UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MPL BRANDS NV, INC., Petitioner,

v.

BUZZBALLZ, LLC, Patent Owner.

PGR2024-00035 Patent 11,932,441 B1

Before KEN B. BARRETT, ERIC C. JESCHKE, and CYNTHIA M. HARDMAN, *Administrative Patent Judges*.

HARDMAN, Administrative Patent Judge.

DECISION Granting Institution of Post-Grant Review 35 U.S.C. § 324

I. INTRODUCTION

Petitioner MPL Brands NV, Inc. requests a post-grant review of claims 1–20 of U.S. Patent No. 11,932,441 B1 ("the '441 patent," Ex. 1001). Paper 1 ("Pet."), 1. Patent Owner BuzzBallz, LLC filed a Preliminary Response. Paper 7 ("Prelim. Resp."). With our authorization, Petitioner filed a Preliminary Reply and Patent Owner filed a Preliminary Sur-reply. Paper 8 ("Prelim. Reply"); Paper 9 ("Prelim. Sur-reply").

We have authority to determine whether to institute a post-grant review. *See* 35 U.S.C. § 324; 37 C.F.R. § 42.4(a). Considering the arguments and evidence presented, we institute a post-grant review because we determine that the Petition demonstrates "that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable." 35 U.S.C. § 324(a).

The following preliminary findings of fact and conclusions of law are made solely to determine whether to institute review. Any final decision will be based on the full trial record.

A. Real Parties in Interest

Petitioner identifies MPL Brands NV, Inc., which does business as Patco Brands, as the real party in interest. Pet. 1. Patent Owner identifies BuzzBallz, LLC as the real party in interest. Paper 6 (Patent Owner Mandatory Notices), 2.

B. Related Matters

The parties identify as related the following matters involving the '441 patent: (i) *MPL Brands NV, Inc. v. BuzzBallz, LLC*, 3:24-cv-01282 (N.D. Cal.), filed March 1, 2024; (ii) *BuzzBallz, LLC et al. v. MPL Brands* *NV, Inc.*, No. 2:24-cv-00548 (D. Nev.), filed March 20, 2024; and (iii) IPR2024-01000. Pet. 1–2; Paper 6, 2.

C. The '441 Patent (Ex. 1001)

The '441 patent, titled "Container," issued on March 19, 2024, from U.S. Application 18/506,811, which was filed on November 10, 2023. Ex. 1001, codes (21), (22), (45), (54). The '441 patent claims priority, as a continuation, to a design patent application and two utility patent applications, the earliest of which was filed on April 19, 2010. *Id.* at code (63).

The '441 patent relates to a container for storing a liquid or solid, having a body formed from plastic (such as polyethylene terephthalate (PET) resin) and a lid formed from metal. *Id.* at code (57), 1:17–20, 3:4–15. The container body may include a vertical neck and a lip, and the bottom wall may include a depression. *Id.* at code (57).

We reproduce below Figure 1 of the '441 patent:

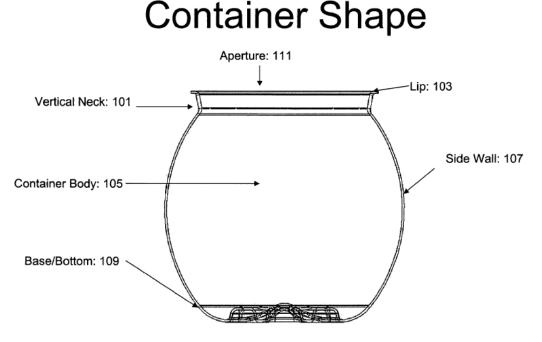


Figure 1

Figure 1, reproduced above, is a side view of hollow container body 105 having convex side wall 107 extending radially around a periphery of the container body. *Id.* at 2:22–29. The distal end of container side wall 107 is connected to base/bottom wall 109 to seal the first end of container 105. *Id.* at 2:30–32. The proximate end of container side wall 107 is connected to substantially vertical neck 101 around the periphery of container side wall 107. *Id.* at 2:32–35. Aperture 111 extends through vertical neck 101 to provide access to a liquid or a solid within container body 105. *Id.* at 2:35–37.

The container's metal lid includes a pull top arm, which pivots and cooperates with a weakened area to provide access to the container body's interior. *Id.* at code (57). We reproduce below Figure 4 of the '441 patent:

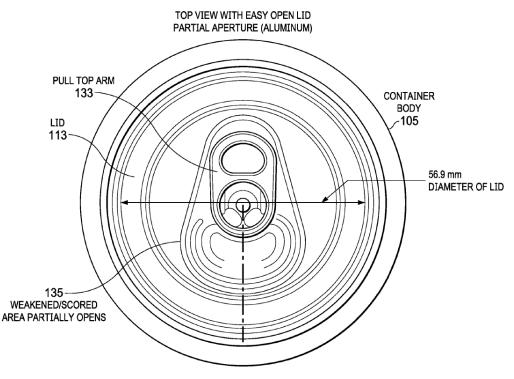
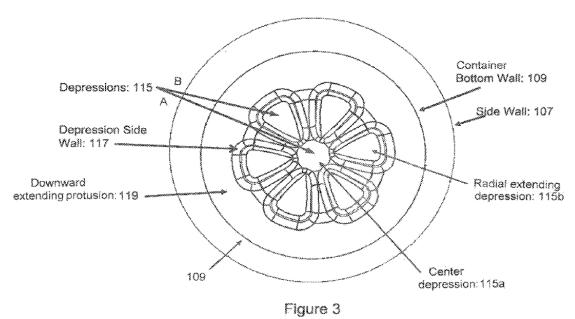


Figure 4

Figure 4, reproduced above, is a top view of deformable container lid 113. *Id.* at 3:31–34. When pull top arm 133 is pivoted by a user's finger through an aperture of pull top arm 133, deformable area 135 provides an opening for access to the contents in container body 105. *Id.* at 3:36–39.

The bottom wall of the container body may include a center protrusion, a depression, and a radially-extending depression. *Id.* at code (57). We reproduce below Figure 3 of the '441 patent:



Bottom of Container

Figure 3, reproduced above, shows container side wall 107 extending radially outwards and bottom wall 109 having a multitude of radially-extending depressions 115, which increase in width as the radial distance from the center increases. *Id.* at 3:20–25. Depression 115 is defined by depression side wall 117 extending around the periphery of depression 115. *Id.* at 3:25–27. Bottom wall 109 includes downward extending protrusion 119 centered with respect to depressions 115 and bottom wall 109. *Id.* at 3:27–30.

D. The Challenged Claims

Petitioner challenges all claims (1-20) of the '441 patent. Claims 1 and 15 are independent. Claim 1 is illustrative and is reproduced below with bracketed notations added:¹

1. [1.Pre] A container, comprising:

- [1.A] a container body, the container body defining a first opening to an interior of the container body; and
- [1.B] a lid connected to the container body and covering the first opening to the interior of the container body;
- [1.C] wherein the container body is made out of a resin;
- [1.D] wherein the lid is made out of a metal;
- [1.E] wherein the container body comprises a container side wall and a base portion connected to the container side wall;
- [1.F] wherein the base portion comprises a bottom and a first depression formed therein, the first depression extending upwardly from the bottom;
- [1.G] wherein the first depression at least partially defines a first outline;
- [1.H] wherein the base portion further comprises a center element centered with respect to the first outline at least partially defined by the first depression;
- [1.I] wherein each of the center element, and the first outline at least partially defined by the first depression, is centered with respect to the container side wall;
- [1.J] wherein each of the center element, and the first outline at least partially defined by the first depression, is centered with respect to the base portion;
- [1.K] wherein a cross-sectional diameter of the first opening to the interior of the container body is less than a cross-

¹ For ease of reference, we use the same notations Petitioner uses in the Petition. *See, e.g.*, Pet. 15–67, 256–59.

sectional diameter of a middle portion of the container side wall;

- [1.L] wherein the base portion defines a diameter that is less than the cross-sectional diameter of the middle portion of the container side wall;
- [1.M] wherein a lower portion of the container side wall extends down wardly from the middle portion of the container side wall to the base portion of the container body, the lower portion along its entirety being greater in diameter than the base portion, including the bottom, thereby rendering the container body stemless;
- [1.N] wherein the container body further comprises a circular neck extending from the container side wall so that the container side wall extends between the circular neck and the base portion;
- [1.0] wherein an upper edge of the container side wall is adjacent to the circular neck of the container body;
- [1.P] wherein the container body further comprises a lip at an end of the circular neck opposite the upper edge of the container side wall;
- [1.Q] wherein the circular neck is adjacent to the lip;
- [1.R] wherein a first portion of the lid is above the lip of the container body;
- [1.S] wherein the first portion of the lid defines a first circular shape;
- [1.T] wherein the first portion of the lid further defines a second circular shape around which the first circular shape circumferentially extends;
- [1.U] wherein the second circular shape defined by the first portion of the lid is concentric with the first circular shape defined by the first portion of the lid;
- [1.V] wherein the first circular shape defined by the first portion of the lid is radially positioned between the container side wall and the second circular shape defined by the first portion of the lid;

- [1.W] wherein a second portion of the lid extends horizontally and is positioned so that the second circular shape is radially positioned between the second portion of the lid and the first circular shape;
- [1.X] wherein the second portion of the lid defines a total area across which the second portion of the lid extends horizontally;
- [1.Y] wherein the second portion of the lid comprises a weakened or scored area;
- [1.Z] wherein the weakened or scored area is less than the total area across which the second portion of the lid extends horizontally;
- [1.AA] wherein the lid further comprises an arm connected to the second portion of the lid and radially positioned within the second circular shape;
- [1.AB] wherein the arm comprises opposing first and second end portions;
- [1.AC] wherein the arm is pivotable from a first position, in which the arm extends horizontally and the weakened or scored area is not deformed, to a second position, in which the arm does not extend horizontally and the weakened or scored area is deformed to provide a second opening to the interior of the container body;
- [1.AD] wherein an upper portion of the container side wall extends upwardly from the middle portion of the container side wall to the upper edge of the container side wall, the upper portion along its entirety being greater in diameter than the first opening to the interior of the container body;
- [1.AE] wherein the container body contains a liquid therewithin;
- [1.AF] wherein the lid cooperates with the lip to provide a seal so that the liquid contained within the container body is sealed against leaking out from between the container body and the lid;
- [1.AG] wherein, when the arm of the lid is in the first position and the weakened or scored area is not deformed:

- the first end portion of the arm is not positioned above the weakened or scored area of the second portion of the lid; and
- at least a portion of the second end portion of the arm is positioned above the weakened or scored area of the second portion of the lid;

[1.AH] wherein the container side wall extends between the circular neck and the base portion so that:

the upper portion of the container side wall defines a first angle:

between the upper portion of the container side wall

and the bottom of the base portion, and

with respect to the bottom of the base portion;

the middle portion of the container side wall defines a second angle:

between the middle portion of the container side wall and the bottom of the base portion, and

with respect to the bottom of the base portion;

the lower portion of the container side wall defines a third angle:

between the lower portion of the container side wall and the bottom of the base portion, and

with respect to the bottom of the base portion;

the first angle is an acute angle; the third angle is an obtuse angle;

the second angle is greater than the first angle; and the third angle is greater than the second angle;

and

[1.AI] wherein the interior of the container body extends continuously across the cross-sectional diameter of the middle portion at a height midway between the circular neck

and the base portion so as to be interrupted, if at all, only by the liquid contained within the container body.

Ex. 1001, 4:7–6:3.

E. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–20 are unpatentable on the following

grounds:

Ground	Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1	1-8	103	Coca-Cola PET Can, ² AAPA ³
2	9–20	103	Coca-Cola PET Can, AAPA, Protais ⁴
3	1–20	103	Metzger, ⁵ Protais, Kaminski ⁶
4	1–20	103	Gardiner, ⁷ Pedmo, ⁸ Brown ⁹

² According to the Petition, Coca-Cola PET Can is a beverage container with a plastic body and an aluminum lid manufactured and commercially sold from 1985–86, as allegedly evidenced by, among other things, Coca-Cola marketing material (Ex. 1006) and the declaration of Joseph T. Norris (Ex. 1005). *See, e.g.*, Pet. 13–15.

³ AAPA stands for applicant-admitted prior art. *See* Pet. i, 67 (citing Ex. 1001, 1:36–37, 2:49–52).

⁴ Protais et al., U.S. Patent 8,524,349 B2, issued September 3, 2013 (Ex. 1008).

⁵ Metzger et al., U.S. Patent 8,141,741 B2, issued March 27, 2012 (Ex. 1010).

⁶ Kaminski et al., U.S. Patent 4,465,204, issued August 14, 1984 (Ex. 1011).

⁷ Gardiner, U.S. Patent 6,729,495 B2, issued May 4, 2004 (Ex. 1012).

⁸ Pedmo et al., U.S. Patent 6,585,123 B1, issued July 1, 2003 (Ex. 1013).

⁹ Brown, U.S. Patent 4,024,981, issued May 24, 1977 (Ex. 1014).

Pet. 3–4. Petitioner supports its contentions with the Declarations of Nathan J. Delson, Ph.D. (Ex. 1002) and Joseph T. Norris (Ex. 1005), among other evidence. Patent Owner supports its contentions with the Declaration of Richard D. Kirkpatrick (Ex. 2001), among other evidence.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

We begin by addressing the level of ordinary skill in the art, because it factors into whether the '441 patent is eligible for post-grant review and whether Petitioner has demonstrated that it is more likely than not that at least one of the challenged claims is unpatentable.

Petitioner contends that a person of ordinary skill in the art (sometimes abbreviated herein as "POSITA"), "as of either the alleged April 2010 priority date or the '441 patent's November 2023 filing date," would have had

(i) an associate's or bachelor's degree in mechanical, industrial or manufacturing engineering and (ii) at least two to three years of practical experience with designing or manufacturing mechanical products such as food or beverage packaging. A POSITA could substitute additional education for industry experience and vice versa.

Pet. 13 (citing Ex. 1002 (Delson Decl.)¶14). Patent Owner does not dispute Petitioner's proposal, or otherwise address the applicable level of skill in the art. *See generally* Prelim. Resp.

Petitioner's proposed level of ordinary skill in the art appears to be consistent with the cited prior art and is undisputed on this record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (indicating that the prior art itself may reflect an appropriate skill level). However, we find some ambiguity in the last sentence of Petitioner's proposal ("A POSITA

could substitute additional education for industry experience and vice versa.") because the reference to "additional education" is not tethered to *relevant* education. Accordingly, we modify the last sentence of Petitioner's proposal to clarify that the additional education must be relevant. Thus, we restate that for purposes of this Decision, a person of ordinary skill in the art of the '441 patent would have had:

(i) an associate's or bachelor's degree in mechanical, industrial or manufacturing engineering and (ii) at least two to three years of practical experience with designing or manufacturing mechanical products such as food or beverage packaging. A POSITA could substitute additional relevant education for practical experience and vice versa.

B. Post-Grant Review Eligibility

As a threshold matter, we must determine whether Petitioner has demonstrated that the '441 patent is eligible for post-grant review. *See US Endodontics, LLC v. Gold Standard Instruments, LLC*, PGR2015-00019, Paper 17, 11–12 (PTAB Jan. 29, 2016) (explaining that Petitioner bears the burden of demonstrating that the challenged patent is eligible for post-grant review).

The post-grant review provisions of the America Invents Act ("AIA") apply to "any application for patent, and to any patent issuing thereon, that contains or contained at any time":

(A) a claim to a claimed invention that has an effective filing date as defined in section 100(i) of title 35, United States Code, that is on or after [March 15, 2013]; or

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

Pub. L. No. 112-29, 125 Stat. 284 (2011), § 3(n)(1).¹⁰ Petitioner contends that the '441 patent is eligible for post-grant review for two independent reasons, i.e., because (1) under AIA § 3(n)(1)(A), claims 9, 10, 15, and 16 of the '441 patent "include new matter with a November 10, 2023, priority date"; and (2) under AIA § 3(n)(1)(B), the '441 patent claims priority under 35 U.S.C. § 120 to a design patent application that contained a claim to an invention that has an effective filing date after March 15, 2013. *See* Pet. 4–8. We address each argument in turn.

1. Whether the '441 Patent is Eligible for Post-Grant Review Under AIA § 3(n)(1)(A)

Petitioner asserts that claims 9, 10, 15, and 16 "do not find written description support in any prior filed applications, and have a priority date of no earlier than November 10, 2023—the filing date of the '441 patent." Pet. 7. According to Petitioner, these claims "recite that a 'depression [at the bottom of the container] is visible through at least a portion of the container body," and thus require the container body to be transparent, but the '441 patent specification "fails to explain whether transparent resins are used." *Id.* (quoting claims 9, 10, 15). Petitioner further asserts that "the limitation requiring 'the container body to contain a liquid therewithin' (EX-1001, 5:30, 8:19) necessitates a transparent/translucent liquid in the container to make the depression visible through the container body, which again, is not described in the '441 patent." *Id.*

¹⁰ Petitioner discusses post-grant review eligibility in terms of Manual of Patent Examining Procedure ("MPEP") § 2159. *See* Pet. 4–8. However, like Patent Owner, we address eligibility using the statutory language found in AIA §§ 3 and 6. *See* Prelim. Resp. 6 n.1.

Petitioner does not persuade us that claims 9, 10, 15, and 16 "do not find written description support in any prior filed applications."¹¹ Pet. 7. Instead, we find adequate description of both a transparent container body and transparent liquids, such that the claimed depression is visible through the container body.

As both parties acknowledge, the '441 patent teaches that the container body may be made of "polyethylene terephthalate (PET) resin." *See* Pet. 7; Prelim. Resp. 7; Ex. 1001, 2:43–52, 3:9–15. Citing the Handbook of Engineering and Specialty Thermoplastics, Petitioner asserts that "PET material can be opaque." Pet. 7 (citing Ex. 1017 (Handbook), 39). This Handbook, however, also indicates that "PET films" can be "*translucent*, opaque or colored (with additives)"). Ex. 1017 (Handbook), 39 (emphasis added). As Patent Owner points out, the Handbook further explains that in its "amorphous state, *PET is transparent*" and can be "used as overhead projector transparency, photographic film, etc." Prelim. Resp. 8 (quoting Ex. 1017 (Handbook), 28–29) (emphasis Patent Owner's). The Handbook also states that in its "semi-crystalline state," PET is "translucent." Ex. 1017 (Handbook), 23.

¹¹ Although a written description analysis occurs "as of the filing date sought," *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991), Petitioner limits its written description analysis to disclosure in the '441 patent specification as issued, without analyzing disclosure in the application that led to the '441 patent, or in any earlier application in the priority chain. *See generally* Pet. 7–8. Patent Owner briefly mentions disclosure in different priority applications (*see* Prelim. Resp. 12 n.2, 23), but also focuses its written description analysis mainly on disclosure in the '441 patent specification. *See* Prelim. Resp. 7–9. In view of the parties' arguments, we likewise focus our analysis on disclosure in the specification of the '441 patent as issued.

Patent Owner directs us to additional evidence of record indicating that PET is translucent. For example, Petitioner's own declarant, Mr. Norris, describes the Coca-Cola PET Cans as "clear," "allow[ing] the product to be seen through the container," and its declarant Dr. Delson explains that "it was well known to a POSITA that PET could be translucent or transparent." Prelim. Resp. 8–9 (emphasis omitted); Ex. 1005 (Norris Decl.) ¶ 11; Ex. 1002 (Delson Decl.) ¶¶ 109, 247. Patent Owner also cites various patents that indicate PET is transparent. *See* Prelim. Resp. 7–8 (citing Ex. 2005 (Mueller), 1:35–38; Ex. 2006 (Kusuda), 3:14–17; Ex. 2007 (Suzuki), 5:52–57).

In view of the evidence discussed above, we agree with Patent Owner that there is adequate written description support for a transparent container body such that a depression in the container base is "visible through at least a portion of the container body," as recited in claims 9, 10, 15, and 16. Prelim. Resp. 9.

Regarding Petitioner's assertion that the '441 patent does not disclose "a transparent/translucent liquid" (Pet. 7), we again disagree. As Patent Owner points out, "the '441 Patent mentions beverages, such as 'beer and soda,' as liquids for which the claimed container would be suitable." Prelim. Resp. 10 (quoting Ex. 1001, 1:25–27). Patent Owner demonstrates that a person of ordinary skill in the art "would have recognized that beer is typically see-through, or translucent." *Id.* (citing Ex. 2012 (Till) ¶24 (discussing an inspection apparatus for bottles that "are filled with a transparent liquid (e.g. beer, table water, mineral water, wine etc.)"); Ex. 2013 (Schnuckle) ¶8 (noting "translucent to transparent liquids such as water, soda, juice, or the like")). We agree with Patent Owner that the

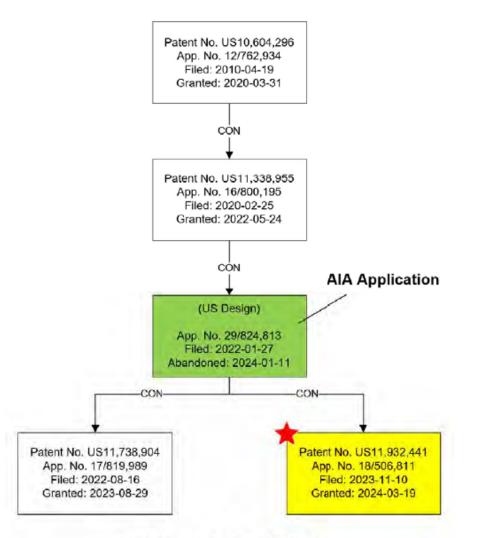
'441 patent's identification of "beer and soda as beverages the described and claimed container was intended to hold" provides adequate written description support "for having transparent or translucent liquids within the container."¹² Prelim. Resp. 10.

For the reasons discussed above, on this record Petitioner has not demonstrated that claims 9, 10, 15, and 16 include subject matter having a November 10, 2023, priority date. Thus, Petitioner has not demonstrated that the '441 patent is eligible for post-grant review under AIA § 3(n)(1)(A).

2. Whether the '441 Patent is Eligible for Post-Grant Review Under AIA § 3(n)(1)(B)

Petitioner contends that the '441 patent is eligible for post-grant review under AIA § 3(n)(1)(B) because it claims priority to a design patent application that contained a claim to an invention having an effective filing date after March 15, 2013. To provide context for our analysis of this argument, we reproduce below Petitioner's graphic showing the asserted priority chain of the '441 patent:

¹² Patent Owner also cites Figures 1 and 2 of the '441 patent and asserts that they show "side views of the claimed container filled with a liquid/solid in which the depression is visible through the side walls." Prelim. Resp. 11. We do not rely on these figures because Patent Owner has not pointed us to disclosure in the '441 patent confirming that these Figures depict "filled" containers.



'441 Patent's Family Tree

Pet. 5. As shown in the graphic above, the asserted priority chain of the '441 patent comprises five applications. Relevant here, the applicant filed the '441 patent (yellow box) as a continuation of a design patent application, U.S. Application No. 29/824,813 (the "'813 design application," green box).

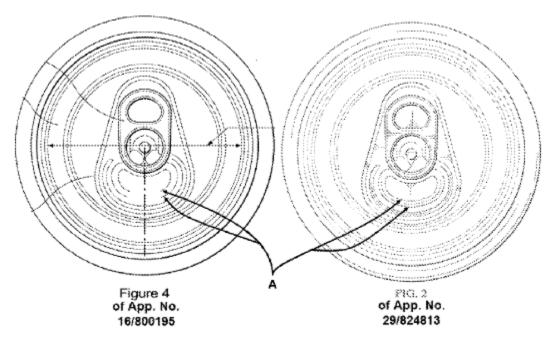
Petitioner argues that the '813 design application, "as initially filed on January 27, 2022, contained a claim that was not supported by the earlier filed applications, and was examined under the AIA provisions." Pet. 7. Petitioner thus argues that "[t]he '441 patent, a continuation of the '813 application, is therefore also subject to the AIA provisions." *Id*.

We begin by reviewing the relevant prosecution history of the '813 design application.

a. Relevant Prosecution History of the '813 Design Application

The applicant filed the '813 design application as a continuation of the prior-filed utility application (App. No. 16/800,195, "the '195 parent application"). *See* Ex. 1003 ('813 design application prosecution history), 183–88. As filed, the '813 design application contained three figures, one of which (Figure 2) illustrated a top view of the claimed container. *See id.* at 184–85, 187.

The Examiner objected to the applicant filing the '813 design application as a continuation of the '195 parent application because "[t]he disclosure of the ['195 parent application] fails to provide adequate written description support in the manner provided by the first paragraph of 35 U.S.C. 112 for the claim of this application." *Id.* at 107. The Examiner provided an annotated graphic comparing Figure 4 in the '195 parent application with Figure 2 in the '813 design application as filed. *Id.* We reproduce the Examiner's graphic below:



Ex. 1003 ('813 design application prosecution history), 107. The graphic above shows Figure 4 from the '195 parent application on the left and Figure 2 from the '813 design application on the right. Both figures depict a can lid having a pop-top. The Examiner added lines (labelled "A") pointing to an area of the pop-top on each figure, and stated, "[s]hape of bottom contour of tear strip portion of [the] poptop has been changed." Id. The Examiner asserted that "[w]ithout additional directions or guidance in the prior-filed application, a design that includes the above feature could not have been recognizable upon filing of the earlier application." Id. at 108. The Examiner stated, "[i]n order to overcome the objection, it is suggested that Applicant may choose" (1) "[t]o keep the changed tear strip appearance" and change the application status from "Continuation" to "Continuation-In-Part;" or (2) "[c]onvert the tear strip appearance in Fig. 2 to that which was shown in the parent application," and "keep the Continuation status." Id. at 108. The Examiner indicated that the application was being examined pursuant to the AIA provisions. Id. at 107.

The applicant responded that it traversed the Examiner's objection, but did not articulate reasoning why. *See id.* at 70.¹³ Instead, the applicant "submitted Replacement Sheets . . . that include an amended FIG. 2, which addresses this objection."¹⁴ *Id.* We reproduce below replacement Figure 2:

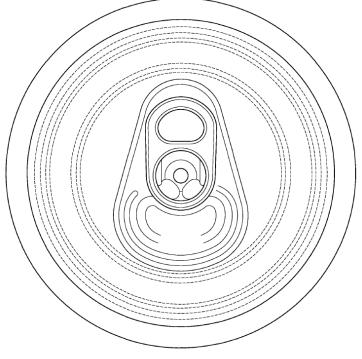


FIG. 2

See id. at 76–77, 70, 102. Replacement Figure 2 above depicts a can lid having a pop-top, where the shape of contour lines under the pop-top tab was reverted to that shown in Figure 4 of the '195 parent application.

In response to the replacement Figure, the Examiner withdrew the application status objection. *Id.* at 51. The Examiner nevertheless continued

¹³ The applicant's response appears in an Amendment dated January 5, 2023. *See* Ex. 1003 ('813 design application prosecution history), 76. The pages of that Amendment are scattered throughout Exhibit 1003, appearing at pages 76–77, 101–03, and 70–75.

¹⁴ Pursuant to 37 C.F.R. § 1.121, "Any changes to an application drawing ... must be submitted on a replacement sheet of drawings"

to indicate that the application was being examined pursuant to the AIA provisions. *See id.* at 51, 11.

b. Analysis

In view of the above-summarized prosecution history, Petitioner asserts that

[b]ecause "the drawings are the claims to the patented subject matter" of a design application (*see Hupp v. Siroflex of Am., Inc.*, 122 F.3d 1456, 1464 (Fed. Cir. 1997)), the '813 application, as initially filed on January 27, 2022, contained a claim that was not supported by the earlier filed applications, and was examined under the AIA provisions.

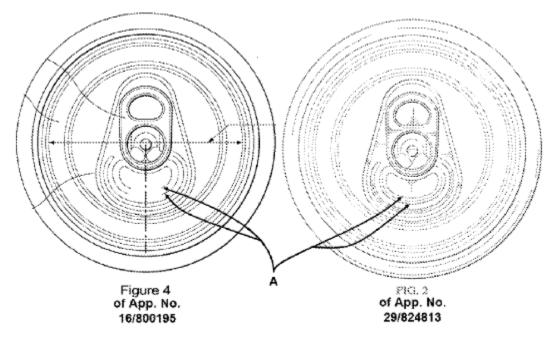
Pet. 7. Petitioner further asserts that "[t]he '441 patent, a continuation of the '813 application, is therefore also subject to the AIA provisions, and thus eligible for [post-grant review]" under AIA § 3(n)(1)(B). *Id.*

Patent Owner disputes Petitioner's argument, contending that "Figure 2 of the '813 Application always retained written description support and the minor drawing changes from the '195 Application did not introduce new claims under the AIA." Prelim. Resp. 13.

"The test for sufficiency of the written description, which is the same for either a design or a utility patent, has been expressed as 'whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *In re Owens*, 710 F.3d 1362, 1366 (Fed. Cir. 2013) (quoting *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)). "In the context of design patents, the drawings provide the written description of the invention." *Id.* "Thus, when an issue of priority arises under § 120 in the context of design patent prosecution, one looks to the drawings of the earlier application for disclosure of the subject

matter claimed in the later application." *Id.* In the design patent context, the Federal Circuit has "interpreted a 'person of ordinary skill in the art to which the invention pertains" as a "designer of ordinary skill who designs articles of the type involved." *LKQ Corp. v. GM Global Tech. Operations LLC*, 102 F.4th 1280, 1299 (Fed. Cir. 2024) (en banc).

On the current record, Petitioner adequately demonstrates that the '813 design application as filed on January 27, 2022, contained a claim that was not supported by the earlier-filed application, and was thus examined under the AIA provisions. Pet. 7. For ease of reference, we again reproduce the Examiner's side-by-side comparison of Figure 4 from the '195 parent application and Figure 2 from the '813 design application:



Ex. 1003 ('813 design application prosecution history), 107. The figures above depict can lids with pop-tops. The figures plainly differ regarding the shape of the contour lines under the pop-top tab. As seen in Figure 4 on the left, the two sets of contour lines under the pop-top tab in the '195 parent application do not connect, whereas these same lines in Figure 2 on the right

connect. The connected lines in the figure on the right form a kidney-bean shape that is absent from the figure on the left. On this record we are not directed to any other figures or disclosure in the '195 parent application that provide support for the line design depicted in Figure 2 of the '813 design application. Accordingly, like the Examiner, we find that the '195 parent application does not contain a written description sufficient to convey to an ordinary designer that the inventor possessed the subject matter of the '813 design application as of the earlier filing date.

In view of this finding, we agree with Petitioner that the '813 design application as initially filed contained a claim that was not supported by the '195 parent application. Pet. 7. Accordingly, the '813 design application contained a claimed invention that has an effective filing date of January 27, 2023 (the filing date of the '813 design application). Because this date is after March 15, 2013, the '813 design application is subject to the AIA provisions. *See* AIA § 3(n)(1)(A); 35 U.S.C. § 100(i)(1)(A). Under AIA § 3(n)(1)(B), the '441 patent, which claims priority to the '813 design application (via 35 U.S.C. § 120), is therefore also subject to the AIA provisions and thus eligible for post-grant review.

Patent Owner makes numerous arguments as to why the '441 patent is not eligible for post-grant review. *See* Prelim. Resp. 13–31. We have considered each of these arguments (and address them in turn below), but on this record find that they do not undermine Petitioner's showing that the '441 patent is eligible for post-grant review under AIA § 3(n)(1)(B).

> *i. Whether the Examiner Applied an "Overly Rigid" Written Description Standard*

Patent Owner argues that the Examiner of the '813 design application, in concluding that the design depicted in Figure 2 "*could not have been*

recognizable as a design in the prior art application's disclosure," applied an "overly rigid standard," "requiring the figures to be *identical*." Prelim. Resp. 16, 17. According to Patent Owner, "[t]here was no change in the design." *Id.* at 17.

We disagree with Patent Owner. The Examiner's reference to the design being "recognizable" does not necessarily mean that the Examiner required the design to be "identical." In any event, independent of the Examiner's analysis, we find that there was a change in the design such that the '195 parent application does not reasonably convey to an ordinarily skilled designer that the inventor had possession of the container depicted and claimed in Figure 2 of the '813 design application as filed, for the reasons discussed above.

Patent Owner argues that "minor inconsistenc[ies]" are not "sufficient to show that [an inventor] did not have possession of the claimed invention," and our focus should be on "whether the inventor had possession of the 'design as a whole." Prelim. Resp. 20–22 (citing *Skechers U.S.A., Inc. v. Nike, Inc.*, IPR2016-00871, Paper 8, 20 (PTAB Sept. 29, 2016); *David's Bridal, Inc. v. Jenny Yoo Collection, Inc.*, PGR2016-00041, Paper 11, ¹⁵ 15 (PTAB Feb. 22, 2017)); *see also id.* at 24. Patent Owner's cases are distinguishable.

In *Skechers*, the Board rejected the petitioner's arguments asserting a lack of adequate written description because the design differences the petitioner identified "were so minute that they could only be observed, if at

¹⁵ Patent Owner repeatedly cites to *David's Bridal* at Paper 9, but Paper 9 was expunged. We instead cite the Board's Decision Denying Institution Paper 11.

all, by magnifying the pictures and drawings," and/or could be resolved by reference to other figures in the application. *See* Prelim. Reply 4; *Skechers*, IPR2016-00871, Paper 8, 14–15, 17, 21. Similarly, in *David's Bridal*, "[t]he Board held that all aspects of the dresses in the divisional application had adequate written description support in the parent application through combinations of other figures." *See* Prelim. Reply 5; *David's Bridal*, PGR2016-00041, Paper 9, 17–18. Here, in contrast, we agree with Petitioner that "the differences between the full-size drawings can be easily observed without any embellishment or magnification,"¹⁶ and "no other figures in the priority applications support the changes to the can lid design." Prelim. Reply 4–5.

Patent Owner repeatedly argues that Petitioner's written description argument is "based on attorney argument, not the understanding of a POSITA." *See, e.g.*, Prelim. Resp. 4, 17, 23–24; Prelim. Sur-reply 1–3. Petitioner, however, goes beyond attorney argument. It bases its written description analysis on the prosecution history of the '813 design application. For example, as Petitioner notes, although the applicant "made extensive arguments against other 112 rejections," it "did not object, argue

¹⁶ Patent Owner argues that in its Preliminary Reply, "Petitioner needed to annotate the figures to direct the reader's attention" to the asserted differences, and "[d]ifferences that require annotations to be identified are not easily observable." Prelim. Sur-reply 6. This argument is unavailing. We are able to ascertain the differences between the figures without the annotation Petitioner included in its Preliminary Reply. Indeed, the Examiner and Patent Owner's declarant similarly identified the relevant difference without the benefit of Petitioner's annotation. *See* Ex. 1003 ('813 design application prosecution history), 107; Ex. 2001 (Kirkpatrick Decl.)¶ 15.

or otherwise refute the Examiner's new matter objections." Prelim. Reply 7 (citing Ex. 1003 ('813 design application prosecution history), 70–74).

Patent Owner contends that the applicant replaced the drawings "in the interests of furthering prosecution," not as a "concession... that the Examiner's position was correct." Prelim. Resp. 29 (citing Ex. 1003 ('813 design application prosecution history) 75). Petitioner, however, has the better view of the prosecution, given that the applicant argued other § 112 rejections but not the new matter objection. *See* Ex. 1003 ('813 design application prosecution history) 70–74. In any event, whatever the applicant's reason for amending Figure 2, the prosecution history also shows that the applicant did not object to the Examiner's repeated statements in later office actions indicating that the '813 design application was being examined under the AIA. *Id.* at 11, 51. Thus, under the circumstances here, we find that Petitioner's reliance on the prosecution history to support its written description arguments to be reasonable.

For the above reasons, Patent Owner's arguments do not undermine Petitioner's showing that the '441 patent is eligible for post-grant review.

> *ii. Whether Figure 2 of the '813 Design Application was Adequately Supported by the Detailed Description of the '195 Parent Application*

Patent Owner argues that "the detailed description of the '195 Application also provided written description support for Figure 2 of the '813 Application." Prelim. Resp. 23. In particular, Patent Owner argues that pop-tops were "well understood by a person of ordinary skill in the art"; the '195 parent application describes "a container lid having an easy-open 'pop-top arm'" and "a weakened (scored metal area)"; and "[t]he novelty of the '441 Patent is not defined by these features." *Id.* (citing Ex. 2002

('195 prosecution history), 92, 94, 95–96). As such, Patent Owner argues that a person of ordinary skill in the art "would have readily recognized and understood from the relevant descriptions in the '195 application that the scope of this common feature encompassed the design shown in Figure 2 of the '813 Application." *Id.* Patent Owner also argues that "given the level of complexity of the technology," "little detail was required to provide adequate written description support for Figure 2 of the '813 Application." *Id.* at 24 (citing *Streck, Inc. v. Rsch. & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1285 (Fed. Cir. 2012)).

We do not agree with Patent Owner that the detailed description of the '195 parent application provides written description support for Figure 2 of the '813 design application. The cited disclosures in the '195 parent application do not address different configurations or designs for the particular lines at issue here. See Ex. 2002 ('195 prosecution history), 92, 94, 95–96. Additionally, the facts that pop-tops were known, and in Patent Owner's view, not complex technology, are not relevant to the question of adequate written description support. See, e.g., Ariad Pharms., Inc., 598 F.3d at 1352 ("a description that merely renders the invention obvious does not satisfy the [written description] requirement"). The '813 design application as filed sought to claim a container with, among other features, the ornamental design of the pop-top depicted in Figure 2. See, e.g., Ex. 1003 ('813 design application prosecution history), 184–85 (claiming the ornamental design shown in the solid lines of Figures 1-3). Patent Owner does not explain specifically how the cited disclosures of the '195 parent application or how knowledge of pop-tops provides adequate disclosure of the ornamental design depicted in Figure 2. Unlike an

invention in a utility patent, a patentable ornamental design has no use other than its visual appearance. *See, e.g., In re Glavas*, 230 F.2d 447, 450 (CCPA 1956) ("A design, from the standpoint of patentability, has no utility other than its ornamental appearance."). Thus, a general knowledge of how pop-tops function does not provide written description support for a range of ornamental pop-top designs.

For the above reasons, Patent Owner's arguments do not undermine Petitioner's showing that the '195 parent application does not contain a written description sufficient to convey to a designer of ordinary skill in the art that the inventor possessed the subject matter of the '813 design application as of the earlier filing date.

iii. Whether the Difference in the Figures is Difference in Drawing Convention, Not Design

Patent Owner, supported by the declaration of Mr. Kirkpatrick, "a patent illustrator with over 32 years of experience," notes the "striking similarity" between the figures and argues that nothing demonstrates that the respective drafters "illustrated a different product or design." Prelim. Resp. 25 (citing Ex. 2001 (Kirkpatrick Decl.)¶¶ 19–21). According to Patent Owner and Mr. Kirkpatrick, there are "multiple constraints in patent illustrations that commonly lead to such minor differences in figures," and the differences between the figures here merely "reflect choices in drafting strategy of the respective illustrators." *Id.* (citing Ex. 2001 (Kirkpatrick Decl.)¶¶ 19, 21–23).

Patent Owner's arguments are unavailing. As an initial matter, Mr. Kirkpatrick is opining about a design patent application, and Patent Owner has not established that Mr. Kirkpatrick possesses the education and experience of a designer of ordinary skill in the art of ornamental aspects of

containers for storing liquids or solids. See Ex. 2001 ¶ 5 (implying that Mr. Kirkpatrick is a generalist whose experience with design patents is in preparing formal drawings of designs invented by others).¹⁷ For this reason alone, on this record we accord Mr. Kirkpatrick's declaration little weight on the question of whether the '195 parent application provides adequate written description support for originally-filed Figure 2 of the '813 design application. See, e.g., Kyocera Senco Indus. Tools Inc. v. Int'l Trade Comm'n, 22 F.4th 1369, 1376–77 (Fed. Cir. 2022) ("To offer expert testimony from the perspective of a skilled artisan in a patent case . . . a witness must at least have ordinary skill in the art. Without that skill, the witness' opinions are neither relevant nor reliable.").

Even if Mr. Kirkpatrick's opinions were relevant, they would not change our conclusion regarding lack of adequate written description. Mr. Kirkpatrick attributes the differences between the drawings to "choices in drafting strategy of the respective illustrators," such as how to use "contour lines to illustrate sloped surfaces" and how much detail to include for well-known features like pop-tops. *See* Ex. 2001 (Kirkpatrick Decl.) ¶¶ 19, 23–24, 28–32.¹⁸ These arguments are unavailing. First, there is no evidence of record indicating that the figures in the '195 parent application and '813 design application were created by different illustrators. Second,

¹⁷ Patent Owner also has not established that Mr. Kirkpatrick possesses the education and experience of a person of ordinary skill in the art of the '441 patent, as we have defined it here. *Supra* Section II.A.

¹⁸ Mr. Kirkpatrick's analysis of a photograph of a can submitted by the applicant during prosecution (*see* Ex. 2001 (Kirkpatrick Decl.) ¶¶ 25–32) is additionally unavailing because there is no evidence of record indicating that the patent illustrator(s) used this particular photograph or the depicted can to create the patent illustrations.

we agree with Petitioner that even if different illustrators employ different drafting strategies, this "does not absolve Patent Owner's responsibility not to add new matter." Prelim. Reply 6.

Patent Owner argues that "a POSITA would have recognized the difference in the purpose of utility patent drawings (the '195 Application) as opposed to design patent drawings (the '813 Application)," and would expect that "design patent drawings will not be identical to drawings of the same product or design in a utility patent." Prelim. Resp. 27. This argument is unavailing because there is no indication that a designer of ordinary skill in the art of ornamental aspects of containers for storing liquids or solids (or in the level of ordinary skill we employ herein for the '441 patent) suggests that such a designer or artisan would have had a familiarity with the purposes or requirements of utility patent drawings versus design patent drawings.

For the above reasons, Patent Owner's argument that the difference between the patent figures is a difference in drawing convention, not a design, is unavailing.

iv. Whether the Board is Bound by the Examiner's Designation of the '813 Design Application as an AIA Application

Patent Owner argues that the Board is not bound by the Examiner's determination to examine the '813 design application under the AIA provisions. *See* Prelim. Resp. 28 (citing Ex. 1003 ('813 design application prosecution history), 107, 51, 11). We agree, but as discussed above, we independently find the '813 design application was properly examined under the AIA provisions.

Patent Owner additionally argues that the "designation of the '813 Application as an AIA patent is at odds with the subsequent prosecution history of the '441 Patent," which was performed "under the pre-AIA first to invent provisions" by a different Examiner. Prelim. Resp. 29 (quoting Ex. 1004 ('441 patent prosecution history), 216). Patent Owner is correct that designating the application that led to the '441 patent as a pre-AIA application is inconsistent with the earlier designation of the '813 design application as an AIA application. Nevertheless, we are also not bound by the later Examiner's finding.

Further, the later Examiner's finding is reasonable, given that upon filing the application that led to the '441 patent, the applicant claimed priority through a chain of continuation applications, the earliest of which was filed on April 19, 2010 (a pre-AIA application). *See* Ex. 1004 ('441 patent prosecution history), 8–9 (priority claim in application data sheet); 204–06 (filing receipt). Unless the filing date of an earlier application is actually needed, there is no need for an examiner to verify entitlement to the filing date of an earlier application. *See, e.g., PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305 (Fed. Cir. 2008); MPEP § 201.08. The Examiner of the application that led to the '441 patent did not issue any prior art rejections of the claims, and the prosecution history does not reflect any priority determination. *See generally* Ex. 1004 ('441 patent prosecution history). Thus, there appears to have been no need for the Examiner to verify the applicant's claim of entitlement to a pre-AIA priority date. v. Whether the Applicant's Replacement of Figure 2 Took the '813 Design Application Outside of AIA § 3(n)(1)(B)

Patent Owner argues that even "[a]ssuming arguendo that Figure 2 of the '813 Application included new matter," the "alleged new matter was never contained at any time in the '813 Application in a manner that would trigger AIA eligibility" because the applicant amended Figure 2, thereby "cancelling any potential claim to the alleged new matter." Prelim. Resp. 29–30, 30–31. Patent Owner argues that "claims lacking written description support that are subsequently *canceled* do not convert an application from pre-AIA review to AIA review." Id. at 30 (citing Intex Recreation Corp. v. Team Worldwide Corp., PGR2019-00015, Paper 7, 14 (PTAB May 14, 2019); Rockwool Int'l A/S, v. Knauf Insulation, Inc., PGR2022-00022, Paper 10, 5–7 (PTAB July 6, 2022). Patent Owner further argues that "PTAB has held that only new matter found in issued claims of a transition application¹⁹ subjects the patent to AIA review." Id. (citing Unified Patents, LLC, v. Ideahub Inc., PGR2022-00044, Paper 27, 16-18 (PTAB Feb. 5, 2024); Home Depot U.S.A., Inc., v. Lynk Labs, Inc., PGR2022-00009, Paper 38, 58 (PTAB May 22, 2023); Microsurgical Tech., Inc., v. Regents of Univ. of Colo., PGR2021-00026, Paper 12, 24 (PTAB Jun. 16, 2021)) (emphasis added).

Patent Owner misreads the cited cases. In both *Intex* and *Rockwool*, "the new matter was not added and claimed when the purported continuation application was filed," but rather was "added and claimed after the filing

¹⁹ A "transition application" is a nonprovisional application filed on or after March 16, 2013, that claims the benefit of or priority to an application having a filing date prior to March 16, 2013. *See* MPEP § 2159.04.

dates of those applications." Prelim. Reply 2 (emphasis omitted); Intex, PGR2019-00015, Paper 7, 12; Rockwool, PGR2022-00022, Paper 10, 8. "The Board held that the proposed claims that were then canceled were never properly proposed claims and therefore did not render those applications subject to the AIA." Prelim. Reply 2; Intex, PGR2019-00015, Paper 7, 13–14; Rockwool, PGR2022-00022, Paper 10, 7–9; see also MPEP § 2159.02. In contrast, in the '813 design application, Figure 2 and a claim encompassing the design in Figure 2 were part of the application when it was filed. See Prelim. Reply 2. Even though Figure 2 was later replaced, it remains part of the patent application's original disclosure. See Ariad Pharms. Inc., 598 F.3d at 1349 ("original claims are part of the original specification"). The '813 design application thus became subject to the AIA provisions at the time original Figure 2 was filed, and even though the applicant later replaced Figure 2, the application remained an AIA application under § 3(n)(1) because it contained at one time a claim to a design having a priority date after March 15, 2013.

Patent Owner is also incorrect that "*only* new matter found in *issued claims* of a transition application subjects the patent to AIA review." Prelim. Resp. 30 (emphasis added). As Petitioner correctly points out, each of the cases Patent Owner cites in support of this argument "did hold that[] because of new matter in the issued claims, the patents were subject to AIA review," "[b]ut none of those cases held that new matter in issued claims was the *only* way that a patent could be subject to AIA review." Prelim. Reply 3; *Unified Patents*, PGR2022-00044, Paper 27, 16–17; *Home Depot*, PGR2022-00009, Paper 38, 51; *Microsurgical Tech.*, PGR2021-00026,

Paper 12, 24. We agree with Petitioner that "such an assertion would render the words 'or application' in AIA § 3(n)(1) meaningless." Prelim. Reply 3.

For the above reasons, Patent Owner's argument that because the applicant canceled the alleged new matter in the '813 design application, that application did not convert from a pre-AIA to an AIA application, is unavailing.

c. Conclusion on Post-Grant Review Eligibility Under AIA § 3(n)(1)(B)

For the above reasons, we find that Petitioner adequately demonstrates that the '813 design application as initially filed on January 27, 2022, contained a claim that was not supported by the earlier-filed applications, and thus was properly examined under the AIA provisions. The '441 patent, a continuation of the '813 design application, is also subject to the AIA provisions, and thus is eligible for post-grant review under AIA § 3(n)(1)(B).

3. Whether the Petition for Post-Grant Review is Timely

"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 '441 patent issued on March 19, 2024 (*see* Ex. 1001, code (45)), and the present Petition was accorded a filing date of June 7, 2024 (*see* Paper 4). Accordingly, the Petition was filed less than nine months after the '441 patent issued, and is thus timely. Patent Owner does not argue otherwise. *See generally* Prelim. Resp.

Because the '441 patent is eligible for post-grant review, we turn to an analysis of whether the Petition demonstrates "that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable." 35 U.S.C. § 324(a).

C. Petitioner's Grounds of Alleged Unpatentability

As noted above in Section I.E, Petitioner asserts four different obviousness grounds. At this stage of the proceeding, Patent Owner does not address the merits of Petitioner's obviousness grounds. *See generally* Prelim. Resp. For the reasons discussed below, we determine that Petitioner has demonstrated that it is more likely than not that the challenged claims are unpatentable based on the asserted grounds.

Before addressing each of Petitioner's grounds, we first set forth the governing legal principles of obviousness and claim construction.

1. Principles of Obviousness Law

In a post-grant review, "the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). The petitioner ultimately bears the burden of persuasion to prove unpatentability of each challenged claim by a preponderance of the evidence. 35 U.S.C. § 326(e). This burden never shifts to the patent owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). The Board may authorize a post-grant review if we determine that the information presented in the record shows that it is more likely than not that the petitioner will prevail with respect to at least one of the claims challenged in the petition. 35 U.S.C. § 324(a).

Under 35 U.S.C. § 103, a claim is unpatentable as obvious if the differences between the claimed invention and the prior art are such that the claimed invention, as a whole, would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. 35 U.S.C. § 103; *see also KSR*

Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007). The question of obviousness is resolved based on underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) any objective indicia of nonobviousness.²⁰ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

An obviousness determination requires finding a reason to combine accompanied by a reasonable expectation of achieving what is claimed in the challenged patent. *See Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367 (Fed. Cir. 2016). "[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *KSR*, 550 U.S. at 419–20.

2. Claim Construction

In AIA proceedings, 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). 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*.

Neither party proposes that any claim term requires an express construction. *See* Pet. 12; *see generally* Prelim. Resp. On this record, we find it unnecessary to construe any claim term to decide whether Petitioner satisfies the standard for instituting trial. *See Nidec Motor Corp. v.*

²⁰ Patent Owner does not presently assert any objective indicia of nonobviousness on the current record. *See generally* Prelim. Resp.

Zhongshan Broad Ocean Motor Co., 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that "we need only constructerms '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))).

Any final written decision entered in this case may include express claim constructions, or may include discussion of claim scope that differs from that provided in our analysis below. Any final claim constructions will be based on the full trial record.

3. Overview of Asserted Prior Art

a. Coca-Cola PET Can

Petitioner alleges that Coca-Cola PET Can "is a beverage container with a plastic body and an aluminum lid that was manufactured and publicly sold from 1985–1986." Pet. 13 (citing, e.g., Ex. 1005 (Norris Decl.), newspaper articles from 1985 (Exs. 1015, 1016), and Coca-Cola advertisement/marketing material (Ex. 1006)). We reproduce below a photograph of a set of Coca-Cola PET Cans that Petitioner alleges it purchased from an on-line vendor:

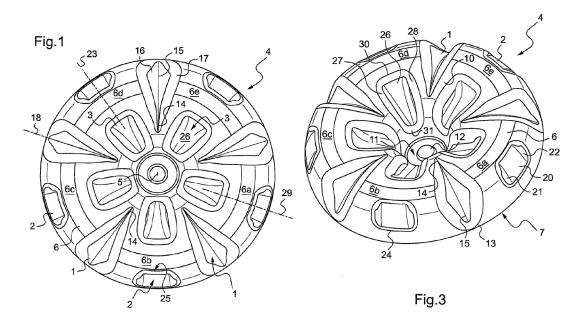


Pet. 13–14. Petitioner's photograph above shows, from left to right, a can of Sprite, Diet Coke, Coca-Cola Classic, and Coke, where each can is purportedly "made from polyethylene terephthalate with an aluminum lid." *Id.* at 14.

b. Protais (Ex. 1008)

Protais, titled "Bottom of Hollow Ware Obtained by the Blow Moulding or Stretch-Blow Moulding of a Thermoplastic Hollow Ware Preform Having Such a Bottom," issued on September 3, 2013, from a PCT application filed on July 13, 2007. Ex. 1008, codes (54), (45), (22). Protais "relates to the technical field of hollow bodies made of thermoplastic material, particularly containers such as jars or bottles . . . obtained by blowing or stretching then blowing an injected preform made of thermoplastic material (injection-blowing)." *Id.* at 1:6–13.

Protais describes a container bottom "capable of recovering its initial shape after being dropped and subsequent deformation." *Id.* at 3:11–18. We reproduce below Protais Figures 1 and 3:



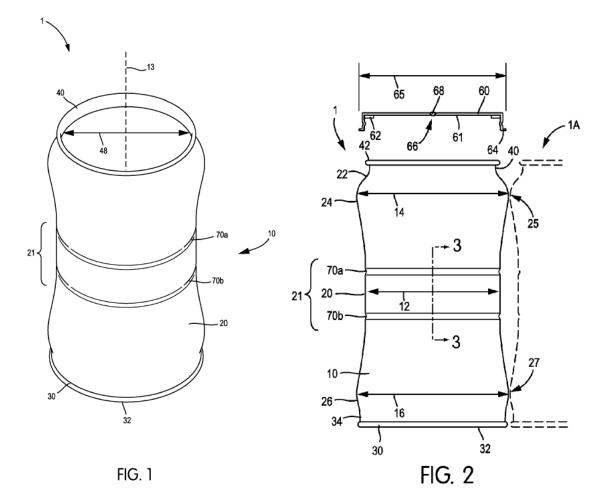
Figures 1 and 3 above depict a bottom view and a perspective view, respectively, of the bottom of a hollow body, such as a bottle. *Id.* at 4:35– 40. Bottom 4 includes five radial ribs 1, five reinforcing notches 2, and five reinforcing grooves 3. *Id.* at 4:41–44. According to Protais, the bottom "will have a better strength under vacuum" and "can be produced with less material than most previously known bottoms." *Id.* at 3:19–25.

c. Metzger (Ex. 1010)

Metzger, titled "Vacuum Container with Protective Features," issued on March 27, 2012, from an application filed on April 4, 2008. Ex. 1010, codes (54), (45), (22). Metzger relates "to food containers capable of maintaining a vacuum with features to protect the integrity of the sealed container and/or to provide improved container structure." Ex. 1010, 1:17– 21.

According to Metzger, "the container may be formed from any material, including metals, various plastics, and glass," and "[t]he container end may be made of metals, such as steel or aluminum, metal foil, plastics, composites, or combinations of these materials." *Id.* at 3:56–58, 3:49–51.

We reproduce below Metzger Figures 1 and 2:



Figures 1 and 2 above depict a perspective view and side view, respectively, of container 1. Ex. 1010, 3:59; 4:12. Container 1 includes generally cylindrical body 10 having sidewall 20 and bottom end wall 32. *Id.* at 3:61–62. Vertical axis 13 forms a right angle with bottom end wall 32. *Id.* at 3:65–67. Container end closure 60 possesses maximum container end width 65 and is provided with closure bottom ring 64 for mechanically coupling closure 60 to neck edge 42. *Id.* at 4:29–31, 8:39–49.

d. Kaminski (Ex. 1011)

Kaminski, titled "Pull Tab for Easy Open End," issued on August 14, 1984, and "is directed to a pull tab for a metallic beverage-type can end or

the like, and more particularly to a pull tab which is retained to the can end after opening." Ex. 1011, codes (45), (54), 1:5–8.

Kaminski describes an "easy open can end having a retained tear strip extending diametrically partly across the can end defined by a score line, and a graspable pull tab adjacent and outside the open end of the score line." *Id.* at code (57).

We reproduce below Kaminski Figure 1:

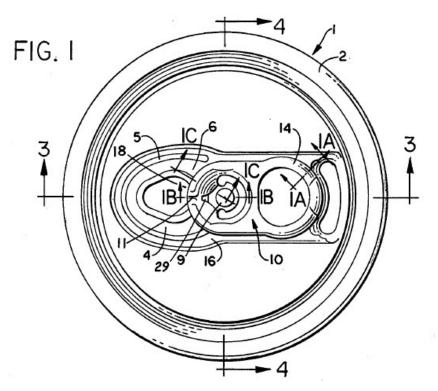


Figure 1 above depicts a top plan view of an easy open can end incorporating a pull tab. Ex. 1011, 2:27–28. The can end includes retained tear strip 4, raised edge 2, U-shaped score or tear line 5, open end 6, integral rivet 9, graspable ring-like pull tab 10, nose portion 11, finger end 14, recessed portion 16, open end 18, and coined V-shape 29. *Id.* at 3:5–3:36. Can end 1 includes circumferentially extending raised edge 2 for attaching can end 1 to a suitable cylindrical beverage can 3. *Id.* at 2:67–3:1.

Can end 1 is "manufactured of a relatively ductile metal, such as aluminum, . . . but may be made from plastic or other materials." *Id.* at 3:2–3:4.

e. Gardiner (Ex. 1012)

Gardiner, titled "Beverage Container," issued on May 4, 2004, and "relates to a beverage container having a cap... arranged with a ring of countersink adjacent to its peripheral... able to withstand normal internal pressure exerted on the cap when the container is filled with a carbonated drink." Ex. 1012, codes (45), (54), 1:15–22.

We reproduce Gardiner Figure 2 below:

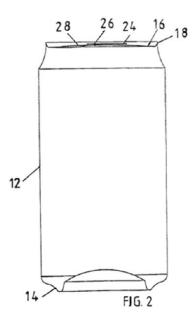


Figure 2 above depicts a section view of a beverage container. Ex. 1012, 3:36–39. The beverage container includes aluminum alloy, steel, or plastic tubular body member 12, end member 14, cap member 16 "sealingly fixed to the periphery of the top open end by seaming," rim 18 formed at the seam, tab portion 24, and exterior surface 28. *Id.* at 4:44–48, 4:54, 4:67.

We reproduce Gardiner Figure 13 below:

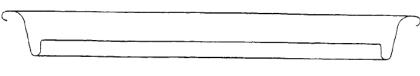




Figure 13 above depicts a schematic view of a cap member, which is "shaped to be positioned . . . over an open end of a can body and seamed thereat to join to the can body for forming a rim of the can." *Id.* at 3:55–67, 5:43–46.

f. Pedmo (Ex. 1013)

Pedmo, titled "Bottle Base," issued on July 1, 2003, and "relates to a hollow plastic bottle with an improved base." Ex. 1013, codes (45), (54), 1:4–5. Pedmo discloses a "plastic bottle... with improved strength properties in the base... which is easy to prepare and ... aesthetically pleasing." *Id.* at 1:24–29. "The plastic bottle is desirably blow molded, desirably biaxially oriented, and polyethylene terephthalate is a preferred material." *Id.* at 1:48–50.

We reproduce Figure 5 of Pedmo below:

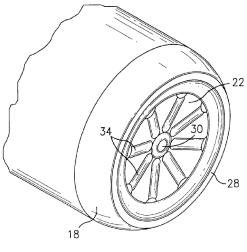


FIG. 5

Figure 5 above depicts a perspective view of the base of a bottle. Ex. 1013,

2:10–11. Base 18 includes struts 34 extending radially from the central

portion of base or hub 30 towards annular rim 28. Id. at 2:39, 2:46-47.

g. Brown (Ex. 1014)

Brown, titled "Easy-Open Ecology End," issued on May 24, 1977,

and discloses

an improved easy opening end wall having a retained tab member operative to form an opening in the end wall by rupture of a tear opening, the ruptured tear portion or panel being retained by a retaining strip, the end structure having bead formations on the end wall and panel and a deformation in the panel to assist in progressive rupture of the scoreline.

Ex. 1014, codes (45), (54), 1:6–14.

We reproduce Figure 8 of Brown below:

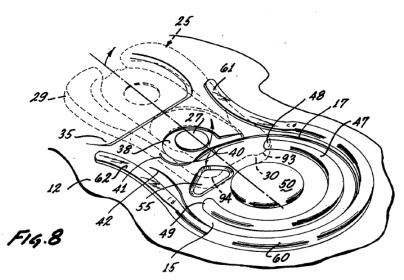


Figure 8 above depicts a fragmentary view of an end structure during an initial pop phase of the end structure's opening sequence. Ex. 1014, 7:15–
18. The end structure includes central wall or panel portion 12 having tab 15 dotted in and pour panel 15 at least partially circumscribed by scoreline 17,

which is ruptured initially at portion 40 to form a pour opening in the end structure. *Id.* at 7:36–40.

4. Petitioner's Grounds of Unpatentability

a. Ground 1 – Alleged Obviousness Over Coca-Cola PET Can, Optionally in Combination with AAPA

Petitioner asserts that claims 1–8 are unpatentable as obvious over Coca-Cola PET Can alone or with AAPA. Pet. 13–68. In brief, for independent claim 1, Petitioner argues that its declarant Dr. Delson analyzed a Coca-Cola PET Can (specifically, a Sprite can) and found that it taught or suggested each limitation of claim 1, including limitations [1.C] and [1.D], which respectively recite that the container body is made of resin and the lid is made of metal. *See id.* at 15–65 (claim chart).

After considering the arguments and evidence of record, we find that for purposes of institution, Petitioner has demonstrated that it is more likely than not that independent claim 1 would have been obvious over Coca-Cola PET Can.²¹ We have also reviewed Petitioner's arguments under Ground 1 directed to dependent claims 2–8, and find that Petitioner has shown that these claims more likely than not would have been obvious over Coca-Cola PET Can (optionally in combination with AAPA for claim 3). *See* Pet. 65– 68.

b. Ground 2 – Alleged Obviousness Over Coca-Cola PET Can, AAPA, and Protais

For Ground 2, Petitioner asserts that claims 9–20 are unpatentable as obvious over Coca-Cola PET Can, AAPA, and Protais. Pet. 69–96. In brief, for independent claim 15, Petitioner again relies on the Coca-Cola PET Can

²¹ Petitioner cites AAPA only in connection with dependent claim 3. *See* Pet. 67 (arguing that "blow molding is AAPA").

as teaching or suggesting many of the limitations of claim 15, in the same manner as Petitioner argued for Ground 1. *See id.* at 82–89 (incorporating by reference many of the arguments from Ground 1). As for the additional limitations of claim 15 directed to limitations of the base portion, Petitioner cites Protais for its teachings of a container bottom. *See id.* at 90 (crossreferencing arguments made at Pet. 70–80 for claims 9 and 11). Petitioner asserts that a person of ordinary skill in the art would have been motivated to combine Coca-Cola PET Can's body and lid with Protais's bottom, to "achieve [the] increased strength and resistance to deformation" afforded by Protais's bottom. *See id.* at 69–70.

After considering the arguments and evidence of record, we find that for purposes of institution, Petitioner has demonstrated that it is more likely than not that independent claim 15 would have been obvious over Coca-Cola PET Can and Protais.²² We have also reviewed Petitioner's arguments under Ground 2 directed to dependent claims 9–14 and 16–20, and find that Petitioner has shown that these claims more likely than not would have been obvious over Coca-Cola PET Can and Protais.²³ *See* Pet. 70–82, 90–96.

c. Ground 3 – Alleged Obviousness Over Metzger, Protais, and Kaminski

Petitioner asserts that claims 1–20 are unpatentable as obvious over Metzger, Protais, and Kaminski. Pet. 96–167. In brief, for independent claim 1, Petitioner proposes a combination using "Metzger's container body

²² Petitioner cites AAPA only in connection with dependent claim 3. *See* Pet. 67.

²³ Although Petitioner lists AAPA as part of Ground 2 (*see, e.g.*, Pet. 69), on the current record, it does not appear that Petitioner cites AAPA as part of this Ground.

with Protais' improved container base" and Kaminski's lid configuration. See id. at 99. Petitioner asserts that a person of ordinary skill in the art "would have been motivated to use the features of Protais's base, including some or all of its ribs, notches, and grooves, to increase the strength and resistance to deformation of the container taught by Metzger." Id. at 100 (citing Ex. 1008 (Protais), 3:14–25, 6:20–27, 6:47–48, 6:56–61; Ex. 1002 (Delson Decl.) ¶178). Petitioner further asserts that Metzger "listed suitable container ends (Metzger, 3:43-47) but did not provide details," and thus a person of ordinary skill in the art "would have found it obvious to look to Kaminski, which provided details about a pull-tablid for a beverage container" and taught various benefits of that lid, such as ecological and safety benefits due to the tab being retained, and providing an easy-open lid using less metal. Id. at 100-01 (citing Ex. 1011 (Kaminski), 1:5-8, 1:14-17, 1:27–31; Ex. 1002 (Delson Decl.) ¶ 179). Petitioner, supported by Dr. Delson, argues that the proposed combination teaches or suggests each limitation of claim 1. See id. at 101-49 (claim chart).

After considering the arguments and evidence of record, we find that for purposes of institution, Petitioner has demonstrated that it is more likely than not that independent claim 1 would have been obvious over Metzger, Protais, and Kaminski. We have also reviewed Petitioner's arguments under Ground 3 directed to claims 2–20, and find that Petitioner has shown that these claims more likely than not would have been obvious over Metzger, Protais, and Kaminski. *See* Pet. 149–67.

d. Ground 4 – Alleged Obviousness Over Gardiner, Pedmo, and Brown

For Ground 4, Petitioner asserts that claims 1–20 are unpatentable as obvious over Gardiner, Pedmo, and Brown. Pet. 167–254. In brief, for

47

independent claim 1, Petitioner proposes a combination using "Gardiner's container body and lid with the teachings of Pedmo's improved container base." *See id.* at 170. Petitioner further asserts that although "Gardiner described a lid having a scored portion and a tab for puncturing it, Gardiner did not explicitly show the tab's position when the puncture occurred." *Id.* As such, Petitioner argues that a person of ordinary skill in the art "would have been guided by the teachings of Brown's tab position both before and after it punctured a scored area of the lid, and would have found the claimed elements obvious." *Id.*

Petitioner asserts that a person of ordinary skill in the art "would have been motivated to use the features of Pedmo's base to improve Gardiner's container," because "Pedmo's base would have imparted increased strength and improved impact properties to the combined container." *Id.* at 172 (citing Ex. 1013 (Pedmo), 2:46–53, 2:59–66²⁴; Ex. 1002 (Delson Decl.) ¶¶ 311–13). Petitioner further asserts that Gardiner taught a lid that includes a scored portion, but "did not explicitly describe how the tab separated the scored portion," so a person of ordinary skill in the art would have looked to "the teachings of Brown to understand how to operate Gardiner's tab to open a pour aperture in Gardiner's lid." *Id.* (citing Ex. 1012 (Gardiner), 5:2, 4:45–53, 5:13–15, 5:27–28, Figure 1; Ex. 1014 (Brown), 5:14–21; Ex. 1002 (Delson Decl.)¶¶ 311, 314). Petitioner, supported by Dr. Delson, argues that the proposed combination teaches or suggests each limitation of claim 1. *See* Pet. 173–235 (claim chart).

²⁴ Petitioner cites Pedmo at "2:46–43" and "32:59–66." Pet. 172. We understand these citations to contain typographical errors, and have updated them to reflect our present understanding of the intended citations.

After considering the arguments and evidence of record, we find that for purposes of institution, Petitioner has demonstrated that it is more likely than not that independent claim 1 would have been obvious over Gardiner, Pedmo, and Brown. We have also reviewed Petitioner's arguments under Ground 4 directed to claims 2–20, and find that Petitioner has shown that these claims more likely than not would have been obvious over Gardiner, Pedmo, and Brown. *See* Pet. 235–54.

D. Discretionary Denial

Institution of post-grant review is discretionary. *See* 35 U.S.C. § 324(a). Patent Owner argues that we should discretionarily deny the Petition because the Board has previously done so where "issues of priority date have arisen in the context of a patent's eligibility for [post-grant review]." Prelim. Resp. 5–6 (citing *Ideavillage Prods. Corp., v. Koninklijke Philips N.V.*, IPR2022-00904, Paper 8, 19 (Oct. 25, 2022) ("The complexity of the issues raised in connection with the priority dispute tips the scale against institution of review in this case.")). Patent Owner contends that "[d]enying institution in this case would not significantly prejudice the Petitioner" because "Petitioner has submitted a separate cumulative IPR petition challenging the same claims of the '441 patent based on two of the same grounds in [the instant Petition]." *Id.* at 31 (citing *MPL Brands NV*, *Inc. v. BuzzBallz, LLC*, IPR2024-01000).

We decline to discretionarily deny the Petition. The question of priority underlying the question of post-grant review eligibility is not so complex here as to "tip[] the scale against institution." Additionally, Patent Owner's assertion of lack of prejudice to Petitioner is misplaced, given that we are concurrently denying institution in IPR2024-01000.

49

III. CONCLUSION AND NOTICES

On the current record, Petitioner sufficiently shows that least one of the challenged claims is more likely than not unpatentable. Accordingly, we institute a post-grant review.

At this stage of the proceeding, the Board has not made a final determination regarding the patentability of any challenged claim. Thus, any conclusion reached in the foregoing analysis could change upon completion of the record.

The Board will deem forfeited any issue not raised in a timely response to the Petition, or as permitted in another manner during trial, even if asserted in the Preliminary Response or discussed in this Decision.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 324(a), a post-grant review is instituted based on all grounds asserted in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 324(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial commencing on the entry date of this Decision.

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