

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

THE GILLETTE COMPANY LLC,
Petitioner,

v.

SPHERE USA, LLC,
Patent Owner.

PGR2022-00030
Patent 11,235,486 B2

Before HUBERT C. LORIN, HYUN J. JUNG and JAMES J. MAYBERRY,
Administrative Patent Judges.

MAYBERRY, *Administrative Patent Judge.*

TERMINATION
Vacating Institution and Dismissing Proceeding
35 U.S.C. § 324

I. INTRODUCTION

The Gillette Company LLC (“Petitioner”) filed a Petition requesting a post-grant review of claims 1–20 (the “Challenged Claims”) of U.S. Patent No. 11,235,486 B2 (Ex. 1001, the “’486 patent”). Paper 1, 1 (“Pet.” or “Petition”). Sphere USA, LLC (“Patent Owner”) is the assignee of the ’486 patent. Paper 5, 1.

For the reasons provided below, we conclude that the ’486 patent is not eligible for post-grant review. Accordingly, we vacate our Institution Decision and terminate the proceeding.

A. *Procedural History*

Upon review of the arguments and supporting evidence in the Petition and in Patent Owner’s Preliminary Response (Paper 7), we instituted a post-grant review of all claims and grounds asserted in the Petition. Paper 8 (“Institution Decision” or “Inst. Dec.”).

Patent Owner filed a Patent Owner Response to the Petition. Paper 14 (“PO Resp.”). Petitioner filed a Reply to the Patent Owner Response. Paper 16 (“Pet. Reply”). Patent Owner filed a Sur-reply to Petitioner’s Reply. Paper 18 (“PO Sur-reply”). An oral hearing for this proceeding and was held on June 27, 2023, and the transcript for that hearing is entered in the record. Paper 25 (“Tr.”).

At oral argument, Patent Owner discussed *Medtronic, Inc. v. Teleflex Innovations S.a.r.l.*, 69 F.4th 1341 (Fed. Cir. 2023), which was decided on June 5, 2023—after briefing had closed in this proceeding. To ensure that both parties have the opportunity to present arguments on how this case may affect the present proceeding, we authorized additional briefing on the case. Paper 26. Petitioner and Patent Owner filed opening briefs (Papers 27

(“Pet. Br.”), 28 (“PO Br.”)) and opposing briefs (Papers 29 (“PO Opp. Br.”), 30 (“Pet. Opp. Br.”)).

B. Real Parties in Interest

Petitioner and Patent Owner state that they are the real parties-in-interest. Pet. 4; Paper 5, 1.

C. Related Matters

Petitioner and Patent Owner state that there are no related matters. Pet. 4; Paper 5, 1.

D. The '486 Patent

The '486 patent, titled “Razor with Cutting Blade Rotatable About Multiple Axes,” issued February 1, 2022, from U.S. Application 15/849,118 (the “'118 application”), filed December 20, 2017. Ex. 1001, codes (54), (45), (21), (22). The face of the patent indicates that the '118 application is a continuation of U.S. Application 14/266,913 (the “'913 application” or “parent application”), filed on May 1, 2014, now U.S. Patent No. 9,889,572, which itself is a continuation of U.S. Application 13/030,752 (the “'752 application” or “grandparent application”), filed February 18, 2011, now U.S. Patent No. 8,720,072. *Id.* at code (63). The face of the '486 patent also indicates that the '118 application claims priority to provisional application 61/372,662, filed August 11, 2010. *Id.* at code (60).

The '486 patent is directed “to a razor with blade holder that is pivotable around three axes.” Ex. 1001, 1:21–22. We reproduce Figure 1, below. *Id.* at 3:8–10.

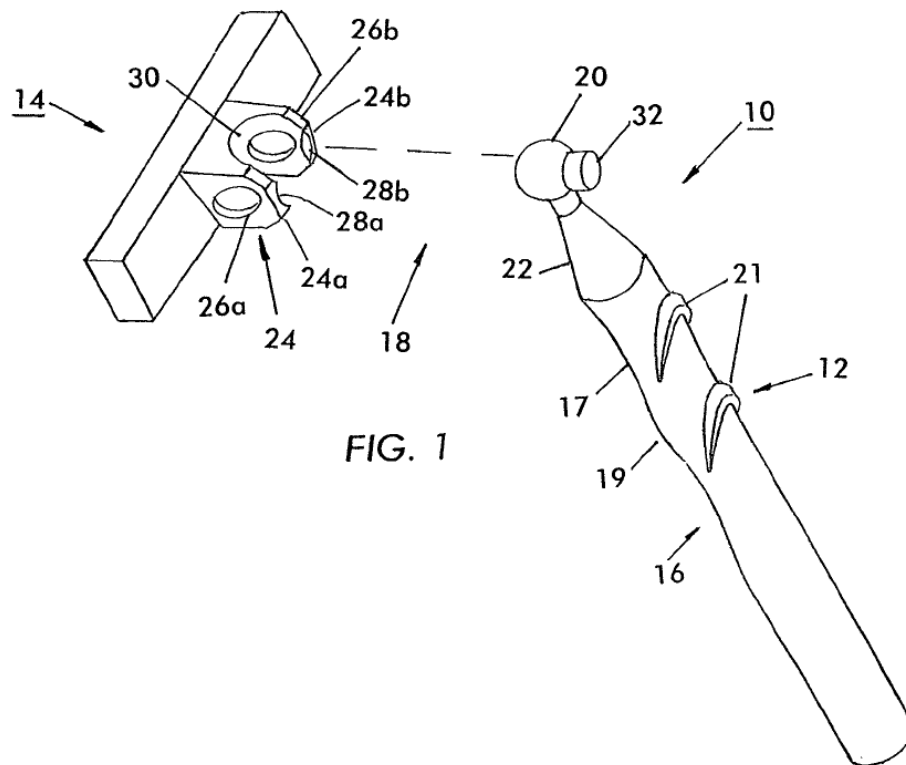


FIG. 1

Figure 1 depicts an exploded assembly view of a razor according to an exemplary embodiment, in which a blade cartridge is separated from the handle along the phantom line. Ex. 1001, 2:64–67; 3:8–12. Razor 10 includes handle 12 having gripping portion 16, and blade cartridge 14 pivotally connected to handle 12. *Id.* at 3:11–13. A first end of handle 12 includes pivot sphere 20, which is secured to the handle or is part of the handle. *Id.* at 3:32–33. In the embodiment of Figure 1, pivot sphere 20 is mounted to handle 12 at the end of arm 22. *Id.* at 3:51–52. “One manner of mounting the arm 22 may be substantially perpendicular to the axis of the handle 12, approximating a ‘T’-shape between the handle 12 and the arm 22.” *Id.* at 3:65–67. “Other configurations, e.g., ‘C’, ‘J’, ‘L’, ‘Y’-shaped combinations of handle 12 and arm 22, are clearly conceivable within the scope of the instant disclosure.” *Id.* at 4:1–3.

Blade cartridge 14 includes clevis 24 for pivotably securing the blade cartridge to pivot sphere 20. *Id.* at 4:4–5. Clevis 24 has two opposed legs 24a, 24b, each having a respective hole 26a, 26b, which are depicted in Figure 1 as through holes. *Id.* at 4:6–8. Holes 26a, 26b are sized and spaced such that when clevis 24 is connected to pivot sphere 20, it is retained thereon so that cartridge 14 holds its orientation with respect to handle 12 at rest, yet pivots freely under any applied pressure. *Id.* at 4:10–20. Clevis 24 includes one or more relief portions 28a, 28b that are generally spherical sections, and guide and ease the interface between pivot sphere 20 and clevis 24 upon assembly. *Id.* at 4:48–54.

In connection with this, making the interface between the pivot sphere 20 and the clevis 24 easy and reliable makes it possible to allow the user to exchange and replace the blade cartridge 14 at that interface in the ordinary course of use. This eliminates the need for an additional point of separation to achieve a blade change, thereby simplifying the construction of the blade cartridge 14. However, this does not exclude an additional point of separation, pivoting and/or articulation in connection with blade cartridge 14 described in the present disclosure.

Id. at 4:54–63.

Although blade cartridge 14 freely moves around three axes of the handle, the '486 patent discloses that it may be desirable to limit the range of motion of blade cartridge 14 to avoid extreme orientations by providing stop 32. *Id.* at 5:4–11. Stop 32 may be formed integrally with pivot sphere 20, or as a separate structure. *Id.* at 5:14–16. The '486 patent explains that stop 32 largely inhibits the lateral rotation of blade cartridge 14, while also enabling blade cartridge 14 to rotate freely about its transverse axis, to “lift its head.” *Id.* at 5:30–32.

E. Challenged Claims

Petitioner challenges the patentability of claims 1–20 of the ’486 patent. Pet. 1, 6. Claims 1, 10, and 16 are independent. Ex. 1001, 5:60–7:23. Independent claim 1 is illustrative, and reproduced below.

1. A personal grooming apparatus, comprising:

a handle having a gripping portion and an attachment portion, the attachment portion including a pivot member having an at least partially spheroid portion; and

a cartridge supporting at least one cutting blade;

wherein rotation of the cartridge is enabled by retention of the pivot member between spaced-apart ends of two opposed legs, the pivot member of the attachment portion pivotably held between the spaced-apart ends of the two opposed legs; and

a stop extending outward from the at least partially spheroid portion of the pivot member and configured to limit rotation of the cartridge when the cartridge is mounted on the attachment portion;

wherein the stop is configured to limit rotation of the cartridge by interacting with a relief portion of at least one of the two opposed legs.

Id. at 5:60–6:9. Independent claim 10 differs from claim 1 in that it is directed to the razor handle, and recites “the pivot member capable of removably attaching a cartridge supporting at least one cutting blade.” *Id.* at 6:36–49. Independent claim 16 differs from claim 1 in that it recites “the attachment portion supporting a pivot member providing a removable attachment to the cartridge.” *Id.* at 6:66–7:13.

F. Asserted Grounds of Unpatentability

Petitioner asserts that the Challenged Claims are unpatentable on the following six grounds (Pet. 7):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 2, 4–16, 18–20	112	Written description
1, 2, 4–16, 18–20	112	Enablement
1, 2, 4–16, 18–20	102	Bucco ¹
1–3, 5–11, 14–17, 19, 20	102	Otten ²
4, 12, 13, 18	103	Otten, Metcalf, ³ Gray ⁴
5, 14, 19	103	Otten

In addition to other evidence, Petitioner relies on declaration testimony of Mr. Evan Pennell (Ex. 1002) in support of these grounds. In addition to other evidence, Patent Owner relies on declaration testimony of Dr. Glenn E. Vallee (Exs. 2009, 2018).

The following subsections provide a brief description of the asserted prior art references.

1. Bucco

Bucco is titled “Razor with Three-Axis Multi-Position Capability,” published June 16, 2011, from the ’752 application, and is the grandparent of the ’486 patent. Ex. 1003, codes (54), (43), (21). According to Patent Owner, “[t]he content of Bucco and the ’486 Patent contain the same specification and drawings, except for the title and the priority claim.” PO Resp. 2 (citing Ex. 1003; Ex. 2001, 159, 169–176). Petitioner agrees that “[t]he ’486 patent shares the same disclosure as Bucco.” Pet. 58.

2. Otten

Otten is titled “Wet Shaving System.” Ex. 1005, code (54). Otten relates to “a safety razor system comprising a handle and a replaceable blade

¹ US Pub. 2011/0138637 A1, published June 16, 2011 (Ex. 1003, “Bucco”).

² DE 20 2006 011 254 U1, published January 11, 2007 (Ex. 1004). We refer to the certified English translation (Ex. 1005, “Otten”).

³ US 5,890,296, issued April 6, 1999 (Ex. 1006, “Metcalf”).

⁴ US D444,267 S, issued June 26, 2001 (Ex. 1007, “Gray”).

block.” *Id.* ¶ 1. Otten discloses that the blade block is pivotally mounted “in order to better follow the contours of the skin during shaving.” *Id.* ¶ 2. We reproduce Otten’s Figure 2, below.

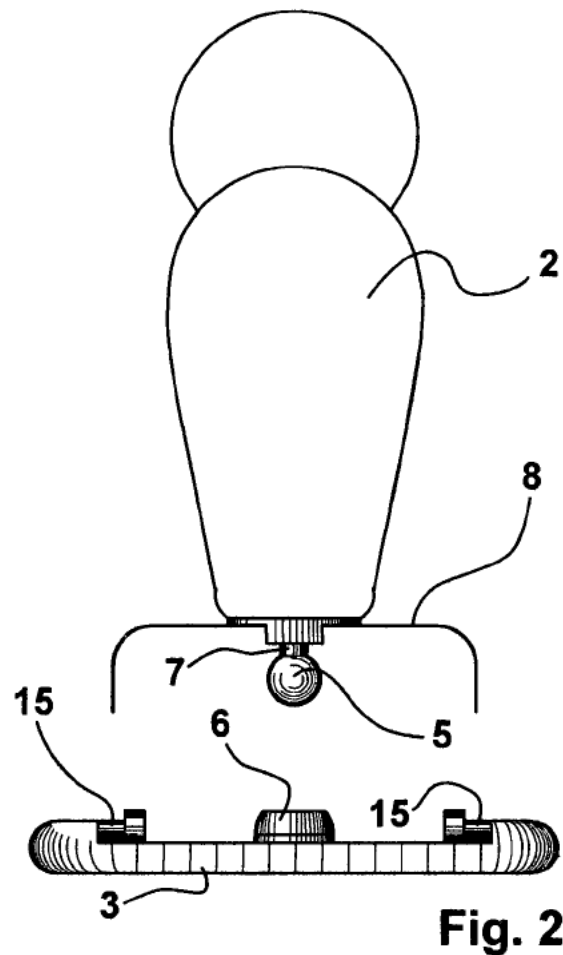


Figure 2 depicts a front view of a safety shaving system in an unassembled state. Ex. 1005 ¶ 6. Otten’s shaving apparatus includes handle 2 and blade block 3, which are connected to one another by a ball joint having joint ball 5, which is part of handle 2, and joint socket 6, which is part of blade block 3. *Id.* ¶ 12. As depicted in Figure 2, joint ball 5 is connected to the handle 2 by cylindrical connecting element 7. A more detailed view of blade block 3 is depicted in Figure 4, reproduced below.

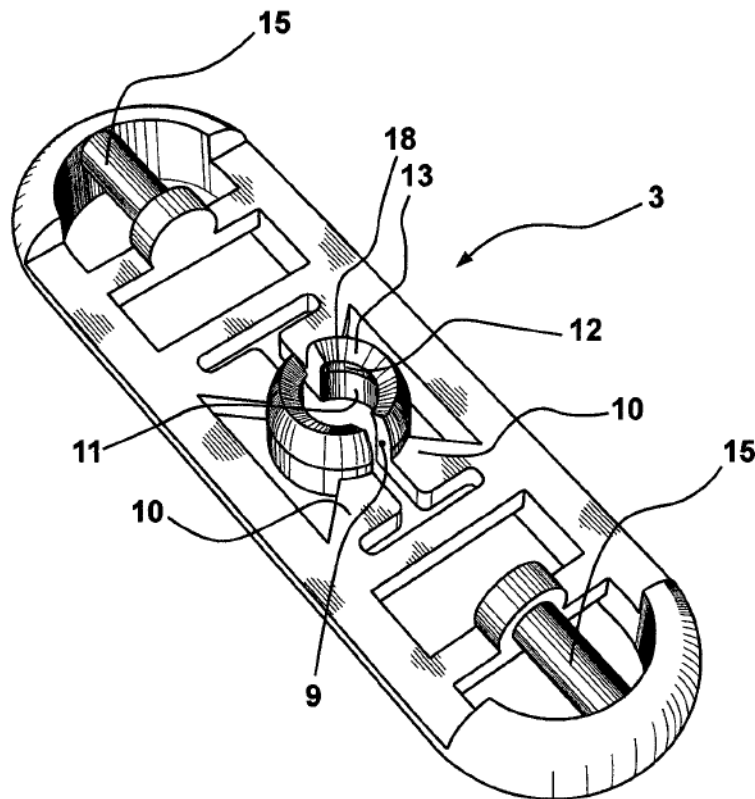


Fig. 4

Figure 4 is a perspective view of the blade block from above. Ex. 1005 ¶ 8. As depicted in Figure 4, the wall of joint socket 6 has two slots 9 that divide the joint socket into two parts which are each flexibly connected to blade block 3 by two arms 10. *Id.* ¶ 12. The inner wall of joint socket 6 has cylindrical lower part 11, and spherically shaped upper part 12, which has a diameter slightly larger than that of the joint ball. *Id.* Otten explains that assembly of the shaving apparatus includes pressing joint ball 5 of the handle into funnel-shaped part 13 of joint socket 6, which causes the two halves of joint socket 6 to diverge. *Id.* ¶ 14. After joint ball 5 passes upper opening 18 of the joint socket, the two halves of joint socket 6 spring back and enclose the joint ball. *Id.*

3. Metcalf

Metcalf is titled “Razor Handle,” and is directed to “shaving razors having handles and replaceable cartridges.” Ex. 1006, code (54), 1:9–10. Relevant to Petitioner’s unpatentability contentions, Metcalf discloses features of the handle depicted, for example, in Figure 3, reproduced below.

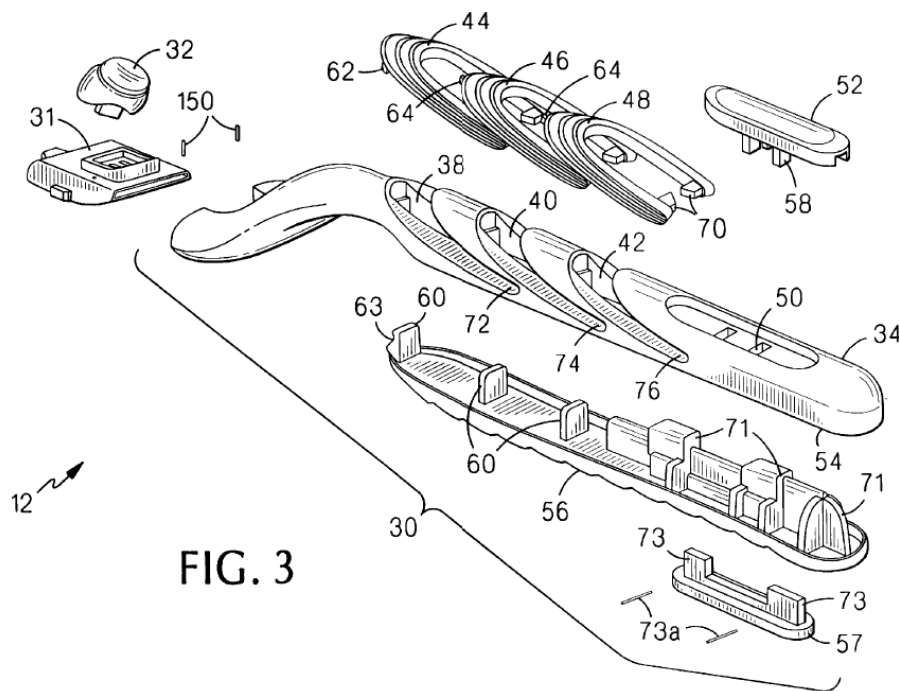


Figure 3 depicts an exploded view of the components of the handle. *Id.* at 3:42–43. Metcalf discloses that handle 12 is part of shaving razor 10 that also includes replaceable shaving cartridge 14. *Id.* at 4:9–10. Handle 12 includes elongated hand gripping structure 30 that connects to cartridge 14 via connecting subassembly 31 and button 32. *Id.* at 4:30–33. Elongated hand gripping structure 30 has metal frame 34, which includes upper, crescent-shaped gripping pads 44, 46, 48 and lower gripping pad 56. *Id.* at 4:33–44. The upper and lower gripping pads provide a hand-gripping

structure that is “made of an elastomeric plastic outer gripping layer (e.g., thermoplastic elastomer) and a nonelastomeric plastic support layer (e.g., of polypropylene or acrylonitrile butadiene styrene) thereunder made by two-color molding.” *Id.* at 4:46–51.

4. *Gray*

Gray is titled “Razor Handle,” and relates to the “ornamental design for a razor handle.” Ex. 1007, codes (54), (57). Figures 4 and 8 of Gray are reproduced below.

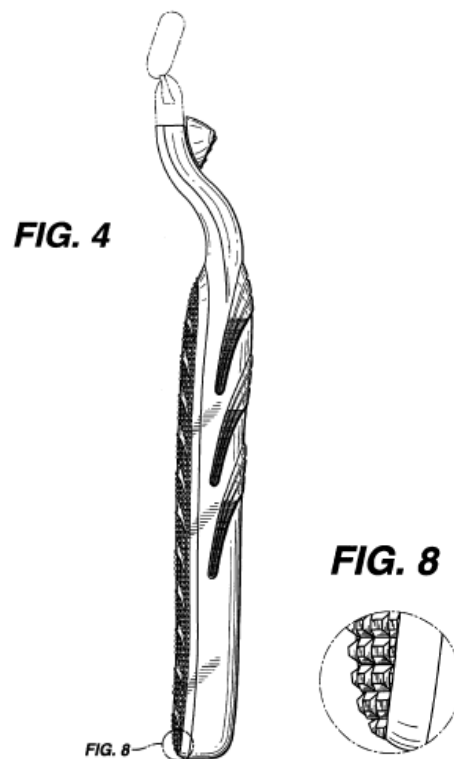


Figure 4 is a left side elevational view of Gray’s design for a razor handle and Figure 8 is a side view of the portion of the design identified in Figure 4 shown separately and on an enlarged scale for clarity of illustration. Ex. 1007, 1.

II. POST-GRANT REVIEW ELIGIBILITY

As a threshold issue, we must determine if the '486 patent is eligible for post-grant review. The post-grant review provisions of the America Invents Act ("AIA") apply to a patent that contains a claim with an effective filing date on or after March 16, 2013. *See* AIA, Pub. L. No. 112-29, 125 Stat. 284 (2011), §§ 3(n)(1), 6(f)(2)(A). The statute defines the "effective filing date" as

(A) if subparagraph (B) does not apply, the actual filing date of the patent or the application for the patent containing a claim to the invention; or

(B) the filing date of the earliest application for which the patent [] is entitled, as to such invention, to a right of priority under section 119, 365(a), 365(b), 386(a), or 386(b) or to the benefit of an earlier filing date under section 120, 121, 365(c), or 386(c).

35 U.S.C. § 100(i)(1).

Determining whether a patent is subject to the first-inventor-to-file provisions of the AIA, and therefore eligible for post-grant review, is straightforward when the patentee filed the application from which the patent issued on or after March 16, 2013, without any priority claim to an application filed prior to March 16, 2013. Here, however, the application that matured into the '486 patent makes a priority claim to an application filed February 18, 2011, the grandparent application. Ex. 1001, code (63). In addition, the '486 patent claims priority to a provisional application filed on August 11, 2010. *Id.* at code (60). Accordingly, the effective filing date of the '486 patent may be as early as August 11, 2010, which brings the eligibility for post-grant review into question.⁵

⁵ We need not address whether the claims of the '486 patent have written description support in, and are enabled by, the provisional application filed

Petitioner, as the proponent of the Petition, has the burden to demonstrate that the '486 patent is eligible for post-grant review. *See* PO Resp. 14 (citing *VMware, Inc. v. Cirba Inc.*, PGR2021-00098, Paper 38, 28 (PTAB Dec. 7, 2022)). In our Institution Decision, we preliminarily found, on the incomplete record, that the grandparent application did not provide written description support for the complete scope of the claimed invention '486 patent, and, as a result, concluded that the '486 patent was eligible for post-grant review. Inst. Dec. 29–30. We look anew at this issue on the complete trial record.⁶

A. Written Description Support for Claims 1, 2, 4–16, and 18–20 in the Grandparent Application

Petitioner asserts that the '486 patent's grandparent application does not provide adequate written description support for claims 1, 2, 4–16, and 18–20, and that these claims are entitled to an effective filing date of no earlier than December 20, 2017, the filing date of the '118 application that issued as the '486 patent. Pet. 29. And, because at least one claim of the

on August 11, 2010. If the grandparent application provides adequate written description support for and enables all of the claims of the '486 patent, then the '486 patent is not eligible for a post-grant review. If the grandparent application does not provide adequate written description support for any claim of the '486 patent, or does not enable the claims, then the provisional application could not cure the inadequacy, even if the provisional application provided adequate disclosure. In that scenario, the grandparent application would have broken the chain of disclosure.

⁶ As a further requirement for eligibility, “[a] petition for a post-grant review may only be filed not later than the date that is 9 months after the date of the grant of the patent.” 35 U.S.C. § 321(c). The '486 patent issued February 1, 2022, and the Petition was accorded a filing date of March 24, 2022, less than two months after the grant of the '486 patent. Ex. 1001, code (45); Paper 4, 1. Accordingly, Petitioner timely filed the Petition.

'486 patent has an effective filing date after March 16, 2013, Petitioner contends that the '486 patent is eligible for post-grant review. *Id.* at 6.

The written description inquiry is a question of fact, is context-specific, and must be determined on a case-by-case basis. *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). The test for sufficiency of support is whether the disclosure of the application relied upon “reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). “One shows that one is ‘in possession’ of *the invention* by describing *the invention*, with all its claimed limitations.” *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). Of course, in some instances, a patentee can rely on information that is well known in the art to satisfy the written description requirement. *Ariad Pharm.*, 598 F.3d at 1351 (“[T]he 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.”). Also, “drawings alone *may* be sufficient to provide the ‘written description of the invention’ required by § 112.” *Vas-Cath Inc.*, 935 F.2d at 1564. Still, “the test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed.” *Ariad Pharms.*, 598 F.3d at 1351.

To assess the priority claim of the '486 patent, we must first construe the relevant claim terms. *See X2Y Attenuators, LLC v. Int'l Trade Comm'n*,

757 F.3d 1358, 1365 (Fed. Cir. 2014) (“Where the claims have not been properly construed, the full scope of the claim is unknown, thereby rendering baseless any determination of written support in an earlier patent.”). Once we construe the relevant claim terms (and determine the relevant level of ordinary skill), we must next determine if the grandparent application disclosure “describ[es] *the invention*, with all its claimed limitations,” *Lockwood*, 107 F.3d at 1572, to show “possession of the claimed subject matter as of the filing date,” *Ariad Pharm.*, 598 F.3d at 1351.

1. Level of Ordinary Skill in the Art

The level of skill in the art is “a prism or lens” through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). Petitioner contends a person of ordinary skill in the art “as of the grandparent application’s filing date (February 18, 2011), through the filing date of the ’486 patent claims (December 20, 2017), possessed at least an undergraduate degree in mechanical engineering and about two years of industry experience, or equivalent experience.” Pet. 21–22 (referencing Ex. 1002 ¶ 51). Petitioner asserts that the relevant field is “razors and personal grooming devices.” *Id.* at 21 (referencing Ex. 1002 ¶ 51).

Patent Owner offers a similar definition and states that “a person of ordinary skill in the art (‘POSA’) in 2010–2011 would have a bachelor’s degree in mechanical engineering, or its equivalent, with approximately two years of design experience in the field of consumer products.” PO Resp. 2–3 (citing Ex. 2009 ¶ 31). As such, Patent Owner’s definition differs from

Petitioner's definition in what constitutes the relevant field of the '486 patent.

Based on our review of the complete trial record, we adopt Petitioner's characterization of the level of ordinary skill in the art. We find that Petitioner's definition is more consistent with the prior art of record, and the skill reflected in the Specification of the '486 patent, based on our review of the record. Specifically, we find that the field of "consumer products," as proposed by Patent Owner, is too broad, based on our review of the complete record before us, including the prior art of record, which is directed to razors and personal grooming devices. *See* Exs. 1003; 1005–1007; 1010; 1011; 2003–2007; 2010–2015; *cf.* Ex. 1002 ¶ 51 (identifying the field of art as razors and personal grooming devices, citing Ex. 1001).

We give little weight to Dr. Vallee's testimony directed to the level of ordinary skill, as it is conclusory. *See* Ex. 2018 ¶¶ 35–37 (providing factors to consider in determining the level of ordinary skill, but not expressly identifying how the factors were used to support his opinion). Similarly, Mr. Pennell's testimony directed to the level of ordinary skill is not entitled to significant weight. Ex. 1002 ¶ 51. Although he does identify the field of the invention, citing to the challenged patent, he does not provide any further basis for his testimony. *Id.* Still, as we indicate above, our review of the complete trial record, including the challenged patent and the cited references, supports Petitioner's characterization of the level of ordinary skill.

We note that our findings and conclusions in this Decision would not change if we applied Patent Owner's definition of the level of ordinary skill.

2. *Claim Construction*

In post-grant reviews, we interpret a claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.200(b) (2022). Under this standard, we construe the claim “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*

Petitioner provides an express construction for the term “holes,” which appears in claim 7. Pet. 28–29. Patent Owner provides express constructions for the term “holes,” and the term “legs.” PO Resp. 12–14. We determine that we need not construe these terms to resolve the parties’ disputes. *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

The parties also offer constructions for the terms in each of the independent claims reciting the relationship between the pivot member and two opposed legs.⁷ See Pet. 24–28; PO Resp. 7–12. We addressed these terms in our Institution Decision. See Inst. Dec. 16–17.

⁷ Claim 1 includes the recitation “the pivot member of the attachment portion pivotably held between the spaced-apart ends of the two opposed legs.” Ex. 1001, 5:67–6:2. Claim 10 includes the recitation “wherein the pivot member includes an at least partially spheroid portion configured to be held between spaced-apart ends of two opposed legs.” *Id.* at 6:41–43. Claim 16 similarly recites “wherein the pivot member includes an at least partially spheroid portion that is configured to be held between spaced-apart ends of two opposed legs.” *Id.* at 7:5–7.

Petitioner proposes that we construe the pivot member placement terms to mean “that the handle can include ***not only*** the pivot member ***but also*** the two opposed legs.” Pet. 28; *see also id.* at 24–28 (providing Petitioner’s contentions with respect to this construction). That is, Petitioner contends that the terms are broad enough to encompass structures where the two opposed legs are not on the cartridge. *See id.* at 24–28. We preliminarily determined, in our Institution Decision, that these terms “encompass embodiments beyond the embodiment illustrated in Figure 1 of the ’486 patent.” Inst. Dec. 17.

In its response, Patent Owner proposes that the plain and ordinary meaning of the terms is “[t]he interface between the handle and cartridge frame includes a pivot member retained/held between spaced-apart ends of two opposed legs.” PO Resp. 7. Patent Owner argues that “[n]othing more is required.” *Id.* Patent Owner criticizes Petitioner’s proposed construction as being based on the embodiments that are encompassed within the disputed terms, not the meaning of those terms. *Id.*

Patent Owner argues that Petitioner seeks to define the disputed terms in terms of encompassed embodiments, recognizing that the claims do not recite a location of the opposed legs. PO Resp. 8. Patent Owner argues that “there is no dispute that the location of the opposed legs—whether they are ‘on the cartridge’ or ‘on the handle’—is not recited by any claim term, there is no basis whatsoever for construing the disputed terms to say anything about the location of the opposed legs.” *Id.*

Based on our review of the complete record, and consistent with our preliminary analysis, we conclude that there is no dispute that the claims do not specify a location for the opposed legs and that the scope of these

disputed terms is broad enough to encompass embodiments beyond the embodiment depicted in Figure 1 of the '486 patent.⁸ Accordingly, we need not provide an express construction for the terms. *See Realtime Data, LLC*, 912 F.3d at 1375.

3. *Petitioner's Contentions – Written Description Support for Claims 1, 2, 4–16, and 18–20 in the Grandparent Application*

Petitioner contends that “except for a few dependent claims, the '486 patent claims encompass subject matter neither described in earlier applications nor possessed by the inventor any earlier than the December 20, 2017, filing date of the '118 application.” Pet. 30. Petitioner contends that the grandparent application does not “suggest to a person of ordinary skill in

⁸ To the extent that Patent Owner argues that “genuine claim construction” is limited to identifying a literal meaning of a disputed term, we do not agree. *See* PO Resp. 10. Our reviewing court often construes claims with respect to the subject matter encompassed by the claim. *Cf., e.g., Uniloc 2017 LLC v. Apple Inc.*, 996 F.3d 1368, 1373 (2021) (“We hold that the claims encompass the situation in which a sending client device intentionally sends a signaling message to the intermediate network entity that performs the interception. Contrary to Uniloc’s contention, that construction is not at odds with the plain meaning of the claims.”); *United Therapeutics Corp. v. Liquidia Techs., Inc.*, 74 F.4th 1360 (Fed. Cir. 2023) (“[W]e agree with the district court that ‘treating pulmonary hypertension’ includes treating all five groups of pulmonary hypertension patients.”). Indeed, we must determine the full scope of the claims to determine the adequacy of the '486 patent’s written description and enablement. *See X2Y Attenuators, LLC*, 757 F.3d at 1365; *see, e.g., Juno Therapeutics, Inc. v. Kite Pharma, Inc.*, 10 F.4th 1330, 1336 (Fed. Cir. 2021) (“We agree with Kite that no reasonable jury could find the '190 patent’s written description sufficiently demonstrates that the inventors possessed the full scope of the claimed invention.”); *cf. LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005) (“A claim will not be invalidated on section 112 grounds simply because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language.”).

the art that the inventor had possession of a razor whose handle includes both the two opposed legs *and* the pivot sphere.” *Id.* at 31 (referencing Ex. 1002 ¶ 67). As such, Petitioner contends that the inventor did not possess the full scope of claims 1, 2, 4–16, and 18–20 at the time the grandparent application was filed. *Id.*

First, Petitioner contends that all of the claims require the pivot member to be on the handle, and that, in such a case, the written description supports only the two opposed legs on the cartridge. Pet. 31–32 (referencing independent claim language and Ex. 1002 ¶ 68).

Next, Petitioner contends that the specification of the grandparent application describes the pivot member on the handle and the opposed legs on the cartridge, and that the connection between the handle and cartridge is essential to permit rotational movement around at least two axes. Pet. 32–33 (referencing Ex. 1003 ¶¶ 7, 23, 25; Ex. 1002 ¶ 69).

Next, Petitioner contends that the specification from the grandparent application describes the two opposed legs as part of a clevis, and the claims do not recite a clevis. Pet. 33 (referencing Ex. 1002 ¶ 70). Petitioner asserts that a person having ordinary skill in the art reading the specification from the grandparent application “would have understood that the inventors were only in possession of a grooming apparatus in which a pivot member is held by two opposed legs of a clevis (or a clevis-like) U-shaped structure.” *Id.*

Next, Petitioner contends that the grandparent application describes a stop member on the pivot sphere, and that this member interacts with the cartridge’s legs to limit rotation. Pet. 33–34 (referencing Ex. 1003 ¶¶ 29, 31, and code (57) (Abstract); Ex. 1002 ¶ 71). Petitioner directs us to Figure 2 of the grandparent application, “which merely shows a handle’s pivot member

formed by ‘deforming a spherical section into a plane,’ permitting stops to replace the removed sections of the sphere.” *Id.* at 34 (quoting Ex. 1003 ¶ 31).

Finally, Petitioner directs us to three Federal Circuit cases with facts that Petitioner contends “closely parallel” the facts in this proceeding. Pet. 35–37 (discussing *D Three Enterprises LLC v. SunModo Corp.*, 890 F.3d 1042 (Fed. Cir. 2018); *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998); *Tronzo v. Biomet, Inc.*, 156 F.3d 1154 (Fed. Cir. 1998)). Petitioner concludes that, “[a]s was true in these Federal Circuit cases, Mr. Bucco’s grandparent application discloses only one, non-generic embodiment of an invention—a handle’s pivot member attaching to two opposed legs of a cartridge’s clevis.” *Id.* at 37 (referencing Ex. 1002 ¶ 72). Petitioner adds that a “person having ordinary skill in the art would not conclude that Mr. Bucco possessed, or that his grandparent application disclosed, an embodiment whereby the legs and the pivot member are both on the handle, and the cartridge is attached by some undisclosed means,” and that these three cases compel such a conclusion. *Id.*

4. *Patent Owner’s Contentions – Written Description Support for Claims 1, 2, 4–16, and 18–20 in the Grandparent Application*

Patent Owner responds that Petitioner’s written description arguments are directed to subject matter that is not recited in the claims. PO Resp. 14. Patent Owner argues that the written description inquiry is limited to the claimed subject matter, and that “[a] patent’s disclosure . . . ‘need not describe an *unclaimed*[element].’” *Id.* at 15–16 (quoting *Crown Packaging Tech., Inc. v. Ball Metal Beverage Container Corp.*, 635 F.3d 1373, 1383 (Fed. Cir. 2011)). Patent Owner argues that Petitioner’s contention is that

the grandparent application does not sufficiently describe locating the opposed legs on the handle, and the claims do not recite a location for the legs. *Id.* at 16–17. Patent Owner also argues that Petitioner’s contentions with respect to a clevis fail as the claims do not recite any connectivity element. *Id.* at 18.

Patent Owner directs us to case law that supports its position. First, Patent Owner directs us to *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corporation*, 93 F.3d 1572 (Fed. Cir. 1996). PO Resp. 18–19; *see id.* at 19–20 (recounting the facts and reasoning in *Ethicon Endo-Surgery*, and applying the reasoning to the facts here). Next, Patent Owner directs us to *U.S. Steel Corp. v. Phillips Petrol. Co.*, 865 F.2d 1247, 1251 (Fed. Cir. 1989). *Id.* at 20–21; *see id.* at 21–22 (recounting the facts and reasoning in *U.S. Steel Corp.*, and applying the reasoning to the facts here). Finally, Patent Owner argues that *SunModo*, *Gentry Gallery*, and *Tronzo* are distinguishable. *Id.* at 23–27.

Next, Patent Owner argues that the Challenged Claims do not recite a genus of locations for the opposed legs. PO Resp. 27. Patent Owner argues that, if the Challenged Claims are considered genus claims, then the grandparent application discloses one of the two possible species. *Id.* at 28. Patent Owner argues that disclosure of this single species can be sufficient to provide written description support for a genus claim, and that the sufficiency “depends in part on ‘the nature and breadth of the genus.’” *Id.* at 28–29 (citing *Bilstad v. Wakalopulos*, 386 F.3d 1116, 1125 (Fed. Cir. 2004); *Allergan Sales, LLC v. Sandoz, Inc.*, 717 F. App’x 991, 995 (Fed. Cir. 2017); *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1351 (Fed. Cir. 2011); *Crown Packaging*, 635 F.3d at 1380; and *AbbVie Deutschland*

GmbH & Co., KG v. Janssen Biotech, Inc., 759 F.3d 1285, 1299 (Fed. Cir. 2014)), 31–32 (arguing that the nature and breadth of the Challenged Claims supports a finding of adequate written description support in the grandparent application).

Patent Owner adds that “‘the level of detail required’ for a disclosure to support a genus also ‘varies’ depending on ‘the complexity and predictability of the relevant technology.’” PO Resp. 30 (quoting *Ariad*, 598 F.3d at 1351). Patent Owner argues that, in a predictable field, such as the mechanical arts, less detail is required in the written description. *Id.* at 30, 32–33 (arguing that the complexity and predictability of the relevant technology of the Challenged Claims supports a finding of adequate written description support in the grandparent application). Patent Owner also argues that the criticality of the species to the invention also affects the required detail in the written description. *Id.* at 30–31, 33–34 (arguing that location of the opposed legs on the cartridge is not critical to the invention).

5. *Petitioner’s Reply Arguments and Patent Owner’s Sur-reply Arguments*

In its reply, Petitioner distinguishes the facts of *Ethicon* and *U.S. Steel*, upon which Patent Owner relies. Pet. Reply 9–10. Petitioner again cites to (and explains) *SunModo*, *Gentry Gallery*, and *Tronzo* in support of Petitioner’s contentions that the grandfather application does not provide adequate written description support. *Id.* at 10–12; *see, e.g., id.* at 12 (quoting *Cooper Cameron Corp. v. Kvaerner Oilfield Prods. Inc.*, 291 F.3d 1317, 1323 (Fed. Cir. 2002), in explaining that *Gentry Gallery* “‘applied and merely expounded upon the unremarkable proposition that a broad claim is

invalid when the entirety of the specification clearly indicates that the invention is of a much narrower scope”).

Petitioner argues that the grandparent application “summarizes [its] invention as one where an end of a razor handle has a pivot sphere, and the blade cartridge is held to that sphere by a clevis defined by opposed legs.” Pet. Reply 12 (quoting Ex. 1003 ¶ 6). Petitioner adds that the grandparent application’s detailed disclosure does not convey to a person having ordinary skill in the art “that the [opposed] legs are located on something other than the blade cartridge, much less where else the legs may be located.” *Id.* at 13.

With respect to Patent Owner’s genus-species arguments, Petitioner distinguishes the cases upon which Patent Owner relies on their facts. *See* Pet. Reply 14–16. Petitioner argues that “[w]here, as here, [Patent Owner] is trying to antedate prior art. [Patent Owner] has the burden to produce evidence that its grandparent application describes the full scope of what the challenged claim recites.” *Id.* at 16–17 (citing *Fiers v. Revel*, 984 F.2d 1164, 1169–70 (Fed. Cir. 1993); *Dynamic Drinkware LLC v. National Graphics, Inc.*, 800 F.3d 1375, 1379–80 (Fed. Cir. 2015)). Petitioner argues that Patent Owner has not met this burden, and a “general rule” that the disclosure of a species can provide sufficient written description support for a claimed genus does not adequately support Patent Owner’s position in light of the evidence of record. *Id.* at 17 (referencing Ex. 1002 ¶¶ 65–74). Petitioner argues that Patent Owner’s reliance on (1) the mechanical nature of the invention and paucity of potential leg locations, (2) the simplicity and predictability of relocating the legs from the blade cartridge, and (3) the lack of criticality/importance of the legs’ location does not support Patent

Owner’s position where the grandparent application illustrates a single position for the legs. *Id.*

Patent Owner replies that the location of the opposed legs is an unclaimed feature. PO Sur-reply 1. Patent Owner again distinguishes *Tronzo*, *Gentry Gallery*, and *SunModo*. *Id.* at 2–6. Patent Owner then argues that Petitioner fails to adequately distinguish *Ethicon*. *Id.* at 8–9. Patent Owner also criticizes Petitioner’s characterization of the language in *Ethicon* upon which Patent Owner relies as “dicta from a footnote,” arguing that the Federal Circuit has repeatedly reaffirmed th[e] principle.” *Id.* at 8 n.2.

Patent Owner also repeats that the disclosure in the grandparent application supports a genus claim for a genus with two species in the predictable mechanical arts. PO Sur-reply 10. Patent Owner argues that the three factors upon which it relies—“(1) ‘the nature and breadth of the genus’; (2) ‘the complexity and predictability of the relevant technology’; and (3) the fact that the location of the opposed legs was not ‘critical’ or ‘important’ to ‘practicing the invention’”—is supported by Federal Circuit precedent. *Id.* at 11–12.

6. *Declarant’s Testimony*

Both Petitioner and Patent Owner offer declaration testimony in support of their written description positions. Ex. 1002 ¶¶ 65–72; Ex. 2018 ¶¶ 91–133⁹. We briefly summarize this testimony below.

⁹ Both Mr. Pennell and Dr. Vallee were cross examined and their depositions are part of the record. See Exs. 2019; 1017.

a) Mr. Pennell

Mr. Pennell testifies that “[n]othing in the grandparent application’s specification even would remotely suggest to a person of ordinary skill in the art that the inventor had possession of a razor whose handle includes both the two opposed legs *and* the pivot sphere.” Ex. 1002 ¶ 67.

Mr. Pennell adds that “[t]he grandparent application’s specification describes no such embodiment—and no such embodiment whereby rotation about the handle’s three axes is possible, and controlled using a stop member.” *Id.* Mr. Pennell testifies that “[a] simple review of the” grandparent application indicates to a person having ordinary skill that “the two opposed legs *must* be on the cartridge[, as n]o other arrangement of the elements of the razor is supported by the written description of the grandparent application.” *Id.* ¶ 68.

Mr. Pennell testifies that the connection between the handle and cartridge is essential to achieve rotation around at least two axes, stating that the grandparent application explains as much, with the explanation “essential,” rather than “exemplary.” Ex. 1002 ¶ 69 (reproducing Ex. 1003 ¶ 25). Mr. Pennell adds that the grandparent application only shows the two opposed legs as part of a clevis.

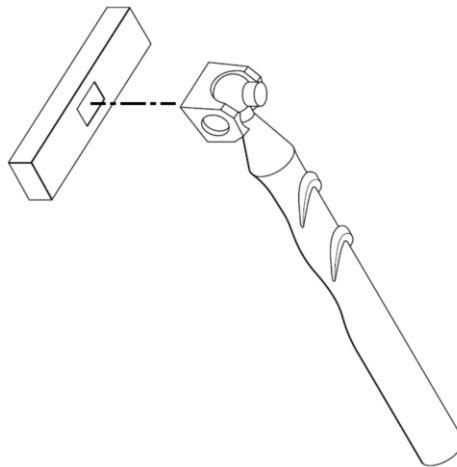
Mr. Pennell also testifies that, in relationship to the working of the stop, the grandparent application only discloses the opposed legs on the cartridge. Ex. 1002 ¶ 71; *see id.* ¶ 72 (“Mr. Bucco’s grandparent application discloses only one, non-generic embodiment of an invention— a handle’s pivot member attaching to two opposed legs of a cartridge’s clevis.”).

b) Dr. Vallee

Dr. Vallee testifies that, in its assembled state, the razor disclosed in the '486 patent¹⁰ discloses all limitations in the independent claims. Ex. 2018 ¶ 99; *see also id.* ¶ 98 (showing illustrations of the unassembled (that is, separate handle and cartridge) and assembled razor). Dr. Vallee testifies that “[t]here is no reason why a [person having ordinary skill in the art] would not consider the assembled razor—which has both a pivot member and the opposed legs between which the pivot member is retained—as not including both the pivot member and the opposed legs ‘on’ the handle.” *Id.* ¶ 99.

Dr. Vallee testifies that the disclosed embodiment is representative of other embodiments that are encompassed by the claims, and other embodiments are implicitly described. Ex. 2018 ¶¶ 101–108. Dr. Vallee identifies some of the implicit embodiments. *Id.* ¶¶ 109–119. Dr. Vallee also testifies about a specific embodiment, where the opposed legs are detachable from the cartridge, as depicted below.

¹⁰ Dr. Vallee refers to the disclosure of the '486 patent, rather than the grandfather application, as “Petitioner and its expert . . . concede that the disclosure of the '486 Patent is substantially identical to that of its Grandparent Application.” Ex. 2018 ¶ 91.



Id. ¶ 122. The image above shows a razor handle substantially similar to the handle depicted in Figure 1 of the '486 patent, with the opposed legs connected to a pivot member located at an end of the handle, with a connection point to a cartridge indicated. Dr. Vallee testifies that the grandparent application “expressly mention[s] this variant.” *Id.* (identifying Ex. 1001, 4:54–63). Dr. Vallee opines that a person having ordinary skill in the art would have “immediately recognize[d], from the disclosure of the '486 Patent and its Grandparent Application, that the inventor had possession of the variant of the frame of the cartridge 14 being detachable from the opposed legs 24a, 24b,” as the specifications “explicitly mention additional points of separation between the handle 12 and the cartridge 14.” *Id.* ¶ 123.

Dr. Vallee also testifies that the grandparent application does not require the opposed legs to be part of a clevis, nor does the application indicate that the opposed legs being part of a clevis is critical to the invention. Ex. 2018 ¶¶ 128–133.

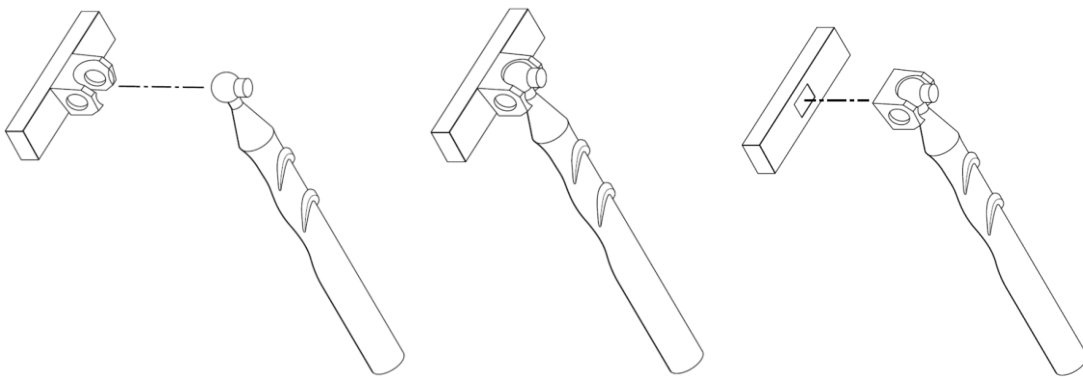
7. *Analysis – Written Description*

For the reasons discussed below, we determine, on the complete trial record, that the grandparent application provides written description support for the full scope of all of the claims of the '486 patent. As a starting point, we emphasize that Petitioner bears the burden of persuasion that the '486 patent is eligible for post-grant review. Contrary to Petitioner's assertion, this is not a case where a patent owner is trying to antedate prior art. *See* Pet. Reply 16–17. Instead, Petitioner is the proponent of the Petition for post-grant review, and one requirement is that Petitioner demonstrates persuasively that the challenged patent is eligible for post-grant review.

Still, we find that Patent Owner has produced evidence that persuasively demonstrates that the grandfather application provides sufficient written description support for the claims of the '486 patent. The parties do not dispute that the independent claims do not expressly recite a location of the opposed legs. *See* Pet. 24–25 (“None of the claims specify the location of the legs, or indeed whether the legs are associated with, and permit attachment to, the razor-containing cartridge.”); PO Resp. 6 (“The *location* of the opposed legs is not an element of the claimed invention.”).

Even if we require the grandparent application to provide written description support for an embodiment where the opposed legs are located on the pivot member, as depicted above in connection with our summary of Dr. Vallee's testimony, rather than the cartridge, as is depicted in Figure 1 of the grandparent application (Ex. 1003) and the '486 patent, we find that the grandparent application provides sufficient support. First, we find that the location of the opposed legs is not critical to the claimed invention. We note

that the specification of the grandparent application does not provide any description that would suggest locating the opposed legs on the cartridge is critical. This lack of criticality can be seen from Dr. Vallee's illustrations, which we reproduce below.



Ex. 2018 ¶¶ 98, 122. The left image depicts Figure 1 of the grandparent application, without reference numerals, and shows a lead line indicating where the pivot member attaches to the opposed legs on the cartridge. *Id.* ¶ 98. The center image depicts the assembled razor. *Id.* ¶¶ 98–99. The right image depicts an unassembled razor, with the opposed legs located on the pivot member of the handle, with a lead line indicating where the opposed legs are connected to the cartridge. *Id.* ¶ 122. As can be seen from these images, the resulting assembled razor is the same regardless of the location of the opposed legs in the unassembled state, supporting a finding that the location of the opposed legs lacks criticality.

Second, we find that the specification of the grandparent application includes permissive language with respect to locating the opposed legs off the cartridge. The grandparent application states that

Relief portions 28a, 28b guide and ease the interface between the pivot sphere 20 and the clevis 24 on their assembly. In connection with this, making the interface between the pivot sphere 20 and the clevis 24 easy and reliable makes it possible to

allow the user to exchange and replace the blade cartridge 14 at that interface in the ordinary course of use. This eliminates the need for an additional point of separation to achieve a blade change, thereby simplifying the construction of the blade cartridge 14. *However, this does not exclude an additional point of separation, pivoting and/or articulation in connection with blade cartridge 14 described in the present disclosure.*

Ex. 1003 ¶ 27 (emphasis added). That is, in the depicted embodiment, the sole separation point is between the pivot sphere and opposed legs of the clevis, with such a connection allowing a user to change the cartridge. The description further explains that an additional point of separation is contemplated. We find that such a configuration is represented by the right image reproduced above (*see* Ex. 2018 ¶ 122). In that image, one point of separation includes the connection between the pivot sphere and opposed legs, with an additional point of separation between the opposed legs and cartridge. This configuration still satisfies the goal of allowing a user to easily change a spent cartridge and provides motion of the cartridge about three axes.

Additionally, the grandparent application describes that

The clevis 24 described herein is advantageously formed of an injection molded plastic and/or metal, for economic benefits in cost of material and manufacture. Alternately, the clevis 24 can be formed and injection molded integrally with the frame of the blade cartridge 14, which is completed by the addition of the blades themselves, among other accessories as desired.

Ex. 1003 ¶ 28. This disclosure indicates that the inventor contemplated having the clevis and opposed legs either manufactured integral with the cartridge or as a separate piece. *Cf.* PO Br. 2.

Third, we find that the technology is not complicated and the level of ordinary skill in the art sufficiently high such that the grandparent application reasonably conveys a razor with opposed legs not on the cartridge. A degreed mechanical engineer, with two years of experience in the razor/personal grooming industry would understand from the disclosure of the grandparent application that the opposed legs could be separately connected to the cartridge.

Also, the grandparent application clearly identifies the illustrated razor of Figure 1 as an *exemplary* embodiment. Ex. 1003 ¶¶ 17, 19, 22–24, 26, 29; *see also id.* ¶ 32 (“The foregoing disclosure has been made with reference to certain exemplary and/or preferred features and embodiments. These are not limiting upon the scope of the disclosure. Certain modification, alterations, or substitutions will be apparent to those of ordinary skill in the art in light of the present disclosure.”).

We credit Dr. Vallee’s testimony that “[t]here is no reason why a [person having ordinary skill in the art] would not consider the assembled razor—which has both a pivot member and the opposed legs between which the pivot member is retained—as not including both the pivot member and the opposed legs ‘on’ the handle.” Ex. 2018 ¶ 99; *see also id.* ¶¶ 122–125 (discussing knowledge of a person having ordinary skill in the art with respect to connecting a handle and a cartridge). We credit this testimony, in part, because it is consistent with the images we discussed above, where the assembled razor is the same regardless of whether the opposed legs are on the fixed to the cartridge or connected to the pivot sphere and separately attached to the cartridge.

Finally, when we consider legal precedent, we conclude that Patent Owner has the stronger position. We agree with Patent Owner that *Ethicon Endo-Surgery* is instructive. *See* PO Resp. 18–19. In *Ethicon Endo-Surgery*, the Federal Circuit stated, when discussing the prosecution history of a patent in the case, that

Claim 1 was properly rejected because it recited an element not supported by Fox’s disclosure, i.e., a lockout “on the stapler.” It does not follow, however, that Fox’s disclosure could not support claims sufficiently broad to read on a lockout off of the cartridge. *See, e.g., In re Vickers*, 141 F.2d 522, 525, 31 C.C.P.A. 985, 61 USPQ 122, 125 (1944) (“an applicant . . . is generally allowed claims, when the art permits, which cover more than the specific embodiment shown.”). If Fox did not consider the precise location of the lockout to be an element of his invention, he was free to draft claim 24 broadly (within the limits imposed by the prior art) to exclude the lockout’s exact location as a limitation of the claimed invention. *See* 35 U.S.C. § 112 (1994) (allocating to the inventor the task of claiming what “the [inventor] regards as his invention.” (emphasis added)). Such a claim would not be unsupported by the specification even though it would be literally infringed by undisclosed embodiments. The district court should not have imposed on claim 24 an additional limitation which it does not contain.

Ethicon Endo-Surgery, Inc., 93 F.3d at 1582 n.7. That is to say, just because a claim may encompass a broad scope, it may not violate the written description requirement just because the specification does not disclose an embodiment that is encompassed by the claim. Significantly, the decision draws a distinction between a claim that positively recites a limitation as compared to a claim that would encompass that limitation. *Id.* Similar to the case before us, the claim at issue did not positively recite the lockout location, and the court stated that the patentee was free to draft the

claim in that way if the inventor did not consider the location of the lockout to be part of the invention. *Id.*

Medtronic, Inc. v. Teleflex Innovations S.a.r.l., 69 F.4th 1341 (Fed. Cir. 2023) is also instructive. In *Medtronic*, Medtronic challenged the Board’s written description finding with respect to substitute claims in granting Teleflex’s motion to amend in an *inter partes* review. *Medtronic, Inc.*, 69 F.4th at 1352–54. The method¹¹ claim at issue recited, in relevant part, “providing a substantially rigid segment,” and “defining a side opening portion,” but did not specify the location of the side opening. *Id.* at 1352; *see also* Pet. Br. 1 (summarizing the claim at issue); PO Br. 1 (“[T]he challenged claims in *Medtronic* did not recite the precise location of ‘side openings’ on a catheter.”).

Before the Board, Medtronic argued that the specification at issue only disclosed the side opening in the rigid segment. *Medtronic, Inc.*, 69 F.4th at 1353. The Board found adequate written description support for the claims, relying in part on permissive language in the specification as to the side opening location. *Id.* at 1354 (“[The Board] identified . . . the patent’s description that ‘[t]he rigid portion *may* include a cutout portion [i.e., a side opening] and a full circumference portion.’”). The Board also found that locating the side opening in the rigid portion was not critical to the invention. *Id.* The decision states that, “[a]pplying our holding in *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, the Board correctly determined

¹¹ Although the claim in *Medtronic* is a method claim and the claims at issue in this proceeding are apparatus claims, the case is still instructive. The method claim is a “method for forming a device,” and includes “providing,” “defining,” and “arranging” steps, which effectively results in limitations comparable to an apparatus claim.

the absence of embodiments in the ‘629 application with a side opening separate from the rigid segment did not preclude written description.” *Id.*

As an initial point, the decision in *Medtronic* belies Petitioner’s characterization of *Ethicon Endo-Surgery*. The decision in *Medtronic* indicates that the statements at footnote 7 of its *Ethicon Endo-Surgery* decision is a “holding,” rather than dicta. *See Medtronic, Inc.*, 69 F.4th at 1354; Pet. Reply 8. Additionally, the facts in *Medtronic* are strikingly similar to those in the present case. Like in *Medtronic*, the challenged claims at issue do not recite a location for the opposed legs, and we find that the location is not critical to the invention.

Petitioner attempts to distinguish *Medtronic* by arguing that the grandparent application does not include permissive language with respect to the location of the opposed legs. Pet. Br. 2–4. As we discussed above, we do not agree—we find that the grandparent application has permissive language as to the location of the opposed legs. *Cf.* PO Br. 2–3.

Petitioner argues that criticality was not an issue in *Medtronic*. Pet. Br. 5. We do not agree. The express language of the decision approvingly quoted language from the Board that the location of the side opening in the rigid portion was not critical, and that the location of the side opening was never asserted as a point of novelty. *Medtronic, Inc.*, 69 F.4th at 1354; *Cf.* PO Br. 2–3. Petitioner adds that locating the opposed legs on the cartridge is critical, relying on its declarant’s testimony that putting the legs on the cartridge is the only description provided to achieve three degrees of rotation. Pet. Br. 5. As we discuss above, however, we find the location of the opposed legs not critical to the invention, as locating the opposed legs on the pivot sphere, then connecting the opposed legs to the cartridge through

an additional point of separation arrives at an identical assembled razor as one with the opposed legs located on the cartridge, and would achieve the three axes of rotation.

We find that Petitioner’s reliance on *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998), and *Tronzo v. Biomet, Inc.*, 156 F.3d 1154 (Fed. Cir. 1998) are misplaced, as they are distinguishable on the facts. In *Gentry Gallery*, the Federal Circuit made clear that “a claim need not be limited to a preferred embodiment.” *Gentry Gallery, Inc.*, 134 F.3d at 1479. The decision then explained that “the original disclosure clearly identifies the console as the only possible location for the controls[,]” and “[n]o similar variation beyond the console is even suggested.” *Id.* The decision adds that “the only discernible purpose for the console is to house the controls . . . [t]hus locating the controls anywhere but on the console is outside the stated purpose of the invention.” *Id.* The decision notes that the inventor “considered the location of the recliner controls on the console to be an *essential* element of his invention.” *Id.* (emphasis added); *cf.* *ScriptPro LLC v. Innovation Assocs., Inc.*, 833 F.3d 1336, 1341 (Fed. Cir. 2016) (indicating that the specification in *Gentry Gallery* “*clearly* limited the scope of the invention[] in ways that the claims clearly did not” (emphasis added)); *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1365 (Fed. Cir. 2003) (stating, in distinguishing *Gentry Gallery*, that: “In the present case, the entirety of the specification does not reflect that the invention goes to the narrower scope of a mixture of half and complete slots. Such a mixture was not conveyed as critical to the invention nor was it described as the only feasible design in the disclosure.”).

We find that the facts of this case differ from *Gentry Gallery*. As we have discussed, we do not find the specification of the grandfather application so limiting as to restrict the opposed legs to the cartridge. Unlike the console in *Gentry Gallery*, the cartridge has a purpose other than serving as a location for the opposed legs. *See* Ex. 1003 ¶¶ 4 (“In a shaving tool for personal grooming, one well known design is the safety razor that has a blade cartridge holding one or more blades at an appropriate angle for shaving, with the blade cartridge connected to a handle.”), 19 (identifying cartridge 14 as a “blade cartridge”). Also, as discussed above, we find that the location of the opposed legs is not critical to the invention disclosed in the grandparent application.

We appreciate that *Gentry Gallery* “did not announce a new ‘essential element’ test mandating an inquiry into what an inventor considers to be essential to his invention and requiring that the claims incorporate those elements.” *See Cooper Cameron Corp. v. Kvaerner Oilfield Prod., Inc.*, 291 F.3d 1317, 1323 (Fed. Cir. 2002). “Rather, in *Gentry [Gallery]*, we applied and merely expounded upon the unremarkable proposition that a broad claim is invalid when the entirety of the specification clearly indicates that the invention is of a much narrower scope.” *Id.*; *see* Pet. Reply 11–12. We find, however, that the grandparent application does not clearly indicate that the invention is of a much narrower scope, requiring the opposed legs to be only on the blade cartridge.

In *Tronzo*, the invention related to artificial hip sockets and the patent at issue was a continuation-in-part of a parent application. *Tronzo*, 156 F.3d at 1156–57. The independent claims that were added in the continuation-in-part application covered a prosthesis socket with no specific

shape. *Id.* at 1157–58. Because the written description disclosed a conical shape for the prosthesis only and, significantly, characterized other shapes as “prior art” and “inferior” to a conical shape, and characterizing the conical shape as an “extremely important aspect of the present invention,” the Federal Circuit held that the independent claims were unsupported by the written description and not entitled to the parent’s filing date. *Id.*

at 1158–60; *see also Crown Packaging Tech., Inc. v. Ball Metal Beverage Container Corp.*, 635 F.3d 1373, 1382 (Fed. Cir. 2011) (“In *Tronzo*, the patentee in a later-filed application asserted claims covering cup implants which were generic as to shape despite the fact that the specification only discussed conical shaped cups, characterized the conical shape as being ‘an extremely important aspect’ of the invention, and only mentioned other shapes in specifically distinguishing the prior art as inferior.”) (cited by Patent Owner, PO Resp. 16, 28, 29, 32).

The grandfather application does not characterize locating the opposing legs at a location other than the cartridge as inferior, nor does the application characterize locating the opposed legs on the cartridge as an important aspect of the invention. Significantly, the grandfather application does not characterize the location of the opposed legs at all—it merely provides an exemplary embodiment showing in that embodiment, that the opposed legs are part of a clevis on the blade cartridge.

The facts in *D Three Enterprises LLC v. SunModo Corp.* are more difficult to reconcile with the current facts. In *SunModo*, two separate written description issues arose, one associated with “washerless claims” and one associated with “washer claims.” *SunModo*, 890 F.3d at 1047–52. The washerless claims recited an “attachment bracket” broadly. *Id.*

at 1047–48. The court found that the priority application at issue disclosed one embodiment that was washerless. *Id.* at 1050. The court then agreed with the district court that only one attachment bracket—a bracket with W-shaped prongs—was disclosed in the patent, and that the specification did not provide adequate written description support for the more broadly claimed attachment bracket. *Id.*

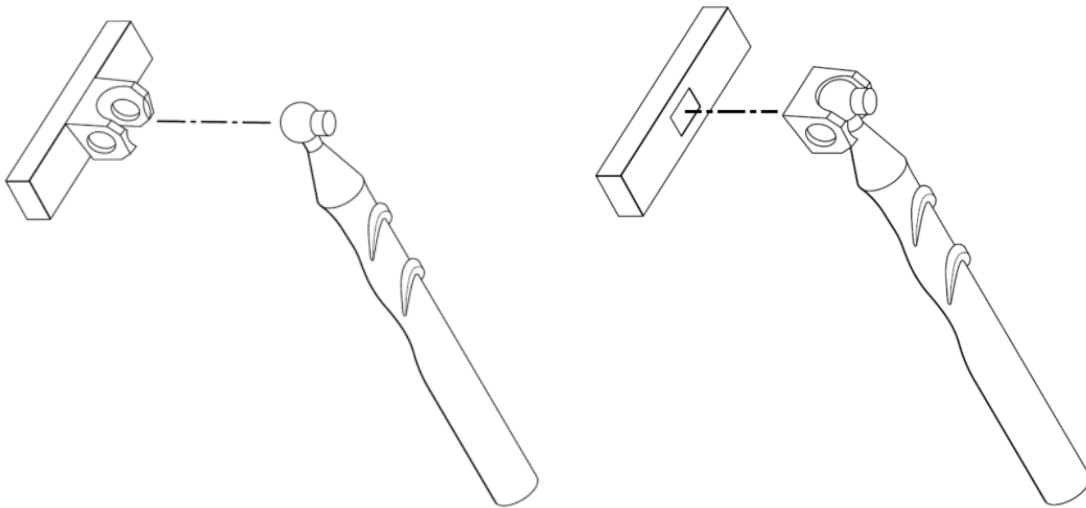
More on point to this proceeding, for the washer claims, the court found that the claims covered configurations with the washer below the flashing or either above or below the flashing. *SunModo*, 890 F.3d at 1052. The court agreed with the district court that the specification did not provide written description support for these claims, as the specification supported only a configuration with the washer above the flashing. *Id.*

In our Institution Decision, we preliminarily found that, like in *SunModo*, the grandparent application expressly discloses the opposed legs attached to the cartridge and the pivot member attached to the arm of the handle only. Inst. Dec. 24. We also preliminarily found that grandparent application does not describe the opposed legs as part of the handle, nor does the application state that the position of the opposed legs and pivot member are flexible, such that they could be reversed. *Id.* We preliminarily found, on the limited record before us, the lack of any disclosure in support of Patent Owner’s reversal of parts embodiment is fatal to Patent Owner’s position. *Cf. SunModo*, 890 F.3d at 1052 (“The lack of any disclosure of an assembly with a washer below the flashing, or statement on the flexibility of the position of the washer, is fatal to D Three’s argument.”).

On the complete record, we find one fact distinguishes the facts of this proceeding from the facts in *SunModo*, leading us to a different conclusion.

We find, as we have already discussed, that the grandparent application includes some language that supports the flexibility of the location of the opposed legs. Specifically, the application provides for additional points of separation between the cartridge and handle and one such additional point could be a connection between the opposed legs and cartridge (in addition to the connection between the opposed legs and pivot sphere). *See* Ex. 1003 ¶ 27. This disclosure, coupled with disclosure that contemplates the opposed legs/clevis constructed as a single piece or integral with the cartridge, indicates a flexibility for the location of the opposed legs. *See id.* ¶ 28.

To the extent that the independent claims of the '486 patent are characterized as genus claims with respect to the location of the opposed legs, we agree with Patent Owner that the claims represent a genus with two species. *See* PO Resp. 27–34; *see also* Pet. 49–50 (“The claim breadth covers two structural alternatives.”). We reproduce images of the two species below.



Ex. 2018 ¶¶ 98, 122. The left image represents the disclosed species and depicts Figure 1 of the grandparent application, without reference numerals,

and shows a lead line indicating where the pivot member attaches to the opposed legs on the cartridge. *Id.* ¶ 98. The right image depicts an unassembled razor, with the opposed legs located on the pivot member of the handle, with a lead line indicating where the opposed legs are connected to the cartridge—a species not expressly depicted in the grandparent application. *Id.* ¶ 122.

The Federal Circuit “held that a sufficient description of a genus . . . requires the disclosure of either a representative number of species falling within the scope of the genus or structural features common to the members of the genus so that one of skill in the art can ‘visualize or recognize’ the members of the genus.” *Ariad Pharms., Inc.*, 598 F.3d at 1350. “[T]he 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.” *Id.* at 1351.

We find that the disclosure of the single species is representative of the two-species genus recited in the claims. As we have already discussed, both species ultimately results in an assembled razor that functions as intended by the inventors. As such, the single embodiment allows an artisan of ordinary skill to envision the other species, with the opposed legs connected to the pivot sphere, and then connected to the blade cartridge. Ex. 2018 ¶¶ 101–108, 122, 123. In other words, the grandparent application discloses structural features common to the members of the genus so that one of skill in the art can visualize or recognize the members of the genus.

Here, the lack of complexity of the relevant technology, the predictability of the mechanical arts, and the scope of the claims (namely, the limited number of possible locations for the opposed legs), reduces the

number of species that must be disclosed. *See* PO Resp. 30, 32–33 (arguing that the mechanical arts is predictable, and that the technology is not complex), 30–31, 33–34 (arguing that the location of the opposed legs is not critical), 31 (the breadth of the claims covers only two species); *cf.* Ex. 1005 ¶ 5 (stating that “it was known to mount the blade cartridge to the handle in a manner to allow the blade cartridge to pivot around an axis parallel to the cutting edge(s) of the blades.”); Ex. 1005 ¶ 2 (“The blade block is mounted so as to be rotatable or pivotable in relation to the handle in order to better follow the contours of the skin during shaving.”); Ex. 1006, 1:18–22 (“In some shaving systems the connection of the cartridge to the handle provides a pivotal mounting of the cartridge with respect to the handle so that the cartridge angle adjusts to follow the contours of the surface being shaved.”); *Bilstad v. Wakalopulos*, 386 F.3d 1116, 1126 (Fed. Cir. 2004) (“In the mechanical world—a fairly predictable field—it is wholly conceivable that manipulation in a small number of directions may convey to one skilled in the art that Bilstad indeed described manipulation in a ‘plurality’ of directions.”).

Petitioner argues that the factors discussed above “are irrelevant to the assessment of Bucco’s *written description* that conveys only the single legs’ location illustrated in Figure 1.” Pet. Reply 17. Petitioner does not further explain its position, so we discount this argument.

We credit Dr. Vallee’s testimony that “[t]hose skilled in the art will recognize that the inventors were in possession of the necessary common attributes or features possessed by variants of the handle-cartridge frame interface, in view of the embodiment disclosed. Those common features are that the pivot member is held between spaced apart ends of two opposed

legs, allowing greater rotational freedom than prior art designs.” Ex. 2018 ¶ 102; *see also id.* ¶ 123 (“[T]hose skilled in the art will immediately recognize, from the disclosure of the ’486 Patent and its Grandparent Application, that the inventor had possession of the variant of the frame of the cartridge 14 being detachable from the opposed legs 24a, 24b. As noted, the ’486 Patent and its Grandparent Application explicitly mention additional points of separation between the handle 12 and the cartridge 14.”). We credit this testimony, in part, because it is consistent with the complexity of the invention, the level of detail in the grandparent application, and the level of ordinary skill in the art.

For similar reasons as those described above, we also find that the grandparent application adequately describes opposed legs that are not part of a clevis. Significant to our finding is that nowhere in the grandparent application does the inventor describe the use of a clevis as critical to the invention or the inventive aspect of the invention. *See* Ex. 2018 ¶ 129. Instead, as we have discussed, the key aspect of the invention is how the pivot member and stop interfaces with the opposed legs to provide the movement about three axes. *See id.* ¶¶ 130–133; *see, e.g., id.* ¶ 131 (“The ’486 Patent and its Grandparent Application often clarify that it is those features of the opposed legs 24a, 24b that are most significant.”).

8. *Conclusions – Written Description*

For the reasons discussed above, we find, on the complete record, that the grandparent application provides adequate written description for all of the claims of the ’486 patent.

B. Enablement for Claims 1, 2, 4–16, and 18–20 in the Grandparent Application

We now turn to our second inquiry for eligibility—whether the grandparent application enables the full scope of the claims of the ’486 patent. For the reasons described below, we conclude that the claims are enabled such that a person having ordinary skill in the art could make and use the full scope of the invention without undue experimentation. “If a patent claims an entire class of . . . machines, . . . the patent’s specification must enable a person skilled in the art to make and use the entire class. In other words, the specification must enable the full scope of the invention as defined by its claims.” *Amgen Inc. v. Sanofi*, 598 U.S. 594, 610 (2023). “That is not to say a specification always must describe with particularity how to make and use every single embodiment within a claimed class.” *Id.* at 610–611. “[I]t may suffice to give an example (or a few examples) if the specification also discloses ‘some general quality . . . running through’ the class that gives it ‘a peculiar fitness for the particular purpose.’” *Id.* at 611.

“[W]hether a patent satisfies the enablement requirement is a question of law based on underlying factual findings.” *Pac. Biosciences of California, Inc. v. Oxford Nanopore Techs., Inc.*, 996 F.3d 1342, 1350 (Fed. Cir. 2021) (citing *McRO, Inc. v. Bandai Namco Games America Inc.*, 959 F.3d 1091, 1096 (Fed. Cir. 2020)). “A claim is not enabled if . . . a relevant artisan would not be able to practice the claimed invention ‘without undue experimentation,’ a determination typically guided by” the so-called *Wands* factors. *Id.* (citing *In re Wands*, 858 F.2d 731, 736–737 (Fed. Cir. 1988)); *see also In re Wands*, 858 F.2d at 737 (“Whether undue experimentation is

needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations.”).

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.

In re Wands, 858 F.2d at 737; *cf. Amgen Inc.*, 598 U.S. at 612 (“[A] specification may call for a reasonable amount of experimentation to make and use a patented invention. What is reasonable in any case will depend on the nature of the invention and the underlying art.”).

1. *The Parties’ Contentions*

Both parties address the *Wands* factors. We summarize their contentions below¹².

a) *The quantity of experimentation necessary*

Petitioner contends that “a significant amount of experimentation would have been required to produce a razor having a handle that includes both a pivot member and also the two opposed legs.” Pet. 55. Petitioner contends that “[r]azors, as sharp instruments designed for use in shaving faces, are designed with precision for the highest level of performance,

¹² Patent Owner also argues that Petitioner’s lack of enablement argument fails because the claims do not recite a location of the opposed legs. PO Resp. 38. We address enablement considering that the full scope of the invention encompasses the two embodiments as to the location of the opposed legs that we discussed in our written description analysis, consistent with our understanding of the Court’s decision in *Amgen Inc.* See *Amgen Inc.*, 598 U.S. at 612.

efficiency, and effectiveness.” *Id.* at 56. Patent Owner responds that the amount of experimentation required is ordinary and routine, and “optimizations implementing the claimed interface are routine and ordinary design choices well within the skill of a” person having ordinary skill in the art. PO Resp. 46–47.

b) The amount of direction or guidance presented

Petitioner contends that the only direction for making and using the invention is provided in Figures 1 and 2 of the disclosure. Pet. 51. Patent Owner responds that, in addition to the two figures, the disclosure provides extensive guidance on modifications, including the shape and form of the pivot member, forming the opposed legs and their components, tolerances, and the possibility of additional points of separation. PO Resp. 43–45.

c) The presence or absence of working examples

Petitioner contends that the grandparent application does not include working examples with the handle having a pivot member and two opposed legs. Pet. 50. Patent Owner responds that the disclosure includes a working example and modifications, all of which address the goal of providing rotation of the cartridge about multiple axes. PO Resp. 46.

d) The nature of the invention

Petitioner address this factor together with the predictability of the art. *See* Pet. 52–54. Patent Owner responds that the nature of the invention relates to the retention of the pivot member between the opposed legs, allowing for the desired rotation of the cartridge. PO Resp. 39. Patent Owner adds that “[t]here is no evidence that ‘the invention would [] be undermined by’ disconnecting the opposed legs from each other or locating

them on the handle.” *Id.* (quoting *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1352 (Fed. Cir. 2011)).

e) The state of the prior art

Petitioner contends that the prior art describes razors where the razor handles and blade cartridges interface “often in a complex arrangement,” pointing to Otten’s ball-and-socket arrangement. Pet. 54–55. Patent Owner argues that “[n]early 200 references” were considered during the examination of the application that matured into the ’486 patent. PO Resp. 40. Patent Owner adds that Mr. Pennell testified that the art of designing a razor was 100 years old. *Id.*

f) The relative skill of those in the art

As we discuss above, Petitioner contends that an artisan of ordinary skill would have had “at least an undergraduate degree in mechanical engineering and about two years of industry experience, or equivalent experience,” a characterization that we adopted. *See* Pet. 21–22. Patent Owner responds that “the level of skill identified by Petitioner is lower than what the Federal Circuit has found to warrant a ‘finding that the field of [an] invention is predictable art.’” PO Resp. 41.

g) The predictability or unpredictability of the art

Petitioner contends that “in the mechanical arts, it is typically predictable to reproduce structures resembling the drawings; however, in the razor art, if changes to one aspect of the handle or the razor are required to practice the invention, the art suggests a great degree of experimentation (and perhaps invention) to enable those changes to the existing disclosure.” Pet. 53–54. Patent Owner responds that a manual shaving razor “is

mechanical in nature, such that a single working example can enable broad claim scope.” PO Resp. 41. Patent Owner adds that the design of handle-cartridge interfaces such as those identified by Petitioner are not for important to the function of a razor, but instead makes the razor not interoperable with competitors’ cartridges. *Id.* at 43.

h) The breadth of the claims

Petitioner contends that the independent claims are broad because they do not require structure on the cartridge other than at least one cutting blade. Pet. 49. Patent Owner responds that, by Petitioner’s own admission, the claims cover only two species. PO Resp. 38.

i) Arguments in reply

In reply, Petitioner argues that Patent Owner ignores the interrelationship of the *Wands* factors. Pet. Reply 19. Petitioner argues that the grandparent application “does not explain how a leg-less cartridge cooperates with a pivot sphere-containing handle, much less cooperates to permit its rotation about three axes of the handle.” *Id.* at 19–20¹³.

In its sur-reply, Patent Owner reiterates that “[b]ecause the location of the opposed legs is not an element of any challenged claim, a location does not need to be enabled.” PO Sur-reply 12. Patent Owner argues that its analysis of the *Wands* factors considers the interrelationship of the factors. *Id.* at 13. Patent Owner concludes that “[b]ecause Petitioner offers no

¹³ Petitioner repeats that it is Patent Owner’s burden to produce evidence in support of its enablement position, as it is trying to antedate prior art. Pet. Reply 20. As we stated in our analysis of written description support, we want to make clear that it is Petitioner’s ultimate burden, as the proponent of the Petition, to demonstrate by a preponderance of the evidence, that the ’486 patent is eligible for post-grant review.

evidence or argument rebutting Patent Owner’s *Wands* factor analysis, Petitioner failed to meet its burden to prove the ’486 Patent is eligible for post-grant review on the basis that [the grandparent application] did not enable the challenged claims.” *Id.*

2. *Analysis*

For the reasons below, we weigh the facts underlying the *Wands* factors and conclude that the grandparent application enables the full scope of the invention. That is, we determine, in weighing the factual record, that a person having ordinary skill in the art could have made and used the full scope of the invention claimed in the ’486 patent, based on the disclosure in the grandparent application, without undue experimentation. As a starting point, we reiterate that the full scope of the claimed invention covers two embodiments—one where the opposed legs are located on the blade cartridge, and one where the opposed legs are located on the pivot member, then attached through an additional separation point to the cartridge.

The parties do not dispute that the grandparent application enables the embodiment where the opposed legs are located on the cartridge. *See, e.g.*, Pet. 48–49 (contending that a person having ordinary skill on the art could not practice the embodiment where a handle includes a pivot member and two opposed legs that hold the pivot member without undue experimentation); PO Sur-reply 13 n.4 (“Patent Owner’s enablement analysis is *explicitly* predicated on the assumption that Bucco must enable an embodiment where the opposed legs are attached to the handle.”).

In addressing the *Wands* factors, we start with the relative skill of those in the art, which informs the other factors. We find that the relative skill is moderately high. The parties agree that the artisan of ordinary skill

would be a degreed mechanical engineer. Pet. 21–22; PO Resp. 2–3. Both parties agree that the person having ordinary skill in the art would have two years of experience, with Petitioner specifying that experience in the razor industry. *See id.* The issue to be solved is connecting the opposed legs, which are connected to the pivot member, to the cartridge through an additional point of separation. This issue is a mechanical problem for which a degreed mechanical engineer would be well suited.

The breadth of the claims also informs the remainder of our analysis. We find that the claims, although broader than the single embodiment depicted in Figure 1 of the grandparent application, is not so broad as to encompass a large number of embodiments with respect to the location of the opposed legs. As we have discussed above, only two embodiments with respect to the location of the opposed legs are encompassed by the full scope of the claims. This limited number of embodiments supports a finding that less experimentation would be required than if the claims breadth encompassed a large number of embodiments.

With respect to what would constitute a reasonable amount of experimentation, the Supreme Court states “[w]hat is reasonable in any case will depend on the nature of the invention and the underlying art. *Amgen Inc.*, 598 U.S. at 612. We find that the nature of the invention and the state of the prior art supports a conclusion that the undue experimentation would not be needed to arrive at the claimed invention. As discussed above in connection with other factors, the claims, although broader than the claims appearing in the grandparent application, are not so broad as to encompass a large number of embodiments that would entail an unreasonable amount of experimentation to arrive at the full scope of the invention. The nature of the

invention—a mechanical connection that allows rotation of a blade cartridge in three axes, and still allows the blade to be changed—is a single, straightforward aspect.

The prior art of record also favors requiring only a reasonable amount of experimentation to enable the full scope of the invention. For example, Otten states that, for its invention, “the pivoting of the blade block is achieved by means of a ball joint arranged between handle and blade block.” That is, Otten focuses on the positioning the joint “between” the handle and cartridge. Although we recognize that Otten places the socket on the cartridge, this focus would inform a person having ordinary skill in the art the aspect of the invention that is critical.

Also, Metcalf depicts a razor with connecting subassembly 31. This subassembly is connected to both a blade cartridge and handle. *See* Ex. 1006, 4:30–33, 6:31–33. We recognize that subassembly 31 is directed to a mechanism to attach and release a cartridge, and not rotation. This reference demonstrates, however, the use of a component that attaches both to a cartridge and a handle.

Similarly, the predictability or unpredictability of the art favors a conclusion that undue experimentation would not be required to arrive at the full scope of the invention. The ’486 patent is in the mechanical arts, which are typically considered predictable. *Cf. In re Vaeck*, 947 F.2d 488, 496 (Fed. Cir. 1991) (“Where, as here, a claimed genus represents a diverse and relatively poorly understood group of microorganisms, the required level of disclosure will be greater than, for example, the disclosure of an invention involving a ‘predictable’ factor such as a mechanical or electrical element.”); *In re Bowen*, 492 F.2d 859, 862 (C.C.P.A. 1974) (“In cases involving

predictable factors, such as mechanical or electrical elements, a single embodiment provides broad enablement in the sense that, once imagined, other embodiments can be made without difficulty and their performance characteristics predicted by resort to known scientific laws.”); Ex. 1002 ¶ 103 (“[I]n the mechanical arts, it is typically predictable to reproduce structures resembling the drawings.”).

We credit Dr. Vallee’s testimony that “[t]he technology of the handle-cartridge frame interface is simple, and entirely mechanical and predictable,” in part based on his extensive experience in mechanical engineering related to razors and other consumer products, and part based on our understanding of the challenged patent and prior art of record. *See* Ex. 2018 ¶ 9. We do not credit Mr. Pennell’s testimony that “in the razor art, if changes to one aspect of the handle or the razor are required to practice the invention, the art suggests a great degree of experimentation (and perhaps invention) is required to enable those changes an existing disclosure.” *See* Ex. 1002 ¶ 103. Mr. Pennell supports this testimony based on examples with unique interfaces between the blade cartridge and handle. *See id.* ¶ 102. We find, however, that these examples do not demonstrate that a person having ordinary skill in the art would have required undue experimentation to arrive at the embodiment with the opposed legs connected to the pivot member with an additional point of separation on the cartridge, based on the disclosure in the grandparent application. We also find that these examples, in and of themselves, do not demonstrate that a great degree of experimentation went into designing the connections. Indeed, if anything, this testimony supports a finding that the prior art would serve as a resource for an artisan of ordinary skill to arrive at the additional point of separation.

With respect to the amount of direction or guidance presented and the presence or absence of working examples, we find that the guidance and examples are sufficient to support arriving at the full scope of the invention without undue experimentation. The grandparent application provides a detailed description of the embodiment with the opposed legs located on the cartridge. The description includes Figure 1, which identifies the components of the razor, and an associated description. Ex. 1003 ¶¶ 19–30, Fig. 1. The description explains the interface between the opposed legs and pivot member to arrive at the desired freedom of motion, and the role of the stop. *Id.* ¶¶ 23–26, 29–30. The description provides certain manufacturing considerations. *Id.* ¶ 28. Significant to our finding are the details with respect to the interface between the pivot member and opposed legs, including the lack of any description of criticality that the opposed legs be located on the cartridge. Also significant is the guidance that an additional point of separation could be present to allow for the change out of a spent cartridge. *See id.* ¶ 27.

Finally, we find that the quantity of experimentation necessary is routine. We base this finding, in part, on Dr. Vallee’s testimony. Dr. Vallee identifies the embodiment where an additional point of separation for the blade cartridge would include an attachment between the cartridge and the opposed legs located on the pivot member. *See* Ex. 2018 ¶ 122. Dr. Vallee then identifies a “simple and straightforward connection” between a replaceable cartridge and handle. *Id.* ¶ 124. We do not credit Mr. Pennell’s testimony, based on arguments made during prosecution of the application that matured into the ’486 patent, as it does not fully consider the arguments made. *See* Ex. 1002 ¶ 107. During prosecution, that applicant argued that it

was not apparent how the Examiner was incorporating the teachings of a ball and socket connection for an unspecified mechanical framework and linkage from a windshield wiper with a razor reference to arrive at the claim invention. *See* Ex. 1008, 320–322. We do not read the applicant to argue that the amount of experimentation of how to incorporate the teachings is high. We also do not credit Mr. Pennell’s testimony that “[r]azors, as sharp instruments designed for use in shaving faces, are designed with precision for the highest level of performance, efficiency, and effectiveness.” *See* Ex. 1002 ¶ 108. The question before us is not whether a person having ordinary skill in the art could produce a commercially-viable product. We must determine if an artisan of ordinary skill in the art could have arrived at the claimed invention without undue experimentation.

3. *Conclusions – Enablement*

Weighing the evidence underlying the *Wands* factors, including “the nature of the invention and the underlying art” (*Amgen Inc.*, 598 U.S. at 612), we conclude that the grandparent application enables a person having ordinary skill in the art to make and use the full scope of the claimed invention without undue experimentation. Significant to our analysis is the limited number of embodiments covered by the claims, the level of ordinary skill, the description of the one embodiment in the grandparent application, and the fact that the invention at issue is mechanical in nature.

C. *Conclusion – Eligibility of the ’486 Patent for Post-Grant Review*

After considering the evidence and arguments presently before us, we determine that the grandparent application (Ex. 1003) provides sufficient written description support and enables the full scope of the claims of the ’486 patent. Because the grandparent application was filed prior to

March 16, 2013, we conclude, on the complete record, that the '486 patent is not eligible for post-grant review.

III. CONCLUSION

We conclude that the '486 patent is not eligible for post-grant review. Accordingly, we vacate our Institution Decision and terminate this proceeding without reaching a Final Written Decision.

At oral hearing, Patent Owner argued that

if the priority claim of the '486 patent stands, then the Board must conclude in its final written decision that the challenged claims are not eligible for post-grant review. And I heard a comment from Petitioner's counsel about a need to terminate the proceeding if that's the Board's conclusion. There's no basis for that. The Board regularly addresses fully and finally, regularly adjudicates [post-grant review] eligibility in final written decision and [P]etitioner presents no reason to depart from that statutory process here.

Tr. 28:1–8. We do not agree. The post-grant review provisions of the AIA apply to a patent that contains a claim with an effective filing date on or after March 16, 2013. *See* AIA, Pub. L. No. 112-29, 125 Stat. 284 (2011), §§ 3(n)(1), 6(f)(2)(A). We do not have the jurisdiction to reach a Final Written Decision on a patent that does not qualify for post-grant review. For that reason, we must vacate the Institution Decision and terminate this proceeding.

IV. ORDER

In consideration of the foregoing, it is:

ORDERED that the Institution Decision (Paper 8) in this proceeding is vacated; and

PGR2022-00030
Patent 11,235,486 B2

FURTHER ORDERED that this proceeding is terminated.

PGR2022-00030
Patent 11,235,486 B2

FOR PETITIONER:

Sandip Patel
Mark Izraelewicz
MARSHALL, GERSTEIN & BORUN LLP
spatel@marshallip.com
mizraelewicz@marshallip.com

FOR PATENT OWNER:

Daniel Venglarik
Keith Harden
MUNCK WILSON MANDALA LLP
dvenglarik@munckwilson.com
kharden@munckwilson.com