

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

STERICYCLE, INC.,
Petitioner,

v.

CATALINA NOMINEES PROPRIETARY LTD.,
Patent Owner.

Case IPR2017-00519
Patent 6,250,465 B1

Before PHILLIP J. KAUFFMAN, CHRISTOPHER L. CRUMBLEY, and
JASON W. MELVIN, *Administrative Patent Judges*.

MELVIN, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Petitioner, Stericycle, Inc., filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 21–24 (“the challenged claims”) of U.S. Patent No. 6,250,465 B1 (Ex. 1001, “the ’465 patent”). Patent Owner, Catalina Nominees Proprietary Ltd., filed a Preliminary Response (Paper 9) and we instituted review of claim 21 (Paper 10 (“Institution Decision” or “Inst.”)). Patent Owner filed a Response (Paper 20, “PO Resp.”) and Petitioner filed a Reply (Paper 21, “Pet. Reply”). Neither party requested oral hearing.

On May 9, 2018, we expanded the scope of this proceeding to include review of all challenged claims and all grounds presented in the Petition. Paper 23; see United States Patent and Trademark Office, Guidance on the Impact of SAS on AIA Trial Proceedings, PATENT TRIAL AND APPEAL BOARD TRIALS (April 26, 2018), <https://go.usa.gov/xQ93y>. Following a teleconference with the parties, we authorized Petitioner to file a brief regarding the expanded scope of the proceeding, and authorized Patent Owner to file a responsive brief. Paper 24.

This a final written decision as to the patentability of the challenged claims. For the reasons discussed below, we determine that Petitioner has proven by a preponderance of the evidence that claim 21 is unpatentable but has not proven that claims 22–24 are unpatentable.

A. RELATED MATTERS

The parties identify the following pending judicial matters as relating to the ’465 patent: *Catalina Nominees Proprietary Ltd. et al v. Stericycle, Inc.*, No. 1:15-cv-10734 (N.D. Ill). Pet. 2; see Paper 5, 2.

B. THE '465 PATENT

The '465 patent relates to “a container for use in the disposal of medical and hospital sharps such as needles, syringes, surgical blades and the like and associated medical or other waste materials.” Ex. 1001, 1:4–7. The '465 patent claims foreign priority benefit to an Australian application filed May 15, 1998. *Id.* at [30].

The '465 patent discloses a container with a pivoting tray that allows disposal of items placed on the tray while at the same time restricting hand access to within the receptacle. *Id.* at 1:66–2:41. Figure 4 is reproduced below:

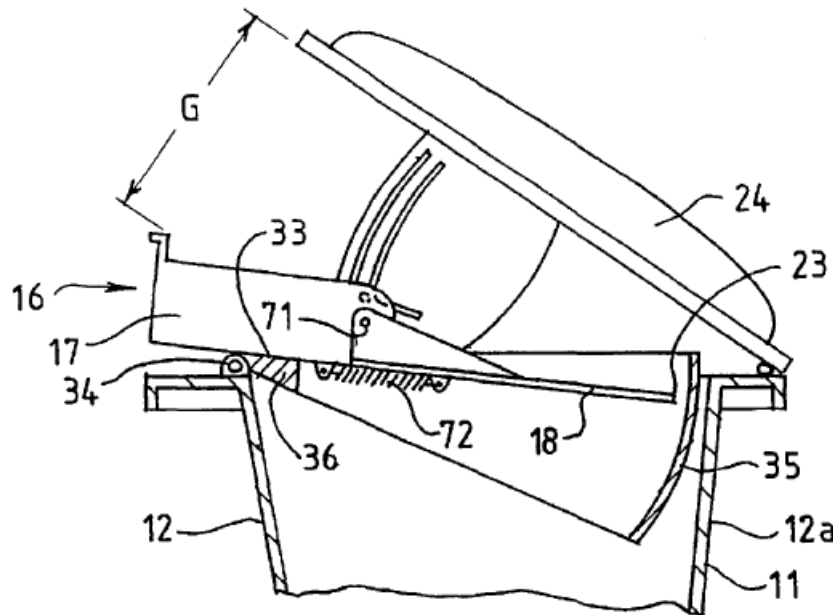


FIG 4

Figure 4 depicts a cross-sectional partial side view of the container, with lid 24 and tray 16; in the figure, lid 24 is open such that a user could deposit items for disposal into tray 16 through gap “G,” and guard 35 prevents

access into the container. *Id.* at 6:44–46, 10:30–45. Figure 5 is reproduced below:

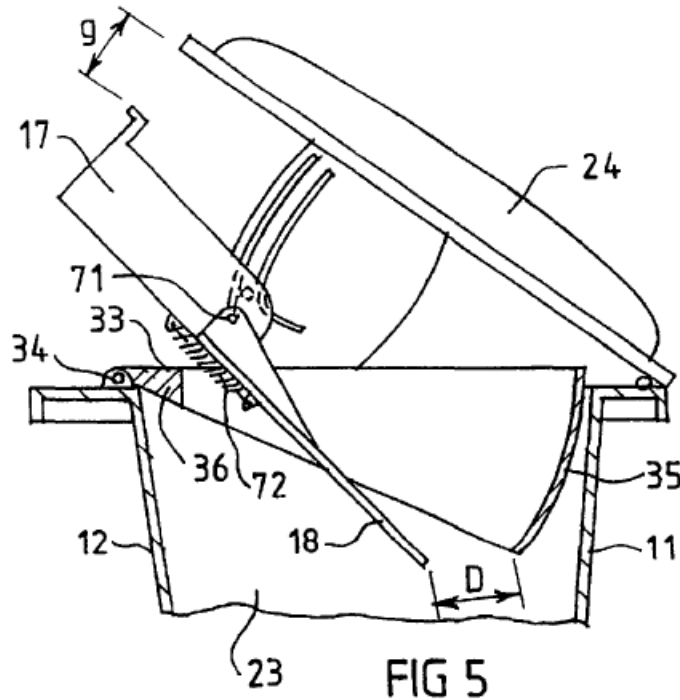


Figure 5 depicts the same cross-sectional partial side view, with the tray pivoting about a pin (indicated by reference 71 (*id.* at 7:8–13)) to create disposal opening “D” while narrowing the gap to “g” such that it is insufficient for a user’s hand to enter. *Id.* at 6:44–46, 10:46–53.

In some embodiments, the ’465 patent describes that opening the lid causes the tray to unfold from a configuration depicted in Figure 8 to the extended position as shown in Figure 4. *See id.* at 12:20–13:5. The Specification generally describes such an arrangement making the lid and tray “operatively associated such that the movement of the lid from its [cl]osed to its opened position moves the disposing means from an inoperative condition to an operative condition wherein it is accessible for medical sharps and waste materials to be placed thereon.” *Id.* at 3:27–58.

C. CHALLENGED CLAIMS

Challenged claims 21 and 23 are independent. Claims 21 and 23 (reproduced below) are illustrative of the claimed subject matter:

21. A container for storing medical sharps and waste materials comprising:
- a receptacle having an opening at the top thereof,
 - a movable lid for completely closing the opening, the lid being hinged to the receptacle for movement between opened and closed positions,
 - a pivotal tray disposed at the opening and mounted to be accessible for medical sharps and waste materials to be placed thereon when the lid is in its opened position, and the tray being pivotally movable with respect to the opening of the receptacle for disposal of medical sharps and waste materials therefrom into the receptacle, the tray being arranged to extend outwardly from the opening when the lid is in the opened position, the tray being arranged relative to the lid in its opened position and arranged relative to the receptacle and its opening to prevent hand access into the receptacle for all positions of the tray about its pivotal axis.

Ex. 1001, 15:65–16:15.

23. A container comprising a receptacle for receiving and storing medical sharps and waste, the receptacle having an opening,
- a lid for closing the opening hingedly connected to the receptacle and manually movable between opened and closed positions,
 - a disposing tray for medical sharps and waste pivotally mounted at the receptacle opening such that the lid and the tray are operatively associated so that the movement of the lid from its closed to its opened position moves the tray from an inoperative condition to an operative condition wherein the tray is accessible for medical sharps and waste materials to be placed thereon and in

the opened position of the lid the disposing tray impedes hand access into the receptacle through said opening, and

the disposing tray being pivotally movable such that the medical sharps and waste are disposable therefrom into the receptacle from a rear portion of the disposing tray whereby said front portion of the tray moves towards said lid to continue to impede hand access into the receptacle.

Ex. 1001, 16:21–43.

D. REVIEWED GROUNDS OF UNPATENTABILITY

This review includes the following grounds of unpatentability¹:

References ²	Basis	Challenged Claim(s)
Gaba ³	§ 102(e)	21
Gaba	§ 103	21
Gaba and Homme ⁴	§ 103	21–24
Gaba and Wallace ⁵	§ 103	21–24
Gaba and Hann ⁶	§ 103	21 and 22

Our Institution Decision explained that, although the Petition raised obviousness over Gaba in combination with other references, we understood

¹ The America Invents Act included revisions to, *inter alia*, 35 U.S.C. § 103 effective on March 16, 2013. Because the '465 patent issued from an application filed before March 16, 2013, the pre-AIA versions of 35 U.S.C. §§ 102 and 103 apply.

² Petitioner also relies on the declaration of Dr. Richard Klopp (Ex. 1002).

³ U.S. Pat. No. 5,947,285 (iss. Sept. 7, 1999) (Ex. 1004).

⁴ U.S. Pat. No. 830,231 (iss. Sept. 4, 1906) (Ex. 1005).

⁵ U.S. Pat. No. 801,622 (iss. Oct. 10, 1905) (Ex. 1006).

⁶ U.S. Pat. No. 890,766 (iss. June 16, 1908) (Ex. 1007).

Gaba alone to support a reasonable likelihood of Petitioner prevailing with both anticipation and obviousness of claim 21. Inst. 17–18, 20. Thus, we instituted review of claim 21 based on those two grounds. Inst. 23. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1273 (Fed. Cir. 2015) (“Nor does the IPR statute expressly limit the Board’s authority at the final decision stage to the grounds alleged in the IPR petition.”), *aff’d on other grounds, Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016); *see also SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1312–13 (Fed. Cir. 2015) (noting that governing statutory provisions do not limit the Board’s authority to proceed with AIA trial proceedings on only the specific statutory grounds alleged in the petition). Patent Owner did not object to this proceeding including grounds based on Gaba alone.⁷

After our expansion of the review (Paper 23), this proceeding includes all of the challenges summarized in the above table.

E. LEGAL PRINCIPLES

1. Burden of proof

In an *inter partes* review, the petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to the patent owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must support its challenge by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). Accordingly, all of our findings and conclusions are based on a preponderance of the evidence.

⁷ We cautioned Patent Owner that “any arguments for patentability not raised in the response will be deemed waived.” Paper 11, 7.

2. Claim construction

Before the Board, claims in an unexpired patent are interpreted according to their broadest-reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo*, 136 S. Ct. at 2144–46. Under that standard, we generally give a claim term its “ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question” at the time of the invention. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). The specification may impose a specialized meaning, departing from the ordinary and customary meaning, by defining a term with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Further, a party may prove “the existence of a ‘clear and unmistakable’ disclaimer” that narrowed a term’s definition in the prosecution history of a challenged patent. *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1063–64 (Fed. Cir. 2016) (quoting *Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1371 (Fed. Cir. 2007)).

3. Anticipation

A patent claim is unpatentable under 35 U.S.C. § 102 if “the four corners of a single, prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.” *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000). “A single prior art reference may anticipate without disclosing a feature of the claimed invention if such feature is necessarily present, or inherent, in that reference.” *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 958 (Fed. Cir. 2014) (citing *Schering Corp. v. Geneva Pharm.*, 339 F.3d 1373,

1377 (Fed. Cir. 2003)). We analyze the ground based on anticipation in accordance with the above-stated principles.

4. Obviousness

An invention is not patentable “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). The question of obviousness is resolved on the basis of 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) where in evidence, so-called secondary considerations, including commercial success, long-felt but unsolved needs, and failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

When evaluating a combination of teachings, we must also “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441, F.3d 977, 988 (Fed. Cir. 2006)). Whether a combination of elements produced a predictable result weighs in the ultimate determination of obviousness. *KSR*, 550 U.S. at 416–17. We analyze the grounds based on obviousness in accordance with the above-stated principles.

II. DISCUSSION

A. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner proposes that a person of ordinary skill in the art as of May 14, 1998, “would be a person with a degree in the mechanical arts and at least two years’ experience with mechanical devices, or equivalent experience.” Pet. 18 (citing Ex. 1002 ¶¶ 21–25). We note that the proposed level of skill is consistent with the teachings of the prior art presented in the Petition. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). Patent Owner does not challenge this proposal, and we adopt it.

B. CLAIM CONSTRUCTION

Petitioner proposes we construe the following terms: “tray being arranged to extend outwardly from the opening” in claim 21; and “[a] container for storing medical sharps and waste materials” in the preamble of the claims. Pet. 5–6. In the Institution Decision, we concluded that the “broadest reasonable interpretation of claim 21 does not require an operative connection between the lid and tray.” Inst. 8–9.

In the Response, Patent Owner raises two arguments regarding the construction of language in claim 21 requiring the tray be “arranged to extend outwardly from the opening when the lid is in the opened position” and “arranged relative to the lid in its opened position and arranged relative to the receptacle and its opening to prevent hand access into the receptacle.” First, Patent Owner asserts the language “requires a gap between the lid and the tray such that sharps objects can be easily placed on the tray for subsequent disposal.” PO Resp. 9–10. Second, it asserts that the language requires the lid play a role “in preventing access to the receptacle when it is in an opened position.” PO Resp. 12.

Regarding a “gap,” Patent Owner points to passages in the Specification describing a gap. *Id.* at 9–11. As Petitioner points out, however, Patent Owner identifies Specification statements that relate to *possible* embodiments, not required features. Pet. Reply 10 (citing Ex. 1001, 1:66, 2:1, 2:3, 2:13, 2:16, 2:33, 2:34, 2:38–39). We conclude Patent Owner has not identified a basis on which we can conclude the Specification *requires*, in all embodiments, the arrangement resulting in a gap. Moreover, no language in claim 21 indicates that “arranged relative” requires some specific spacing. Thus, we do not construe claim 21 as requiring a gap between the lid and the tray in any particular position.

Regarding whether the lid plays a role in preventing access to the receptacle when the lid is opened, Patent Owner has not identified a basis on which to read such a requirement into the claim. *See* PO Resp. 12. We agree with Petitioner that claim 21 recites that the *tray* must be arranged “to prevent hand access into the receptacle for all positions of the tray about its pivotal axis” and does not require the lid play a role in preventing access. *See* Pet. Reply 11–12. Thus, the plain language of the claim resolves this issue. To the extent Patent Owner’s argument is that the lid must have an operative connection with the tray in claim 21, we do not agree.

In the Institution Decision, we concluded that the record did not indicate that we should construe claim 21 as requiring an operative connection between the lid and tray. Inst. 7–9. We concluded that the claims and prosecution history supported such a construction for the other claims at

issue but not for claim 21.⁸ *Id.* at 8. In the instituted trial, Patent Owner has not relied on the prosecution history to support a construction of claim 21. We again conclude claim 21 does not require an operative connection between the lid and tray. That conclusion is consistent with the Specification, which describes an operative connection as an optional feature of the invention. Ex. 1001, 2:62–67 (“While in the arrangement described above the lid is maintained in a generally stationary opened position throughout disposal of sharps material, an alternative arrangement is that the lid may be caused to pivot with the tray in order to reduce the gap between the lid and the tray for the reasons discussed above.”), 3:27–32 (“Preferably the lid and the pivotal disposing means are operatively associated . . .”). The lack of a requirement for an operative connection in claim 21 is also consistent with the added requirement for one in claim 22, which depends from claim 21. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (“[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.”).

⁸ During prosecution, the applicants amended certain claims to add an operative connection between the lid and tray (Ex. 1008, 114–18) and argued that the amendment distinguished the claims over Gaba (*id.* at 122). The applicants did not similarly amend claim 22 in the application (now claim 21) and instead argued that Gaba “does not disclose an arrangement wherein a pivotal tray disposed at the opening of the container extends outwardly therefrom when the lid is in the opened position.” *Id.* at 122. We do not view the applicants’ argument as rising to the level of a prosecution disclaimer sufficient to narrow the broadest-reasonable interpretation of the claim. Rather, we view the applicants as arguing simply that Gaba does not teach an opened tray.

We determine that no other term requires express construction for purposes of this decision.

C. ANTICIPATION BY GABA

1. Gaba (Ex. 1004)

Gaba issued from an application filed on November 12, 1997 (Ex. 1004, [22]), and thus presumptively serves as prior art to the '465 patent, which issued from a PCT application filed May 14, 1999 (Ex. 1001, [22]), under § 102(e). *See* Inst. 23 n.4.

Gaba teaches a medical-waste disposal container in which a pivoting tray (called a tumbler) is used to deposit waste into the container while preventing access to the interior of the container. *E.g.*, Ex. 1004, [57], 2:3–22, 2:28–36. Gaba's Figure 21A is reproduced below:

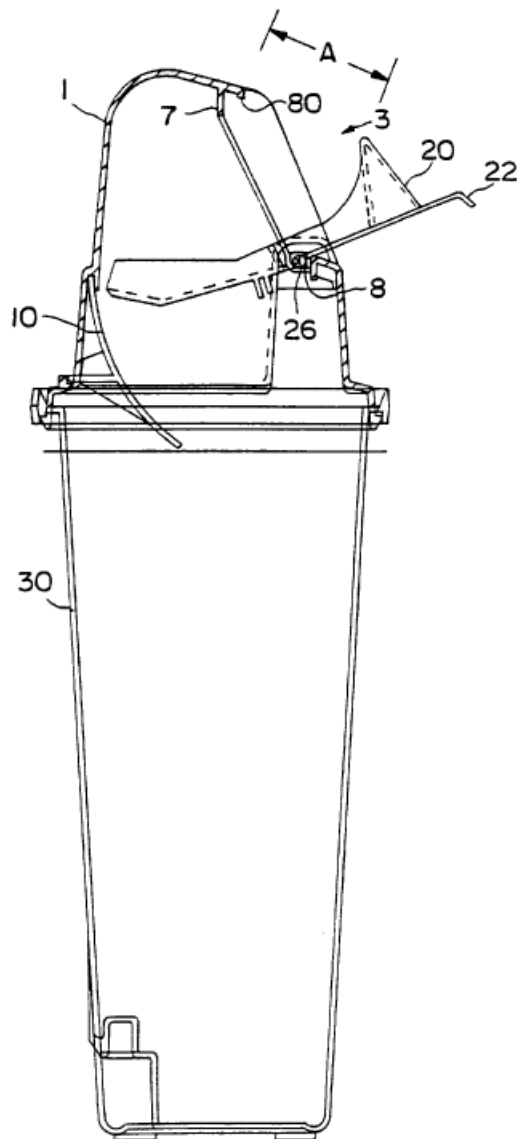


FIG. 21A

Figure 21A is a cross-sectional side view, and depicts one embodiment of Gaba's container with pivoting tumbler 20 shown in the open position, in which "a significant portion of tumbler 20 extends beyond housing enclosure 1." Ex. 1004, 4:45–49, 10:1–6.

Gaba's Figure 22 is reproduced below:

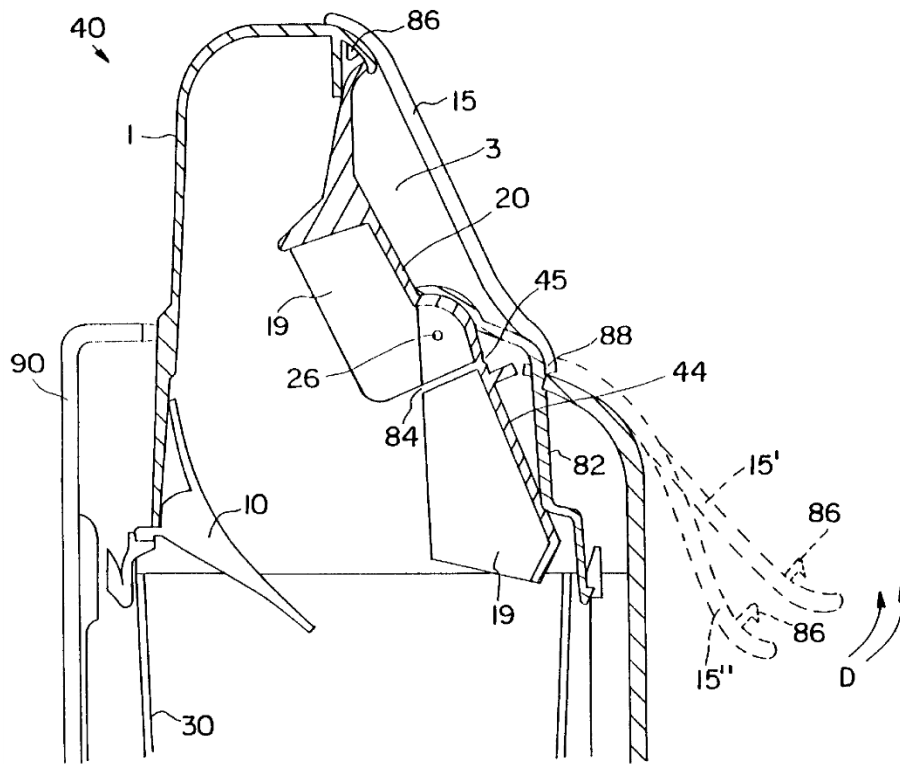


FIG. 22

Figure 22 is a cross-sectional side view, and depicts a different embodiment of Gaba's container where the enclosure has lid 15 independent of the tumbler, and the pivoting tumbler is illustrated in the closed position. Ex. 1004, 4:58–62, 11:10–33. Gaba teaches that the embodiment of Figure 22 “combines several features” disclosed in connection with other embodiments. *Id.* at 10:32–35. In one aspect, the tumbler extends beyond the housing when in the fully open position. *Id.* at 10:35–39. Gaba teaches that its tumbler “restricts access by a user both to the interior of housing enclosure 1 and to the interior of disposal container 30 when tumbler 20 is rotated to dispose of a sharp.” *Id.* at 5:11–15; *accord id.* at 6:32–34 (“Thus, by permitting only upper opening 3 or lower opening 4 to be substantially opened at any given point in time, tumbler 20 prevents the hand of a user

from following the same path into disposal container 30.”). In another embodiment depicted in Figure 2A, Gaba teaches that the lid “is pivotally mounted to housing enclosure 1 by hinge 18.” *Id.* at 7:34–35.

2. Claim 21

Petitioner asserts that Gaba teaches every limitation of claim 21, generally relying on the embodiment depicted in Gaba’s Figure 22. Pet. 20–30.

Petitioner asserts Gaba discloses a “container for storing medical sharps and waste materials” as recited by the preamble. Pet. 20 (citing Ex. 1004, 2:3–22, 2:28–36). Patent Owner does not contest Petitioner’s assertions in this regard. *See* Paper 11, 7. We need not determine whether the preamble limits the claim, because we agree with Petitioner that Gaba is consistent with the preamble.

Petitioner asserts Gaba teaches a “receptacle having an opening at the top thereof” by disclosing a “receptacle (30) that includes an opening (3) at its top.” *Id.* at 20–21 (citing Ex. 1004, 11:25–27, Fig. 22). Patent Owner does not contest Petitioner’s assertions in this regard. We agree with Petitioner and find Gaba teaches a “receptacle having an opening at the top thereof.”

Petitioner asserts Gaba teaches “a movable lid for completely closing the opening” because Gaba’s Figure 22 “shows a lid (15) in the closed position completely closing opening (3) and shows lid (15’), in dash, in the open position.” *Id.* at 22. Patent Owner does not contest Petitioner’s assertions in this regard.

Petitioner states that “Gaba does not expressly teach that lid (15) of FIG. 22 is hinged to receptacle (30), but states that ‘[l]id 15 pivots about

holding lugs 88 provided in front wall 82 of housing enclosure 1.” Pet. 22–23 (quoting Ex. 1004, 11:20–22). We noted in the Institution Decision that, “by teaching a lid that pivots on ‘holding lugs’ (Ex. 1004, 11:19–21, Fig. 22), Gaba’s Figure 22 and corresponding description seemingly teach the claimed ‘lid being hinged to the receptacle for movement between opened and closed positions’ (Ex. 1001, 16:1–3).” Inst. 17.

Patent Owner contests whether Gaba teaches a lid hinged to the receptacle. PO Resp. 6–8. According to Patent Owner, the “holding lugs 88 illustrated in FIG. 22 are not the same as (and cannot be substituted for) the hinge 18 of FIG. 2A.” *Id.* at 6. The analysis required for anticipation, however, does not depend on whether one embodiment of Gaba is the same as another embodiment. Rather, we consider whether a single embodiment of Gaba teaches all elements of claim 21. We find that, by teaching a lid that pivots on “holding lugs,” Gaba teaches a “lid being hinged to the receptacle for movement between opened and closed positions” as claimed. In this finding, we note that claim 21 does not recite a particular hinge structure, but instead recites a functional relationship of the lid to the receptacle. *See* Pet. Reply 2 (arguing that the broadest-reasonable construction of “‘hinged’ requires a connecting structure that allows the lid to ‘move[] between opened and closed positions’”). Patent Owner argues that “there is no evidence that the lid 15 is pivotally mounted by the holding lugs 88” and that “the term ‘holding’ appears to imply a stationary, non-pivotable, aspect to the structure of the holding lugs 88.” PO Resp. 4. We do not agree. Gaba discloses that the lid is constrained to a pivoting motion about the lugs and thus we find that Gaba’s Figure 22 discloses structure with the functional relationship of claim 21.

Patent Owner argues that it would be improper to combine elements from different embodiments in an anticipation ground. PO Resp. 7–8 (citing *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359 (Fed. Cir. 2008)). We do not, however, rely on multiple embodiments from Gaba. As we explained in the Institution Decision, our consideration of anticipation relates only to the Gaba’s embodiment depicted in Figure 22. Inst. 17–18.

Thus, we agree with Petitioner and find Gaba teaches claim 21’s “moveable lid” limitation.

Petitioner asserts that Gaba teaches the claimed “pivotal tray” by disclosing a “tumbler” that pivots on its “pivot pins.” Pet. 24–28 (citing Ex. 1004, 5:18–20, 10:35–39). When Gaba discloses the pivoting arrangement of the tumbler, it characterizes the disclosure as part of “the present invention” rather than limited to a particular embodiment. Ex. 1004, 5:11–19. Gaba discloses that “a significant portion of tumbler 20 extends beyond housing enclosure 1 when tumbler 20 is in the fully open position and ready to receive sharps 42 for disposal.” Pet. 26–27 (quoting Ex. 1004, 10:36–39).

Patent Owner contests whether Gaba teaches the claimed pivotal tray, arguing that Gaba fails to show a tray “arranged relative to the lid in its opened position and arranged relative to the receptacle and its opening to prevent hand access into the receptacle for all positions of the tray about its pivotal axis.” PO Resp. 8–13. Patent Owner argues that Gaba does not demonstrate “a gap between the lid and the tray such that sharps objects can be easily placed on the tray for subsequent disposal.” *Id.* at 10.

As discussed above, claim 21’s “arranged relative” language does not impose a requirement for a specific gap between the lid and tray or for an

operative connection such that opening the lid also opens the tray. *See supra* at 10–12. Without either such requirement, we do not agree with Patent Owner’s argument that, because Gaba’s lid may be open without the tray allowing access for waste material, Gaba’s container falls outside of claim 21. *See* PO Resp. 11.

Patent Owner also argues that Gaba does not anticipate because its “lid does not play any role . . . in preventing access to the receptacle when it is in an opened position.” PO Resp. 12–13. As also discussed above, we do not agree with Patent Owner that claim 21 requires the lid play a role in preventing access to the receptacle. *See supra* at 11.

Thus, we agree with Petitioner and find Gaba teaches the entire “pivotal tray” limitation.

In light of the foregoing and having considered the entire record developed at trial, we find that Petitioner has proven by a preponderance of the evidence that Gaba, in a single embodiment, discloses the limitations of claim 21. Accordingly, we find claim 21 is unpatentable as anticipated by Gaba.

D. OBVIOUSNESS OVER GABA

To support the obviousness of claim 21 over Gaba alone, Petitioner relies on the combination of two embodiments in Gaba. Other than as discussed below, Petitioner’s assertions regarding anticipation by Gaba (discussed above) support the obviousness ground also and we adopt our findings discussed above.

Regarding the requirement that the lid be “hinged to the receptacle for movement between opened and closed positions,” Petitioner relies on the embodiment of Gaba’s Figure 2A, asserting that it “would have been

obvious to a POSITA [(person of skill in the art)] to connect lid (15) of FIG. 22 with hinge (18) of FIG. 2A.” Pet. 23 (citing Ex. 1002 ¶ 49). In that regard, Petitioner relies on the declaration of Dr. Richard Klopp, who states that a person of ordinary skill would make the substitution of a hinge “with round shafts to provide a smoother motion than would occur with the rectilinear lug engagement features disclosed in Gaba ’285 patent Fig. 22.” Ex. 1002 ¶ 49.

Patent Owner contests the combination, arguing first that Gaba would not “work as intended if modified as suggested by the Petition.” PO Resp. 3. Patent Owner does not provide evidence in this regard, instead relying on the assertion that the Petition lacks sufficient explanation. *Id.* We do not agree. As we explained in the Institution Decision, the record does not indicate there is any meaningful difference between Figure 22’s “lugs” and Figure 2A’s “hinge.” Inst. 18 (citing Ex. 3001 (definition of “hinge”)). Based on Gaba’s disclosure that the “[l]id 15 pivots about holding lugs 88 provided in front wall 82 of housing enclosure 1” (Ex. 1004, 11:20–22), the lugs and hinge provide equivalent functionality. Thus, as we noted in the Institution Decision, using Gaba’s hinge in place of its lugs would have been a simple substitution of one known element for another with the same purpose. *See KSR*, 550 U.S. at 417.

Patent Owner argues that because the lid is “‘pivotally mounted’ **by** hinge 18” but “pivots **about** . . . the holding lugs 88,” one cannot be substituted for the other. PO Resp. 4. We do not agree. Based on the distinction it draws, Patent Owner concludes that “the term ‘holding’ appears to imply a stationary, non-pivotable, aspect to the structure of the holding lugs 88.” *Id.* Such an inference would be directly at odds with

Gaba's disclosure that the lid pivots about the lugs. *See* Ex. 1004, 11:20–22. To the extent Patent Owner argues that the lugs themselves are stationary, that does not bear on the issue before us, as the portion of Gaba's hinge affixed to the housing enclosure similarly remains stationary as the lid pivots. *See* Ex. 1004, Fig. 2A, 7:33–35.

We further credit the testimony of Dr. Klopp that a person of ordinary skill had reason to use Gaba's hinge in place of the lugs "to provide a smoother motion than would occur with the rectilinear lug engagement features." Ex. 1002 ¶ 49. In light of Dr. Klopp's testimony, we find that, beyond a simple substitution, using Gaba's hinge provided an advantage over the lugs and therefore gave a person of ordinary skill reason to modify Gaba as asserted by Petitioner.

Patent Owner argues also that because "Gaba – on its own – effectively operates to receive medical sharps and waste, and to prevent access to such materials," any modification of Gaba would only result from hindsight. PO Resp. 5–6. Regardless of whether Gaba's Figure 22 embodiment provided that functionality, however, as explained above, we conclude using the hinges of Gaba's Figure 2A would have not only been a simple substitution of an alternative structure with the same function, but would also have provided a benefit of smoother motion. Neither reason for modifying Gaba's lugs is derived from the '465 patent and neither results from improper hindsight.

Patent Owner does not argue that any objective indicia weigh against obviousness. Petitioner's showing of obviousness satisfies the legal thresholds and outweighs Patent Owner's arguments for nonobviousness. Thus, based on the record, we conclude Petitioner has demonstrated by a

preponderance of the evidence that the subject matter of claim 21 would have been obvious over Gaba.

E. OBVIOUSNESS OVER COMBINATIONS OF REFERENCES

Because the additional grounds asserted by Petitioner suffer from common defects, we address them together. We conclude Petitioner has not shown that any of the challenged claims is unpatentable based on any of the additional grounds.

1. *Homme (Ex. 1005)*

Homme teaches a mailbox that “when opened will prevent access to the mail that has already been deposited in the box.” Ex. 1005, 1:16–22.

Homme’s Figure 2 is reproduced below:

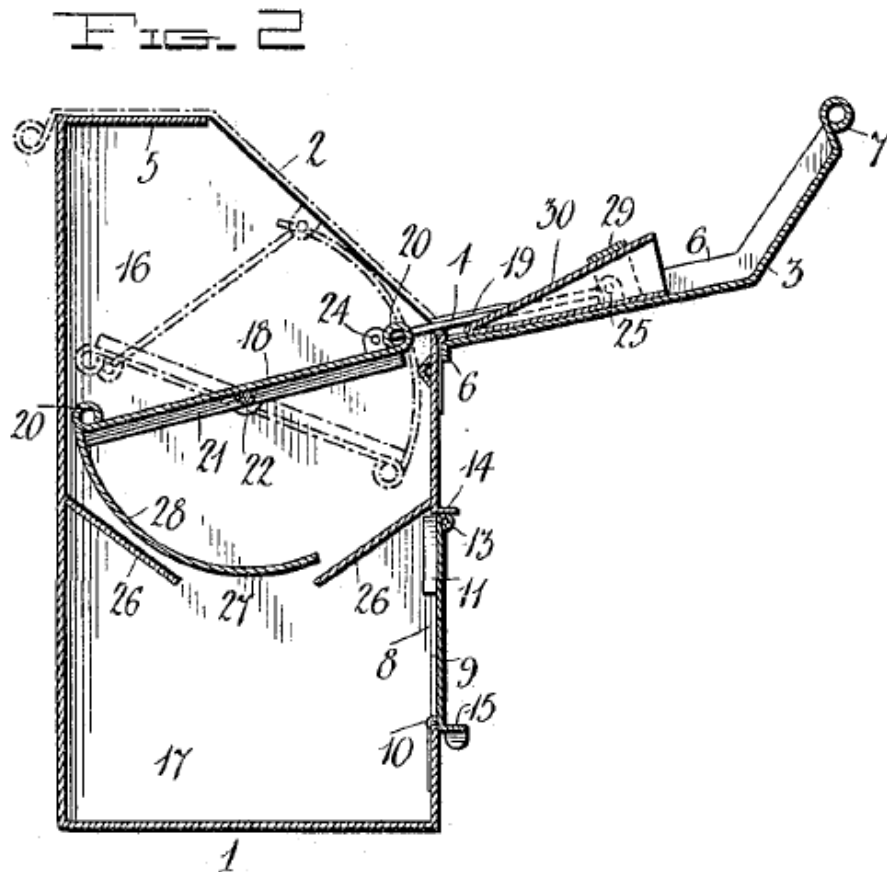


Figure 2 depicts that opening 2 is closed by swinging cover or lid 3 and provides access to “receiver or tray 18, upon which the mail is deposited by the mailman when the cover or lid 3 is in its open position.” *Id.* at 1:37–84. Figure 2 further depicts that “[t]he tilting of the receiver is done automatically by swinging the cover or lid 3, this being effected by a link 19, which connects the two.” *Id.* at 1:91–93; *accord id.* at 1:30–34 (noting that Figure 2 shows the open position in solid lines and the closed position in dotted lines).

2. Wallace (Ex. 1006)

Wallace teaches a mailbox in which two receptacles work together such that when the mailbox is opened, it provides a pocket in which to place mail, and when closed, the mail is deposited into the box. *See Ex. 1006*, 1:53–65. Wallace’s Figure 2 is reproduced below:

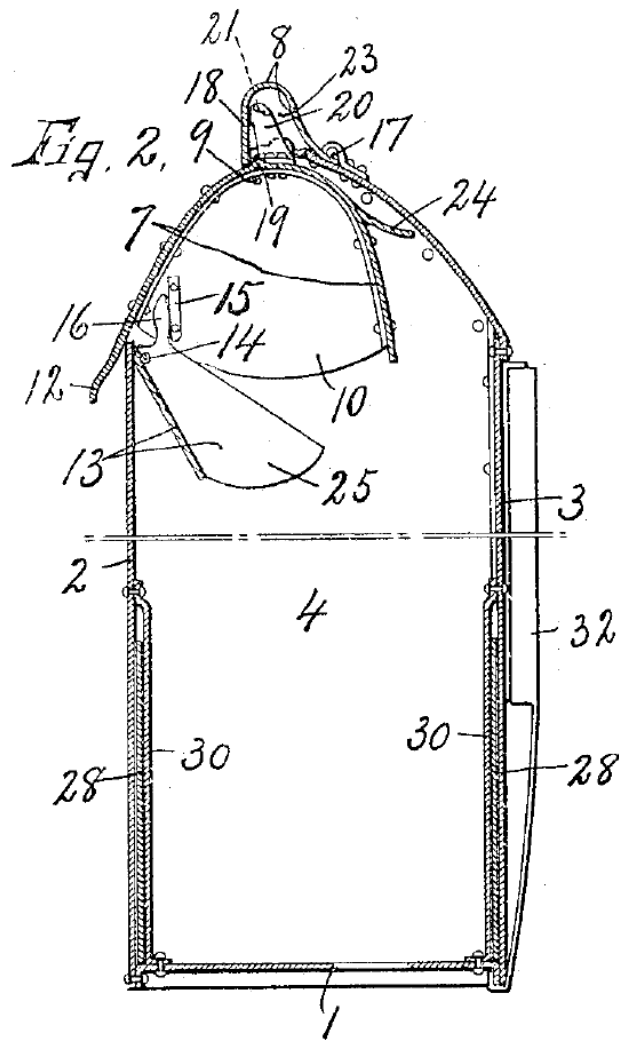


Figure 2 depicts the container with lid, 7, forming part of a receptacle and interfacing with second receptacle, 13, to provide access to the second receptacle when the lid is opened and to move mail into the box when lid is closed. *Id.* at 1:85–92, 2:9–32.

3. Hann (Ex. 1007)

Hann teaches a mailbox “constructed as to prevent unauthorized persons from tampering with the mail delivered thereto.” Ex. 1007, 1:13–15. Hann’s Figure 3 is reproduced below:

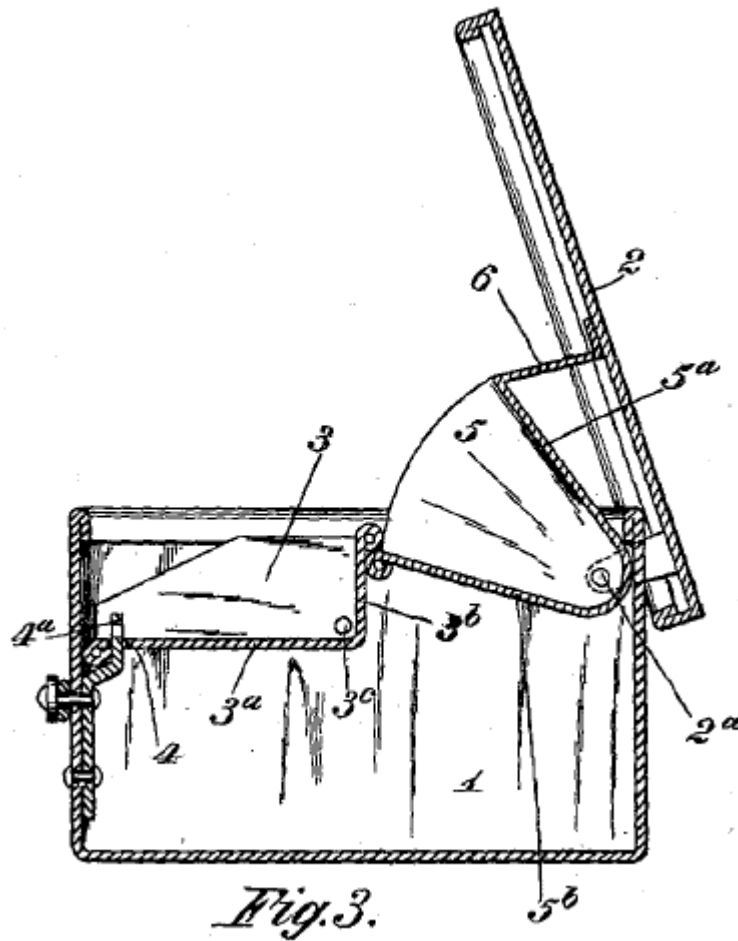


Figure 3 depicts exterior lid or cover 2 pivoted on pin 2^a and affixed to tray such that opening and closing the lid provides access to the tray and releases the tray's contents into the main receptacle, respectively. Ex. 1007, 1:45–95.

4. Claim 21

Although Petitioner asserts that the subject matter of claim 21 would have been obvious over Gaba in combination with teachings from Homme, Wallace, or Hann (see Pet. 20–30, 44–53, 65–74), we do not reach those contentions because of our conclusion above that claim 21 is unpatentable over Gaba alone.

5. Claim 22

Claim 22 depends from claim 21 and further recites that “the mounting for the tray is arranged to *cause* it to extend outwardly from the opening in the receptacle when the lid is in its opened position, and to be fully retracted into the container when the lid is in its closed position.” Ex. 1001, 16:16–20 (emphasis added). Because claim 22 recites that the tray mounting causes the coordinated motion of the tray and lid, it has a distinctly different scope from claim 21. Petitioner does not, however, adequately address any such difference. Rather, addressing Gaba’s teachings, Petitioner merely repeats that Gaba’s tumbler extends beyond the housing when open. Pet. 30, 53–54, 74–75.

In its Supplemental Brief responding to Patent Owner’s Preliminary Response (Paper 25, “Pet. Supp.”), Petitioner asserts that “[t]he motions of tray and lid are coordinated because tray is ‘overbalanced to tip open when not constrained by a lid.’” Pet. Supp. 12 (citing Ex. 1002 ¶ 63). That assertion, however, was not made in the Petition and is therefore untimely. Moreover, even considering the merits of Petitioner’s argument, we further determine that Petitioner’s declarant’s statement does not adequately support Petitioner’s untimely argument. Petitioner’s declarant states that a *different* embodiment of Gaba (depicted in Figure 10), not the embodiment of Figure 22, shows an operative association between lid and tray, and that other embodiments “would be operatively associated” only “[t]o the extent that any other of the trays . . . are overbalanced.” Ex. 1002 ¶ 63. The statement lacks an adequate basis on which to conclude that the tray of Figure 22 is overbalanced and would tip open when not constrained by a lid. We

conclude that Petitioner did not provide an adequate basis *in the Petition* on which to conclude that Gaba discloses the limitations of claim 22.

Regarding the asserted combinations of Gaba with Wallace and Hann, Petitioner asserts that the tray and lid of Wallace or Hann, respectively, teach the limitation of claim 22. Pet. 54, 75. But Petitioner offers insufficient analysis or evidence regarding how or why a person of skill would have combined such a feature—namely, that the act of opening the lid causes the tray to extend outwardly—with the teachings of Gaba. Instead, Petitioner addresses only general reasons for combining Wallace or Hann with Gaba, without focusing on the relevant feature of claim 22. *See id.* at 43, 64.

Petitioner argues also that “motivation to combine exists because each reference addresses the same fundamental problem to be solved in each device—to block, prevent, or inhibit access to [a] container’s interior when [the] container is open.” Pet. Supp. 14 (citing Ex. 1002 ¶¶ 7, 40–44). That argument suffers from the same defect as a number of assertions in the Petition, which address only reasons a person of ordinary skill would look to certain references.

An “Overview of the Prior Art” in the Petition (*see* Pet. 9–18) discusses reasons why the various prior-art *references* could be used together in a combination. For example, discussing Homme, the Petition draws parallels between Homme and Gaba—that both prevent hand access into the lower receptacle of a container and thus that both address “the same problem.” Pet. 12. Such an argument relates to whether the Petition relies on analogous art, not whether a skilled artisan had reason to combine particular teachings of the prior art. And, in the Overview of the Prior Art, the Petition cites the portion of Dr. Klopp’s Declaration discussing the scope of relevant

prior art. Pet. 13 (citing Ex. 1002 ¶¶ 7, 40–44); *e.g.*, Ex. 1002 ¶¶ 7 (“A PHOSITA would recognize that essentially the same problem of preventing or inhibiting access to an easily-used container exists for sharps containers, mailboxes, animal-proof trash cans, rent-a-car key drops, bank night-deposit receptacles, and secure document drops.”), 43 (“[I]t was well known in the field of the ’465 patent that prior art could be found in the field of mailboxes, and this is strong evidence of a motivation to combine art from the fields of mailboxes and medical sharps disposal.”), 44 (“A PHOSITA . . . would be motivated to consider prior art related not only to mailboxes, but also to similar containers needing one-way access.”). These cited paragraphs from Dr. Klopp’s Declaration do not address reasons that a skilled artisan would combine particular teachings of the prior art to end up with the asserted combinations. Thus, the statements in the Overview of the Prior Art also do not explain an intended combination of teachings or the reason a person of ordinary skill would have made such a combination. *See KSR*, 550 U.S. at 418 (“Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.”).

Petitioner presents some more-specific assertions regarding a reason to combine the references; we address each below. The Overview of the Prior Art also asserts that, for example:

A POSITA would understand that the lid (3) and receiver (18) mechanism of Homme could be suitably shaped for the container of Gaba to achieve the solution of permitting an item

to be deposited into the lower receptacle of a container while preventing access by a person's hand into the lower receptacle through the opening when the lid is open.

Pet. 12.⁹ That statement, however, does not provide an adequate reason for a skilled practitioner to use the operative connection from Homme in a combination with Gaba. There is insufficient evidence in the record that the operative connection of Homme would contribute to the ability of Gaba's already existent mechanism to prevent access by a person's hand into the lower receptacle. Gaba's tray prevents access regardless of the lid's position, so coupling the tray position to the lid position would not change the functionality of preventing access by a person's hand.

Petitioner asserts also that "Gaba itself provides motivation to add Wallace's or Hann's feature to Gaba'[s] other embodiments" because of the "desirability of coordinated motion" but does not cite to any disclosure in Gaba to that effect. Pet. Supp. 13. Rather, Petitioner points to assertions made against claim 24 and the notion that, in Gaba, "tray mobility is necessarily dependent upon lid opening." *Id.* (quoting Ex. 1002 ¶¶ 69, 96). Of course, one motion being dependent on another is not necessarily the same as coordinated motion.

The Petition lacks sufficient information identifying the reason a person of skill would have made particular combinations of prior-art teachings. *See* 37 C.F.R. § 42.104(b). Thus, we conclude the Petition falls short of the required showing; Petitioner has not demonstrated by a preponderance of the evidence that the subject matter of claim 22 would

⁹ Nearly identical sentences from the Petition exist for Wallace (Pet. 14) and Hann (*id.* at 18) in place of Homme.

have been obvious over Gaba combined with Homme, Gaba combined with Wallace, or Gaba combined with Hann.

6. Claims 23 and 24

Independent claim 23, similar to claim 22, requires that the “lid and the tray are operatively associated so that the movement of the lid from its closed to its opened position moves the tray from an inoperative condition to an operative condition.” Ex. 1001, 16:28–32. Petitioner asserts that Gaba teaches the claimed “disposing tray” but does not assert that Gaba’s lid and tray teach the claimed operative association. *See* Pet. 34–36, 57–59.

Petitioner agrees further that Gaba does not teach the related limitation that the front portion of the tray moves toward the lid (*see* Ex. 1001, 16:41–43). *Id.* at 39, 61–62.

Petitioner asserts that Homme and Wallace teach the operative association between a tray and lid but does not discuss sufficiently why a person would modify Gaba’s device in light of Homme’s or Wallace’s teachings. *See* Pet. 34–36, 57–59. Petitioner asserts broadly that, “it would have been obvious to combine the teachings of the two references for the reasons detailed in Dr. Klopp’s declaration.” *Id.* at 39, 62. Such an assertion, however, without any discussion in the Petition itself, merely incorporates arguments from the declaration into the Petition; such incorporation violates our rules. 37 C.F.R. § 42.6(a)(3); *see Cisco Systems, Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 10 (PTAB, Aug. 29, 2014). The Petition itself lacks sufficient particularity to support a combination of Gaba’s teachings with teachings from Homme or Wallace. *See* 37 C.F.R. § 42.104(b).

Moreover, even if the Petition were to have contained arguments based on the statements of Petitioner's declarant, we conclude that those statements fall short of providing rational underpinning for the combination. Petitioner's declarant states that adding a "causal relationship between the lid being opened and the tray being in the receiving position" would "facilitate one-handed tray deployment." Ex. 1002 ¶¶ 63 (addressing Homme), 90 (addressing Wallace). But in Gaba's unmodified device, a user could use one hand to open the lid and then move the tray to the receiving position; adding an operative association between the tray and lid would not further the ability to use a single hand. Thus, we conclude that even with Petitioner's declarant, the Petition lacks sufficient explanation of why a person of skill would have modified Gaba's device with teachings from Homme or Wallace.

Similarly, when addressing claim 23's requirement that the front portion of the tray moves toward the lid to continue to impede hand access into the receptacle, Petitioner states that Homme discloses the limitation and that it would be obvious to combine that teaching with Gaba "for the reasons detailed in Dr. Klopp's declaration." Pet. 39 (citing Ex. 1002 ¶¶ 4, 45, 66–67). Petitioner's declarant states that a person of ordinary skill "would have found it obvious to modify the disclosure in Gaba '285 patent Fig. 22 in light of the other embodiments" of *Gaba* "in order to continue to impede hand access." Ex. 1002 ¶ 67. The declarant only addresses Homme by stating that it "discloses a tray pivotable such that the front edge moves toward the approaching lid." *Id.* We conclude the declarant does not provide an adequate *reason* that a skilled artisan would have combined teachings of Homme with those of Gaba.

Petitioner asserts that it would have been obvious to combine Wallace’s teaching with Gaba “for the reason detailed in Dr. Klopp’s declaration.” Pet. 61–62 (citing Ex. 1002 ¶¶ 5, 71, 93–94). Regarding Wallace, the declarant states that a person of ordinary skill “would have considered it obvious to view the motion as relative, such that the motion of the lid towards the front of the tray could be viewed as motion of the front of the tray towards the lid, and either perspective results in impeding hand access.” Ex. 1002 ¶ 94. We conclude the declarant does not provide an adequate *reason* that a skilled artisan would have combined teachings of Wallace with those of Gaba.

Petitioner presents some arguments regarding claim 23 that suffer from the same problems discussed above regarding claim 22. *See supra* at 27–29. For example, Petitioner argues that motivation to combine comes from the references addressing “essentially identical problems.” Pet. Supp. 4–5. As explained above, Petitioner’s arguments are directed at considerations of analogous art, not a reason to combine specific teachings of the prior art references. Indeed, Petitioner draws from case law regarding analogous art, not a reason to combine teachings. *See In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1380 (Fed. Cir. 2007); Pet. Supp. 4.

Additionally, we do not agree with Petitioner’s argument that we must accept unrebutted statements by an expert. *See* Paper 25, 5, 7–8. Petitioner bears the burden of proving unpatentability, regardless of any argument or evidence from Patent Owner. *See Apator Miitors ApS v. Kamstrup A/S*, 887 F.3d 1293, 1297 (Fed. Cir. 2018) (explaining that unrebutted evidence may still fail to carry a burden of proof). Because the Petition failed to properly

present arguments based on the statements of the declarant, we will not consider such statements in isolation.

Petitioner makes the argument regarding an operative connection in claim 23 that it makes for claim 22—that Gaba’s tray is “overbalanced” and will tip open when the lid is opened. Pet. Supp. 8. We conclude that argument lacks support and is not persuasive for the same reasons discussed above. *See supra* at 26.

To the extent Petitioner makes additional arguments in its Supplemental Brief regarding the reason a skilled artisan would combine teachings from Homme or Wallace with those from Gaba, we conclude that those arguments are new arguments without adequate support in the Petition. *See* Pet. Supp. 5–7, 10–11.

As described above and consistent with the Institution Decision (*see* Inst. 21–22), we conclude the Petition fails to make an adequate challenge to claim 23. Accordingly, we conclude Petitioner has not demonstrated by a preponderance of the evidence that the subject matter of claim 23 would have been obvious over Gaba combined with Homme, or over Gaba combined with Wallace. We reach the same conclusion for claim 24, which depends from claim 23.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that:

- a) Claim 21 is unpatentable under 35 U.S.C. § 102(e) as anticipated by Gaba; and
- b) Claim 21 is unpatentable under 35 U.S.C. § 103(a) as obvious over Gaba.

We further determine that Petitioner has not demonstrated by a preponderance of the evidence that:

- a) Any of claims 21–24 is unpatentable under 35 U.S.C. § 103(a) as obvious over Gaba and Homme;
- b) Any of claims 21–24 is unpatentable under 35 U.S.C. § 103(a) as obvious over Gaba and Wallace; or
- c) Claim 21 or 22 is unpatentable under 35 U.S.C. § 103(a) as obvious over Gaba and Hann.

Because this is a Final Written Decision, parties to the proceeding seeking judicial review of the Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IV. ORDER

Accordingly, it is:

ORDERED that claim 21 of the '465 patent is unpatentable; and

FURTHER ORDERED that claims 22–24 of the '465 patent have not been proven unpatentable.

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Patent 6,250,465 B1

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