Paper 20 Date: April 22, 2025

#### UNITED STATES PATENT AND TRADEMARK OFFICE

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### BEFORE THE PATENT TRIAL AND APPEAL BOARD

BABYBJÖRN AB, Petitioner,

v.

THE ERGO BABY CARRIER, INC., Patent Owner.

IPR2025-00110 Patent 11,786,055 B2

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Before FRANCES L. IPPOLITO, KEVIN W. CHERRY, and ERIC C. JESCHKE, *Administrative Patent Judges*.

JESCHKE, Administrative Patent Judge.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

#### I. BACKGROUND

Petitioner, BabyBjörn AB, filed a Petition to institute *inter partes* review of claims 1–15, 19–24, and 28–30 of U.S. Patent No. 11,786,055 B2 (Ex. 1001, "the challenged patent"). Paper 1 ("Pet."). Patent Owner, The ERGO Baby Carrier, Inc., timely filed a Preliminary Response. Paper 14 ("Prelim. Resp.").

We have authority to determine whether to institute *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2024) ("The Board institutes the trial on behalf of the Director."). *Inter partes* review may not be instituted "unless . . . the information presented in the petition... shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314. Upon consideration of the evidence and arguments in the record, for the reasons below, we determine that the information presented does not show a reasonable likelihood that Petitioner would prevail with respect to at least one of the challenged claims. We thus deny institution of *inter partes* review. *See* 37 C.F.R. § 42.108(b) ("At any time prior to a decision on institution of *inter partes* 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 *inter partes* review.").

# A. Related Proceedings

The parties identify a proceeding in the U.S. District Court for the Western District of Texas involving the challenged patent: *The ERGO Baby Carrier, Inc. v. BabyBjörn AB*, No. 6:24-cv-0083-DAE (W.D. Tex.), filed February 9, 2024. Pet. 3–4; Paper 5 (Patent Owner's Mandatory Notices) at 2; Paper 18 (Petitioner's Updated Mandatory Notices) at 1.

On the same day as the filing of the Petition in this Proceeding (October 29, 2024), Petitioner filed another petition for *inter partes* review of claims 1–15, 19–24, and 28–30 of the challenged patent in IPR2025-00111. *See BabyBjörn AB v. The ERGO Baby Carrier, Inc.*, IPR2025-00111, Paper 1 (PTAB Oct. 29, 2024). We issue a decision on institution in that proceeding concurrently with this Decision.

### B. The Challenged Patent

The challenged patent "relates to a child carrier that is adaptable to ergonomically carry a child as the child grows." Ex. 1001, 1:21–24.

Figure 1 is reproduced below:

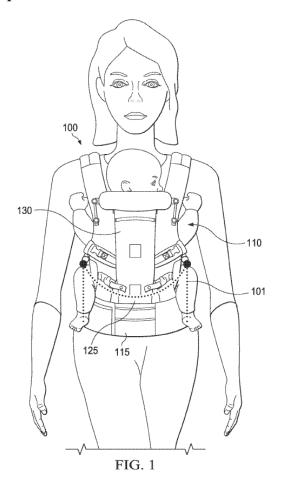


Figure 1 depicts an adult carrying a child in an adjustable carrier. Ex. 1001, 4:25–26. Specifically, depicted adjustable carrier 100 includes

main body 110, coupled to waist belt 115. *Id.* at 7:18–21. Main body 110 includes torso support portion 130 and bucket seat 125. *Id.* at 7:21–22.

Figures 2A and 2B are reproduced below:

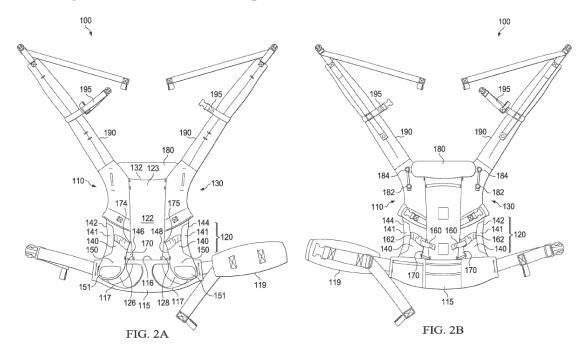


Figure 2A depicts an *inside* view of an adjustable baby carrier, and Figure 2B depicts an *outside* view of a carrier. Ex. 1001, 4:27–30. In addition to the features discussed above, main body 110 includes seat portion 120 and thigh support areas 140. *Id.* at 7:66–67. "Torso support portion 130 is configured to support [the] upper body of the child while in the carrier while seat portion 120 cooperates with adjustable thigh support areas 140 to form an adjustable bucket seat 125 (FIG. 1) adapted to ergonomically position the child's legs and hips." *Id.* at 8:4–8.

Moreover, the challenged patent discloses that "[i]nner end portions of thigh support areas 140 can be selectively coupled to waist belt 115 by base

<sup>&</sup>lt;sup>1</sup> In this Decision, we omit emphasis on reference numerals in quotations from the challenged patent and prior art references.

width adjusters 150 that are configurable for adjusting the width and depth of the bucket seat 125." Ex. 1001, 8:15–19. "Base width adjusters 150 may be coupled to respective thigh support areas 140" (including potentially "being part of the same thigh support straps") and "can be selectively coupled to waist belt 115 to couple thigh support areas 140 of main body 110 to waist belt 115." *Id.* at 8:64–9:6.

#### C. The Challenged Claims

Petitioner challenges claims 1–15, 19–24, and 28–30, of which claims 1, 6, and 11 are independent. Claims 2–5, 19, 21, and 28 depend from claim 1, claims 7–10, 20, 22, and 29 depend from claim 6, and claims 12–15, 23, 24, and 30 depend from claim 11. Independent claim 1 is reproduced below, reformatted from the version provided in the challenged patent, with bracketed alphanumeric designations added to each clause, and with emphasis added to language relevant to the discussion below:

- 1. [1pre] An adjustable child carrier for supporting a child by a user, the adjustable child carrier comprising:
  - [1a] a body configured to support the child,
- [1b] wherein the body forms a bucket seat configured to support legs of the child;
- [1c] a neck support comprising a first neck support attachment and a second neck support attachment;
- [1d] a first shoulder strap coupled to the body and configured to extend over a first shoulder of the user;
- [1e] a second shoulder strap coupled to the body and configured to extend over a second shoulder of the user;
- [1f] a first attachment disposed on the first shoulder strap and configured to receive the first neck support attachment;

- [1g] a second attachment disposed on the second shoulder strap and configured to receive the second neck support attachment,
- [1h] wherein the neck support is configured in an upward neck supporting position when the first neck support attachment is coupled to the first attachment and the second neck support attachment is coupled to the second attachment;
- [1i] the body forming a first thigh support and a second thigh support;
- [1j] a first setting, a second setting, and a third setting defined by the adjustable child carrier; and
- [1k] at least one thigh support adjuster coupled to the first thigh support and the second thigh support,
- [1m] wherein the at least one thigh support adjuster is configured to be selectively positioned to one of the first setting, the second setting, or the third setting to thereby adjust a length of the body to accommodate various sizes of the child as the child ages,
- [1n] wherein the length is defined from a bottom of the bucket seat to a top of the body.

Ex. 1001, 17:15-48.2

We adopt and apply below Petitioner's designations for the elements of the challenged claims. See Pet. i–vii (showing alphanumeric designations for the language in the challenged claims).

D. Asserted Grounds of Unpatentability

Petitioner challenges claims 1–15, 19–24, and 28–30 on the following grounds:

Grounds	Claim(s) Challenged	35 U.S.C. § <sup>3</sup>	Reference(s)/Basis
1a <sup>4</sup>	1–15, 19–24, 28–30	102	Synergy Manual <sup>5</sup>
1b	1–15, 19–24, 28–30	103	Synergy Manual
1c	1–15, 19–24, 28–30	103	Synergy Manual, knowledge of a person of ordinary skill in the art
1d	1–15, 19–24, 28–30	103	Synergy Manual, Lundh <sup>6</sup>
1e	1–15, 19–24, 28–30	103	Synergy Manual, knowledge of a person of ordinary skill in the art, Lundh

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 there is no dispute that the challenged claims have effective filing dates after March 16, 2013, we apply the AIA versions of the statutes. We would reach the same outcome, however, under the pre-AIA versions.

<sup>&</sup>lt;sup>4</sup> In presenting Ground 1, Petitioner states that the challenged claims "are anticipated and obvious over the Synergy Manual, alone or in view of knowledge of a POSITA and/or Lundh." Pet. 21 (heading). For clarity, we break out each of the alternative bases for this ground. We similarly break out each of the alternative bases for the grounds based on Staten and on Stomper-Rosam.

<sup>&</sup>lt;sup>5</sup> BabyBjörn AB, Owners Manual - BabyBjörn Baby Carrier Synergy (2007) (Ex. 1014, "Synergy Manual").

<sup>&</sup>lt;sup>6</sup> US 2018/0199730 A1, published July 19, 2018 (Ex. 1008, "Lundh").

Grounds	Claim(s) Challenged	35 U.S.C. § <sup>3</sup>	Reference(s)/Basis
2a	1–15, 19–24, 28–30	102	Staten <sup>7</sup>
2b	1–15, 19–24, 28–30	103	Staten
2c	1–15, 19–24, 28–30	103	Staten, knowledge of a person of ordinary skill in the art
2d	1–15, 19–24, 28–30	103	Staten, Lundh
2e	1–15, 19–24, 28–30	103	Staten, knowledge of a person of ordinary skill in the art, Lundh
3a	1–15, 19–24, 28–30	102	Stomper-Rosam <sup>8</sup>
3b	1–15, 19–24, 28–30	103	Stomper-Rosam
3c	1–15, 19–24, 28–30	103	Stomper-Rosam, knowledge of a person of ordinary skill in the art
3d	1–15, 19–24, 28–30	103	Stomper-Rosam, Gray <sup>9</sup>
3e	1–15, 19–24, 28–30	103	Stomper-Rosam, knowledge of a person of ordinary skill in the art, Gray

<sup>&</sup>lt;sup>7</sup> International Publication WO 2006/116117 A2, published November 2, 2006 (Ex. 1013, "Staten").

<sup>&</sup>lt;sup>8</sup> Austrian Patent Office Publication AT 620 U2 2011-02-15, published February 15, 2011 (Ex. 1015 (English version and certification), "Stomper-Rosam").

<sup>&</sup>lt;sup>9</sup> US 2008/0190972 A1, published August 14, 2008 (Ex. 1009, "Gray").

Petitioner supports its challenges with a declaration from Mr. David Smith, P.E., CSP. Ex. 1003 ("the Smith Declaration" or "Smith Decl."). In response to Petitioner's challenges, Patent Owner provides the Declaration of Mr. Dirk Duffner with the Preliminary Response. Ex. 2005 ("Duffner Decl.").

#### II. DISCUSSION

### A. 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 prior art. *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.* (internal quotation marks and citation omitted).

Petitioner contends, with accompanying declaration testimony, that a person having ordinary skill in the art "would have had at least a four-year degree in a design-based field, which may include fashion design, industrial design, mechanical engineering, or another technical field, or equivalent experience, and familiarity working with child products and/or adjustable products." Pet. 6–7 (citing Smith Decl. ¶¶ 32–38).

Patent Owner does not address Petitioner's proposed definition, which appears consistent with the record in this proceeding, including the prior art. *See GPAC Inc.*, 57 F.3d at 1579. Furthermore, Patent Owner does not argue

that Petitioner's proposal for the level of ordinary skill leads to an improper understanding of how a skilled artisan would understand either the challenged patent or the prior art. For purposes of this Decision, we adopt the definition of the level of ordinary skill in the art proposed by Petitioner.

#### B. Claim Construction

In *inter partes* 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. § 42.100(b). Under that standard, we generally give claim terms their ordinary and customary meaning, as 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.

Petitioner discusses "at least one thigh support adjuster" in limitations 1k, 6j, and 11m (among others). Pet. 7–11. Patent Owner responds by addressing Petitioner's positions and also discussing the phrase "defined by" in limitations 1j, 6k, and 11l. Prelim. Resp. 1–15. We discuss each below.

# 1. "at least one thigh support adjuster"

Each of independent claims 1, 6, and 11 recites "at least one thigh support adjuster." Ex. 1001, 17:40, 18:34, 19:45. Petitioner proposes that this term should be interpreted under 35 U.S.C. § 112(f) as a means-plusfunction limitation. Pet. 7–10. Petitioner then proposes a construction for this term under § 112(f) as well as a construction under the plain and

ordinary meaning. *See* Pet. 9–11. Patent Owner responds that "at least one thigh support adjuster" should *not* be interpreted under 35 U.S.C. § 112(f) as a means-plus-function limitation. Prelim. Resp. 6–12.

Based on the current record, we need not construe explicitly the term "at least one thigh support adjuster" because doing so would not change the outcome of the analysis below. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) ("The Board is required to construe 'only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy." (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). More particularly, and as discussed below, Petitioner does not show sufficiently how the prior art teaches the structure identified as corresponding to the alleged claimed function.

Further, because we deny on the merits (as discussed below), we do not address Patent Owner's *alternative* argument that we should deny institution because "Petitioner fails to construe th[is] limitation and otherwise argues for an advisory opinion from the Board on indefiniteness." Prelim. Resp. 1; *see id.* at 1–6 (entire argument).

# 2. "defined by"

Limitations 1j and 111 each recite "a first setting, a second setting, and a third setting *defined by* the adjustable child carrier." Ex. 1001, 17:38–39 (emphasis added), 19:43–44 (emphasis added). Limitation 6k recites "a first position, a second position, and a third position *defined by* the adjustable child carrier." *Id.* at 18:36–37 (emphasis added).

Patent Owner proposes a construction for "defined by" in these limitations. *See* Prelim. Resp. 12–15. At this stage of the proceeding and based on the current record, we need not construe explicitly "defined by"

because doing so would not change the outcome of the analysis below. *See Realtime Data*, 912 F.3d at 1375.

C. Asserted Anticipation & Obviousness of Claims 1–15, 19–24, and 28–30 Based Primarily on the Synergy Manual

Petitioner asserts that claims 1–15, 19–24, and 28–30 of the challenged patent (1) are anticipated by the Synergy Manual, (2) would have been obvious based on the Synergy Manual alone, (3) would have been obvious based on the Synergy Manual and the knowledge of a person of ordinary skill in the art, (4) would have been obvious based on the Synergy Manual and Lundh, and (5) would have been obvious based on the Synergy Manual, the knowledge of a person of ordinary skill in the art, and Lundh. Pet. 2, 21–47. Patent Owner asserts (among other arguments) that Petitioner has failed to establish that the Synergy Manual qualifies as a prior art printed publication under 35 U.S.C. § 311(b). Prelim. Resp. 15–24, 30–32.

1. The Status of the Synergy Manual as a Printed Publication A petitioner in an inter partes review may challenge a patent's claims "only on the basis of prior art consisting of patents or printed publications." 35 U.S.C. § 311(b) (emphasis added). "[A]t the institution stage, the petition must identify, with particularity, evidence sufficient to establish a reasonable likelihood that [a] reference was publicly accessible before the critical date of the challenged patent and therefore that there is a reasonable likelihood that it qualifies as a printed publication." Hulu, LLC v. Sound View Innovations, LLC, IPR2018-01039, Paper 29 at 13 (PTAB Dec. 20, 2019) (precedential). Petitioner provides only one statement addressing the alleged basis for the Synergy Manual's status as a prior art printed publication:

1) BabyBjörn Baby Carrier Synergy Owners Manual ("Synergy Manual") (published 2007). Ex. 1014.

Pet. 2; see also Prelim. Resp. 16 (citing this statement as the sole basis for Petitioner's position).

Patent Owner argues that Petitioner has failed to meet its burden to establish that the Synergy Manual qualifies as a prior art printed publication. *See* Prelim. Resp. 15–18. More specifically, Patent Owner argues that Petitioner's "bare assertion does not even suggest that the *Synergy Manual* was disseminated or made available to interested persons exercising reasonable diligence or otherwise publicly accessible, let alone 'identify, with particularity, evidence sufficient to establish a reasonable likelihood' that it was publicly accessible" as required. Prelim. Resp. 16 (citing *Hulu*, Paper 29 at 13). For the reasons below, we agree with Patent Owner.

Public accessibility "has been called the touchstone in determining whether a reference constitutes a 'printed publication'..." Blue Calypso, LLC v. Groupon, Inc., 815 F.3d 1331, 1348 (Fed. Cir. 2016) (quoting In re Hall, 781 F.2d 897, 898–99 (Fed. Cir. 1986)). In Hulu, the Precedential Opinion Panel ("POP") rejected a petitioner's argument that a reference necessarily meets "the reasonable likelihood standard for institution where the reference bears conventional markers of publication, such as a copyright date, edition identifiers, publication by a commercial publisher, and the assignment of an ISBN number." Hulu, Paper 29 at 17. The POP stated: "We do not hold that any particular indicia per se is sufficient at the institution stage. Rather, the indicia on the face of a reference, such as printed dates and stamps, are considered as part of the totality of the evidence." Id. at 17–18 (citing Nobel Biocare Servs. AG v. Instradent USA, Inc., 903 F.3d 1365, 1377 (Fed. Cir. 2018)).

Here, Petitioner provides no citation, no discussion, and no support for its assertion that the Synergy Manual was "published" in "2007." *See* Pet. 2. Instead, we are left to assume that Petitioner relies on the text "© BabyBjörn AB, Stockholm, 2007" at the bottom of page 6 of the Synergy Manual. More to the point, Petitioner does not discuss in the Petition *any* evidence supporting the implicit position that the Synergy Manual was *publicly accessible* prior to the critical date of the claimed invention.

As noted by Patent Owner, the record includes a declaration by David Grünbaum (current General Counsel for Petitioner), who discusses his alleged "personal knowledge" as to the Synergy Manual. Ex. 1017 ¶ 4; see also Prelim. Resp. 17–18 (discussing Ex. 1017). But the Petition does not mention, cite, or discuss the Grünbaum Declaration at all. We will not search through the record to develop Petitioner's argument on this issue. See SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1320 (Fed. Cir. 2006) ("Judges are not like pigs, hunting for truffles buried in briefs." (quoting United States v. Dunkel, 927 F.2d 955, 956 (7th Cir. 1991)).

Numerous Board decisions have held that copyright dates *alone* are not sufficient at the institution stage to demonstrate public accessibility. *See, e.g., In-Depth Geophysical, Inc. v. ConocoPhillips Co.*, IPR2019-00849, Paper 14 at 10–11 (PTAB Sept. 6, 2019) (informative in relevant part) (stating that a "copyright notice" "sheds virtually no light on whether the document was publicly accessible"); *Microsoft Corp. v. Corel Software, LLC*, IPR2016-01083, Paper 14 at 13–14, 15 (PTAB Dec. 1, 2016) ("The copyright notice, alone, however, sheds virtually no light on whether the document was publicly accessible as of that date, therefore additional

evidence is typically necessary to support a showing of public accessibility.... Collectively, all of the information provided by Petitioner shows only a copyright notice date and that, alone, is insufficient to support a threshold showing of public accessibility for QuarkXPress."); see also Laird Techs. Inc. v. A.K. Stamping Co., IPR2017-02038, Paper 6 at 10 (PTAB Mar. 14, 2018); Power Integrations, Inc. v. Semiconductor Components Indus., LLC, IPR2017-01975, Paper 9 at 12–14 (PTAB Mar. 12, 2018); Intel Corp. v. Alacritech, Inc., IPR2017-01402, Paper 10 at 4 (PTAB Dec. 21, 2017) (collecting cases on this issue); Alarm.com Inc. v. Vivint, Inc., IPR2016-00155, Paper 14 at 11–15 (PTAB Apr. 28, 2016); Stryker Corp. v. Karl Storz Endoscopy-Am., Inc., IPR2015-00677, Paper 15 at 18–19 (PTAB Sept. 2, 2015) (discussing how a copyright notice "does not establish when a document was publicly accessible under patent law").

On the particular facts here, we determine that Petitioner has not satisfied the standard set forth in *Hulu* as to the alleged public accessibility of the Synergy Manual.

#### 2. Conclusion

For the reasons above, we determine, based on the current record, that the Petition does not show a reasonable likelihood that Petitioner would prevail in demonstrating the unpatentability of any of the challenged claims based on the grounds involving the Synergy Manual.

D. Asserted Anticipation & Obviousness of Claims 1–15, 19–24, and 28–30 Based Primarily on Staten

Petitioner asserts that claims 1–15, 19–24, and 28–30 of the challenged patent (1) are anticipated by Staten, (2) would have been obvious based on Staten alone, (3) would have been obvious based on Staten and the knowledge of a person of ordinary skill in the art, (4) would have been

obvious based on Staten and Lundh, and (5) would have been obvious based on Staten, the knowledge of a person of ordinary skill in the art, and Lundh. Pet. 2, 47–78. Patent Owner provides arguments addressing these grounds. Prelim. Resp. 19–20, 24–28, 33–34. We first summarize aspects of the relied-upon prior art.

# 1. Overview of Staten

Staten discloses a "harness-type baby carrier." Ex. 1013 at 1.<sup>10</sup> Figures 8 and 9 of Staten are reproduced below:

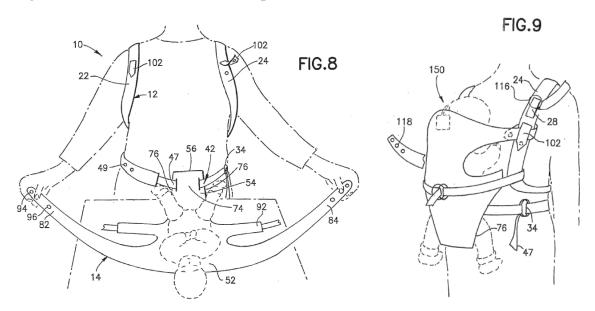


Figure 8 depicts an intermediate stage of assembling the disclosed baby carrier; Figure 9 depicts an assembled baby carrier with a detachably coupled harness, infant support, and bag components. Ex. 1013 at 5. As to Figure 8, Staten discloses that "[t]he wearer initially adjusts harness 12 on his/her back, then slips tether 47 of shoulder strap 24 through bottom region 54 of infant carrier 14 and attaches the end of tether 47 to D-ring 34 of

Like Petitioner, we cite to the native page numbering in Staten (in the middle of each page) rather than the page numbering added by Petitioner prior to filing (in the bottom right of each page).

waistband 42." *Id.* at 14. To assemble the baby carrier as shown in Figure 9, harness 12, and infant support 14 are coupled together with the infant supported by infant support 14, and lower flaps 90 (unnumbered) and 92 of infant support 14 are attached together. *Id.* 

Figure 6 is reproduced below:

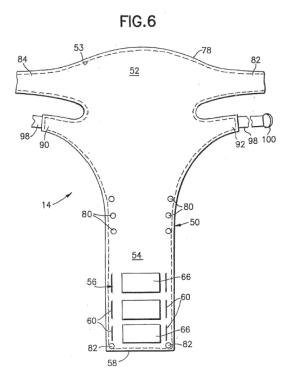
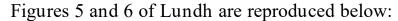
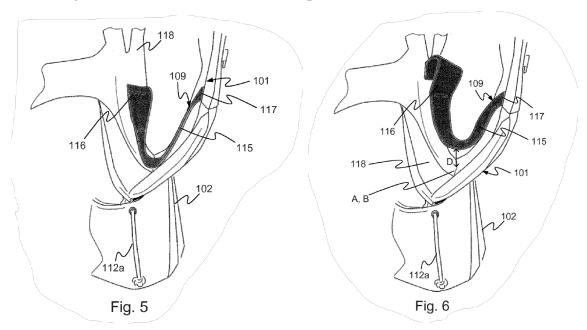


Figure 6 is a rear elevated view of infant support 14, as shown above. Ex. 1013 at 4. Interface 56 provides a coupling between harness 12 (Figure 8) and infant support 14 to adjust the distance from top region 52 and bottom region 54 of infant support 14 when in the assembled state. *Id.* at 9. Staten discloses a series of individual pockets 66 along bottom region 54, each of which is "configured to receive tether 47 of shoulder strap 24." *Id.* at 10. In a "further embodiment," Staten discloses a plurality of slits 60, each of which is "dimensioned to allow tether 47 of shoulder strap 24 to slip through it." *Id.* 

# 2. Overview of Lundh

Lundh discloses a "carrying harness" for carrying a small child in either a forward or backward position. Ex.  $1008 \ \P \ 1$ .





Figures 5 and 6 are isometric views of the bottom portion of a baby carrier in a low and high position, respectively. Ex.  $1008 \, \P \, 24$ , 25. To achieve the configuration in Figure 6 beginning with that in Figure 5, a user detachably removes, by a hook-and-loop connection, part 116 from stomach portion 118. *Id.*  $\P \, 41$ . Part 116 is then reattached to stomach portion 118 at a second, higher position to suit a smaller child. *Id.*  $\P \, 42$ .

# 3. Independent Claims 1, 6, and 11

For independent claims 1, 6, and 11, Petitioner contends that a combination of the relied-upon teachings discloses each limitation. Pet. 47–58, 63–65, 66–70. Patent Owner presents several arguments challenging Petitioner's positions, as discussed below. For the reasons below, we determine that the Petition does not show a reasonable likelihood that

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Petitioner would prevail in demonstrating the unpatentability of any of challenged claims 1, 6, or 11 based on the grounds involving Staten.

a. The "thigh support adjuster" Limitations

Each of independent claims 1, 6, and 11 recites "at least one thigh support adjuster coupled to the first thigh support and the second thigh support." Ex. 1001, 17:40–41, 18:34–35, 19:45–46. For these limitations in the context of these grounds, Petitioner relies on *only* its proposed construction under § 112(f) and makes no mention of the alternative "plain and ordinary meaning" construction. *See* Pet. 53–57; *see also* Prelim. Resp. 33 ("Petitioner only contends that *Staten* discloses limitation [1k] under its proposed 112(f) construction or, alternatively, that it would have been obvious to modify *Staten's* carrier to satisfy [1k] in view of *Lundh*."). Specifically, Petitioner states that these limitations are "likely indefinite," but if not, they are "a means-plus-function term corresponding to the 'base width adjusters' from the patent specification." Pet. 53–54 (citing Smith Decl. ¶¶ 41–43, 54–59, 64–69).

As discussed above, we take no position as to whether § 112(f) applies to the "thigh support adjuster" limitations. See § II.B.1. But if § 112(f) does apply to these limitations—as it does in the only argument presented here—Petitioner "must prove that the corresponding structure—or an equivalent—was present in the prior art." Fresenius USA, Inc. v. Baxter Int'l, Inc., 582 F.3d 1288, 1299 (Fed. Cir. 2009) (citing In re Donaldson Co., 16 F.3d 1189, 1193 (Fed. Cir. 1994)). Two structures are "equivalent" within the meaning of § 112(f) if the structure identified in the prior art "performs the same function as the disclosed structure [in the challenged patent], in substantially the same way, with substantially the same result."

Regents of Univ. of Minnesota v. AGA Med. Corp., 717 F.3d 929, 941 (Fed. Cir. 2013).

Petitioner presents two alternative arguments for these limitations: one based on Staten and an alternative based on "the knowledge of a POSITA and/or in view of Lundh." See Pet. 53–57 (addressing limitation 1k); see also Pet. 64 (referring to the discussion of limitation 1k for limitation 6j), 69 (referring to the discussion of limitation 1k for limitation 11m). Patent Owner contends that Petitioner's discussion of both alternatives—including the statements by Mr. Smith—does not satisfy the burden at this stage of the proceeding as to the "thigh support adjuster" limitations because Petitioner has not adequately explained why the identified aspects of the prior art are the "corresponding structure" or "equivalents thereof." See Prelim.

Resp. 33–34. For the reasons below, we agree with Patent Owner.

As to Staten, Petitioner provides this discussion (reproduced in full):

First, the below annotations to FIG. 8 illustrate that the disclosed carrier includes three thigh support adjusters, each of which extends between the thigh supports. Ex. 1003, Appx. A, limitation 1k. As discussed *supra* at limitation [1j], the interface of the carrier of Staten includes pockets and/or slits for receiving a tether (e.g., 47 of FIG. 8). For example, "[e]ach pocket 66

In a footnote, Petitioner attempts to rely on Gray as a *third alternative* to address limitation 1k in the context of these grounds. *See* Pet. 54 n.9. First, we question the propriety of presenting a substantive argument such as this in a footnote. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1320 (Fed. Cir. 2006) (collecting decisions supporting that "arguments raised in footnotes are not preserved"). Second, with its footnote, Petitioner strays from its presented ground, which *does not* involve Gray. *See* Pet. 2 (Ground 2, not listing Gray), 47 (heading indicating same); *see* 37 C.F.R. § 42.104(b)(2) (requiring each petition to provide a "statement of the precise relief requested for each claim challenged," including "the patents or printed publications relied upon *for each ground*" (emphasis added)).

extends between the opposite sides of shell 50 and is configured to receive tether 47 of shoulder strap 24," and "[t]he slits 60 each are dimensioned to allow tether 47 of shoulder strap 24 to slip through it." Ex. 1013, p. 10. Accordingly, the tether provides thigh support adjustment by coupling to the pockets and/or tethers in each of the defined settings. Ex. 1003, Appx. A, limitation 1k.

Pet. 54-55 (also including an annotated version of Figure 8 of Staten).

As argued by Patent Owner, this discussion simply fails to address why the "tether" in Staten is either (1) the "corresponding structure" identified by Petitioner (i.e., the "base width adjusters" in the challenged patent (Pet. 53)) or (2) an "equivalent[] thereof." See Prelim. Resp. 33–34; Pet. 53–55. And the relied-upon portion of the Smith Declaration also fails to address these issues. See Smith Decl. pp. 111–112.

Turning to Lundh, Petitioner provides this discussion (reproduced in full):

Second, even if limitation [1k] were not disclosed in Staten, this feature is disclosed in Lundh, and it would be obvious for a POSITA to combine the "at least one thigh support adjuster" of Lundh with the carrier of Staten for the obvious benefit more convenient adjustment of the carrier (e.g., no more need to thread a strap through the slits). *Id.* As illustrated in the below annotations to FIG. 6 of Lundh, the carrier of Lundh includes a bottom portion 109 that is detachably connected to the stomach portion 118 using a hook-and-eye connection (traversing between the thigh supports), and the bottom portion is adjustable between multiple positions to accommodate a child at different sizes. Ex. 1003, Appx. A, limitation 1k; see also Ex. 1008, ¶¶[0041]-[0042]. Thus, the adjustable bottom portion of Lundh is also a "thigh support adjuster," as in claim 1 of the '055 Patent. Ex. 1003, Appx. A, limitation 1k. Incorporating this approach into Staten would be a simple task for a POSITA simply insert element 109 in the same location in Staten, and operate it in the same way as in Lundh. *Id.*; see also Ex. 1003,

¶ 121. Doing so would allow the parent to adjust the height of the seat with one hand (i.e., lift the child with one hand and adjust the hook-and-eye engagement point with the other) instead of manually threading the strap through the slits as in Staten. Ex. 1003, Appx. A, limitation 1k. One-handed adjustment would be an obvious benefit to a POSITA and to parent users of the carrier. *Id*.

Pet. 55–57 (also including an annotated version of Figure 8 of Staten).

Again, Petitioner's discussion as to Lundh—as well as that in the Smith Declaration—simply fails to address *why* the "bottom portion" in Lundh is either (1) the "corresponding structure" identified (i.e., the "base width adjusters" in the challenged patent (Pet. 53)) or (2) an "equivalent[] thereof." *See* Prelim. Resp. 33–34; Pet. 55–57; Smith Decl. pp. 113–114.

On the current record, we determine that Petitioner has not made a sufficient showing that the relied-upon prior art discloses the "thigh support adjuster" limitations under the § 112(f) construction relied upon in the context of these grounds.

#### b. Conclusion

For the reasons above, we determine, based on the current record, that the Petition does not show a reasonable likelihood that Petitioner would prevail in demonstrating the unpatentability of any of challenged claims 1, 6, or 11 based on the grounds involving Staten.

4. Dependent Claims 2–5, 7–10, 12–15, 19–24, and 28–30

The grounds as to dependent claims 2–5, 7–10, 12–15, 19–24, and 28–30 includes the same deficiencies discussed in the prior section addressing independent claims 1, 6, and 11 (see § II.D.3). Pet. 47–78. Thus, we determine that the Petition does not show a reasonable likelihood that Petitioner would prevail in demonstrating the unpatentability of any of

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challenged claims 2–5, 7–10, 12–15, 19–24, and 28–30 based on the grounds involving Staten.

E. Asserted Anticipation & Obviousness of Claims 1–15, 19–24, and 28–30 Based Primarily on Stomper-Rosam

Petitioner asserts that claims 1–15, 19–24, and 28–30 of the challenged patent (1) are anticipated by Stomper-Rosam, (2) would have been obvious based on Stomper-Rosam alone, (3) would have been obvious based on Stomper-Rosam and the knowledge of a person of ordinary skill in the art, (4) would have been obvious based on Stomper-Rosam and Gray, and (5) would have been obvious based on Stomper-Rosam, the knowledge of a person of ordinary skill in the art, and Gray. Pet. 2, 78–109. Patent Owner provides arguments addressing these grounds. Prelim. Resp. 20–30, 34–41. We first summarize aspects of the relied-upon art.

### 1. Overview of Stomper-Rosam

Stomper-Rosam discloses "an ergonomically adjustable baby and toddler carrier." Ex.  $1015 \ \P \ 1$ .

Figure 1 of Stomper-Rosam is reproduced below:

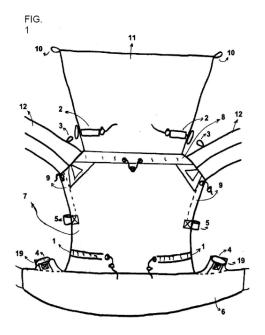
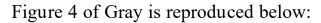


Figure 1 is an overall view of the carrier with the headrest raised. Ex. 1015 at 4 (§ 5 DRAWINGS). The depicted carrier includes fabric headrest 11, fabric back panel 7, two shoulder straps 12, and hip belt 6. *Id.* ¶ 22. Stomper-Rosam discloses that "[t]o allow for size and developmental adjustments, a bridge reduction and back shortening feature 1 is included" in the carrier, "achieved through two drawstrings located on the left and right in the lower part of the back panel." *Id.* ¶ 28. The "bridge reduction 1 allows for stepless adjustment of the seat bridge" to "ensure[] that the seat bridge lies exactly between the knees of smaller children." *Id.* ¶ 29. The carrier also includes drawstrings 9 on both sides of the upper area of back panel 7. *Id.* ¶ 31. The angle of the drawstrings off the vertical "allows for lateral support of smaller babies when the drawstrings are used." *Id.* 

### 2. Overview of Gray

Gray discloses a baby carrier that includes an adjustable shoulder harness with a detachable adjustable pouch system. Ex.  $1009 \, \P \, 5$ .



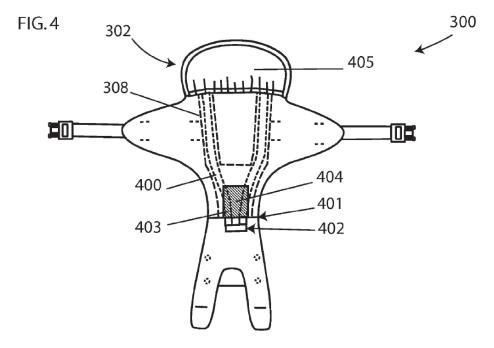


Figure 4 is a perspective view of the interior of a detachable adjustable pouch system. See Ex.  $1009 \, \P \, 10$ . Specifically, depicted pouch system 300 includes a retractable drawstring system 308, which includes retractable drawstrings 400 "that may subsequently be disposed within channels that form a generally V-shaped configuration." *Id.*  $\P \, 26$ . Drawstrings 400 "may be attached at their ends to a portion of the back 302 portion of the pouch system 300 that extends to an opening 401 where a strip comprising a pull tab 402 is attached at the apex of the V-shaped configuration." *Id.* 

# 3. Independent Claims 1, 6, and 11

For independent claims 1, 6, and 11, Petitioner contends that a combination of the relied-upon teachings discloses each limitation. Pet. 78–91, 97–98, 100–103. Patent Owner presents several arguments challenging Petitioner's positions, as discussed below. For the reasons below, determine that the Petition does not show a reasonable likelihood that Petitioner would prevail in demonstrating the unpatentability of any of challenged claims 1, 6, or 11 based on the grounds involving Stomper-Rosam.

# a. The "defined by" Limitations

As discussed above, limitations 1j and 11l each recite "a first setting, a second setting, and a third setting defined by the adjustable child carrier." Ex. 1001, 17:38–39, 19:43–44. Limitation 6k recites the same, with "position" in place of each recitation of "setting." *Id.* at 18:36–37.

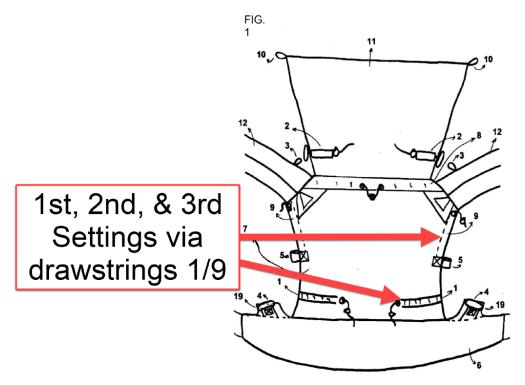
For these limitations in the context of these grounds, Petitioner relies on two different aspects of Stomper-Rosam. First, Petitioner relies on the disclosure of "the bridge reduction feature (e.g., 1 of FIG. 11) and/or the drawstrings on either side of the upper area of the back panel (e.g., 9 of

FIG. 11)." Pet. 85 (addressing limitation 1j); see Pet. 98 (referring to the discussion of limitation 1j for limitation 6k), 103 (referring to limitation 1j for limitation 11l). According to Petitioner, "[t]he bridge reduction feature can use two drawstrings in the lower part of the back panel, which are disposed in channels and adjustable to both adjust the seat bridge and shorten the back panel vertically," and "[f]urther adjustments can be made in the upper area of the back panel using the drawstrings 9." Pet. 85–86 (citing Ex. 1015 ¶ 28–31). Petitioner then presents the second aspect of Stomper-Rosam relied upon for the "defined by" limitations, stating that although "the illustrated bridge reduction feature and drawstrings provide continuous adjustment, Stomper-Rosam expressly discloses that other kinds of fastening systems can also be used, including discretely adjustable fasteners such as hooks or buttons." Pet. 86 (citing Ex. 1015 ¶ 31).

Patent Owner argues that Petitioner has not adequately explained *how* Stomper-Rosam teaches, suggests, or renders obvious the "defined by" limitations. *See* Prelim. Resp. 37–41. For the reasons below, we agree.

A petitioner has the ultimate burden of persuasion to prove 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). "Because of the expedited nature of IPR proceedings, '[i]t is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify "with particularity" the "evidence that supports the grounds for the challenge to each claim."" *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1330 (Fed. Cir. 2019) (quoting *Intelligent Bio-Sys., Inc. v. Illumina Cambridge, Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (quoting 35 U.S.C. § 312(a)(3))).

As argued by Patent Owner, Petitioner does not adequately address how Stomper-Rosam allegedly teaches, suggests, or renders obvious the three "setting[s]" or "position[s]" recited in the "defined by" limitations. *Id.* at 40–41. Indeed, the textual discussion in the section of the Petition addressing limitation 1j (summarized above) entirely avoids the three "setting[s]" requirements. *See* Pet. 85–86. The only acknowledgment of those requirements is in the annotated version of Figure 1 of Stomper-Rosam reproduced here:



Pet. 86. In the annotated version of Figure 1 of Stomper-Rosam shown above, Petitioner added a text box and arrows stating "1st, 2nd, & 3rd Settings via drawstrings 1/9." *Id.* No text in the Petition, however, refers to or discusses this annotated figure, and the annotated figure has no citations to any supporting evidence or testimony. Pet. 85–86. Stated differently, Petitioner fails to explain *how* "drawstrings 1/9" provide the required three

"setting[s]" (or the "position[s]" of claim 6) as alleged in its annotated figure.

Moreover, the record supports Patent Owner's argument that Stomper-Rosam itself "does not disclose that its carrier defines any settings or positions." Prelim. Resp. 40. Indeed, none of the paragraphs cited by Petitioner includes such teachings. *See* Pet. 85–86 (citing Ex. 1015 ¶¶ 28–31). To the contrary, Stomper-Rosam expressly describes bridge reduction 1 as providing "*stepless* adjustment" (Ex. 1015 ¶29 (emphasis added)), which, according to Patent Owner's declarant, Mr. Duffner, would have been understood by one of ordinary skill in the art to indicate that the system has "no specific positions" at all. Duffner Decl. ¶37, *cited at* Prelim. Resp. 38.

We turn now to Petitioner's declaration testimony. After the first sentence of the section of the Petition addressing limitation 1j, Petitioner cites the entire section of the Smith Declaration addressing limitation 1j in the context of these grounds. *See* Pet. 85 (citing Smith Decl. "Appx. C, limitation [1j]"<sup>12</sup>). It is there we first see a *potential* explanation on the "setting[s]" or "position[s]" in the "defined by" limitations. There, Mr. Smith states: "Adjustment of the bar reduction 1 defines at least 3 settings: a fully loose setting, a fully tightened setting, and at least one setting between fully loose and fully tightened (i.e., "a first setting, a second setting, and a third setting"). Smith Decl., p. 137.

We view this testimony as improperly incorporated by reference into the Petition (which, as noted above, does not address *how* Stomper-Rosam

<sup>&</sup>lt;sup>12</sup> This section appears at pages 137–138 of the Smith Declaration. Confusingly, Mr. Smith discusses aspects of limitation 1j *above* the row that includes "1j" and the language of that limitation. *See* Smith Decl. p. 137.

provides the required three "setting[s]" or "position[s]"). As stated in the Board's Trial Practice Guide, "parties that incorporate expert testimony by reference in their petitions, motions, or replies without providing explanation of such testimony risk having the testimony not considered by the Board." Trial Practice Guide 35–36 (Nov. 2019), https://www.uspto.gov/Trial PracticeGuideConsolidated ("TPG") (citing *Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 (PTAB Aug. 29, 2014) (informative)); *see also* 37 C.F.R. § 42.6(a)(3) ("Arguments must not be incorporated by reference from one document into another document."). That guidance applies squarely to this situation for the reasons discussed above.

Further, even if we were to view Mr. Smith's testimony as properly referenced in the Petition, neither Mr. Smith nor Petitioner *mention or address* in any way *why* the three identified "setting[s]" or "position[s]"—a fully loose setting, a fully tightened setting, and an "in-between" setting (Smith Decl., p. 137)—are "*defined by* the adjustable child carrier" as required by the limitations at issue (with emphasis added). Although we do not necessarily agree with Patent Owner's proposed construction for the phrase "defined by" (*see* § II.B.2), Petitioner must address in its Petition *each element* of a claim. *See* 37 C.F.R. § 42.104(b)(4) (stating that a petition must set forth "[h]ow the construed claim is unpatentable" and "must specify where *each element of the claim* is found in the prior art patents or printed publications relied upon" (emphasis added)); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art."). Petitioner has not adequately done so here.

We turn now to the second aspect of Stomper-Rosam relied on as to the "defined by" limitations. Pet. 86 (citing Ex. 1015 ¶ 31). For completeness, we provide background as to Stomper-Rosam's relevant disclosure. After discussing "bridge reduction 1" and "drawstrings 9" in detail (Ex. 1015 ¶¶ 28–31), Stomper-Rosam then adds: "Alternatively, a fastening system using snap buckles, hooks, buttons, or hook-and-loop fasteners could be used." Ex. 1015 ¶ 31. This is the only disclosure cited by Petitioner on this alternative aspect, and Petitioner discusses this second relied-upon aspect in a *single sentence* of the Petition (Pet. 86 (first sentence)), which cites only paragraph 31 of Stomper-Rosam.

On the current record, and as argued by Patent Owner, Petitioner has again failed to explain how the disclosed alternative "fastening system[s]" provide the required three "setting[s]" or "position[s]" in a manner "defined by" the adjustable child carrier. See Prelim. Resp. 39 ("But the mere disclosure of other fasteners that may be used still does not teach, suggest, or render obvious **three settings/positions that are** defined by **the carrier**." (citing Duffner Decl. ¶¶ 39–40)). The broad teaching of the potential alternative use of, e.g., "buttons," does not alone necessarily satisfy the specific requirements of the "defined by" limitations (including the presence of three "setting[s]" or "position[s]"). For example, and as noted by Mr. Duffner, Stomper-Rosam "does not associate any number of settings/positions with the use of other fastener systems." Duffner Decl. ¶ 39, cited at Prelim. Resp. 39; see also Southwire Co. v. Cerro Wire LLC, 870 F.3d 1306, 1311 (Fed. Cir. 2017) ("[W]e have emphasized that 'the limitation at issue necessarily must be present' in order to be inherently

disclosed by the reference." (quoting *PAR Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1194–95 (Fed. Cir. 2014))).

Turning to the Smith Declaration, we again view any testimony on these issues as improperly incorporated by reference into the Petition. *See* TPG 35–36. Even if we were to view Mr. Smith's testimony as properly referenced in the Petition, we find the testimony lacking. Specifically, Mr. Smith states that the alternative "fastening system[s]" in Stomper-Rosam are "discrete setting systems," but he fails to explain *why* that general conclusion—even if accepted—would necessarily satisfy the specific requirements of the "defined by" limitations (including the presence of *three* "setting[s]" or "position[s]"). *See* Smith Decl., pp. 137–138. On the current record, we determine that Petitioner has not made a sufficient showing that the relied-upon prior art discloses the "defined by" limitations.

#### b. Conclusion

For the reasons above, we determine, based on the current record, that the Petition does not show a reasonable likelihood that Petitioner would prevail in demonstrating the unpatentability of any of challenged claims 1, 6, or 11 based on the grounds involving Stomper-Rosam.

4. Dependent Claims 2–5, 7–10, 12–15, 19–24, and 28–30

The grounds as to dependent claims 2–5, 7–10, 12–15, 19–24, and 28–30 includes the same deficiencies discussed in the prior section addressing independent claims 1, 6, and 11 (*see* § II.E.3). Pet. 78–109. Thus, we determine that the Petition does not show a reasonable likelihood that Petitioner would prevail in demonstrating the unpatentability of any of challenged claims 2–5, 7–10, 12–15, 19–24, and 28–30 based on the grounds involving Stomper-Rosam.

# III. CONCLUSION

For the reasons above, we determine that the Petition does not show a reasonable likelihood that Petitioner would prevail with respect to at least one of challenged claims 1–15, 19–24, and 28–30 of the challenged patent.

#### IV. ORDER

Accordingly, it is hereby:

ORDERED that the Petition is denied as to all challenged claims, and no *inter partes* review is instituted.

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