

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

IRONRIDGE, INC.,
Petitioner,

v.

PEGASUS SOLAR, INC.,
Patent Owner.

PGR2022-00024
Patent 10,998,847 B2

Before SCOTT A. DANIELS, ERIC C. JESCHKE, and
JASON W. MELVIN, *Administrative Patent Judges*.

JESCHKE, *Administrative Patent Judge*.

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

I. BACKGROUND

A. Introduction

Petitioner, IronRidge, Inc., filed a Petition to institute post-grant review of claims 1–12 (the “challenged claims”) of U.S. Patent No. 10,998,847 B2 (Ex. 1001, “the ’847 patent”). Paper 1 (“Pet.”). Patent Owner, Pegasus Solar, Inc., filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). With our authorization (Paper 7), Petitioner filed a Preliminary Reply. Paper 8 (“Prelim. Reply”).

We have authority to determine whether to institute a post-grant review. *See* 35 U.S.C. § 324 (2018); 37 C.F.R. § 42.4(a) (2021) (“The Board institutes the trial on behalf of the Director.”). Post-grant review may not be instituted “unless . . . the information presented in the petition . . . , if such information is not rebutted, would demonstrate 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. Upon consideration of the evidence and arguments in the record, for the reasons below we determine that the information presented does not show that it is more likely than not that Petitioner would prevail with respect to at least one of the challenged claims. We thus deny institution of post-grant review. *See* 37 C.F.R. § 42.208(b) (“At any time prior to institution of post-grant review, the Board may deny all grounds for unpatentability for all of the challenged claims. Denial of all grounds is a Board decision not to institute post-grant review.”).

B. Related Proceedings

The parties do not identify any related proceedings that might affect, or be affected by, a decision in this proceeding. *See* Paper 4 (Patent Owner Mandatory Notice) at 2; Pet. 2.

C. The '847 Patent

The '847 patent relates to a structural support block that cooperates with a protrusion in a roof's flashing to allow mounting of structures, such as solar panels. Ex. 1001, code (57), 1:13–25. According to the '847 patent, prior solar panel mounting solutions suffered from numerous disadvantages, including difficulty in levelling and in installing. *Id.* at 1:12–22.

Figure 1 is reproduced below:

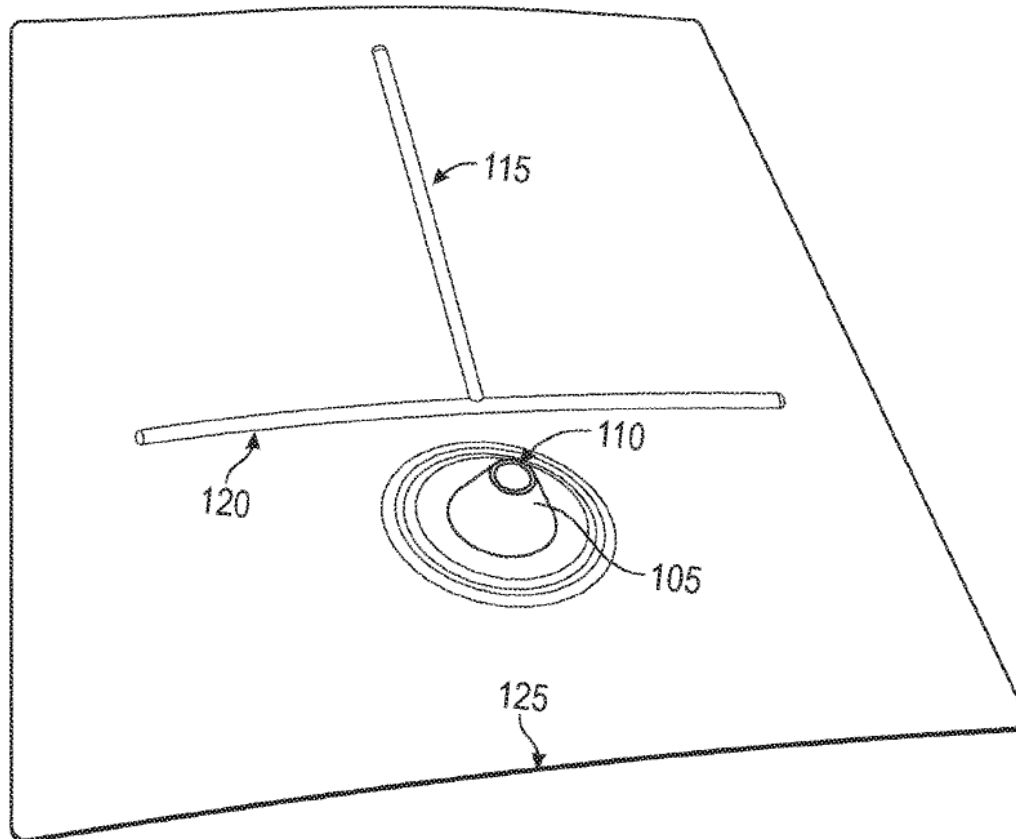


FIG. 1

Figure 1 shows roof flashing with a protrusion 105, which includes a through-hole 110. Ex. 1001, 2:41–42. “The through-hole 110 provides an entrance for a fastener (e.g. a lag bolt) to secure the flashing and a structural

support (e.g. a support block, a mounting assembly base, etc.) to an installation service.”¹ *Id.* at 2:42–45.

Figures 2L and 2N are reproduced below:

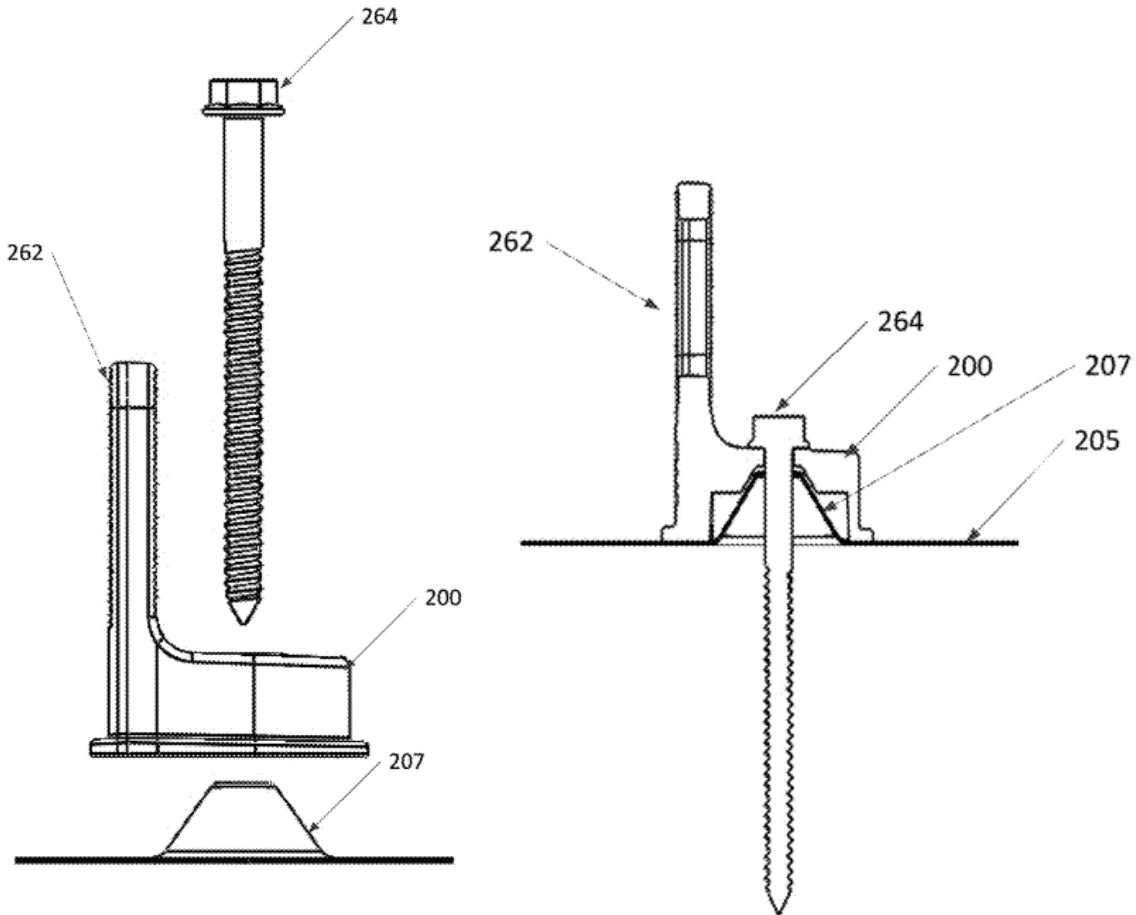


FIG. 2L

FIG. 2N

Figure 2L depicts “an exploded view of [a] support block with integrated bracket, a fastener, and flashing” and Figure 2N depicts “a cut-away view of a support block with integrated bracket, fastened to a flashing

¹ In this Decision, we omit emphasis on reference numerals in quotations from the ’847 patent and prior art references.

with a fastener.” Ex. 1001, 2:3–4, 2:7–9. The solar mounting assembly in Figure 2L includes support block 200, flashing with protrusion 207, and fastener 264. *Id.* at 4:56–59. Support block 200 includes integrated bracket 262. *Id.* Figure 2N shows the same components in cutaway, and after fastening the support block down using fastener 264. *Id.* at 4:63–65.

Figure 2G is reproduced below:

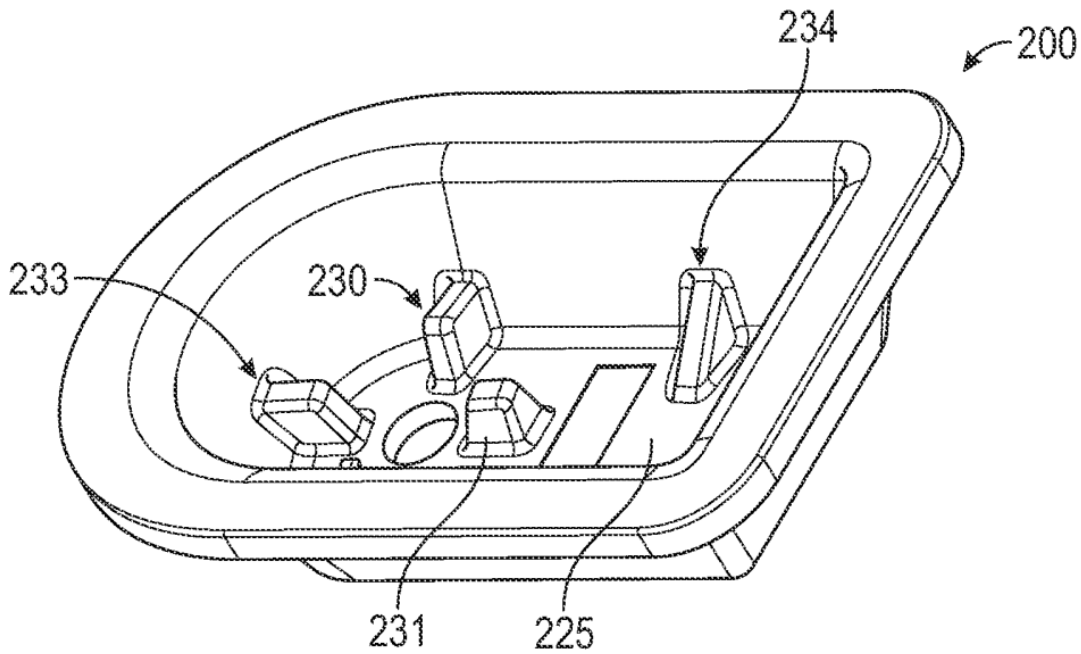


FIG. 2G

Figure 2G depicts “an isometric view of the support block showing the internal cavity and a plurality of internal rib features.” Ex. 1001, 1:57–59. Specifically, Figure 2G shows an embodiment of support block 200, including internal cavity 225 and plurality of internal rib features 230, 231, 232 (unnumbered), 233, 234, 235 (unnumbered). *Id.* at 4:17–20. “[I]nternal rib features 230, 231, 232, 233 can facilitate rotation of the support block 200 around the protrusion on a flashing.” *Id.* at 4:20–22.

D. Challenged Claims

Petitioner challenges claims 1–12, of which only claim 1 is independent. Independent claim 1 is reproduced below, with bracketed alphanumerical designations added to identify each clause:

1. A solar mounting assembly comprising:

[1a] a flashing comprising a substantially flat sheet, the flashing having an upward-facing substantially symmetric tapered protrusion and a through-hole in a center of the symmetric tapered protrusion; and

[1b] a support block that is separate from the flashing, the support block cast in a single piece and having:

[1c] a bracket having at least one grooved surface that is configured to engage solar mounting accessories, and a longitudinal slot configured to secure the solar mounting accessories to the support block;

[1d] a top surface integrated with the bracket;

[1e] a curved outer side surface on an up-slope portion of the support block, the curved outer side surface forming an obtuse angle with the top surface;

[1f] an aperture disposed through the top surface, wherein the aperture is configured to align with the through-hole in the center of the symmetric tapered protrusion; and

[1g] an internal cavity, wherein at least a portion of the internal cavity conforms to the curved outer side surface, the internal cavity is configured to accommodate the symmetric tapered protrusion of the flashing when the support block is placed on the flashing over the symmetric tapered protrusion such that the support block compresses onto the flashing and seals the symmetric tapered protrusion and the through-hole when a first fastener is inserted through the aperture and the through-hole.

Ex. 1001, 7:7–35.²

E. Asserted Grounds of Unpatentability

Petitioner challenges claims 1–12 on the following grounds:

Claim(s) Challenged	35 U.S.C. §³	Reference(s)/Basis
1–12	112(a)	Written Description
1–12	112(b)	Indefiniteness
1, 4, 5, 11, 12	103	Stearns, ⁴ Meine II ⁵
2	103	Stearns, Meine II, Meine I ⁶
6, 7	103	Stearns, Meine II, West ⁷
8	103	Stearns, Meine II, Corsi ⁸

² We adopt Patent Owner’s designations for the elements of the challenged claims. *See* Prelim. Resp. 3–4 (showing alphanumerical designations for the language in claim 1).

³ The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. §§ 102, 103 that became effective on March 16, 2013. Pub. L. No. 112-29, §§ 3(b)–3(c), 3(n)(1), 125 Stat. 284, 285–87, 293 (2011). Because the challenged claims of the ’847 patent have an effective filing date after March 16, 2013, we apply the AIA versions of these statutes.

⁴ US 2014/0305046 A1, published October 16, 2014 (Ex. 1005, “Stearns”).

⁵ US 2018/0167022 A1, published June 14, 2018 (Ex. 1006, “Meine II”).

⁶ US 2016/0134230 A1, published May 12, 2016 (Ex. 1008, “Meine I”).

⁷ US 2013/0133270 A1, published May 30, 2013 (Ex. 1011, “West”).

⁸ US 2013/0298494 A1, published November 14, 2013 (Ex. 1010, “Corsi”).

Claim(s) Challenged	35 U.S.C. §³	Reference(s)/Basis
9, 10	103	Stearns, Meine II, Yamamoto ⁹
1, 3–7, 11, 12	103	Stearns, Meine II, West
8	103	Stearns, Meine II, West, Corsi
9, 10	103	Stearns, Meine II, West, Yamamoto
1, 3–5, 11, 12	103	Stearns, Schaefer ¹⁰
2	103	Stearns, Schaefer, Meine I
3, 6, 7	103	Stearns, Schaefer, West
8	103	Stearns, Schaefer, Corsi
9, 10	103	Stearns, Schaefer, Yamamoto

Petitioner supports its challenges with a declaration from Mr. Barry Cinnamon. Ex. 1002 (“Cinnamon Decl.”).

II. DISCUSSION

A. Eligibility for Post-Grant Review

1. Legal Framework

As a threshold matter, we must determine whether the ’847 patent is eligible for post-grant review. The post-grant review provisions in section 6(d) of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (September 16, 2011) (“AIA”), apply only to patents that “contain[] or contained at any time . . . a claim to a claimed invention that has an effective

⁹ Japanese Patent Application Publication No. 2003-0336355 (with translation), published November 28, 2003 (Ex. 1018 (Japanese version) and Ex. 1019 (machine translation), collectively “Yamamoto”).

¹⁰ US 2015/0270802 A1, published September 24, 2015 (Ex. 1009, “Schaefer”).

filing date . . . that is on or after [March 16, 2013].” AIA §§ 3(n)(1), 6(d), 6(f)(2)(A), 125 Stat. 284, 293, 305–312 (2011).

Each petitioner for post-grant review must certify that the challenged patent is available for post-grant review. 37 C.F.R. § 42.204(a). In addition, “[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 or of the issuance of a reissue patent (as the case may be).” 35 U.S.C. § 321(c). Petitioner has the burden of demonstrating eligibility for post-grant review. *See Mylan Pharms. Inc. v. Yeda Res. & Dev. Co.*, PGR2016-00010, Paper 9 at 10 (PTAB Aug. 15, 2016).

2. *Overview of Priority of the ’847 Patent*

The ’847 patent claims priority to U.S. Provisional Application No. 62/378,553 (“the ’553 provisional”), which was filed on August 23, 2016. Ex. 1001, code (60), 1:6–8. Petitioner argues that the ’847 patent is not entitled to an effective filing date based on the filing date of the ’553 provisional because the ’553 provisional does not support all of the limitations of claim 1 of the ’847 patent. Pet. 1–2, 9. Petitioner alleges that the effective filing date of the ’847 patent is therefore the filing date of U.S. Patent Application No. 15/681,809, which is August 21, 2017. Pet. 2. At this stage in the proceeding, Patent Owner does not address this issue. *See also* Prelim. Resp. 36 n.5 (reserving the right to prove the ’847 patent is entitled to an effective filing date earlier than August 21, 2017 if proceeding is instituted). We need not and do not address this issue as the outcome does not alter the decision on institution.

3. *Analysis*

Petitioner certifies that the '847 patent is eligible for post-grant review. Pet. 2. Regardless of whether the effective filing date of the '847 patent is August 23, 2016, or August 21, 2017, the effective filing date of the '847 patent is on or after March 16, 2013, the date set forth in the relevant statutory provision of the AIA.

Patent Owner argues, however, that the Petition does not satisfy the requirement of 35 U.S.C. § 321(c) because it was *served* on Patent Owner outside of the 9-month statutory window following issuance of the '847 patent on May 4, 2021. Prelim. Resp. 1, 9–11; *see also* 35 U.S.C. § 321(c) (“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 . . .”). In support of the assertion that a petition for post-grant review must be served within the 9-month window of § 321(c), Patent Owner relies on the requirement in 37 C.F.R. § 42.206(a) that “[a] petition to institute a post-grant review will not be accorded a filing date until the petition satisfies all of the following requirements:” including “(2) Effects service of the petition on the correspondence address of record as provided in § 42.205(a),” which includes that “[t]he petition and supporting evidence must be served on the patent owner at the correspondence address of record for the subject patent.” *See* Prelim. Resp. 9.

As an initial matter, we question Patent Owner’s understanding of the relationship between the 9-month window of § 321(c) and the relevant regulations. The statutory provision at issue provides a 9-month window after issuance of a patent for a petition for post-grant review to “be filed.” 35 U.S.C. § 321(c). Here, there is no dispute that the Petition was “filed”—

i.e., uploaded to the PTAB case management system—on February 4, 2022. In contrast, the regulations cited address when a petition for post-grant review will be “accorded a filing date.” *See, e.g.*, 37 C.F.R. § 42.206(a). The date on which a petition is “accorded a filing date” may occur *after* the filing date of the petition. For example, in this proceeding, the “Notice of Filing Date Accorded to Petition and Time for Filing Patent Owner Preliminary Response” issued on February 15, 2022. *See* Paper 3. Thus, it is not clear that one of the service requirements of 37 C.F.R. §42.205 must occur within the 9-month statutory window provided in 35 U.S.C. § 321(c).

We assume for purposes of the discussion below, however, that Patent Owner is correct as to the relationship between the relevant statutory and regulatory provisions. Under that assumption, Patent Owner alleges that service of the Petition was not affected on the correspondence address of record until February 5, 2022, which is one day *after* the 9-month statutory window. Prelim. Resp. 9. In support of this argument, Patent Owner relies on a postage label on a box used to deliver to Patent Owner a hard copy of the Petition, with the label reading: “Feb 05 2022.” *Id.* at 9–10 (citing Ex. 2001). Patent Owner also relies on an online report from the United States Postal Service (“USPS”) indicating that the earliest entry for the tracking number of the box was February 5, 2022 at 1:10 a.m. *Id.* at 11 (citing Ex. 2002).

Petitioner certified in the Petition that “service was made on counsel for Patent Owner” on February 4, 2022. Pet. 118. In the Preliminary Reply, Petitioner first states that electronic service of the Petition was provided to “Patent Owner’s counsel of record” via emails to Mr. Chris L. Holm (counsel of record during prosecution of the ’847 patent) and Mr. Jeffrey M.

Fisher (an attorney identified in a letter to Petitioner notifying of the publication of the application leading to the '847 patent). Prelim. Reply 1–2 (citing Ex. 1020 (electronic service email); Ex. 1021 (same)). Petitioner additionally alleges that a physical copy of the Petition was mailed to Patent Owner’s counsel in this proceeding on February 4, 2022—i.e., *within* the 9-month statutory window—as evidenced by a receipt from Mailboxes Plus showing that a shipment with the same tracking number on the box photographed by Patent Owner was accepted into USPS Priority Mail at 5:11 p.m. on February 4, 2022. *Id.* at 3 (citing Ex. 1023 (receipt showing USPS tracking number)); *see also* Ex. 2001 (showing same tracking number).

We first address Petitioner’s argument that *electronic service* of Patent Owner’s counsel was sufficient to meet the service requirements of 37 C.F.R. § 42.205. Section (a) of that regulatory provision states that “[t]he petition and supporting evidence must be served on the patent owner at the correspondence address of record for the subject patent. The petitioner may additionally serve the petition and supporting evidence on the patent owner at any other address known to the petitioner as likely to effect service.” Section (b) adds that, “[u]pon agreement of the parties, service may be made electronically.” 37 C.F.R. § 42.205(b) (emphasis added). Although Petitioner does appear to have emailed the Petition to persons satisfying the requirements in § 42.205(a), there is nothing in the record indicating *an agreement between the parties* that service may be made electronically, as required by § 42.205(b). *See, e.g.*, Ex. 1020 at 1 (showing an attorney for Petitioner in this proceeding asking Mr. Holm if Patent Owner would “agree to electronic service” without any showing of a subsequent agreement).

Without an agreement between the parties as to sufficiency of electronic service, we find Petitioner's emailing of the Petition to Mr. Holm and Mr. Fisher insufficient to effect service.

We turn now to the mailing of a physical copy of the Petition. As mentioned above, Petitioner sent the physical copy via USPS Priority Mail, which is not the same as "Priority Mail Express," the service specifically mentioned in the relevant regulatory provisions. *See* 37 C.F.R. §§ 42.6(e)(1) ("Service may be by Priority Mail Express® or by means at least as fast and reliable as Priority Mail Express®."), § 42.205(b) (same). Petitioner states that, "due to COVID-19 conditions at the time the Petition was delivered, the Mailboxes Plus location was not able to provide for Priority Mail Express shipping." Prelim. Reply 3 n.3. Petitioner does not explain, however, why it was limited to using a Mailboxes Plus location, rather than, for example, a USPS location. Nor does Petition address why USPS Priority Mail is as "fast and reliable as Priority Mail Express®." 37 C.F.R. §§ 42.6(e)(1), 42.205(b)(1). Patent Owner, however, also does not raise the issue. For purposes of this Decision only, we assume as adequate Petitioner's use of USPS Priority Mail.

With that assumption, based on the current record, we agree with Petitioner that the Petition was effectively served on February 4, 2022, within the 9-month statutory window. Specifically, the receipt from Mailboxes Plus shows that the box containing the Petition was received for USPS Priority Mail delivery at 5:11 p.m. on February 4, 2022. Ex. 1023, *cited at* Prelim. Reply 3. As argued by Petitioner (Prelim. Reply 4), the Board has found receipt of a paper copy of a petition by a carrier within a statutory window to satisfy the service requirement of our rules. *See TIZ*

Inc. v. Smith, CBM2020-00029, Paper 17 at 13 (PTAB March 25, 2021). On this record, and, again, assuming Patent Owner’s interpretation of the relationship between the relevant statutory and regulatory provisions, we determine that the ’847 patent is eligible for post-grant review because the record supports Petitioner’s assertion that the Petition was effectively served on Patent Owner within nine months of the issuance date of the ’847 patent.

Further, to the extent necessary, we waive regulatory requirements related to the timing of Petitioner’s service based on the particular facts of this case. *See* 37 C.F.R. § 42.5(b) (“The Board may waive or suspend a requirement of parts 1, 41, and 42 and may place conditions on the waiver or suspension.”); *see also* Prelim. Reply 5 (“In the event it is determined that the facts and circumstances herein do not evidence proper service under rule 37 C.F.R. § 42.205, Petitioner respectfully requests that the PTAB waive the requirements for service . . .”). For example, the Petition was available for download from the PTAB case management system on February 4, 2022, and Patent Owner has not alleged prejudice due to the allegedly late service of the physical copy of the Petition.

B. Discretion Under 35 U.S.C. § 324(a) and § 325(d)

Patent Owner argues that we should exercise our discretion under § 324(a) and under § 325(d) to deny institution. *See* Prelim. Resp. 50–51 (discussing § 324(a)), 11–21 (discussing § 325(d)). Because we deny the Petition after considering the merits of each ground, we need not and do not reach Patent Owner’s arguments based on discretion.

C. The Level of Ordinary Skill in the Art

The level of ordinary skill in the art is “a prism or lens” through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261

F.3d 1350, 1355 (Fed. Cir. 2001). The person of ordinary skill in the art is a hypothetical person presumed to have known the relevant art at the time of the invention. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In determining the level of ordinary skill in the art, we may consider certain factors, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *Id.*

Petitioner contends, with accompanying declaration testimony, that a person having ordinary skill in the art at the time of the alleged invention “would have had at least a bachelor’s degree in mechanical engineering, structural engineering, or similar technical field, with at least three years of relevant (metal fabrication, aluminum extrusion, architectural glass structural) product design experience.” Pet. 36 (citing Cinnamon Decl. ¶ 51). Petitioner adds that “[a]n increase in experience could compensate for less education.” *Id.* (citing Cinnamon Decl. ¶ 51).

Patent Owner does not dispute Petitioner’s proposed definition of the level of ordinary skill in the art, which appears consistent with the record at this stage of the proceeding, including the prior art. *See GPAC Inc.*, 57 F.3d at 1579. For purposes of this Decision, we adopt the definition of the level of ordinary skill in the art proposed by Petitioner.

D. Claim Construction

In post-grant reviews, the Board interprets claim language using the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b), as described in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.200(b). Under that standard,

we generally give claim terms their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1313–14. Although extrinsic evidence, when available, may also be useful when construing claim terms under this standard, extrinsic evidence should be considered in the context of the intrinsic evidence. *See id.* at 1317–19.

Neither Petitioner nor Patent Owner proposes constructions for any claim terms. *See* Pet. 35–36; *see generally* Prelim. Resp. Based on the current record, we need not construe any claim terms because doing so would not change the outcome of the analysis below. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (stating that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

E. Asserted Lack of Written Description for Claims 1–12

Petitioner asserts that claims 1–12 of the ’847 patent lack adequate written description support under 35 U.S.C. § 112(a) due to lack of support for the subject matter of independent claim 1 as well as for dependent claims 2, 5, and 10. *See* Pet. 36–46. Patent Owner provides arguments specifically addressing this asserted ground. *See* Prelim. Resp. 21–32. For the reasons below, we determine that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that any of claims 1–12 of the ’847 patent lack adequate written description support.

1. Independent Claim 1

Petitioner argues that independent claim 1—and thus challenged claims 2–12, which depend from claim 1—fail to satisfy the written description requirement of 35 U.S.C. § 112(a) because the '847 patent does not support three limitations in claim 1: (1) “the support block cast in a single piece and having . . . an internal cavity, wherein at least a portion of the internal cavity conforms to the curved outer side surface” as recited in portions of elements 1b and 1g (collectively “the ‘support block’ limitation”); (2) “a bracket having at least one grooved surface that is configured to engage solar mounting accessories, and a longitudinal slot configured to secure the solar mounting accessories to the support block” as recited in element 1c (“the ‘bracket’ limitation”); and (3) “the internal cavity is configured to accommodate the symmetric tapered protrusion of the flashing when the support block is placed on the flashing over the symmetric tapered protrusion such that the support block compresses onto the flashing and seals the symmetric tapered protrusion and the through-hole when a first fastener is inserted through the aperture and the through-hole” as recited at the end of element 1g (“the ‘internal cavity’ limitation”). Pet. 37–44.

a. The “Support Block” and “Bracket” Limitations

We first address the “support block” limitation and the “bracket” limitation. Petitioner argues that these two limitations “were amended into independent claim 1,” “were not present in original claim 1 or any original dependent claims” and “are not described in the written description.” Pet. 38. Specifically, as to the “support block” limitation, Petitioner argues that “[t]here is no written support for a support block that is cast in a single piece” and argues that “neither ‘conforms’ nor ‘conform’ appear in the

specification of the '847 patent.” Pet. 39 (citing Ex. 1001; Cinnamon Decl. ¶ 55). As to the “bracket” limitation, Petitioner argues that “there is no description of a ‘grooved surface that is configured to engage solar mounting accessories’ or a ‘longitudinal slot configured to secure the solar mounting accessories to the support block’ as recited in claim 1.” *Id.* (citing Ex. 1001; Cinnamon Decl. ¶ 55).

The test for compliance with the written description requirement is “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.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). The written description requirement, however, “does not demand any particular form of disclosure . . . or that the specification recite the claimed invention *in haec verba.*” *Id.* at 1352. “[U]nder proper circumstances, drawings alone may provide a ‘written description’ of an invention as required by § 112.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1565 (Fed. Cir 1991).

On the current record, we determine that Petitioner has not adequately shown lack of written description support for the “support block” limitation or the “bracket” limitation. As to the requirement for a “support block cast in a single piece,” we agree with Patent Owner that, although the '847 patent does not describe the “single piece” feature in text, Figures 2L and 2O adequately show that the inventors had possession of that subject matter. *See* Prelim. Resp. 22–24. As noted by Patent Owner, although Figure 2L is an “exploded view,” it shows the support block and bracket *integrated together as one piece* even though Figure 2H—also an “exploded view”—shows the bracket and support block as separate components. *Id.* at 23–24

(showing annotated versions of Figures 2L and 2H). As also argued by Patent Owner, the '847 patent adequately supports the use of casting. *Id.* at 24 (citing Ex. 1001, 5:40–44 (the '847 patent describing, for one embodiment, “a metal injection molding or die casting process for forming the mounting assembly”)). We turn now to the requirement in the “support block” limitation that “at least a portion of the internal cavity conforms to the curved outer side surface.” We agree with Patent Owner that, although the '847 patent does not use “conforms” in text, Figures 2D, 2F, and 2G adequately show that the inventors had possession of the subject matter at issue because those Figures depict a portion of internal cavity 225 conforming to the shape of curved outer side surface 215. *See id.* at 25.

Turning now to the “bracket” limitation, we also agree with Patent Owner that Figures 2L and 2O disclose a “grooved surface” and “longitudinal slot” on the “bracket” and that the '847 patent describes using the “support block” and “bracket” to secure/engage solar mounting accessories. *See* Prelim. Resp. 22 (citing Ex. 1001, 4:23–35).

b. The “Internal Cavity” Limitation

As the last of the three limitations argued by Petitioner in the context of this asserted ground, we turn now to the “internal cavity” limitation. Petitioner argues that “the written description does not describe how the internal cavity of the support block is configured so that when a fastener is simply *inserted* through the aperture of the support [block] and the through-hole of the flashing, the symmetric tapered protrusion and the through-hole are sealed.” Pet. 39–40 (citing Ex. 1001; Cinnamon Decl. ¶ 57). After noting certain disclosures of sealing (Ex. 1001, 2:57–60, 3:32–38, 6:9–13), Petitioner argues that “there is no support for sealing the symmetric tapered

protrusion and the through-hole, when a first fastener is *inserted* through the aperture of the support and the through-hole of the flashing.” Pet. 40–41 (citing Ex. 1001; Cinnamon Decl. ¶ 57). According to Petitioner, claim 1 is “missing necessary elements” to provide a sealing function because no seal is described as present in any of four potential locations on the relevant structures. *See* Pet. 41–44.

On the current record, we determine that Petitioner has not adequately shown lack of written description support for the “internal cavity” limitation. As argued by Patent Owner, one of the passages discussed by Petitioner provides adequate support for the aspect of the “internal cavity” limitation at issue. Specifically, discussing Figures 2A–2O, the ’847 patent provides:

The support block 200 includes an aperture 210 for allowing a fastener (not shown) to be inserted through the aperture 210, through the through-hole of the flashing 205, and coupled with an installation surface. When coupled with an installation surface, *the fastener tightly seals the support block 200 onto the flashing 205.*

Ex. 1001, 3:32–38 (emphasis added), *quoted at* Prelim. Resp 26. We also agree with Patent Owner that the preceding paragraph in the ’847 patent provides context and further describes the “seal between the structural support and the flashing 100.” Ex. 1001, 3:20–29, *cited at* Prelim. Resp. 26.

Further, we are not persuaded that the lack of disclosure or recitations in claim 1 as to *seals at particular locations* reveals a lack of written description support. *See* Pet. 41–44. Indeed, as argued by Patent Owner, the ’847 patent expressly discloses a seal as recited. *See* Prelim. Resp. 26 (citing Ex. 1001, 3:20–29, 3:32–38). To the extent Petitioner argues that the seal would not actually exist without additional structure, on the particular facts here, that is not a written description issue. *See id.* at 26–28 (arguing

that this issue is related to enablement). For these reasons, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claim 1 of the '847 patent lacks adequate written description support.

2. Dependent Claim 2

Claim 2 depends from claim 1 and adds that “the flashing further comprises a first notch feature configured as an alignment guide.” Ex. 1001, 7:36–38. Petitioner argues that, although the '847 patent “states ‘[i]n some cases, the vertical ridge 115 can be used to align the flashing 100 (e.g. with a roof joist, pilot hole, etc.) during installation . . . [s]imilarly, the flashing 100 can include a score mark on a terminal edge 125 for alignment”, there is no support for a notch feature as recited in claim 2.” Pet. 44 (alterations in original) (citing Ex. 1001, 3:4–8; Cinnamon Decl. ¶¶ 63–64).

On the current record, we determine that Petitioner had not adequately shown lack of written description support for claim 2. Instead, we agree with Patent Owner that Figures 2O and 2P show notches being used as “alignment guide[s]” and we agree that a “notch feature” as recited and depicted would have been understood as a type of “score mark on a terminal edge,” as disclosed in column 3, lines 4–8. *See* Prelim. Resp. 29 (providing an annotated version of Figure 2P). Thus, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claim 2 of the '847 patent lacks adequate written description support.

3. Dependent Claim 5

Claim 5 depends from claim 1 and adds that “the bracket is configured in an asymmetrical orientation with the curved outer side surface on the up-

slope portion and an elongated, substantially rectangular portion on a down-slope portion of the support block.” Ex. 1001, 8:4–8. Petitioner argues that, although the ’847 patent “states ‘[a]s shown in FIG. 2A, the shape of the support block 200 is asymmetric with a rounded up-slope portion 215 and elongated, substantially rectangular down-slope portion 220’, these features are described with respect to the *support block*, but there is no support for a *bracket* as recited in claim 5.” Pet. 45 (alternation in original) (citing Ex. 1001, 3:57–60; Cinnamon Decl. ¶¶ 65–66). Patent Owner argues that one of ordinary skill in the art reading claim 5 would have understood the recitation of “bracket” as an obvious typographical error in which “support block” was the intended phrase. *See* Prelim. Resp. 30.

On the current record, we determine that Petitioner had not adequately shown lack of written description support for claim 5. A district court may “correct an error in a patent by interpretation of the patent where no certificate of correction has been issued . . . only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *Novo Indus., LP v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003); *see Fitbit, Inc. v. Valencell, Inc.*, 964 F.3d 1112, 1119–20 (Fed. Cir. 2020) (suggesting the standard from *Novo* extends to corrections the Board may make in post-grant proceedings, and holding it was error to not correct a “conspicuous” and undisputed error related to antecedent basis). The Board has applied the same standard. *See Volkswagen Grp. of Am., Inc. v. Michigan Motor Techs. LLC*, IPR2020-00446, Paper 9 at 10–11 (PTAB Aug. 25, 2020) (collecting cases).

For the reasons provided by Patent Owner (Prelim. Resp. 30–31), we agree that the proposed correction is not subject to reasonable debate and the prosecution history does not suggest a different interpretation of the recited “bracket.” *See id.* at 30. And as argued by Patent Owner, the passage in the ’847 patent highlighted by Petitioner uses language almost identical to claim 5 to describe the support block. *See id.* (citing Ex. 1001, 3:57–60). Thus, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claim 5 of the ’847 patent lacks adequate written description support.

4. *Dependent Claim 10*

Claim 10 depends from claim 1 and adds: “wherein the first fastener has a cavity on an underside of a flange to accommodate a flexible washer, wherein the flexible washer is compressed between the flange and the support block when the solar mounting assembly is installed on an installation surface.” Ex. 1001, 8:28–33. Petitioner argues that “[t]here is no support for a first fastener as recited in claim 10” and that “[t]he specification of the ’847 patent does not describe—or even mention—a fastener that has a cavity on an underside of a flange.” Pet. 45–46 (citing Cinnamon Decl. ¶¶ 67–68).

On the current record, we determine that Petitioner had not adequately shown lack of written description support for claim 10. Instead, we agree with Patent Owner that the Figures and cited passages in the ’847 patent support the subject matter of claim 10. *See* Prelim. Resp. 31–32 (citing Ex. 1001, 1:14–17, 2:3–11, 2:57–60, 3:38–43, 4:24–35, 4:56–67, Figs. 2B, 2C, 2H, 2I, 2L–2R). In particular, we agree with Patent Owner that “figures 2H and 2I disclose a fastener 244 with a flange having a cavity underneath it

between the fastener flange and bracket 242, with a washer 243 compressed between the two.” *Id.* at 31 (citing Ex. 1001, 4:24–35, Figs. 2H, 2I). Thus, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claim 10 of the ’847 patent lacks adequate written description support.

5. *Conclusion*

For the reasons above, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that any of claims 1–12 of the ’847 patent lack adequate written description support.

F. Asserted Indefiniteness of Claims 1–12

Petitioner asserts that claims 1–12 of the ’847 patent are indefinite under 35 U.S.C. § 112(b) based on language in independent claim 1. *See* Pet. 46–49. Patent Owner provides arguments specifically addressing this asserted ground. *See* Prelim. Resp. 32–34. For the reasons below, we determine that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claims 1–12 are indefinite.

1. The “Support Block” Limitation

Petitioner argues that the “support block” limitation¹¹ renders indefinite claim 1 because “[t]here is no description in the specification of what type of conformity exists between the internal cavity and the curved outer side surface.” Pet. 47.

¹¹ As a reminder, the “support block” limitation requires that “the support block cast in a single piece and having . . . an internal cavity, wherein at least a portion of the internal cavity conforms to the curved outer side surface.”

To satisfy the definiteness requirement of § 112, a patent’s claims must, when “viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014); *see also* Memorandum from Andrei Iancu, Andrew Hirshfield, and Scott R. Boalick to Members of the Patent Trial and Appeal Board (Jan. 6, 2021), *available at* <https://www.uspto.gov/sites/default/files/documents/IndefinitenessMemo.pdf> (clarifying that the agency’s approach to analyzing indefiniteness in AIA post-grant proceedings will adhere to the approach explained in *Nautilus*).

On the current record, we determine that Petitioner had not adequately shown that the “support block” limitation renders indefinite claim 1. Instead, we agree with Patent Owner that the plain meaning of “conform”—“be similar in form or type”—and Figures 2D, 2F, and 2G of the ’847 patent would provide reasonable certainty as to the scope of the requirement that “at least a portion of the internal cavity conforms to the curved outer side surface.” *See* Prelim. Resp. 32 (citing Ex. 2005 (dictionary definition of “conform”)); *see also* *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1378–79 (Fed. Cir. 2017) (discussing how “the written description is key to determining whether a term of degree is indefinite” and how examples and requirements in the written description can, in certain instances, help provide an objective standard for claim scope).

2. The “Internal Cavity” Limitation

Petitioner also argues that the “internal cavity” limitation renders indefinite claim 1 for two reasons.¹² Pet. 47–49. First, Petitioner argues that, although “claim 1 recites that a seal is created ‘when a first fastener is inserted through the aperture and the throughhole,’ it is unclear if claim 1 would require a first fastener to be present in an accused solar mounting assembly to be considered an infringing solar mounting assembly since the first fastener is not positively recited.” Pet. 48 (citing Cinnamon Decl. ¶ 72; MPEP § 2173). Petitioner adds that “[t]his lack of clarity is only reinforced based on the limitations of claim 10, which is dependent from claim 1 and provides structural limitations to the first fastener but does not itself clearly indicate whether the first fastener is a component of claim 1 or whether the first fastener is included as a component of claim 10.” *Id.* (citing Ex. 1001, 8:28–33; Cinnamon Decl. ¶ 72).

On the current record, we determine that Petitioner had not adequately shown that the “internal cavity” limitation renders indefinite claim 1. Instead, we agree with Patent Owner that the “internal cavity” limitation describes how the “internal cavity” is “configured,” and that the limitation does not require the *presence* of a “first fastener.” *See* Prelim. Resp. 33 (“The phrase ‘configured to’ does not require that the fastener itself be

¹² As a reminder, the “internal cavity” limitation requires that “the internal cavity is configured to accommodate the symmetric tapered protrusion of the flashing when the support block is placed on the flashing over the symmetric tapered protrusion such that the support block compresses onto the flashing and seals the symmetric tapered protrusion and the through-hole when a first fastener is inserted through the aperture and the through-hole.”

present in order to infringe claim 1, only that the internal cavity be ‘configured’ in the claimed manner.”). Indeed, Petitioner acknowledges that the “first fastener is not positively recited.” Pet. 48.

We also do not view dependent claim 10 as indefinite or as indicating indefiniteness of claim 1. As acknowledged by Petitioner, claim 10 adds structural limitations to the “first fastener,” thereby rendering the presence of that element—and the recited structural features—required by dependent claim 10, even if the presence of the “first fastener” was not required by independent claim 1.

Second, Petitioner argues that “the scope of claim 1 is unclear based on the limitations ‘the support block compresses onto the flashing and seals the symmetric tapered protrusion and the through-hole when a first fastener is inserted through the aperture and the through-hole’” as recited in the “internal cavity” limitation. Pet. 48 (quoting Ex. 1001, 7:32–35). Referring back to the argument provided in the context of the asserted ground based on alleged lack of written description support, Petitioner argues that “it is unclear where and how a seal is formed such that the symmetric tapered protrusion and the through-hole are sealed when a first fastener is inserted through an aperture of the support block and the through-hole of the flashing.” Pet. 48–49 (citing Cinnamon Decl. ¶ 73).

On the current record, we determine that Petitioner had not adequately shown that the highlighted aspect of the “internal cavity” limitation renders indefinite claim 1. Instead, we agree with Patent Owner that the *express language* at issue in the “internal cavity” limitation and the relevant portions of the ’847 patent provide reasonable certainty to *both* the location of and the manner in which the seal would be formed by an assembly configured as

required by claim 1. *See* Prelim. Resp. 33 (citing Ex. 1001, 3:20–29, 3:32–38, Figs. 2L–2N). For these reasons, we determine that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claims 1–12 of the ’847 patent are indefinite.

G. Asserted Obviousness of Claims 1, 4, 5, 11, and 12 Based on Stearns and Meine II

Petitioner asserts that claims 1, 4, 5, 11, and 12 of the ’847 patent would have been obvious under 35 U.S.C. § 103 based on Stearns and Meine II. Pet. 34, 49–71. Patent Owner provides arguments specifically addressing this asserted ground. Prelim. Resp. 34–43.

1. Independent Claim 1

For independent claim 1, Petitioner contends that the proposed combination of Stearns and Meine II discloses each limitation. Pet. 49–63. Patent Owner argues that Petitioner has not shown that Meine II is prior art to the challenged claims of the ’847 patent, including claim 1. *See* Prelim. Resp. 35–37. For the reasons below, we agree with Patent Owner’s argument, and thus determine that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claim 1 would have been obvious based on Stearns and Meine II.

Meine II is a publication of U.S. Non-provisional Application No. 15/840,430, filed on December 13, 2017. *See* Ex. 1006, codes (10), (21), (22). Meine II claims priority to U.S. Provisional Application No. 62/433,953, filed on December 14, 2016 (“the ’953 provisional application”). *See id.* at code (60). The filing date of the non-provisional

application that issued as the '847 patent is August 21, 2017,¹³ which is *between* the filing dates of Meine II's non-provisional and provisional applications. *See* Ex. 1001, code (22).

Under 35 U.S.C. § 102(a)(2), an applicant is not entitled to a patent if the claimed invention was described in a published application that “was effectively filed before the effective filing date of the claimed invention.” Petitioner states that “Meine II is prior art to the '847 patent as of December 14, 2016 [(i.e., the filing date of the '953 provisional application)] and qualifies as prior art under AIA 35 U.S.C. § 102(a).” Pet. 29 (citing Ex. 1006). In support, Petitioner only states that, “[b]ased on a review of the '953 provisional application (Ex. 1007), the disclosure of Meine II is present in the '953 provisional application and Meine II ‘is entitled to claim priority to’ the '953 application” because it allegedly fulfills the three “ministerial requirements” listed in MPEP § 2154.01(b).¹⁴ *Id.*

Patent Owner counters that Petitioner has not adequately demonstrated that Meine II is prior art to the claimed invention. *See* Prelim. Resp. 35–37. Specifically, Patent Owner argues that “Petitioner has the burden of persuasion to show that a reference is prior art” and argues that “merely being entitled to claim priority is not sufficient to show that Meine

¹³ As noted above (*see supra* § II.A.2), Patent Owner does not assert an earlier effective filing date to the challenged claims.

¹⁴ “A U.S. patent document ‘is entitled to claim’ priority to, or the benefit of, a prior-filed application if it fulfills the ministerial requirements of: (1) containing a priority or benefit claim to the prior-filed application; (2) being filed within the applicable filing period requirement (copending with or within twelve months of the earlier filing, as applicable); and (3) having a common inventor or being by the same applicant.” MPEP § 2154.01(b).

II is prior art since the Petitioner must also show the '953 provisional application describes the subject matter Petitioner relies on in Meine II.” *Id.* at 36 (citing 35 U.S.C. § 102(d)). We agree with Patent Owner.

For the reasons discussed by Petitioner, Meine II “is entitled to claim” the benefit of an earlier filing date under 35 U.S.C. § 119(e) based on the '953 provisional application. *See* MPEP § 2154.01(b) (“Determining When Subject Matter Was Effectively Filed Under AIA 35 U.S.C. [§] 102(d)”). In that situation, however, 35 U.S.C. § 102(d)(2) provides that, “[f]or purposes of determining whether a[n] . . . application for patent”—such as the application underlying Meine II—“is prior art to a claimed invention under subsection (a)(2), such . . . application shall be considered to have been effectively filed, with respect to *any subject matter described in the . . . application . . . as of the filing date of the earliest such application that describes the subject matter.*” 35 U.S.C. § 102(d)(2) (emphasis added). Thus, even assuming that Meine II “is entitled to claim” the benefit of the filing date of the '953 provisional application (as argued by Petitioner), Patent Owner accurately states that the disclosures in Meine II are *only* effective as prior art for subject matter *also* described in the '953 provisional application. *See* Prelim. Resp. 36; MPEP § 2154.01(b) (“AIA 35 U.S.C. 102(d) requires that a prior-filed application to which a priority or benefit claim is made must describe the subject matter from the U.S. patent document relied upon in a rejection.”).

In the discussion of claim 1 in the context of this asserted ground based in part on Meine II, however, Petitioner does not cite to or discuss the '953 provisional application at all. *See* Pet. 49–63; *see also* Prelim. Resp. 37 (“There is no analysis showing where the subject matter from Meine II

relied on by the Petitioner is found in the '953 provisional application.”). Moreover, we give little weight to the testimony of Mr. Cinnamon, who only mentions the '953 provisional application to note, without analysis, that he has “been informed and understand[s] that the relevant portions of Meine II discussed herein are described in” the '953 provisional application.

Cinnamon Decl. ¶ 75; *see* 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”). For these reasons, on the record here, we determine that Petitioner has not made a sufficient showing that Meine II is prior art to the invention claimed in the '847 patent. Accordingly, the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claim 1 would have been obvious based on Stearns and Meine II.

2. Claims 4, 5, 11, and 12

Claims 4, 5, 11, and 12 depend from claim 1. This asserted ground as to claims 4, 5, 11, and 12 includes the same deficiency discussed in the prior section addressing claim 1. Thus, we determine that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claims 4, 5, 11, and 12 would have been obvious based on Stearns and Meine II.

H. Asserted Obviousness of Claims 2 and 6–9 Based on Stearns, Meine II, and Other References

Petitioner asserts that claims 2 and 6–9 of the '847 patent would have been obvious under 35 U.S.C. § 103 based on Stearns, Meine II, and other references. Pet. 34, 71–86. Patent Owner again asserts that Petitioner has not shown that Meine II is prior art. *See* Prelim. Resp. 34–37.

For the same reasons discussed above (*see supra* § II.G.1), because Petitioner has not adequately demonstrated that Meine II is prior art to the challenged claims, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claims 2 and 6–9 of the '847 patent would have been obvious based on Stearns, Meine II, and other references.

I. Asserted Obviousness of Claims 1 and 3–12 Based on Stearns, Meine II, West, and Other References

Petitioner asserts that claims 1 and 3–12 of the '847 patent would have been obvious under 35 U.S.C. § 103 based on Stearns, Meine II, West, and other references. Pet. 34–35, 86–100. Patent Owner again asserts that Petitioner has not shown that Meine II is prior art. *See* Prelim. Resp. 43–44.

For the same reasons discussed above (*see supra* § II.G.1), because Petitioner has not adequately demonstrated that Meine II is prior art to the challenged claims, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claims 1 and 3–12 of the '847 patent would have been obvious based on Stearns, Meine II, West, and other references.

J. Asserted Obviousness of Claims 1, 3–5, 11, and 12 Based on Stearns and Schaefer

Petitioner asserts that claims 1, 3–5, 11, and 12 of the '847 patent would have been obvious under 35 U.S.C. § 103 based on Stearns and Schaefer. Pet. 34, 100–111. Patent Owner provides arguments specifically addressing this asserted ground. Prelim. Resp. 44–50. We first summarize aspects of Stearns and Schaefer.

1. Stearns

Stearns discloses “mounting assemblies for supporting solar panels and other structures on roof tops.” Ex. 1005 ¶ 8. Figure 1A of Stearns is reproduced below:

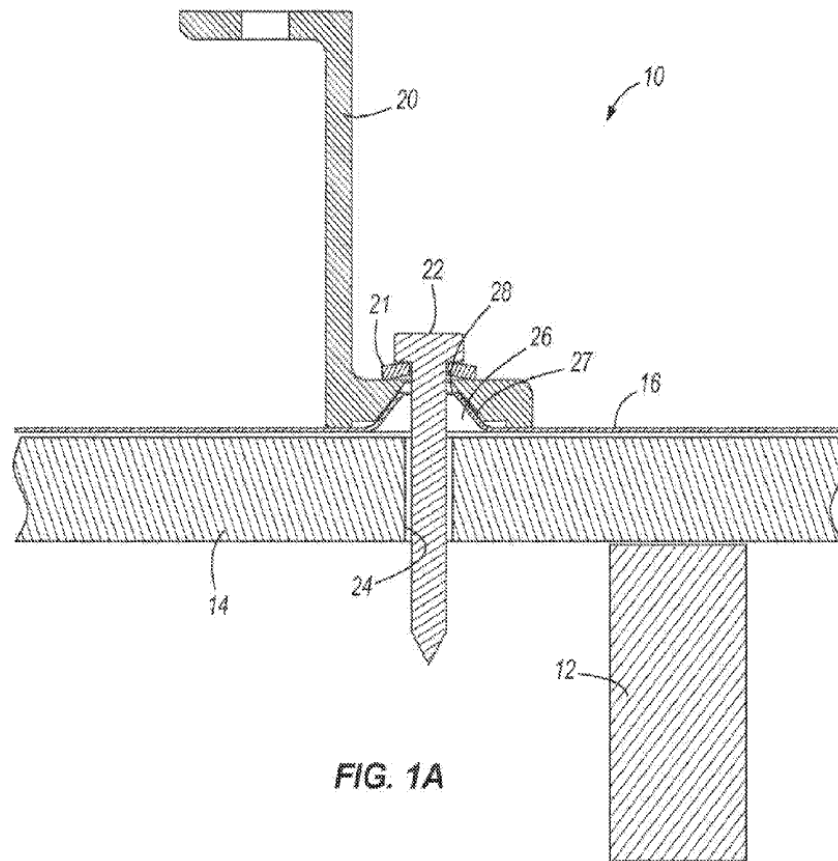


FIG. 1A

Figure 1A depicts a cross-sectional view of a roofing system. Ex. 1005 ¶¶ 15–16. Specifically, roofing system 10 in Figure 1A includes a number of rafters or beams 12, roof substrate 14 supported on the rafters, flashing 16 extending across the substrate, and mounting bracket 22. *Id.* ¶ 173. Stearns discloses that at least one fastener 22 connects bracket 20 to roof substrate 14 and flashing 16. *Id.* System 10 also includes washer 21, positioned between mounting bracket 20 and fastener 22. *Id.* In addition,

flashing 16 may have a projection (unnumbered) that may include concave interior side 26, exterior side 27, and a frustoconical end 28. *Id.* ¶ 177.

2. Schaefer

Schaefer discloses a roof mounting system that may be used to mount solar panels. Ex. 1009, code (57), ¶ 5.

Figure 11A is reproduced below:

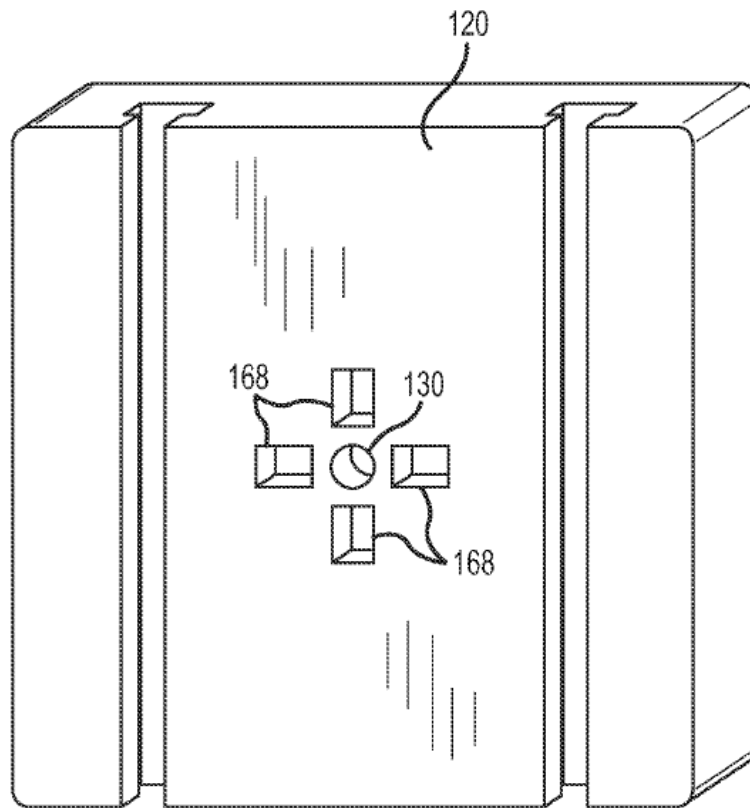


FIG. 11A

Figure 11A depicts an embodiment of a top cap of a roof mount system. Ex. 1009 ¶ 29. Specifically, Figure 11A shows top cap 120, which includes a top surface having “a central aperture 130 for receiving a fastener for attaching an object to the cap 120.” *Id.* ¶ 59.

Figure 12 of Schaefer is reproduced below:

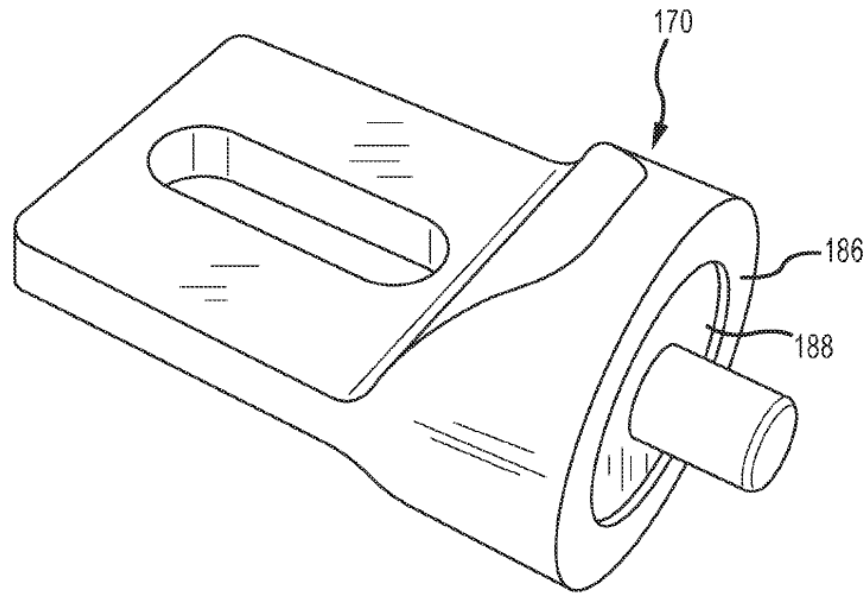


FIG. 12

Figure 12 depicts an embodiment of an attachment element. Ex. 1009 ¶ 31. Specifically, attachment element 170 shown in Figure 12 can be attached to a top cap, such as that depicted in Figure 11A above. *Id.* ¶ 61. Depicted attachment element 170 has circular base 186, which has recess 188 for receiving a “pliable washer.” *Id.*

3. Analysis

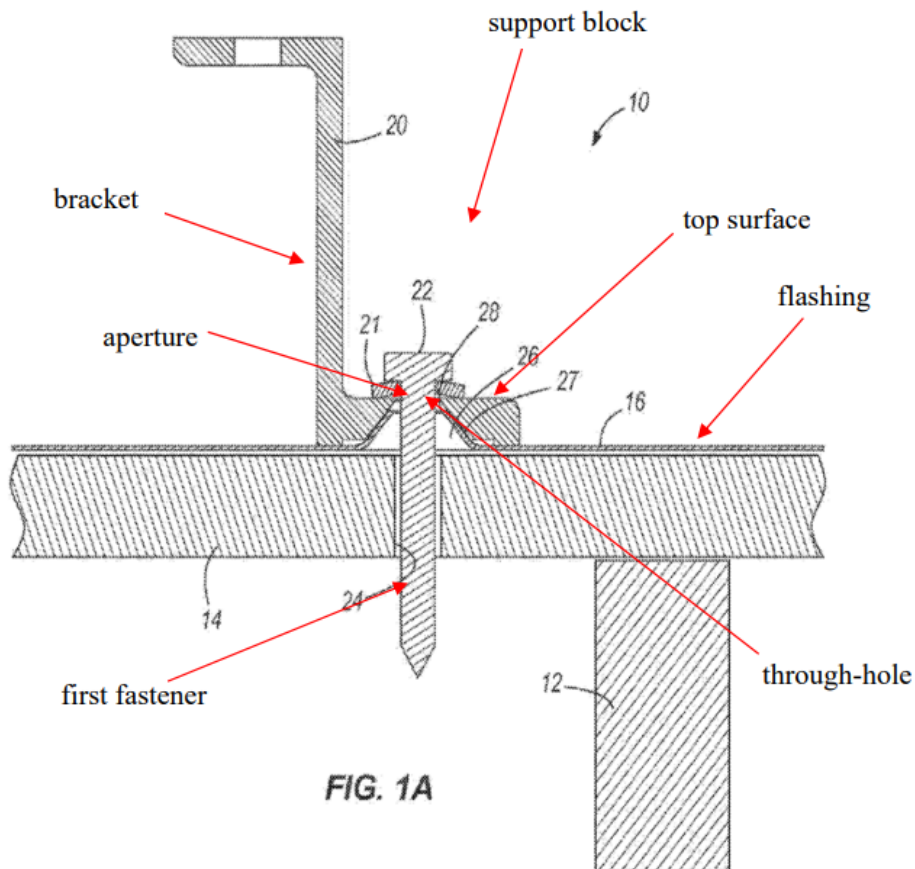
a. Independent Claim 1

For claim 1, Petitioner contends that the combination of Stearns and Schaefer discloses each limitation. Pet. 35, 100–104. Patent Owner (1) challenges Petitioner’s articulated reasons to combine Stearns and Schaefer and (2) argues that Petitioner has not provided an adequate explanation for how Stearns and Schaefer render obvious claim 1. *See* Prelim. Resp. 45–49. For the reasons below, we agree with Patent Owner and determine that the Petition does not show more likely than not that Petitioner would prevail in

demonstrating that claim 1 would have been obvious based on Stearns and Schaefer.

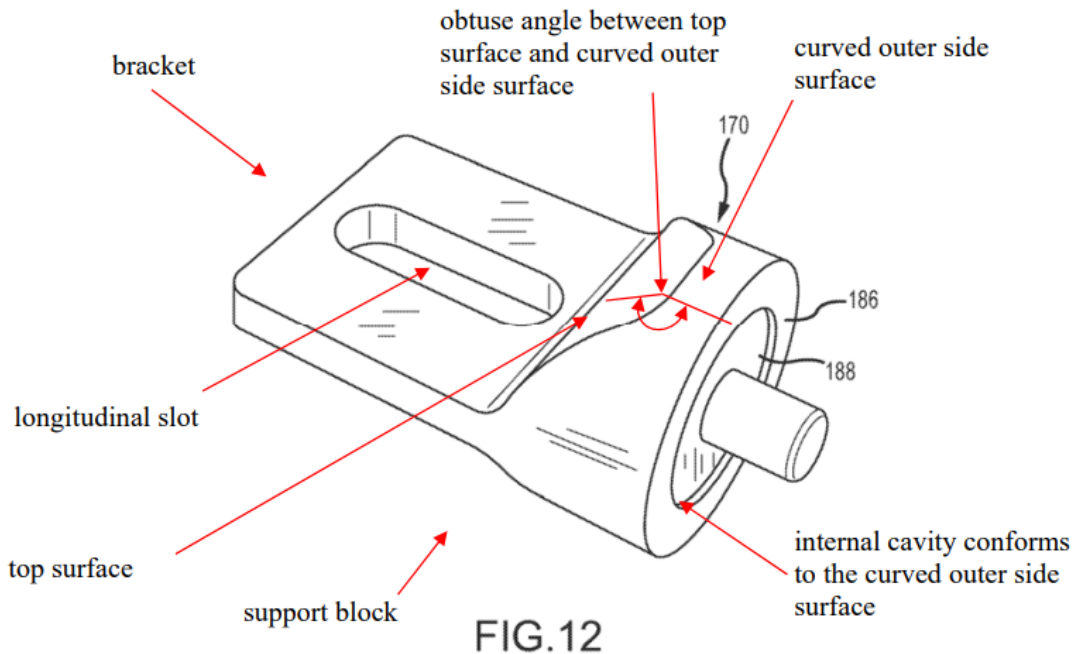
For elements 1a–1c, Petitioner states that Stearns discloses these aspects of claim 1, with Petitioner referring to the discussion of these elements in the context of the asserted ground of Stearns and Meine II. *See* Pet. 100–101 (citing Pet. 49–54). For elements 1d–1g, Petitioner begins by reciting the claim language, then stating that “[t]hese limitations are disclosed in FIG. 1A of Stearns and FIG. 12 of Schaefer.” Pet. 101.

Petitioner then provides the following annotated version of Figure 1A of Stearns:



Pet. 102 (citing Cinnamon Decl. ¶ 85). In the annotated version of Figure 1A, Petitioner added red lines and text identifying a “bracket,” “support

block,” “top surface,” “flashing,” “through-hole,” “first fastener,” and “aperture.” *Id.* Petitioner then block quotes portions of paragraphs 191 and 194 and all of paragraph 241 of Stearns. Pet. 102–103. Then Petitioner provides the following annotated version of Figure 12 of Schaefer:



Pet. 103 (citing Cinnamon Decl. ¶ 93). In the annotated version of Figure 12, Petitioner added red lines and text identifying a “bracket,” “obtuse angle between top surface and curved outer surface,” “curved outer side surface,” “internal cavity conforms to the curved outer side surface,” “support block,” “top surface,” and “longitudinal slot.” *Id.* Petitioner then states:

One of ordinary skill would have been motivated to combine Stearns with Schaefer to provide “a support block that is separate from the flashing, the support block cast in a single piece and having: a bracket having . . . a longitudinal slot configured to secure the solar mounting accessories to the support block; a top surface integrated with the bracket; a curved outer side surface on an up-slope portion of the support block, the curved outer side surface forming an obtuse angle with the top surface . . . [and] an internal cavity, wherein at least a portion of the internal cavity conforms to the curved outer side surface”

as recited in claim 1, with a reasonable expectation of success since this is a combination of known components that would function as expected. ([Cinnamon Decl.] ¶94). A motivation would have been to provide a support block with a shape that allows for water and moisture to flow away from a top surface of the support block. *Id.*; *see also* Ex.1009, ¶¶[0008]-[0009].

Pet. 103–104.

Patent Owner argues that Petitioner has not provided adequate reasoning to combine Stearns and Schaefer as proposed (Prelim. Resp. 45–48) and argues that Petitioner has not explained “with particularity” how the proposed combination satisfies all the elements of claim 1 (*id.* at 48–49 (citing 35 U.S.C. § 322(a)(3); 37 C.F.R. § 42.204(b)(4)¹⁵). We agree with Patent Owner’s arguments.

First, we determine that Petitioner has not provided adequate reasons to combine for the aspects of claim 1 allegedly provided by the *combination* of Stearns and Schaefer. In the discussion block quoted above, Petitioner identifies *the combination* as providing all of element 1b, a portion of element 1c, all of elements 1d and 1e, and the portion of element 1g reciting “an internal cavity, wherein at least a portion of the internal cavity conforms to the curved outer side surface.” Pet. 103–104. The reason to combine provided by Petitioner—“to provide a support block with a shape that allows for water and moisture to flow away from a top surface of the support block” (Pet. 104)—however, only addresses why one of ordinary skill in the art would have allegedly modified the outer surface of the “support block” of Stearns with the shape of the “support block” in Schaefer to allegedly satisfy

¹⁵ Although Patent Owner cites “37 CFR § 42.402(b)(4),” based on the context and quotation of “precise,” we understand Patent Owner to refer to 37 C.F.R. § 42.204(b)(4).

only *element 1e* (“a curved outer side surface on an up-slope portion of the support block, the curved outer side surface forming an obtuse angle with the top surface”).

The reasoning provided *does not*, for example, explain why one of ordinary skill in the art would have allegedly modified the “support block” of Stearns with the “internal cavity [that] conforms to the curved outer side surface” identified in Schaefer to allegedly satisfy the initial portion of *element 1g*. Pet. 103. Notably, Petitioner *does not* identify an “internal cavity” in Stearns in the context of this asserted ground. *See* Pet. 101–104. We do not view Petitioner’s reason to combine as addressing the “internal cavity” because the provided reason addresses why one of ordinary skill in the art would have modified the *outside* of the “support block” but fails to explain why to modify the *inside*, such as the “internal cavity.” *See* Pet. 104.

Second, although the analysis above sufficiently supports the overall conclusion as to this asserted ground, we also determine that the Petition lacks the required “particularity” as to certain language in claim 1. A petitioner seeking post-grant review must, in the petition, “identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge, Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2006) (quoting 35 U.S.C. § 312(a)(3)); *see also* 35 U.S.C. § 322(a)(3) (establishing requirements for a petition for post grant review). Here, as noted above in the block quote, Petitioner identifies *the combination* as providing all of element 1b, a portion of element 1c, and all of elements 1d, and Petitioner identifies—in *both* Stearns and Schaefer—a “support block,” as recited in element 1b, a “bracket,” as recited in element

1c, and a “top surface,” as recited in element 1d. Pet. 101–103. By identifying these aspects of claim 1 in *both* Stearns and Schaefer, and then stating these aspects are provided by the combination, Petitioner does not identify with sufficient particularity, the particular features of *each* reference in the modified device of this asserted ground. *See ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012) (discussing how an accused infringer, via its expert, “failed to explain how specific references could be combined, which combination(s) of elements in specific references would yield a predictable result, or how any specific combination would operate or read on the asserted claims”), *cited at* Prelim. Resp. 48. For these reasons, we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claim 1 would have been obvious based on Stearns and Schaefer.

b. Claims 3–5, 11, and 12

Claims 3–5, 11, and 12 depend from claim 1. This asserted ground as to claims 3–5, 11, and 12 includes the same deficiencies discussed in the prior section addressing claim 1. Thus, we determine that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claims 3–5, 11, and 12 would have been obvious based on Stearns and Schaefer.

K. Asserted Obviousness of Claims 2, 3, and 6–10 Based on Stearns, Schaefer, and Other References

Petitioner asserts that claims 2, 3, and 6–10 of the ’847 patent would have been obvious under 35 U.S.C. § 103 based on Stearns, Schaefer, and other references. Pet. 34–35, 111–115. Patent Owner asserts the same

arguments addressing the asserted ground of Stearns and Schaefer. *See* Prelim. Resp. 44–50.

For the same reasons discussed above (*see supra* § II.J.3.a), we determine, based on the current record, that the Petition does not show more likely than not that Petitioner would prevail in demonstrating that claims 2, 3 and 6–10 of the '847 patent would have been obvious based on Stearns, Schaefer, and other references.

III. CONCLUSION

For the reasons above, we determine that the Petition does not show more likely than not that Petitioner would prevail with respect to at least one of challenged claims 1–12 of the '847 patent.

IV. ORDER

Accordingly, it is hereby:

ORDERED that the Petition is denied as to all challenged claims, and no post-grant review is instituted.

PGR2022-00024
Patent 10,998,847 B2

FOR PETITIONER:

John McIlvaine
William Passodelis
Steven D. Czajkowski
THE WEBB LAW FIRM
jmcilvaine@webblaw.com
wpassodelis@webblaw.com
sczajkowski@webblaw.com

FOR PATENT OWNER:

James P. Murphy
Ryan Murphy
POLSINELLI PC
jpmurphy@polsinelli.com
rmurphy@polsinelli.com