressing alleged lack of written description of claims 1-5) and *22-37 (addressing alleged lack of enablement of claims 1-5). Because Petitioner has failed to identify the statutory basis for Ground 1A *with particularity*, Ground 1A fails to meet that statutory standard for institution. Nevertheless, even if the merits are considered, Petitioner’s arguments are misguided and deficient.

a) The “quick-connect system” limitation is enabled

If Petitioner’s Ground 1A alleges that the “quick-connect system” limitation is not enabled, Petitioner fails to apply to proper test for enablement. As recently explained in *Phison Electronics Corp. v. Vervain, LLC*, PGR2024-00047, Paper 9, *35-36 (March 17, 2025):

“To be enabling, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without ‘undue experimentation.’” *Genentech, Inc. v. Novo*

Nordisk, A/S, 108 F.3d 1361, 1365 (Fed. Cir. 1997) (quoting *In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993)). Determining the need for “undue experimentation” is not “a single, simple factual determination, but rather is a conclusion reached by weighing many” factors. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). Those factors (the *Wands* factors) include:

(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims.

Id. (citing *In re Forman*, 230 USPQ 546, 547 (BPAI 1986)).

The Federal Circuit did not “interpret *Amgen* to have disturbed [its] prior enablement case law, including *Wands* and its factors.” *Baxalta Inc. v. Genentech, Inc.*, 81 F.4th 1362, 1367 (Fed. Cir. 2023). The Office “continue[s] to use the *Wands* factors to ascertain whether the experimentation required to enable the full scope of the claimed invention is reasonable” because “Federal Circuit precedent applying the *Wands* factors prior to *Amgen* is still informative.” 89 Fed. Reg. 1,563, 1,565–66 (Jan. 10, 2024).

Petitioner fails to acknowledge, let alone address, the *Wands* factors, nor does Petitioner analyze the nature or amount of experimentation needed to make and use the full scope of the claimed invention. Thus, Petitioner’s argument is deficient because it altogether fails to explain how the “quick-connect system” limitation fails to satisfy § 112’s enablement requirement. *See Phison Electronics Corp.*, PGR2024-00047, Paper 9, *39-40 (finding that the petitioner failed to support its § 112 enablement argument because it confused written description and enablement requirements and failed to consider the *Wands* factors).

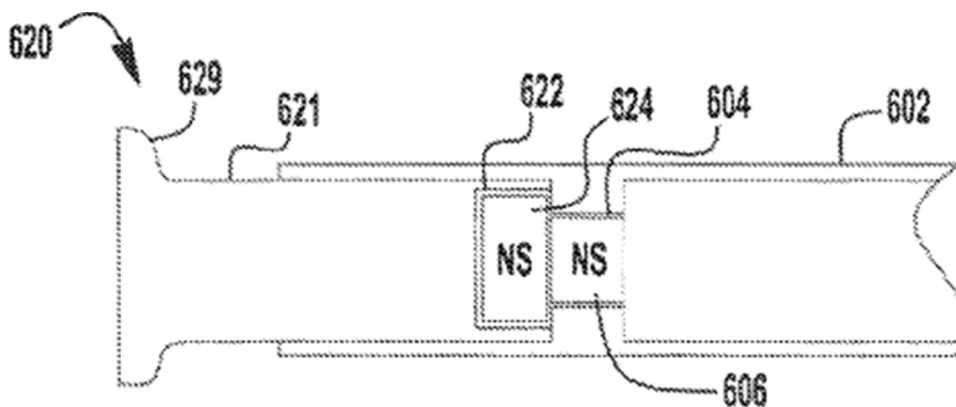
b) The “quick-connect system” limitation satisfies the written description requirement

If Petitioner’s Ground 1A is based on an alleged lack of written description, which it does not purport to address, Petitioner’s argument is still deficient. Notably, Petitioner exclusively relies on cases and PTAB decisions addressing the written description requirements in the context of the pharmaceutical arts, but the ’082 Patent is in the mechanical arts. *See* Pet. at 13 (alleging that a POSITA “would have had a bachelor’s degree in mechanical engineering, or a related field”). This distinction is critical because “the level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.” *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.*, 598 F. 3d 1336, 1351 (Fed. Cir.

2010); *see also Hologic, Inc. v. Smith & Nephew, Inc.*, 884 F.3d 1357, 1361 (Fed. Cir. 2018) (“We agree with the Board's finding that the field of this invention is a predictable art, such that a lower level of detail is required to satisfy the written description requirement than for unpredictable arts.”). In particular, the mechanical arts are predictable, such that “[a] single embodiment may provide broad enablement.” MPEP § 2164.03 (citing *In re Vickers*, 141 F.2d 522, 526-27, 61 USPQ 122, 127 (CCPA 1944)). This is a long held legal principle that Petitioner conveniently ignores. *See Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987) (“If an invention pertains to an art where the results are predictable, e.g., mechanical as opposed to chemical arts, a broad claim can be enabled by disclosure of a single embodiment ... and is not invalid for lack of enablement simply because it reads on another embodiment of the invention which is inadequately disclosed.”) (internal citations omitted).

By citing only cases and PTAB decisions involving the unpredictable chemical arts—indeed, the panel in *Forte Biosciences*, PGR2023-00014, Paper 45, *33, cited by Petitioner, described the field of that particular invention related to “IL-15/IL-15R inhibition” as being “complicated and unpredictable”—Petitioner attempts to foist upon the Patent Owner an entirely incorrect standard to judge written description support as to this limitation and the claims as a whole.

Nevertheless, the written description and accompanying figures reasonably convey, to a skilled artisan, a “quick-connect system” that “is configured to have a proximal end of the first massaging head inserted into or removed from the bore while the piston reciprocates the predetermined first stroke length at the first speed” as recited in claim 1 and the related limitations as recited in claim 18. Indeed, the specification explicitly describes and illustrates, in detail, one example embodiment of the quick-connect system, in which magnets assist in securing the massaging head to the bore in the piston:



FIGS. 6 and 6A illustrate an exemplary embodiment of a quick-connect system 600 for connecting a massaging head 620 to a piston 602. When providing a deep tissue massage using a massaging device, such as, for example, massaging device 100, it may be desirable to switch massaging heads to work on different muscles or different portions of muscles during the massage. The exemplary quick-connect system 600 allows a user to quickly switch massaging heads 620.

Moreover, the exemplary quick-connect system 600 may be used without turning off the massaging device 100.

Quick-connect system 600 includes a piston 602 that has a hollow-end bore 608 for receiving the shaft 621 of a massaging head 620. Located within the bore 608 of piston 602 is a cylindrical seat 604. Cylindrical seat 604 retains a magnet 606. Magnet 606 is illustrated with its north pole located flush with the seat and facing toward the opening in bore 608. Massaging head 620 includes a shaft 621 having a cylindrical pocket 622 at the distal end. Located within the cylindrical pocket 622 is a magnet 624. Magnet 624 is positioned so that its south pole is located at the distal end of shaft 621. Accordingly, when the shaft 621 of massaging head 620 is slid into opening in bore 608, the magnets 606 and 624 are attracted to one another and magnetically hold massaging head 620 firmly in place.

See Ex. 1001 at 6:57-7:3, Fig. 6; *see also id.* at 2:7-11, 3:35-36, 42-45, Figs. 1-3 (disclosing and describing an additional quick-connect system embodiment).

Petitioner contends that this disclosure “fails to provide sufficient written description to support the challenged claims’ broad functional language claiming any ‘quick connect system’ that ‘is configured to have a proximal end of the first massaging head inserted into or removed from the bore while the piston reciprocates the predetermined stroke length at the first speed,’ or that has ‘a proximal end of the first massaging head ... configured to be inserted into or removed from the bore while the piston reciprocates the predetermined stroke length at the first speed.” Pet. at

18-19. But—leaving aside Petitioner’s failure to address other disclosed embodiments of the “quick-connect system”—disclosing only one example embodiment of the recited “quick-connect system” is not *per se* deficient as Petitioner suggests, and such a position is wholly inconsistent with Federal Circuit precedent as explained above. Indeed, Petitioner merely attempts to limit the scope of the “quick-release connector,” as recited in independent claims, to an exemplary embodiment described in the ’082 Patent’s specification while arguing that failure to describe any other embodiment somehow runs afoul of § 112’s written description requirement. This approach would, taken to its (il)logical end, result in any patent claim being limited to the specific embodiments disclosed in the specification. *See Phillips v. AWH Corp.*, 415 F. 3d 1303, 1323 (Fed. Cir. 2005) (“In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. ... One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example of how to practice the invention in a particular case.”).

Further, Petitioner refers to “quick-connect system” limitation as “broad functional language” but then altogether ignores the limitations placed on the “quick-connect system” in the body of independent claims 1 and 18. Pet. at p. 18. In particular, the “quick-connect system” as claimed is limited to a particular

structure of a piston with a bore and a first massaging head with a proximal end to be inserted into or removed from the bore while the piston reciprocates, and the function is self-evident—to connect the massaging head and the piston.

Moreover, Petitioner ignores that a “quick-connect” system is a well-understood term of art in the mechanical arts featuring male and female components that can be attached and detached without the use of separate tools, which is modified in the context of claims 1 and 18 in that the quick-connect system is used in the field of percussive massagers and must be operable while the piston reciprocates. See https://en.wikipedia.org/wiki/Quick_connect_fitting (Wikipedia entry for “Quick connect fitting”) (accessed April 7, 2025). Indeed, a quick-connect system would be known to a POSITA to include a number of different mechanical configurations. See *Boston Scientific Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011) (Because specification is viewed from perspective of one of skill, a patentee may rely on information that is “well-known in the art” for purposes of meeting written description requirement); see also *Capon*, 418 F.3d at 1359 (“It is not necessary that every permutation within a generally operable invention be effective in order for an inventor to obtain a generic claim, provided that the effect is sufficiently demonstrated to characterize a generic invention.”).

Thus, even if Petitioner’s § 112 ground regarding the “quick-connect system” is considered, it is deficient.

2. Ground 1B: The “substantially cylindrical bore” Limitation

The written description and accompanying figures reasonably convey, to a skilled artisan, a “substantially cylindrical bore.” The specification reasonably conveys a piston having a bore and further reasonably conveys that the bore is a substantially cylindrical bore. The written description notes that the “[q]uick-connect system 600 includes a piston 602 that has a hollow-end bore 608 for receiving the shaft 621 of a massaging head 620. Located with the bore 608 of piston 602 is a cylindrical seat 604.” Ex. 1001 at 6:57-60. Indeed, the perspective view of the piston 230 in Figure 4 (below top) shows a circular opening at the distal end thereof, and the cross-sectional view of the piston 602 in Figure 6A (below bottom) shows a deep bore, which together with Figure 4 reasonably conveys to a POSITA that the bore in the piston is cylindrical, *i.e.*, a circle extended along a third dimension.

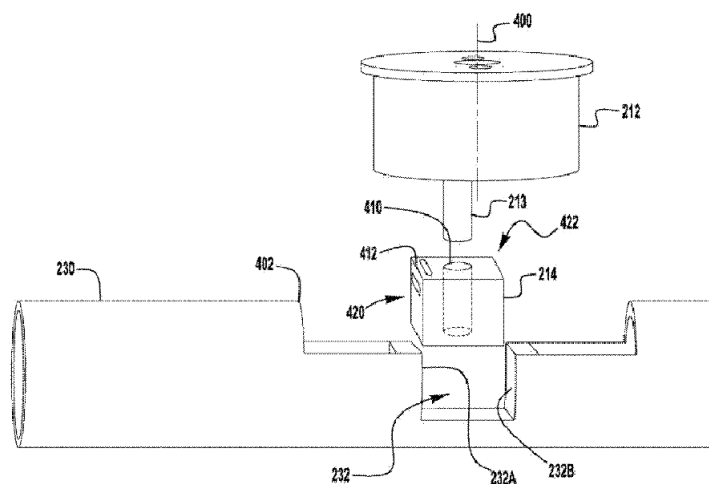


FIG. 4

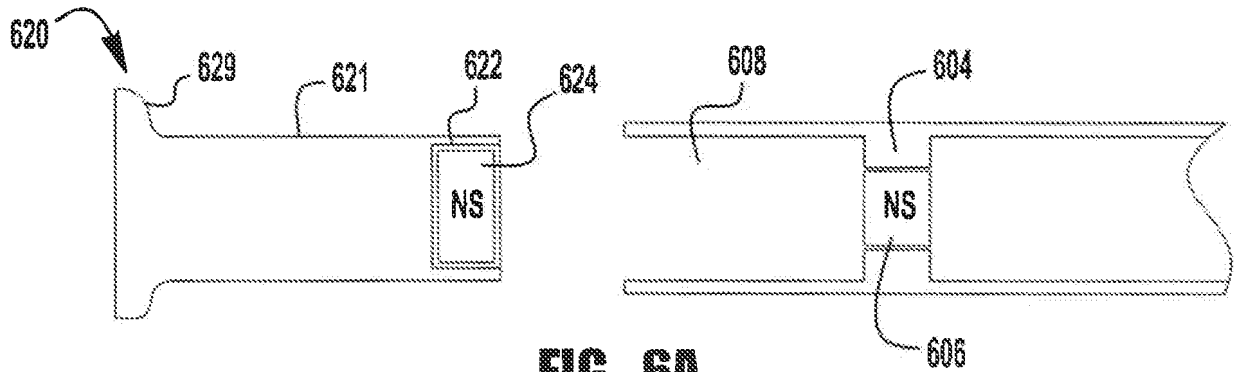


FIG. 6A

Petitioner further argues that the specification must disclose a “substantially cylindrical” bore. Pet. at p. 19. There is no such standard. As Petitioner admits, “[t]he term ‘substantial’ implies ‘approximate,’ rather than ‘perfect.’” *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1329 (Fed. Cir. 2006) (quoting *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 355 F.3d 1361, 1368 (Fed. Cir. 2004)).” Pet. at p. 20, n.5. Claim 13’s recitation of a “substantially cylindrical bore” merely allows for minor variations in a cylindrical shape and need not be mathematically defined. Indeed, Petitioner’s own arguments confirm that the bounds of a “substantially cylindrical bore” would be well understood by a POSITA as being able to receive the proximal end of the first massaging head without the need for alignment. Pet. at p. 19-20.

Much like Petitioner’s Ground 1A, Petitioner again attempts to fashion a new legal framework that would demand strict disclosure of each and every aspect of every claimed feature, with anything less falling outside the scope of the patent. Section 112 has never been interpreted so narrowly. Indeed, Petitioner did not cite

a *single* case or PTAB decision supporting its novel argument that the common patent drafting term “substantially” requires explicit, mathematically precise disclosure, and Federal Circuit precedent is to the contrary. *See Sonix Tech. v. Publications Intern.*, 844 F.3d 1370, (Fed. Cir. 2017) (“a patentee need not define his invention with mathematical precision”) (internal quotations and citations omitted); *Dynaenergetics Europe GmbH v. Qinetiq Ltd.*, PGR2023-00003, Paper 19, *32 (PTAB Apr. 11, 2024) (stating that “[p]etitioner’s non-enablement grounds seeks to foist upon Patent Owner an artificial and arbitrary standard of mathematical precision....”).

Again, Petitioner has not shown that “substantially cylindrical” is unsupported by the disclosure of the ’082 Patent.

3. Ground 1C: Claim 17

To streamline and expedite this proceeding, and to focus on the claims that are primarily at issue in the underlying district court litigation, Patent Owner has filed a statutory disclaimer with the USPTO disclaiming challenged claim 17 of the ’082 Patent. Ex. 2004. Pursuant to 37 C.F.R. § 42.207(e), “[n]o post-grant review will be instituted based on disclaimed claims.” Accordingly, Patent Owner respectfully submits that the Board should not institute any post-grant review based on disclaimed claim 17 of the ’082 Patent, and Patent Owner will not otherwise address disclaimed claim 17 in this Preliminary Response.

For the avoidance of doubt, Patent Owner is not making any admission as to the validity of disclaimed claim 17 or of any other claims. Thus, no adverse

inference shall result from the disclaimer, and the disclaimer shall have no effect on the non-disclaimed claims of the '082 Patent. *See Raytheon Technologies Corp. v. General Electric Company*, 993 F.3d 1374, 1379, n.4 (Fed. Cir. 2021) (internal citations and quotations omitted) (“Disclaimed claims are treated as if they never existed, ... and disclaimer does not legally constitute an admission that the subject of the disclaimer appears in the prior art.”). Further, Patent Owner is not seeking an adverse judgment against it as to disclaimed claim 17. Pursuant to 37 C.F.R. § 42.73(b), Patent Owner is not disclaiming the '082 Patent or any of the remaining non-disclaimed claims challenged in the Petition.

B. Ground 2: The “substantially cylindrical bore” Limitation Is Not Indefinite

A patent is indefinite only “if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901, 134 S.Ct. 2120, 189 L.Ed.2d 37 (2014); *see also* 35 U.S.C. § 112(b) (the specification must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.”). The indefiniteness standard “mandates clarity, while recognizing that absolute precision is unattainable.” *Nautilus*, 572 U.S. at 901. Words of degree like “substantially” are not “inherently indefinite,” but “the court must determine whether the patent provides some standard for measuring that degree.” *Biosig Instruments, Inc. v.*

Nautilus, Inc., 783 F.3d 1374, 1378 (Fed. Cir. 2015) (internal quotation marks omitted).

In *Ironburg Inventions Ltd. v. Valve Corp.*, 64 F.4th 1274, 1288 (Fed. Cir. 2023), the Federal Circuit held that the “substantially...” language italicized below did not render the limitation indefinite:

a first back control and a second back control, each back control being located on the back of the controller and each back control including an elongate member that *extends substantially the full distance between the top edge and the bottom edge* and is inherently resilient and flexible

The accused product – a handheld controller for a game console, is shown below:



The Federal Circuit agreed with the district court’s holding that the claim term was not indefinite based on the purpose of the claimed structure: “[w]ith respect to the rear controls, the word ‘substantially’ is reasonably precise, given that the purpose of the elongate shape is to allow ‘a user to engage the paddles with any of the middle, ring, or little finger.’” *Ironburg Inventions*, 64 F.4th at 1288.

Similarly, in *Grace Instrument Indus., LLC v. Chandler Instruments Co.*, 57 F.4th 1001, 1009 (Fed. Cir. 2023), the Federal Circuit concluded that the term “enlarged chamber” was not indefinite: “in the context of this patent, ‘enlarged chamber’ does not require that chamber to be larger than some baseline object; rather it must be large enough to accomplish a particular function.” As stated by the *Ironburg* court:

The indefiniteness challenge in *Grace* was unsuccessful because a person of ordinary skill in the art would know when a chamber is large enough to accomplish the function identified in the patent. Likewise, here, a person of ordinary skill in the art would know that an elongate member extends substantially the full distance between the top and bottom edge of a controller when the elongate member is long enough for different-sized hands to engage with the member using a middle, ring, or little finger.

Ironburg Inventions, 64 F.4th at 1288.

Likewise, with respect to the ’082 Patent, a person of ordinary skill in the art would know when the bore in the piston is substantially cylindrical enough, *i.e.*, sufficiently cylindrical, to accomplish the function identified in the claims themselves: receiving or allowing removal of the proximal end of the first massaging head while the piston reciprocates.¹⁰ In other words, the bore of the piston needs to

¹⁰ Similarly, in the parallel district court proceeding, Therabody asserts the following alternative proposed claim construction for “wherein the bore comprises a substantially cylindrical bore”: “the bore is sufficiently cylindrical such that it

be sufficiently cylindrical to enable the massaging head to be attached or removed while the massage device's piston is reciprocating.

Indeed, Petitioner's own retelling of the prosecution history of the parent '482 Patent in Ground 1B confirms that a POSITA would understand that the bore is substantially cylindrical when it can receive the proximal end of massaging head without alignment, which would be required for attachment while the piston is reciprocating. *See* Pet. at 19. Thus, the term "substantially cylindrical bore" is not indefinite.

C. Defects in the § 103 Grounds

1. Ground 3: Petitioner Fails to Establish that Claims 1 and 18 are Obvious Over Mabuchi and Colloca

At least the following recitations of independent claim 1 and the substantially similar recitations of independent claim 18 of the '082 Patent are either missing from, or not obvious in light of, the Mabuchi and Colloca in Ground 3. Thus, the Petition fails to meet its burden under Ground 3 and, therefore, also under Ground 4.

a) A POSITA Would Not Have Been Motivated To Modify Mabuchi in View of Colloca

Petitioner alleges that "[a] POSITA would have been motivated to combine Mabuchi and Colloca." Pet. at p. 34. A POSITA would not find the necessary

can receive the proximal end of the first massaging head without the need for rotational alignment." Ex. 1016 at pp. 8-9.

motivation to combine the teachings of Mabuchi and Colloca. *See InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1351-52 (Fed. Cir. 2014); *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012). “[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.” *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (emphasis in original) (citation omitted).

First, Petitioner argues that “[b]oth references describe percussive massage devices.” Pet. at p. 34. This is false. Mabuchi clearly and specifically distinguishes its “beauty treatment device” that “repeatedly pats a skin surface” from “[o]n the other hand, the conventional patting device which is intended mainly for the massage of the muscular [*i.e.*, muscle] tissues, not for beauty treatment of the skin.” Ex. 1005 at 1:6-58. According to Mabuchi’s introductory paragraphs, “the conventional patting device,” as opposed to its disclosed beauty treatment device, “belongs to the category of massager.” *See id.* at 1:26-28.

Colloca describes the very sort of “conventional patting device” described in Mabuchi as “belong[ing] to the category of massager” “which is intended mainly for the massage of muscular issue.” Indeed, Colloca is expressly described as being related to “the chiropractic art” and providing a device “to allow more bone movement” to fix or cure “[m]isalignment or other mis-adjus[t]ment or subluxation

of the spine and bones of the human body.” Ex. 1009 at ¶¶[0001]-[0003] and [0009]. If there was any doubt, Colloca exclusively claims a “chiropractic adjusting instrument.” Put simply, Mabuchi’s device is intended to mimic the “repeated[] tap[ping] or pat[ting] the skin surface with fingertips or palms” to improve beauty while Colloca is intended to move bones. Ex. 1005 at 1:14-20; Ex. 1009 at ¶¶[0002]-[0003] and [0009]. Thus, Mabuchi’s own disclosure confirms the unrelatedness of Mabuchi and Colloca, directly contravening the very basis for Petitioner’s argument for combining these references.

Second, Petitioner overlooks that Mabuchi and Colloca operate fundamentally differently, which results in their different padder assembly 6/impact head 70 mounting mechanisms. Mabuchi is specifically designed to include the space guide 5, which ensures that the padder assembly 6 contacts and separates from the skin surface each stroke, to repeatedly pat the skin surface. Ex. 1005 at 3:64-4:30, 5:33-38, FIGS. 2-4 (below) (showing the padder assembly 6 moving from a position retracted within the space guide 5 to be out of contact with the skin surface to protruding from the space guide 5 to contact the skin surface).

FIG. 2

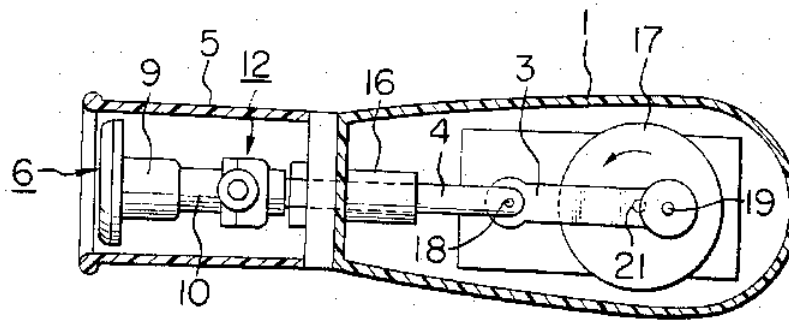


FIG. 3

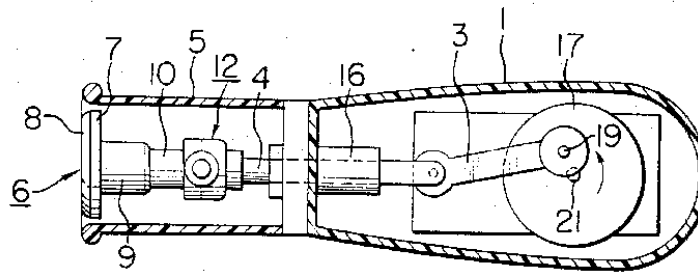
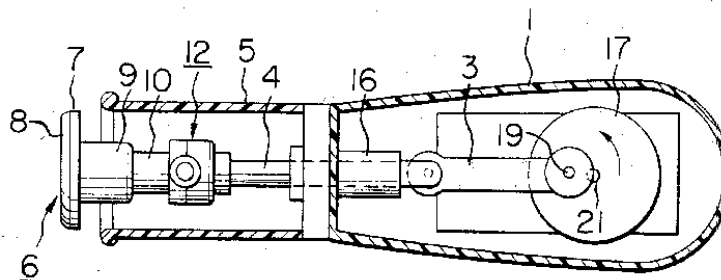


FIG. 4



To this end, Mabuchi specifically teaches against operating the device without the space guide 5, explaining that:

The space guide 5 plays a role of maintaining the distance between the device body 1 and the skin surface constant. In the absence of the space guide 5, the patting intensity of the pater assembly 6 would

become unstable due to the variability of the distance with service conditions. In other words, it would become difficult for the padder assembly 6 to pat the skin surface at a constant rate. In some cases, the absence of the space guide 5 would cause both the plate member 7 and the cushion member 8 to be kept in contact with the skin surface at all times to exert a pushing force onto the skin surface, rather than patting the skin.

Ex. 1005 at 5:39-50.

On the other hand, Colloca, consistent with its intended use as a chiropractic device rather than as a beauty treatment device, can operate *only* when the impact head 70 is maintained in contact with a body. Colloca explains that prior art devices had a “disadvantage ... [in] they do not have trigger system and pulse system including an interlock such that the device cannot be activated with an appropriate preload” and “do not have an interlock so that the device cannot be triggered unless the appropriate preload is attained.” Ex. 1009 at ¶¶[0006] and [0008]. To overcome this “disadvantage,” Colloca requires a preload be applied to the impact head 70 by placing it against a body before the device can operate, *i.e.*, before reciprocal motion can be initiated. *Id.* at ¶¶[0043], [0054], and [0055].

Thus, it is unsurprising that each and every embodiment of the padder connection assembly in Mabuchi includes some positive retainer, *e.g.*, the leaf spring 23 in the embodiment of FIGS. 8 and 9, the connecting pin 32 in the embodiment of FIGS. 10 to 12, the resilient connecting pawls 35 in the embodiment of FIGS. 13

and 14, the elliptical leaf spring 39 in the embodiment of FIGS. 15 and 16, the threaded connection in the embodiment of FIG. 17, and the magnets 43 and 44 in the embodiment of FIGS. 18 and 19, because the patten assembly 6 separates from the skin surface each stroke. On the other hand, Colloca merely describes an impact head 70 that includes an impact coupler 78 that “is typically a soft material such as an o-ring to form a press fit with the thrust nose piece 130,” which would be sufficient for Colloca because the device of Colloca includes a safety interlock that prevents reciprocal motion when the impact head 70 is not in contact with a body. Ex. 1009 at ¶¶[0055] and [0056]. That is to say, the impact head 70 in Colloca is held in place in the thrust nose piece 130 substantially by being held in contact with a body and would, due to its inventive interlock device, immediately shut off if removed from contact with the body.

With this understanding of the different operating principles of Mabuchi and Colloca, Petitioner’s bare argument that “Colloca complements Mabuchi by expressly teaching ‘a thrust nose piece 130’ including ‘a bore 139 adapted to the at least one impact head 70,’” rings hollow as the connection mechanism of Colloca is designed for a different operating environment and use profile than that of Mabuchi. Pet. at p. 35.

In view of these many structural and operational differences between Mabuchi and Colloca, Petitioner’s superficial recitation of the obviousness standard without

any articulated reasoning is legally deficient. *See* Pet. at 35 (“A POSITA would have been motivated to modify Mabuchi to have a bore in the piston’s distal end adapted to accept the shanks of interchangeable impact heads as taught by Colloca. ... A POSITA would have had a reasonable expectation of success in combining the teachings of Mabuchi and Colloca because they teach compatible systems.”). Indeed, merely arguing that similarity between references provides some motivation to combine them is legally insufficient. *See William Wesly Carnes, Sr., Inc. v. Seaboard Intern. Inc.*, IPR2019-00133, Paper 10, *17 (PTAB May 8, 2019) (“To the extent that Petitioner is arguing that these alleged similarities would have provided a POSITA with a reason to modify the mud-gas separators described in Erwin, Burnham ’113, Griffin, or Burnham ’927 to separate shale-liquid-gas mixtures, that argument is not persuasive. ... Petitioner’s conclusory statement that a POSITA would have used mud-gas separators for shale-gas separation does not constitute an articulated reasoning with rationale underpinning sufficient to support a motivation to modify the prior art teachings.”). Further, Petitioner’s repeated reference the feasibility of its proposed modification, *i.e.*, that “POSITA would have understood that their teachings *could be combined* with little to no change in their respective functions” and “Colloca’s bore for receiving the attachment head *could be* implemented on Mabuchi incorporating a bore to accept a massaging head shank,” rather than providing any evidence as to why a POSITA would have made such a

modification, is similarly insufficient. Pet. at p. 35; *InTouch Technologies, Inc. v. VGO Communications*, 751 F.3d 1327, 1351-52 (Fed. Cir. 2014) (“VGo’s expert also succumbed to hindsight bias in her obviousness analysis. Dr. Yanco’s testimony primarily consisted of conclusory references to her belief that one of ordinary skill in the art could combine these references, not that they would have been motivated to do so.”); *William Wesly Carnes, Sr., Inc.*, IPR2019-00133, Paper 10, *18 (“Furthermore, to the extent that Petitioner is asserting that a POSITA ‘could’ have combined the references to reach the claimed invention, this is also insufficient for obviousness.”).

Accordingly, because Petitioner has not provided any rational underpinning for its obviousness analysis, it Ground 3 is deficient.

b) Element 1[pre]: Mabuchi Is Not A Percussive Massager

Petitioner argues that “[t]o the extent the preamble is limiting, Mabuchi teaches or suggests Element 1[pre]” and goes on to describe how Mabuchi describes a “beauty treatment device.” Pet. at 36. As explained above, Mabuchi is not a percussive massager and specifically distinguishes its disclosed beauty treatment device from massagers. As Mabuchi explains, it is directed to a “beauty treatment device” having “a patten [that] repeatedly pats a skin surface,” which it explicitly contrasts with a “vibrator,” which “only presses and/or kneads the skin,” and a “conventional patting device,” which “belongs to the category of massager.” Ex. 1005 at 1:14-29. The “percussive massager” as recited in the Challenged Claims

is, by its own terminology, a “massager” and, thus, different from Mabuchi’s “beauty treatment device.”

That Petitioner is willing to ignore Mabuchi’s clear disclosure on this point is not only troubling but shades its entire obviousness analysis, which is *entirely* reliant on Petitioner’s incorrect presupposition that Mabuchi and Colloca describe the same class or type of device and are complimentary disclosures. *See, e.g.*, Pet. at pp. 34-35 (“Both references describe percussive massage devices.”), (“Both references are directed to solving similar technical problems known in the art at the time of the invention.”); (“Colloca complements Mabuchi....”); (“[T]hey teach compatible systems—namely, percussive massage devices....”); (“[B]ecause Mabuchi and Colloca provide percussive massage devices that operate in similar ways, a POSITA would have understood that their teachings could be combined....”).

**c) Element 1[b]: Petitioner Fails to Support Its
Combination of Mabuchi with Colloca**

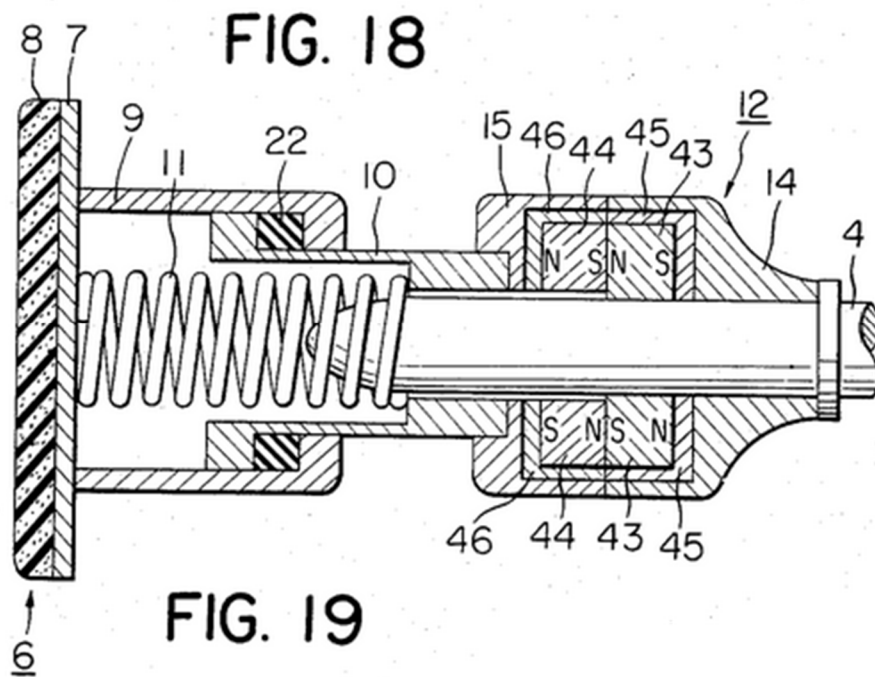
Petitioner asserts that “[a] POSITA would understand that it would have been a simple design choice to modify Mabuchi’s patten connection mechanism to have a bore in the distal end of actuator 4 and coupling 14 that, like Colloca’s integral preload switch plunger 150 and thrust nose piece 130, was adapted to accept the shanks of a patten.” Pet. at p. 38. The Petition is entirely devoid of any factual basis supporting Petitioner’s assertion that such a POSITA *would have* been motivated to modify Mabuchi in this manner. Instead, Petitioner merely provides a diagram showing how the combination *could have* been made. Pet. at p. 38 (“A diagram of

how a POSITA would understand that Mabuchi's patten connection mechanism would be modified based on the teachings of Colloca is shown below.”).

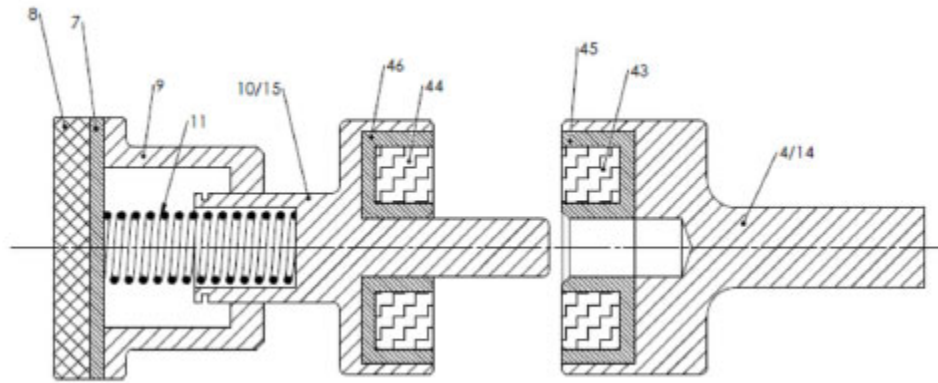
The Federal Circuit has rejected this very sort of conclusory “design choice” contention. *Cutsforth, Inc. v. MotivePower, Inc.*, 636 F. App'x 575, 578 (Fed. Cir. 2016) (nonprecedential) (“Merely stating that a particular placement of an element is a design choice does not make it obvious. The Board must offer a reason for why a person of ordinary skill in the art would have made the specific design choice to locate the spring on the mounting block. Here, it does not.”). The PTAB has similarly rejected such conclusory “design choice” arguments. *See, e.g., Cisco Systems, Inc. v. Video Solutions Pte. Ltd.*, IPR2024-00922, Paper 7, *19 (PTAB Nov. 12, 2024) (stating that “[p]etitioner’s design choice contentions are conclusory” and faulting the petitioner for not “explain[ing] persuasively why a person having ordinary skill in the art would have chosen the particular combination and modification set forth in the Petition”); *Voltage, LLC v. Shoals Technologies Group, LLC*, IPR2024-00876, Paper 9, *47 (PTAB Nov. 18, 2024) (finding that “Petitioner’s single sentence is insufficient to show any design incentive, predictability, or other reason why adoption of a 30 amp feeder cable is an improvement to some solar systems” and stating that the petitioner’s declarant “does not provide any reasoning as to why one of skill in the art would have selected a feeder cable rated for 30 amps as opposed to some other value”); *Vectair Systems Inc. v. Fresh Products, Inc.*, IPR2024-00824, Paper 9, *18 (PTAB Nov. 12, 2024) (stating that “unsupported statements that a combination of elements would have been merely a design choice is insufficient to establish obviousness” and “whether

a skilled artisan would have understood how to make a modification does not address the question of why a skilled artisan would have had reason to make the modification”). Here, Petitioner simply explains how a POSITA *could have* modified Mabuchi in view of Colloca to arrive at the claimed embodiment but fails to provide any explanation or evidence as to why a POSITA *would have* been motivated to modify Mabuchi in such a manner.

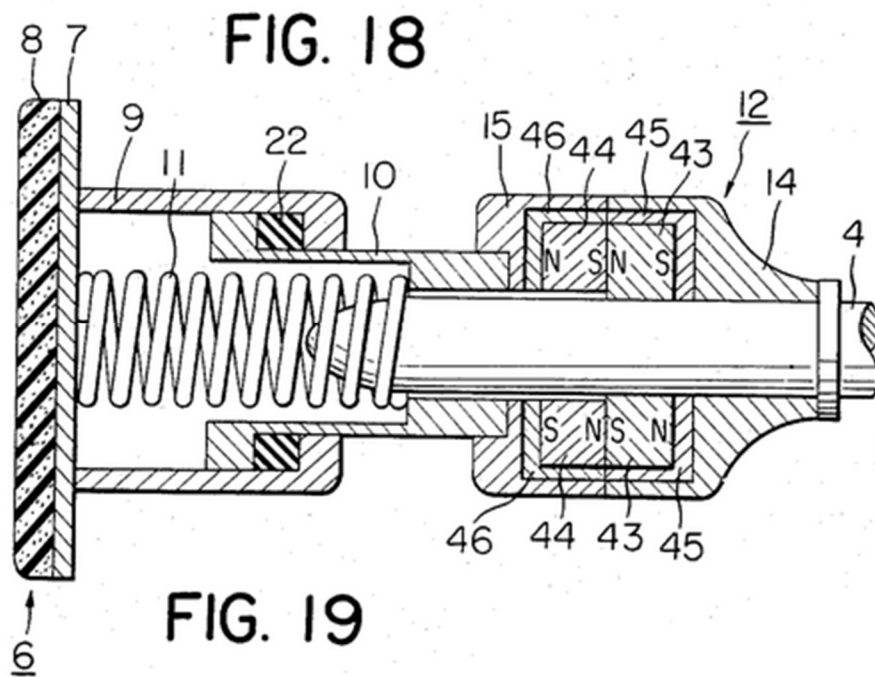
Moreover, Petitioner fails to address the negative impacts of its proposed modifications. Notably, Petitioner’s expert states that, with respect to original/unmodified Figures 18 and 19 of Mabuchi, “[t]he protruding head of actuator 4 engages a bore in patter slide tube 10 to stabilize an impact head 6 upon attachment to the percussive massager.” Ex. 1002 at ¶121. Figure 18 of Mabuchi is reproduced below showing the protruding head of actuator 4 that engages the bore in the patter slide tube 10, which according to Petitioner’s expert stabilizes the patter slide tube 10, especially because the patter body 9 slides along the patter slide body 10 during use. Ex. 1005 at 2:58-63 (“More specifically, as the actuator 4 is connected to the patter slide tube 10 via the patter connecting mechanism 12, the reciprocating motion of the actuator 4 is transmitted directly to the patter slide tube 10. The patter slide tube 10 is slidably fitted to the patter body 9.”) and 3:5-22 (describing how the patter slide tube 10 slides within the patter body 9).



Yet, in Petitioner's modified Figure 18 of Mabuchi (below), which is allegedly "[a] diagram of how a POSITA would understand that Mabuchi's pater connection mechanism would be modified based on the teachings of Colloca," the protruding head of the actuator 4 is reversed to face toward the actuator 4 (or toward an opening in another actuator 4), and the space previously occupied by the "protruding head of the actuator 4" in the bore in pater slide tube 10 that "stabilize[s] [the] impact head 6," according to Petitioner's expert, is left empty. Thus, in Petitioner's own modified Figure 18 of Mabuchi, the pater assembly 6 (referred to as the impact head 6 by Petitioner's expert) would lack the stabilization provided by the protruding head of the actuator 4 extending into the pater body 10 in Mabuchi's unmodified Figure 18 (above).



Even further, Mabuchi describes that “the actuator 4 is press-fitted to a coupling 14.” Ex. 1005 at 6:9. Indeed, Figure 18 of Mabuchi (below) shows the actuator 4 as a solid structure extending through a hole in the coupler 14, which is shown in cross-hatching. Petitioner’s proposed modification (above) would undesirably complicate the overall patten connection mechanism 12 by splitting the actuator 4 such that part of it protrudes from the patten assembly 6 while retaining another part of the actuator 4 for the coupling member 14 to attach thereto and to attach to the rod 3. Petitioner does not address or explain this modification to Mabuchi but appears to simply assert that the actuator 4 and the coupler 14 are (or can be) made integral as shown by use of “4/14” in Petitioner’s modified Figure 18 of Mabuchi and the use of continuous cross-hatching across both the coupler 14 and the part of the actuator 4.



The issues with Petitioner's combination do not end there. For example, by splitting the actuator 4 into two parts (or including *another* actuator 4 on the patter assembly 6), overall mass of the reciprocating assembly is increased. Specifically, Petitioner's modification to Mabuchi in view of Colloca would add substantial mass onto the patter assembly 6 by adding the actuator 4 onto the patter assembly 6. Mabuchi is directed to a beauty treatment device intended to merely pat the skin. Increasing the mass of the patter assembly 6 would increase the momentum of the patter assembly 6, increasing the impact force on the skin, which may be ideal for Colloca's chiropractic device meant to move bones but is contrary to Mabuchi's intended purpose to simply pat the skin. Moreover, moving additional mass onto the patter assembly 6 increases the risk that the patter assembly 6 unintentionally detaches from the actuator 4, again, not a consideration in Colloca's device which has a safety shutoff switch if the impact head 70 no longer contacts the body but

relevant to Mabuchi's device that intentionally moves out of contact with the skin each cycle and could be operated without contacting a body part.

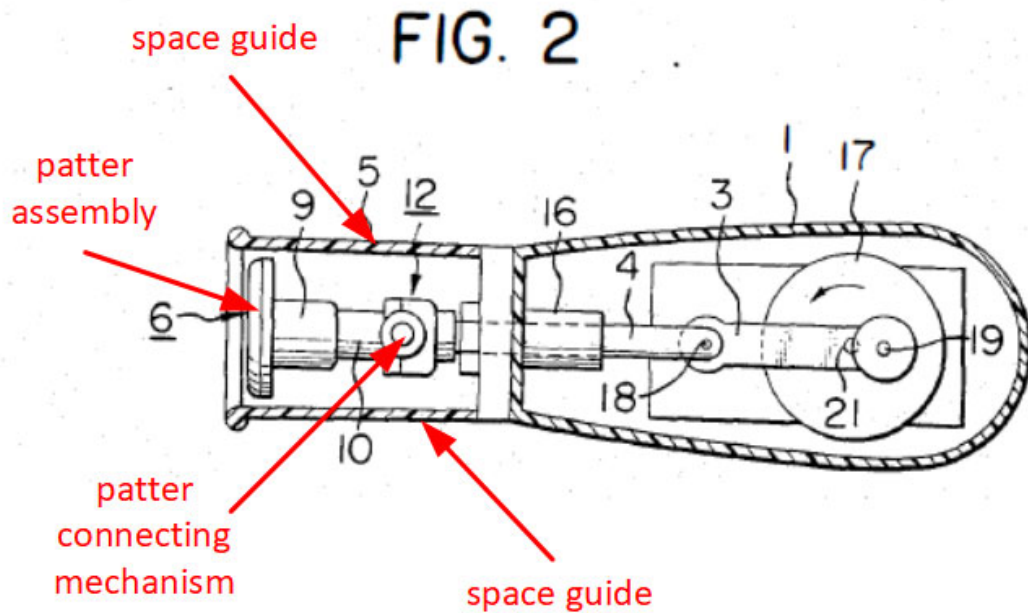
d) **Element 1[e]: Petitioner Fails to Establish that the Patter Assembly 6 Could Be “inserted into or removed from the bore while the piston reciprocates”**

Petitioner asserts that “Mabuchi teaches Element 1[e].” Pet. at 40. Not so. Although Mabuchi “has a patter connecting mechanism for facilitating the changing of the patter assembly 6,” Mabuchi does not disclose, teach, or even suggest that the patter assembly 6 could be changed (*i.e.*, inserted into or removed from¹¹) while the actuator 4 reciprocates. Ex. 1005 at 5:65-67. Rather than address the full scope of this claim limitation, Petitioner attempts to unilaterally limit this claim limitation to requiring only that the patter assembly 6 be connected to the actuator 4 “without positioning” or being that “the user does not need to carefully control the angular

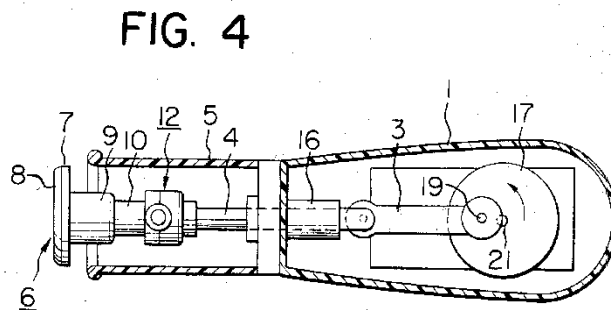
¹¹ Petitioner does not argue that Mabuchi, alone or in combination with Colloca, teaches that the patter assembly 6 could be “removed from” the bore as recited in claim 1. *See generally* Pet. at pp. 42-44. Petitioner only argues that “[a] person of ordinary skill in the art would understand that the Mabuchi patter connecting mechanism, as modified by the teachings of Colloca, is configured to secure the massage head while the piston reciprocates a predetermined stroke length at a first speed.” *Id.* at p. 42. Indeed, Mabuchi discloses that the patter assembly 6 is disconnected from the actuator 4 “[b]y turning 180° ... the magnet 43 implanted in the coupling 14 and the magnet 44 implanted in the flange 15 are repulsed with each other due to repulsion force caused by the same polarities, causing the patter assembly 6 to separate from the actuator 4.” Ex. 1005 at 8:20-25.

orientation or spatial positioning of the massage head in relation to head of the actuator during attachment.” Pet. at pp. 43-44. Although requiring a particular alignment between the padder assembly 6 and the actuator 4 *would* prevent attachment or detachment while the actuator 4 reciprocates, this claim limitation is not limited thereto, and the only support Petitioner cites for such a limiting interpretation is “the file history in the related ’482 Patent” addressing the unrelated prior art device in Miller (Ex. 1008). *Id.* at pp. 43-44.

Turning to Mabuchi, Petitioner overlooks or omits that Mabuchi requires that the “space guide 5” be present during use. Indeed, Mabuchi confirms that the space guide 5 is critical to the purported invention because it “plays a role of maintaining the distance between the device body 1 and the skin surface constant,” and “the absence of the space guide 5 would cause both the plate member 7 and the cushion member 8 to be kept in contact with the skin surface at all times to exert a pushing force onto the skin surface, rather than patting the skin.” Ex. 1005 at 5:38-51. As shown in Figure 2 of Mabuchi (reproduced below with annotations), the space guide 5 entirely encompasses the actuator 4 and the padder connecting mechanism 12 while only allowing the padder assembly 6 “to protrude slightly from the end face of the space guide.” Ex. 1005 at 1:4-42.



For example, Figure 4 of Mabuchi (below) shows the actuator 4 in “the extreme left-hand position” such that “the cushion member 8 of the pater assembly 6 protrud[es] from the open end face of the space guide” when “no skin surface exists at the open end face of the space guide 5.” Ex. 1005 at 4:18-25.



Separate from any alignment consideration, Petitioner fails to consider that replacing the pater assembly 6 would require removing the space guide 5 so that the pater assembly 6 could be grasped by a user, leaving Mabuchi in an unusable state until the space guide 5 was replaced. Indeed, attempting to replace the pater assembly 6 without removing the space guide 5 while the pater assembly 6

reciprocates would lead to a user pinching his or her fingers between the patter assembly 6 and the end of the space guide 5.

Petitioner cites the following text of Mabuchi to allege that “Mabuchi notes that the device can be operated before the patter assembly 6 is connected”:

As shown in FIG. 18, the magnet 43 implanted in the coupling 14 and the magnet 44 implanted in the flange 15 are connected to each other by attracting force caused by different polarities on the two magnets 43 and 44. In this state, or in the state where the actuator 4 is connected to the patter assembly 6, the patter assembly 6 is operated, as described referring to FIGS. 1 through 5.

Pet. at p. 43; Ex. 1005 at 8:11-18. This passage simply states that “the patter assembly 6 is operated,” not that “the device” is operated as Petitioner alleges. When considered as a whole, this passage merely confirms that the patter assembly 6 “is operated” in the state described in the immediately preceding sentence, that is, when the patter assembly 6 is magnetically connected to the coupler 14 on the actuator 4, or for short, simply “in this state.”

Because Petitioner has failed to allege how Mabuchi and Colloca disclose each and every limitation of claim 1 or why a POSITA would have combined Mabuchi and Colloca in the manner necessary to arrive at the embodiment of claim 1, Petitioner has not shown that it is more likely than not that claim 1 is unpatentable.

e) Independent Claim 18

In addressing claim 18, Petitioner refers back to its analysis of claim 1. *See* Pet. at pp. 50-51. Accordingly, Patent Owner reincorporates its arguments

regarding claim 1 herein. For the same reasons as with claim 1, Petitioner has failed to allege how Mabuchi and Colloca disclose each and every limitation of claim 18 or why a POSITA would have combined Mabuchi and Colloca in the manner necessary to arrive at the embodiment of claim 18. Thus, Petitioner has not shown that it is more likely than not that claim 18 is unpatentable.

2. Ground 5: Petitioner Fails to Establish that Claims 1 and 18 are Obvious Over Pivaroff and Clark

At least the following recitations of independent claim 1 and the substantially similar recitations of independent claim 18 of the '082 Patent are either missing from, or not obvious in light of, the Pivaroff and Clark in Ground 5. Thus, the Petition fails to meet its burden under Ground 5 and, therefore, also under Ground 6.

a) Clark is Non-Analogous Prior Art

A reference only qualifies as prior art for an obviousness determination when it is analogous the claimed invention. *In re Klein*, 647 F.3d 1343, 1348 (Fed. Cir. 2011). “Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.” *Id.* (quoting *In re Bigio*, 381 F.3d 1320, 1325 (Fed.Cir.2004)) (internal quotations omitted).

As to the first test, the '082 Patent is directed to percussive massagers and, according to Petitioner, “the claims of the '082 Patent are directed to a different aspect of the percussive massage device: a ‘quick-connect system.’” Pet. at p. 5.

Petitioner asserts that “Clark is directed ‘to tools adapted to magnetically hold and drive a multiplicity of different types of screws or the like.’” Pet. at p. 33 (quoting Ex. 1014 at 1:8-10). In other words, Clark is directed to a screwdriver.

Petitioner does not appear to contend that Clark is in the same field of endeavor as the '082 Patent. At most, Petitioner alleges that that “Clark complements Pivaroff by teaching a connecting means that uses magnetic connection....” Pet. at p. 57. Put simply, the '082 Patent, even if narrowly considered as being directed to a quick-connect system for a percussive massager, is in a wholly different field of endeavor than screwdrivers. *See Mito Red Light, Inc. v. Joovv, Inc.*, IPR2024-00621, Paper 7, *22 (PTAB Sept. 19, 2024) (“From their descriptions, we find that one of ordinary skill in the art would have viewed the '719 patent and Norwood as directed to light therapy and scent diffusers and nightlights, respectively. These are different fields of endeavor.”); *The Chamberlain Group, LLC v. Overhead Door Corp.*, IPR2022-00842, Paper 9, *34 (PTAB Oct. 25, 2022) (“These disparate technologies and goals raise a question as to whether Romine is from the same field of endeavor as that of the claimed subject matter. Petitioner does not address this question. Based on the evidence, Petitioner does not sufficiently show that Romine and the claimed subject matter are from the same field of endeavor.”).

The second test asks whether Clark is reasonably pertinent to the particular problem with which the inventor is involved. “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have

commended itself to an inventor's attention in considering his problem.” *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

Clark describes a prior “magnetic screw driver capable of use with a plurality of different screw driving bits” that “has been extensively used and has been highly successful in practice” but goes on to describe “a desire and a need for greater universality in the types of screws and the like that can be processed by a single tool. For instance, it is highly desirable to be able to drive screws having hexagonal or other multisided heads, or in other words, to provide a tool which will accommodate driving means in the nature of socket wrenches and the like.” Ex. 1014 at 1:11-28. To this end, Clark describes that “by selecting a magnet of proper length and adjusting its position in relation to the nonmagnetic and magnetic portions of the sleeve or casing in such manner that one half or more of the length of the magnet is encased in the non-magnetic portion of the casing, a new and useful result is accomplished in that a large number of different tool ends can be selectively employed, as hereinafter described, and the magnetic force imparted to the end of the tool for holding a screw or the like can be selected to accommodate the needs of any particular use.” *Id.* at 2:19-29.

The problem Clark seeks to solve—use of different shaped tool ends to magnetically retain a screw in a magnetic screwdriver—is not reasonably pertinent to the particular problem the inventor of the '082 Patent is involved. Again, accepting Petitioner’s characterization of the '082 Patent as being directed a quick-connect system for a percussive massager, a POSITA would not have viewed problems associated with retaining different tool ends in a screwdriver to drive

differently shaped screws as reasonably pertinent to the problem with which the inventor of the '082 Patent was involved, namely a connection system between a massage head and a percussive massager. *See The Chamberlain Group, LLC*, IPR2022-00842, Paper 9, *37 (“A person having ordinary skill in the art of automated door control systems would not reasonably have been expected to consult a reference (i.e., Romine) that deals with factory testing of wireless devices without physical connections in order to solve a problem of pairing without having to involve a user (i.e., the '120 patent).”).

Similar to the first test, Petitioner again fails to provide any evidence as to how Clark would have logically commended itself to the particular problem faced by the inventor of the '082 Patent.

Because Clark is in a different field than the '082 Patent and a POSITA would not have been expected to consult a reference describing magnetic screwdrivers when designing a percussive massager, Clark is non-analogous to the claimed invention and does not qualify as prior art for an obviousness determination.

**b) A POSITA Would Not Have Been Motivated to Modify
Pivaroff in View of Clark**

If Clark is considered, Petitioner fails to adequately supports its assertion that a POSITA would have modified Pivaroff in view of Clark to arrive at the claimed embodiments and that a POSITA would have a reasonable expectation of success. *Arctic Cat v. Bombardier Recreational Products*, 876 F. 3d 1350. 1360-61 (quoting *Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068-69 (Fed. Cir. 2012)) (“[W]here a party argues a skilled artisan would

have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so,’ ... [such that] if an ordinarily skilled artisan would not believe that a particular combination would have a reasonable expectation of ‘anticipated success,’ the combination may not be obvious.”). Instead, Petitioner engages in an improper results-oriented hindsight reconstruction of the claimed embodiments.

Pivaroff is directed to a “deep muscle stimulator device” that improves prior art devices by vibrating at higher speeds and providing increased force to “reach deep muscle tissues.” Ex. 1007 at 1:6-17. Pivaroff’s disclosure focuses on the hollow head 44, which includes a hollow body 46 filled with a loosely packed granular material 50, and a metallic cap 48. *Id.* at 2:55-60. The granular material 50 can include diamond, ruby, copper, bloodstone, garnet, malachite, and carbon. *Id.* at 2:63-65. The head 44 is threaded into the opening 40 by the threaded pin 42, and the electric motor operates between 2000 to 3600 RPM, which is transferred to the head 44 as reciprocal motion. *Id.* at 2:50-54, 3:44-48. Pivaroff asserts that this combination of novel head 44 housing loosely packed granular material 50 and the high-speed reciprocation provide the desired improvements over the prior art. *Id.* at 3:48-60.

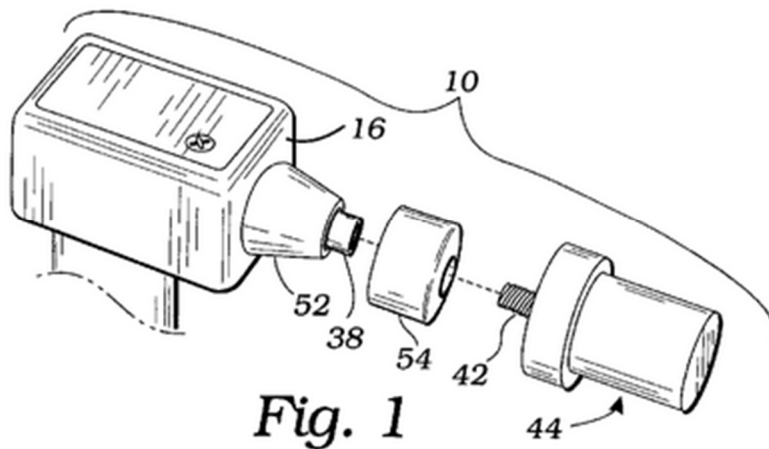


Fig. 1

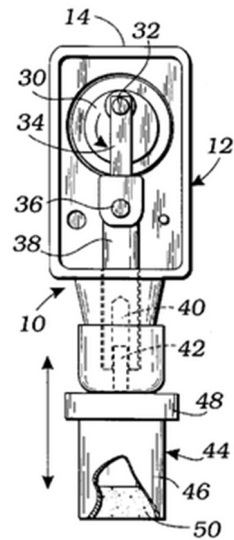


Fig. 3

Petitioner asserts that “Clark complements Pivaroff by teaching a connecting means that uses magnetic connection that can be ‘adapted to magnetically hold and drive a multiplicity of different types of screws or the like.’” Pet. at p. 57. Petitioner also asserts that “[a] POSITA would have been motivated to apply Clark’s teaching of a magnetic connection mechanism to Pivaroff’s teachings of connecting means 42 on the proximal end of hollow body 44 so that the changing of the hollow body can be easily accomplished.” *Id.* Finally, Petitioner asserts that “POSITA would have had a reasonable expectation of success in combining Clark’s teachings with Pivaroff because they teach compatible systems—namely, connecting means for interchangeable heads that can easily be inserted or removed” and that “Pivaroff and Clark’s connecting means operate in similar ways....” *Id.* at 58. These conclusions are addressed in turn.

First, Clark does not compliment Pivaroff and is, in fact, unrelated to Pivaroff. As explained above, Clark is directed to a magnetic screwdriver. In a magnetic

screwdriver, the magnetically attached component, *i.e.*, the screw, is: (1) subject to rotational rather than reciprocal motion; and (2) is intended to be detached from the screwdriver once screwed into the desired component. In a percussive massager, on the other hand, the attached head is: (1) subject to reciprocal motion; and (2) must stay attached to the device during use until intentionally removed. Petitioner does not explain how Clark “compliments” Pivaroff in light of these substantial differences.

Second, Petitioner’s only apparent motivation for modifying Pivaroff’s threaded connection between the head 44 and the device itself is so that “the changing of the hollow body can be easily accomplished.” Pet. at p. 57. Pivaroff, however, is concerned with adequately attaching a metallic head 44 filled with granular materials 50 to the rod 38 and then reciprocating the head 44 between 2000 to 3600 RPMs. Pivaroff does not mention any concern about the difficulty or hassle of attaching the head 44 to the rod 38. Similarly, Clark does not refer to the ease with which a screw is attached to the magnetic screwdriver. This motivation appears to be of Petitioner’s own creation.

Third, Petitioner fails to support its bare assertion of a reasonable expectation of success in its proposed combination. As explained above, Clark is directed to removably retaining a screw, which weighs little, while placing it against a workpiece and then rotating it. Pivaroff, on the other hand, is directed to reciprocating a head 44 housing granular material between 2000 and 3600 RPMs. Petitioner fails to explain how a POSITA would have reached the conclusion that a magnetic retainer designed to briefly hold a screw would be suitable to retain a heavy

head full of granular material as it reciprocates between 2000 and 3600 RPMs with any reasonable expectation of success. Petitioner merely asserts that “[Pivaroff and Clark] teach compatible systems,” but this is circular logic. Petitioner is the only party asserting that Pivaroff and Clark are compatible systems, yet Petitioner relies on its own logic to somehow assert that “[a] POSITA would have had a reasonable expectation of success in combining Clark’s teachings with Pivaroff.” Common sense dictates that the magnetic connection described in Clark would be entirely unsuitable to and unsuccessful in retaining the head 44 while it reciprocates between 2000 and 3600 RPMs in Pivaroff and would almost certainly result in the head 44 being unintentionally detached from Pivaroff, leading to injuries and property damage.

Perhaps more egregiously, Petitioner asserts that “a POSITA would have understood that [Pivaroff and Clark’s] teachings could be combined with little to no change in their respective functions.” Pet. at p. 58. Again, Pivaroff and Clark are directed to entirely different classes of devices—a percussive massager and a screwdriver—that operate entirely differently—high-speed reciprocation versus low speed rotation. Petitioner simply ignores all of the differences between Pivaroff and Clark and, thus, its arguments are deficient.

Because Petitioner has failed to allege why a POSITA would have combined Pivaroff and Clark in the manner necessary to arrive at the embodiment of claim 1 or that a POSITA would have had any reasonable expectation of success in its proposed combination, Petitioner has not shown that it is more likely than not that claim 1 is unpatentable.

a) Independent Claim 18

In addressing claim 18, Petitioner refers back to its analysis of claim 1. *See* Pet. at pp. 70-72. Accordingly, Patent Owner reincorporates its arguments regarding claim 1 herein. For the same reasons as with claim 1, Petitioner has failed to allege why a POSITA would have combined Pivaroff and Clark in the manner necessary to arrive at the embodiment of claim 18 or that a POSITA would have had any reasonable expectation of success in its proposed combination. Thus, Petitioner has not shown that it is more likely than not that claim 18 is unpatentable.

Accordingly, Petitioner has not met its burden to show that at least one claim is more likely than not unpatentable in Grounds 5 and 6.

VIII. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Board deny institution.

Dated: April 11, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing Patent Owner's Preliminary Response Pursuant to 37 C.F.R. §42.207 and supporting materials (Exhibits 2001-2004) have been served in their entirety today, April 11, 2025, by electronic mail to:

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Dated: April 11, 2025

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. §42.24(d), the undersigned hereby certifies that this paper contains 14,288 words, excluding the portions exempted under 37 C.F.R. §42.24(a)(1), according to the word count feature of the word-processing system used to prepare this paper.

The undersigned further certifies that this paper complies with the typeface requirements of 37 C.F.R. §42.6(a)(2)(ii) and formatting requirements of 37 C.F.R. §42.6(a)(2)(iii). This paper has been prepared in 14-point, Times New Roman proportional font with normal spacing.

Dated: April 11, 2025

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