

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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NESTED BEAN, INC.,  
Petitioner,

v.

BIG BEINGS USA PTY LTD and LB ONLINE & EXPORT PTY LTD  
d/b/a LOVE TO DREAM ONLINE AND EXPORTS,  
Patent Owner.

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IPR2020-01234  
Patent 9,179,711 B2

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Before NEIL T. POWELL, MITCHELL G. WEATHERLY, and  
KEVIN W. CHERRY, *Administrative Patent Judges*.

CHERRY, *Administrative Patent Judge*.

JUDGMENT  
Final Written Decision  
Determining Some Challenged Claims Unpatentable  
*35 U.S.C. § 318(a)*

I. INTRODUCTION

A. BACKGROUND

Nested Bean, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting institution of *inter partes* review of claims 1–18 of U.S. Patent No. 9,179,711 B2 (Ex. 1001, “the ’711 patent”). Big Beings USA Pty Ltd.

and LB Online Expert Pty Ltd d/b/a Love to Dream Online and Experts (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). We authorized Petitioner to file a Reply (Paper 11) and Patent Owner to file a Sur-Reply (Paper 13).

On January 25, 2021, based on the record before us at the time, we instituted an *inter partes* review of all challenged claims on the sole ground alleged. Paper 15 (“Institution Decision” or “Dec.”). We instituted trial on the following grounds:

<b>Claim(s) challenged</b>	<b>35 U.S.C. §</b>	<b>Reference(s)</b>
1–18	102 <sup>1</sup>	Parks <sup>2</sup>
1–6, 8–16	103(a)	Parks, Moss <sup>3</sup>
1–6, 8–16	103(a)	Parks, Moss, Greirt <sup>4</sup>
1–6, 8–16	103(a)	Parks, Moss, Knowledge of Person of Ordinary Skill in the Art
7, 17, 18	103(a)	Parks, Moss, Beiring <sup>5</sup>

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<sup>1</sup> Because the claims at issue appear to have an effective filing date prior to March 16, 2013, the effective date of the applicable provisions of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), we apply the pre-AIA versions of 35 U.S.C. §§ 102 and 103 in this Decision.

<sup>2</sup> US Patent No. 2,225,884, issued Dec. 24, 1940 (Ex. 1003, “Parks”).

<sup>3</sup> WO 2007/098558, published Sept. 7, 2007 (Ex. 1004, “Moss”).

<sup>4</sup> US Patent No. 3,259,126, issued July 5, 1966 (Ex. 1005, “Greiert”).

<sup>5</sup> US Patent Publication No. 2009/0064390, published Mar. 12, 2009, filed Sept. 3, 2008 (Ex. 1006, “Beiring”).

<b>Claim(s) challenged</b>	<b>35 U.S.C. §</b>	<b>Reference(s)</b>
7, 17, 18	103(a)	Parks, Moss, Beiring, Knowledge of Person of Ordinary Skill in the Art

Petitioner supports its Petition with a Declaration by Sara McMahon, dated July 2, 2020. Ex. 1016. Patent Owner supported its Preliminary Response with the Declaration of Judy Pokonosky, dated October 27, 2020 (Ex. 2002) and the Declaration of Hana Krawchuk, dated October 23, 2020 (Ex. 2004).

Patent Owner filed a Response in opposition to the Petition (Paper 19, “PO Resp.”). Patent Owner supported its Patent Owner Response with the Declaration of Judy Pokonosky (Ex. 2015), the Declaration of Alissa Green (Ex. 2016), the Declaration of Hana Krawchuk (Ex. 2017), and the Declaration of Rachel Wilson (Ex. 2038). Petitioner filed a Reply in support of the Petition (Paper 23, “Reply”). Patent Owner filed a Sur-reply responding to the Reply (Paper 25, “Sur-Reply”).

Both parties requested an oral hearing. *See* Papers 26 and 27. A transcript of the oral hearing are entered in the record. Paper 33 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. The evidentiary standard is a preponderance of the evidence. *See* 35 U.S.C. § 316(e) (2018); 37 C.F.R. § 42.1(d) (2019). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

#### B. REAL PARTIES IN INTEREST

The Petition identifies Nested Bean, Inc. as the real party in interest for Petitioner. Pet. viii. Patent Owner identifies Big Beings USA Pty Ltd. and LB Online Expert Pty Ltd d/b/a Love to Dream Online and Experts as

the real parties-in-interest for Patent Owner. Paper 4, 1 (Patent Owner's Mandatory Notices).

#### C. RELATED PROCEEDINGS

The parties identify *Big Beings USA Proprietary Ltd. et al v. Nested Bean, Inc.*, Civil Case No. 1:20-cv-10101-IT (D. Mass.) (currently pending) as a related co-pending district court litigation ("the District Court Action"). Pet. viii; Paper 4, 1.

#### D. THE '711 PATENT

The '711 patent is titled "Swaddling Suit." Ex. 1001, Code [54]. The '711 patent issued from Application Serial No. 12/920,034, filed on January 6, 2009, which is a U.S. national phase application of PCT/AU2010/000800, filed June 25, 2010, and claims priority to application AU200903034, filed June 30, 2009. *Id.* at Codes [21], [22], [86], [30].

The '711 patent relates to a "swaddling suit that swaddles infants by sufficiently restraining movement of the limbs to suppress the startle reflex, yet allowing movement of hand to mouth thereby facilitating non-nutritive sucking and allowing the infant to self-soothe by sucking the hands." *Id.* at Code [57].

In the Background, the '711 patent explains that recent research suggests that a baby's risk for Sudden Infant Death Syndrome (SIDS) can be "greatly reduced by using a pacifier" or other non-nutritive sucking such as finger or thumb sucking. *Id.* at 1:14–32, 2:37–49. The Background also explains that putting babies to sleep on their backs also helps reduce the incidence of SIDS. *Id.* at 1:33–35. The patent explains that babies "sleep better on their tummies than on their backs," but that swaddling, the practice wrapping infants tightly in a blanket or cloth so that movement of the limbs

is restricted, has been found to assist infants in sleeping more comfortably on their backs and to improve infant sleep overall. *Id.* at 1:35–50.

Swaddling requires that the infant be wrapped sufficiently tightly to restrain their limbs and to inhibit the movements associated with the startle reflex, but not too tightly because this can make breathing difficult, lead to overheating, and increase the risk of hip dysplasia. *Id.* at 1:51–2:3.

The '711 patent describes prior art efforts to overcome the difficulty in learning proper swaddling techniques and to address the problems of improper swaddling, through the development of various swaddling suits, including the infant safety suit of WO 2007/098558<sup>6</sup> (the Snuggo), the Ergococoon and the Woombi, all of which address the problems of wrapping the infant too loosely or too tightly by having the suit predetermine the degree of wrapping. *Id.* at 2:29–36. However, the patent explains that none of these suits allows non-nutritive sucking, such as thumb or finger sucking, which could have further calming effects on the infant. *Id.* at 2:50–65.

The '711 patent notes that there is a swaddling article that attempts to facilitate non-nutritive sucking by securing a pacifier to the blanket, but asserts that the use of a pacifier is a disadvantage because pacifiers have certain problems associated with them. *Id.* at 2:66–3:12, 3:23–47. Moreover, the '711 patent contends that a known swaddling article “essentially extends the blanket across the face (around the mouth region), which can be uncomfortable and covering the face during sleep increases the risk of SIDs.” *Id.* at 3:14–18. Moreover, another disadvantage is that this

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<sup>6</sup> This is the Moss reference discussed in detail below. *See infra* at 20–23.

known swaddling article is in the form of a modified blanket and so lacks the convenience and advantages of a swaddling suit, including the swaddling suit's ability to prevent the Swaddle from loosening through movement thus becoming less effective and also posing a suffocation risk. *Id.* at 3:18–22.

Thus, the '711 patent explains that there is a need

for a swaddling suit that does not suffer the disadvantages of a swaddling using a blanket and that effectively swaddles infants by sufficiently restraining movement of the limbs to suppress the startle reflex, yet still affords sufficient movement so that infants can get their hand(s) toward their mouth, so providing the opportunity for non-nutritive sucking without reliance on a pacifier.

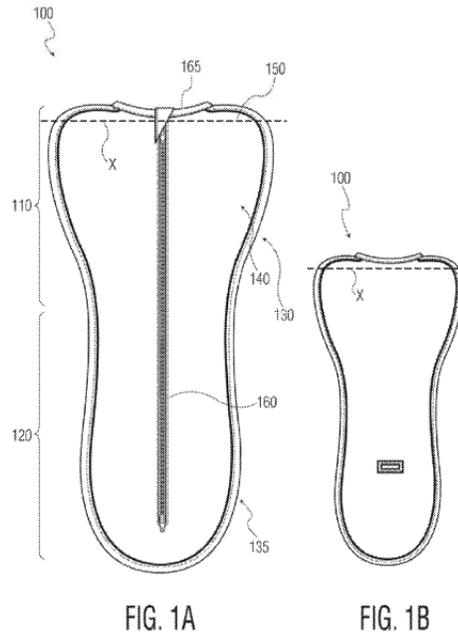
*Id.* at 4:4–10.

The '711 patent seeks to address these needs by providing a new swaddling suit that

swaddles infants by sufficiently restraining movement of the limbs to suppress the startle reflex, yet allowing movement of the hand towards the mouth and maintaining the hand in position relative to the infant's face thereby facilitating non-nutritive sucking and allowing the infant to self-soothe by sucking the hands.

*Id.* at 5:66–6:5.

The '711 patent discloses several preferred embodiments. *See id.* at 6:21–9:8 (describing embodiment one); 9:9–21 (describing an alternative version of embodiment one); 9:22–59 (describing embodiment two); 9:60–10:23 (describing embodiment three). These embodiments share a number of common features. *See id.* at Figs. 1A, 2A, 5A. One embodiment is illustrated in Figures 1A and 1B, reproduced below.



Figures 1A and 1B, reproduced above, show the front and back views of one embodiment of the claimed invention. *Id.* at 5:29–33. Swaddling suit 100 consists of upper portion 110 for enclosing the infant’s upper body, and lower portion 120 for enclosing the infant’s lower body. *Id.* at 6:21–28. Upper portion 110 includes a bodice portion 130 for enclosing the infant’s torso and arms. *Id.* at 6:29–30. On each side of bodice portion 130 is wing portion 140 near the shoulder line of the suit. *Id.* at 6:30–32. Wing portion 140 acts as a position-restricting means to maintain the hands in position relative to the face. *Id.* at 6:37–39. Each embodiment “taper[s] at the waist line, below the wing portion 140” and “then widens to accommodate hip width.” *Id.* at 7:41–43. The suit of each embodiment also has an opening that can be closed using a zipper or other suitable closure means. *Id.* at 8:27–40 (describing opening 160). It also has a hole in the top for the baby’s neck and head. *Id.* at 8:62–67 (neck hole 165).

In embodiment 100, shown in Figure 1A, each wing portion 140 is designed to receive one of the infant's arms in a hands-raised position, with the hands raised above the shoulder line—typically, with elbows bent and hands raised on both sides of the infant. *Id.* at 6:37–43. In this embodiment, wing portion 140 fits snugly around the arm thereby hugging the arm towards the infant's body in a hand-raised position maintaining the hands up near the face. *Id.* at 6:44–47. Additionally, wing portion 140 tapers in towards the infant's body under the bent elbow, thereby cupping the bent elbow and further supporting the hands up near the face and restricting the infant from moving the hands away from the face, by preventing passage of the elbow out of the wing portion. *Id.* at 6:48–53. Wing portion 140 includes wing tip 150 at its upper most portion, to receive the infant's raised hand. Wing tip 150 assists to further secure the hand and retain it in place once in position. *Id.* at 6:54–57. The wing tip also can brush against the infant's cheek to trigger the infant's rooting or hand-to-mouth reflexes, or both. *Id.* at 7:9–12.

The main differences between the various preferred embodiments lie in wing portions 140. *See id.* at 6:30–63, 9:9–21, 9:60–10:23. In embodiment 200, shown in Figure 4A, each wing portion 140 is detachable from bodice portion 130. *Id.* at 9:23–24. In the third embodiment, shown above in Figures 5A and 5B, wing portions 140 are configured to receive the arms in a hand-raised position, with the hands raised above the shoulder line. *Id.* at 9:60–65.

Of the challenged claims, claims 1, 2, and 8 are independent. Claims 1 and 2 are apparatus claims and claim 8 is a method of using the apparatuses of claims 1 or 2. Claims 3–7 and 9–18 depend directly or

indirectly from either claim 1, or 2, or 8. Claims 1 and 2, reproduced below, bracketing and annotations added, are illustrative:

1. [1P] A swaddling suit for swaddling an infant comprising,
  - [1A] an upper portion for enclosing the infant's upper body, wherein the upper portion includes
    - [1B] (a) a bodice portion, and
    - [1C] (b) a neck hole at an uppermost central portion of the bodice portion, and
    - [1D] (c) wing portions comprising one wing portion of the swaddling suit on one side of the bodice portion and another wing portion of the swaddling portion on another side of the bodice portion,
      - [1E] said one wing portion and said another wing portion extending laterally from the bodice portion at an uppermost portion of the suit,
      - [1F] each of said one wing portion and said another wing portion having a wing tip at an uppermost portion of each of the wing portions that is positioned above a level of the neck hole of said suit,
      - [1G] each of said wing portions being large enough to completely surround and retain an infant's arm and hand in a hand-raised and elbow-bent position,
      - [1H] said swaddling suit being tapered in at a waist line below said wing portions and then widening whereby a narrowest region of said suit is at said waist line.

Ex. 1001, 11:14–53, Certificate of Correction.

2. [2P] A swaddling suit for swaddling an infant, said swaddling suit being formed by a front panel secured to a back panel, said swaddling suit further including:
- [2A] an upper portion for enclosing the infant's upper body and one or both arms, wherein the upper portion includes:
- [2B] (a) a bodice portion for enclosing an infant's torso;
- [2C] (b) a neck hole at an uppermost central portion of the bodice portion, and
- [2D] (c) a wing portion on each side of the bodice portion,
- [2E] each wing portion extending laterally from the bodice portion at an uppermost portion of the suit and
- [2F] having a wing tip at an uppermost portion of the wing portion that is positioned above a level of the neck hole of said suit,
- [2G] each wing portion being large enough to completely surround and retain an infant's arm,
- [2H] said swaddling suit being tapered in at a waist line below each wing portion and then widening whereby a narrowest region of said suit is at said waist line.

Ex. 1001, 11:36–53.

## II. ANALYSIS

### A. CLAIM INTERPRETATION

We interpret claims in the same manner used in a civil action under 35 U.S.C. § 282(b), “including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b) (2020). When applying that standard, we interpret the claim language as it would be understood by one of ordinary skill in the art in light of the specification. *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010). Thus, we give claim terms their ordinary and customary meaning as they would be understood by an ordinarily skilled artisan. *See In*

*re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (“The ordinary and customary meaning ‘is the meaning that the term would have to a person of ordinary skill in the art in question.’” (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005))). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

In its Petition, Petitioner identified “above a level of the neck hole of said suit” as needing construction. Pet. 26–28. Patent Owner disagreed with Petitioner’s proposed construction, and submitted that no construction is necessary of “above a level of the neck hole of said suit.” PO Resp. 9.

In our Institution Decision, we agreed with Patent Owner that no construction is necessary of “above a level of the neck hole of said suit” or of any other term for our determination of whether to institute *inter partes* review. Dec. 11.

After our Institution Decision, Patent Owner raised two claim construction issues in its Patent Owner Response: (1) “swaddling suit” and (2) “retain.” PO Resp. 9–13.

1. “Swaddling Suit”

Patent Owner contends that the term “swaddling suit,” found in independent claims 1 and 2, should be construed as “a garment that provides sufficient tension to restrain the movement of at least the arms to suppress the startle reflex.” PO Resp. 9. Petitioner responds that “swaddling suit” is a preamble term that should not be treated as limiting. Reply 4–7.

“Generally, a preamble is not limiting.” *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1292 (Fed. Cir. 2015). Whether a preamble is

limiting is “determined on the facts of each case in light of the overall form of the claim, and the invention as described in the specification and illuminated in the prosecution history.” *Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc.*, 98 F.3d 1563, 1572–73 (Fed. Cir. 1996). A preamble limits the claimed invention if it recites essential structure or steps, or if it is “necessary to give life, meaning, and vitality” to the claim. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999). A preamble is not limiting, for example, if the patentee “defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002). And, a preamble is generally not limiting unless there is “clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art.” *Id.* A preamble can be limiting if it recites “additional structure or steps underscored as important by the specification,” is “essential to understand limitations or terms in the claim body,” or provides necessary structure absent from the claim body. *Id.* at 808–09.

We agree with Petitioner that the preamble is not a limitation. The term “swaddling suit” is merely a descriptive name for the apparatus that is covered by the claims. *IMS Tech, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434 (Fed. Cir. 2000) (Terms in the preamble are not limiting if they “merely give[] a descriptive name to the set of limitations in the body of the claim that completely set forth the invention.”). It is well-established that “[a]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990). For example, in *Cochlear Bone Anchored Solutions AB v. Oticon*

*Med. AB*, the Federal Circuit held that a statement of intended purpose in the preamble—“for rehabilitation of unilateral hearing loss”—was not limiting, because the claimed apparatus was fully structurally claimed in the body of the claim, and its structure would allow it to function identically whether or not used for its stated intended purpose. *See* 958 F.3d 1348, 1355 (Fed. Cir. 2020). We find that this is the case here. The bodies of claims 1 and 2 recite structurally complete inventions, which would function identically whether or not they are used for its stated intended purpose. Indeed, if the term “swaddling suit” were replaced by the word “garment,” it would not change the nature of the claim.

This interpretation is consistent with the Specification that

The invention has been developed primarily for use as a means for swaddling infants for safe sleeping. However, it will be appreciated that the invention is not restricted to this particular use.

Ex. 1001, 1:7–10; *see also id.* at 11:6–11 (the alleged invention “is not restricted to these particular fields of use and it is not limited to particular embodiments or applications described herein”).

Patent Owner offers various extrinsic evidence. PO Resp. 11–13. However, this evidence only goes to the meaning of the word “swaddling,” not whether the term “swaddling suit” in the preamble should be limiting. Thus, we do not find it persuasive in this analysis.

Accordingly, we determine that the term “swaddling suit” found in the preamble is not limiting.

## 2. “retain”

Claim 1 recites that the wing portions must be large enough to “completely surround and retain an infant’s arm and hand in a hand-raised

and elbow-bent position.” Ex. 1001, 11:29–32. Claim 2 recites that the wing portion acts to “retain an infant’s arm.” *Id.* at 11:49–50. In its Patent Owner Response, Patent Owner argues that “retain” should be construed to mean “to hold or keep.” PO Resp. 13 (citing Ex. 2022 (Merriam-Webster Dictionary definition of “retain”)). Petitioner argues that no construction of “retain” is necessary. Reply 7. Petitioner asserts that to the extent “retain” has any special meaning in the context of the ’711 patent, “it simply means that the wing portions are closed, as opposed to having open ends like sleeves.” *Id.* at 7.

We agree with both the parties that retain has its plain and ordinary meaning. But we further agree with Patent Owner that the plain and ordinary meaning for that term is simply “to hold or to keep.” *See* Ex. 2022. Petitioner’s argument that the Specification uses “retain” to mean that the wing portions are closed, as opposed to having open ends like sleeves reads retain out of context. The portion of the Specification identified by Petitioner states

The ends of the wing portions 140 may be open, allowing the hands to extend through the opening end as shown in FIG. 5E. Alternatively, *the ends of the wing portions 140 may be closed so that the hands are retained within the wing portions 140* as shown in FIGs. 5C and D.

Ex. 1001, 10:3–7 (emphasis added). We do not read this passage as creating a special meaning for “retained,” as Petitioner suggests. Reply 7–8.

Petitioner focuses on the portion of this statement that “the ends of the wing portions . . . may be closed so that the hands are retained. . .” to argue that the Specification uses the term “retained” to mean “closed.” However, this argument ignores the end of the sentence that “the ends of the wing portions . . . may be closed so that the hands are retained *within the wing portions.*”

When considered in its full context, we agree with Patent Owner that this passage is consistent with Patent Owner’s construction. *See* Sur-Reply 11. Indeed, the passage simply uses “retained” in its ordinary sense—i.e., “the ends of the wing portions 140 are closed so that the hands are [held or kept] within the wing portions.”

Accordingly, we determine that “retain” has its plain and ordinary meaning, i.e., “to hold or retain.”

### *3. Remaining Terms*

We discern no other terms in need of express interpretation. Accordingly, we apply the legal standards set forth above when reading the claims.

## B. THE PARTIES’ POST-INSTITUTION ARGUMENTS

In our Institution Decision, we concluded that the argument and evidence adduced by Petitioner demonstrated a reasonable likelihood that claims 1–18 were unpatentable. Dec. 41. We must now determine whether Petitioner has established by a preponderance of the evidence that the remaining challenged claims are unpatentable over the cited prior art. 35 U.S.C. § 316(e) (2018). We previously instructed Patent Owner that “any arguments not raised in the [Patent Owner Response] may be deemed waived.” Paper 16, 8; *see also In re NuVasive, Inc.*, 842 F.3d 1376, 1381 (Fed. Cir. 2016) (holding that patent owner’s failure to proffer argument at trial as instructed in scheduling order constitutes waiver). Additionally, the Board’s Trial Practice Guide states that the Patent Owner Response “should identify all the involved claims that are believed to be patentable and state the basis for that belief.” Consolidated TPG at 66.

C. LEGAL STANDARDS

Petitioner’s first asserted ground of unpatentability is based on anticipation under 35 U.S.C. § 102(b) by Parks. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). To establish anticipation, “all of the elements and limitations of the claim must be shown in a single prior reference, arranged as in the claim.” *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001).

Petitioner also challenges the patentability of claims 1–6 and 8–16 on the ground that the claims are unpatentable as obvious over Parks and Moss and Parks, Moss, and Greirt, and Parks, Moss, and the knowledge of person of ordinary skill in the art. To prevail in its challenge to the patentability of the claims, Petitioner must establish unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d) (2019). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burdens of proof in *inter partes* review).

The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), reaffirmed the framework for determining obviousness as

set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The *KSR* Court summarized the four factual inquiries set forth in *Graham* that we apply in determining whether a claim is unpatentable as obvious under 35 U.S.C. § 103(a) as follows: (1) determining the scope and content of the prior art, (2) ascertaining the differences between the prior art and the claims at issue, (3) resolving the level of ordinary skill in the pertinent art, and (4) when in evidence, considering objective evidence indicating obviousness or nonobviousness. *KSR*, 550 U.S. at 406 (citing *Graham*, 383 U.S. at 17–18). In an *inter partes* review, Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

Petitioner must explain how the proposed combinations of prior art would have rendered the challenged claims unpatentable. An obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418; *accord Translogic*, 504 F.3d at 1259. Petitioner also must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *NuVasive*, 842 F.3d at 1382.

At this final stage of the proceeding, we determine whether a preponderance of the evidence of record shows that the remaining challenged claims would have been rendered obvious in view of the asserted prior art. We analyze the asserted ground of unpatentability in accordance with these principles.

#### D. LEVEL OF ORDINARY SKILL

Petitioner proposes that a person of ordinary skill

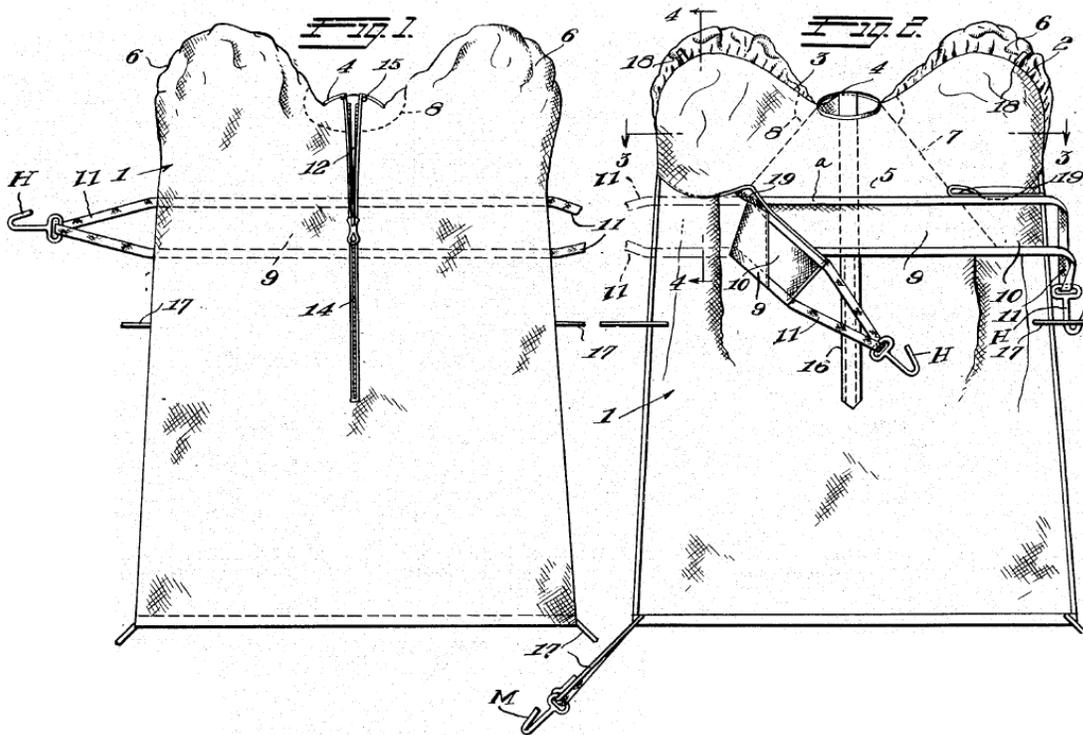
would have had either formal or informal training in fashion or clothing design with at least 1 year of experience. A person of ordinary skill in the art would likely have had experience designing, producing, or working with clothing for infants, either in a formal or informal setting, including as a new parent or expected parent.

Pet. 22–23. Patent Owner does not dispute this definition of a person of ordinary skill. *See generally* PO Resp. For purposes of this Decision, we adopt Petitioner’s proposed level of ordinary skill as it appears to be consistent with the level of skill reflected by the specification and in the asserted prior art references. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art itself can reflect the appropriate level of ordinary skill in the art).

#### E. OVERVIEW OF THE PRIOR ART

##### 1. Parks

Park is entitled “Sleeping Cover.” Ex. 1003, 1. Park discloses a sleeping cover for infants to protect the chest, shoulders, arms, and hands of the infant yet at the same time allow the child freedom of movement. *Id.* at 1:1–6. Parks explains that an object of the invention is to provide a cover that has arm pockets in the upper part that are “comparatively short and full- and which, while allowing plenty of freedom for the arms, cannot accidentally cover the face.” *Id.* at 1:13–18. Parks further explains that a “further object of the invention” to provide a cover with arm pockets that “may be anchored in a manner to restrain the infant as when trying to suck a hand through the cover or a tendency to crawl down under the covers.” *Id.* at 1:24–30. Figures 1 and 2 of Parks are reproduced below.



Figures 1 and 2 of Parks, reproduced above, top plan view and bottom plan view (with certain portions folded back), respectively, of a sleeping cover constructed in accordance with an embodiment of Parks. *Id.* at 1:45–50. Parks comprises sheet 1, which is of a general rectangle except that its upper or top corner portions are rounded off as at 2. *Id.* at 2:18–27. Extending across the upper portion of sheet 1 is back member 5, which extends downwardly along sheet 1 to the middle of the back of the infant. *Id.* at 2:28–32. Back member 5 is flat and has its upper marginal portions cut to conform to the cutting of the adjacent top portion of sheet 1. *Id.* at 2:33–35. Back member 5 is cut such that at opposite sides of neck 4, there are “large and roomy pockets 6 to receive the arms of the infant and allow[] the infant to freely move its arms so that no hindrance or obstruction will be given to the natural movement of the infant.” *Id.* at 2:41–50. Parks “especially notes” that “these arm pockets 6 while comparatively short and

full and giving plenty of freedom to the arms, cannot accidentally cover the face.” *Id.* at 2:50–54.

Parks also includes tapes *a* that are attached to back panel 5. Tapes *a* are secured to elastic webs 11 that can be engaged with hook member H to be secured to the spring of the crib or bed at one side of the mattress on the spring. *Id.* at 3:13–26.

There is a cut or slit in the center of neck 4 in the upper portion of sheet 1. *Id.* at 3:38–42. The slit is closed with a fastener such as a zipper. *Id.* at 3:42–46.

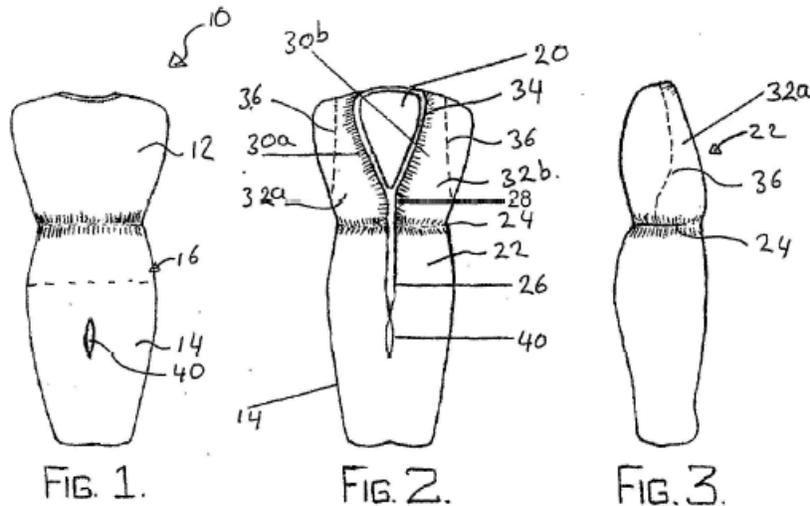
## 2. Moss

Moss is entitled “Infant Safety Unit.” Ex. 1004, code [54]. Moss discloses an “article[] of clothing and more particularly articles of clothing for babies and young infants.” *Id.* at 1:3–4. Specifically, Moss attempts to address the problem that conventional wrapping and swaddling techniques are, generally, incompatible with baby and child restraints in cars and more particularly the restraint belts used to restrain the baby in the restraint. *Id.* at 2:11–13. Moss explains that conventional techniques are incompatible with child restraints in cars because of the general requirement that restraint belts bear on the bony parts of the torso directly and hands and arms are not located between the belt and the torso. *Id.* at 2:13–16. Moss further explains that wrapping or swaddling frequently results in the baby’s arms crossing over to the other side of their body and if positioned in a car restraint so wrapped the restraint belts may bear on the hands or arms. *Id.* at 2:16–18.

To address this problem, Moss describes an article of clothing that includes a shell portion that substantially encloses the torso and arms of the

baby and in which the arms of the baby are generally free to move, the shell portion has at least one restraining member located internally for engagement with each arm of the baby and to substantially prevent the baby moving its arms within the shell portion to the other side of its body. *Id.* at 1:20–2:4.

Figures 1, 2, and 3 of Moss are reproduced below.



Figures 1, 2, and 3 show rear, front, and side views of one embodiment of the invention of Moss. *Id.* at 3:11–16. Figures 1, 2, and 3 show suit 10, which has upper torso surrounding shell portion 12 and a lower leg 10 surrounding portion 14, delineated approximately by line 16. *Id.* at 4:9–11. Suit 10 substantially encloses the baby 18 (shown in Figures 4 and 5, reproduced below) with aperture 20 provided on front 22 of the suit to allow the baby's neck and head to extend out of the shell portion. *Id.* at 4:11–14.

Figures 4 and 5 of Moss are reproduced below.

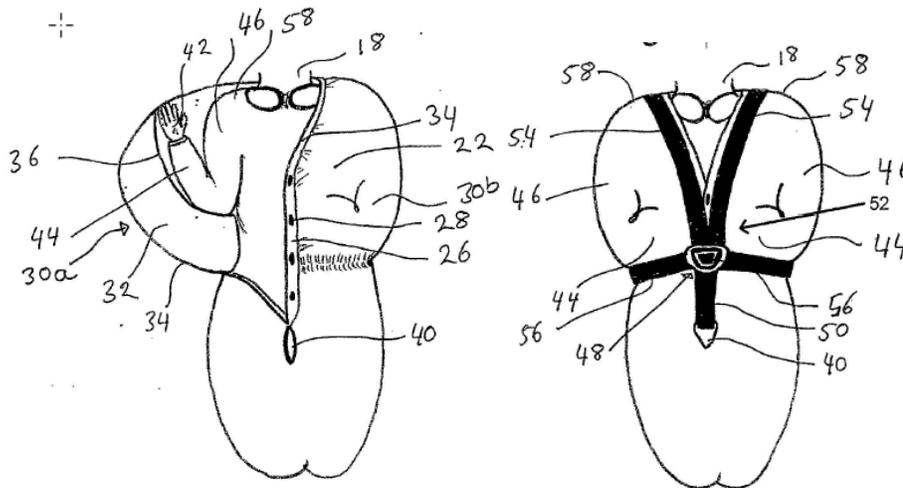


Figure 4

Figure 5

Figure 4 shows a front view of an article of clothing according to a first embodiment of the invention in a partially opened position. *Id.* at 3:17–18. Figure 5 shows a front view of an article of clothing according to a first embodiment of the invention in use and showing the location of child restraint belts. *Id.* at 3:19–21.

Aperture 20 is approximately V-shaped and extends downwards from top 15 of the suit towards waist region 24. *Id.* at 4:13–15. There is portion 26 of the aperture that, in use, is closed with fasteners 28 (shown Figure 4) but which may be opened to enable the suit to be placed on or removed from the baby. *Id.* at 4:15–17. The shell portion does not have any separate arms, and the baby's arms are enclosed within shell portion 12 and “are generally free to move, except for the restraining members.” *Id.* at 4:17–21.

Upper portion 12 of the suit has two regions 30a, 30b on either side of the vertical centerline of the suit. *Id.* at 4:22–23. The inside of each region 30a, 30b is provided with a restraining member 32, which in this

embodiment is a pocket. *Id.* at 4:23–24. Pocket 32 is formed by a piece of fabric that is sewn to the internal surface of the fabric of the suit. The pocket is open along line 36 that extends from waist region 24 to shoulder region 38, and has a generally triangular shape. *Id.* at 5:3–6.

Edge 34 of aperture 20 is preferably elasticized so that the fabric is pulled close to the baby's body and so resists movement of the baby's arms away from the its body. *Id.* at 5:7–9. As seen in Figure 4, pockets 32 are sized and positioned so that the baby's hand 42 and lower arm 44 may be positioned in the pocket, with the hands extending into the triangular end near the junction of the waist and aperture 20. *Id.* at 5:14–17. Only the part of upper arm 46 near the elbow extends into the pocket but, if desired, pocket 32 may be configured so that substantially the entire arm is enclosed by the pocket. *Id.* at 5:17–19. As seen in Figure 3, the pocket extends over substantially the entire front half of the body, with opening 36 of the pocket generally at the side of the body. *Id.* at 5:20–22. As seen in the figures, each pocket 32 is closed at or near the edge of opening 20 and so, while the baby's arm and hand are within the pocket 32, 25 they cannot cross the body's centerline, which prevents the baby's fingers, and the rest of its hand or its arm, from being positioned between belt 54 and its torso (as shown in Figure 5). *Id.* at 5:23–25, 6:1–8.

### 3. *Greiert*

*Greiert* is entitled “Garment for Child.” Ex. 1005, 1. *Greiert* discloses “a garment for a child which may be [easily] lengthened to grow in size as the child grows,” “may be opened at the bottom to change the child's diaper, leaving the top of the garment closed to protect the child's chest and upper body,” also “has two positions, one in which it warmly encloses the

child's legs, and one in which it exposes the child's feet, allowing him to walk," and "may be secured to the child's bed or crib to prevent the child from rolling over." *Id.* at 1:14–24. Figures 2 and 3 of Greiert are reproduced below.

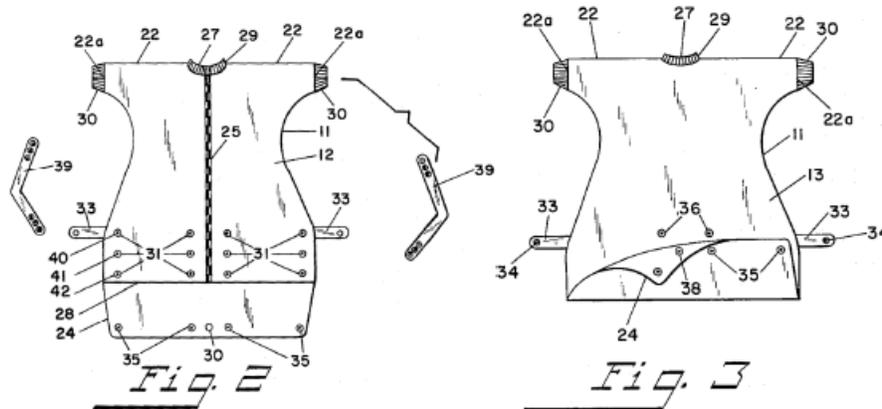


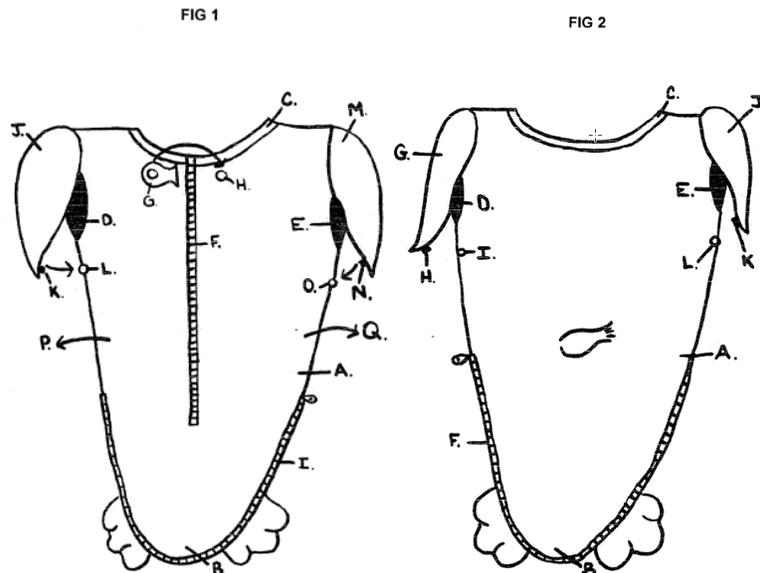
Figure 2 is a front view of Greiert's garment and Figure 3 is a rear view of the garment of Figure 2. Figures 2 and 3 shows garment 11 has front panel 12 and rear panel 13. *Id.* at 1:36–37. The panels may have any convenient shape, but are generally contoured to the outline of a child's body, as shown. *Id.* at 1:38–39. Lower portion 23 of the longer rear panel 13 is not sewn to the front panel 12, but instead it hangs free to form flap 24. *Id.* at 1:54–56. Garment 11 also has sleeve 22. *Id.* at 1:56–59. Zipper 25 or other suitable fastening means is attached in the front panel 12 at its slit 26. *Id.* at 1:59–60. When zipper 25 is closed, as it is in Figures 2 and 3, and flap 24 hangs free, garment 11 has four openings, top opening 27 for the child's head and neck, openings 22a in the two sleeves 22, and bottom opening 28. *Id.* at 1:61–65.

Greiert may be used as a sleeping garment "which snugly encloses a child's body and legs." *Id.* at 1:69–71. Tabs 33 may be used to help secure

garment 11 to the rails or bars of the crib or bed in which the child wearing garment 11 sleeps. *Id.* at 2:32–35.

#### 4. *Beiring*

*Beiring* is entitled “One Piece, Wearable Sleep Training System with Illuminating Section.” Ex. 1006, at code [54]. *Beiring* discloses “[a] one piece sleep training garment used to progress an infant through three stages of Swaddling positions” where “[s]tage one will Swaddle both arms, stage two will only Swaddle one arm and stage three will allow both arms to be free.” *Id.* at code [57]. Figures 1 and 2 of *Beiring* are reproduced below.



Figures 1 and 2 of *Beiring* are reproduced above, and are front and rear views, respectively, of *Beiring*’s sleep training system. *Id.* ¶¶ 36, 37. Figure 1 is a closed view of the sleep training system. Wearable garment (A) is a garment that fully encloses both legs of an infant in a singular compartment. *Id.* ¶ 46. The garment consists of a front, closed bottom (B), two arm holes (D) and (E), and neck hole (C). *Id.* Garment (A) is divided into portions (P) and (Q) via a zipper that allows an infant to be received into it. *Id.* The zipper extends from the neck opening down to the near bottom

portions of the garment, thus acting as a connection between left and right segments (P) and (Q) of the garment. *Id.* Two attached arm hole coverings (J) and (M) may be fastened via (K) and (N) to corresponding fasteners (L) and (O) in order that garment is sealed while infant is utilizing the full or half swaddle positions of the sleep training system. *Id.*

As shown in Figure 2, two attached arm hole coverings (G) and (J) may be fastened via (H) and (K) to corresponding fasteners (I) and (L) in order that garment is sealed while infant is utilizing the full or half swaddle positions of the sleep training system. *Id.* ¶ 48. Zipper mechanism (F) is located at the bottom portion of garment (A), so that when the zipper is open, access is given to infant's lower body. *Id.*

#### F. ANTICIPATION BY PARKS: CLAIMS 1–18

Petitioner argues that Parks anticipates claims 1–18. Pet. 28–69; Reply 10–19. Patent Owner argues that Petitioner's challenge fails. *See* PO Resp. 14–27; Sur-Reply 3–12.

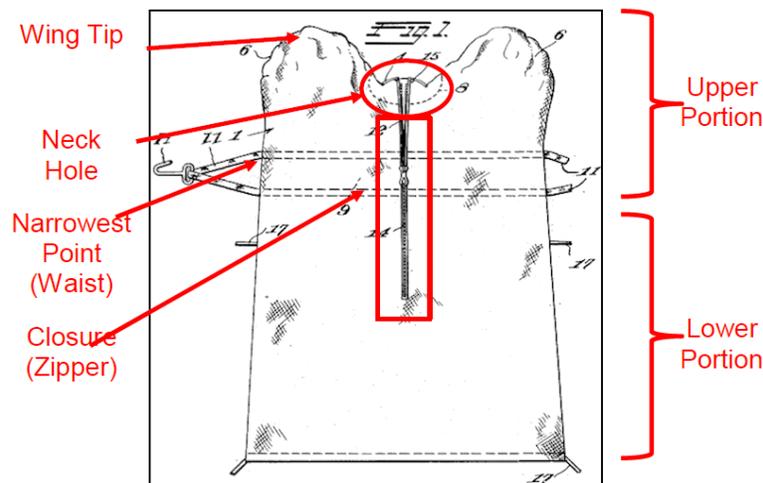
##### *1. Independent Claims 1 and 2*

We first consider Petitioner's argument that Parks anticipates claims 1 and 2. Pet. 28–36.

##### a. Analysis

##### i. Petitioner's Contentions

Petitioner maps the language of independent claims 1 and 2 to Parks's disclosures as shown in the annotated version of Figure 1 of Parks, reproduced below. Pet. 28–36.



*Parks, Fig. 1.*

Figure 1 of Parks as annotated by Petitioner to show the upper portion, lower portion, closure, narrowest point, neck hole, and wing tips.

Pet. 22. In particular, Petitioner submits that Parks discloses: “a swaddling suit for swaddling an infant,” Ex. 1003, 1:1–12; Ex. 1016 ¶ 50; “an upper portion for enclosing the infant’s upper body,” Ex. 1003, Fig. 1 (*see* annotated figure above), 2:28–35; Ex. 1016 ¶¶ 53, 54; “a bodice portion” and “a neck hole at an uppermost central portion of the bodice portion,” Ex. 1003, Fig. 1, 2:23–27; Ex. 1016 ¶¶ 55–57; “wing portions comprising one wing portion of the swaddling suit on one side of the bodice portion and another wing portion of the swaddling portion on another side of the bodice portion, said one wing portion and said another wing portion extending laterally from the bodice portion at an uppermost portion of the suit,” Ex. 1003, Fig. 1, 4:41–54; Ex. 1016 ¶¶ 58, 59; “each of said one wing portion and said another wing portion having a wing tip at an uppermost portion of each of the wing portions that is positioned above a level of the neck hole of said suit,” Ex. 1003, Fig. 1; Ex. 1016 ¶¶ 60–62; “each of said wing portions being large enough to completely surround and retain an infant’s arm and hand in a hand-raised and elbow-bent position,” Ex. 1003,

2:41–47, 2:53–54; Ex. 1016 ¶¶ 64, 65; and a “swaddling suit being tapered in at a waist line below said wing portions and then widening whereby a narrowest region of said suit is at said waist line,” Ex. 1003, Fig. 1; Ex. 1016 ¶¶ 67–69.

ii. Patent Owner’s Arguments

Patent Owner argues that Parks fails to disclose a number of limitations of claims 1 and 2, including: (a) “a swaddling suit,” (of limitations [1P] and [2P] above), (b) “wing portions extending laterally from a bodice portion” (limitations [1E] and [2E] above), (c) “wing portions” that have “a wing tip at an uppermost portion of each of the wing portions that is positioned above a level of the neck hole of said suit” (limitations [1F] and [2F]), and (d) “wing portions” that “retain an infant’s arm and hand in a hand-raised and elbow-bent position” (limitation [1G]) and “wing portions” that “retain an infant’s arm” (limitation [2G]). PO Resp. 14–29. On the full record and as we explain in detail below, we agree with Patent Owner that Parks fails to disclose “wing portions” that “retain an infant’s arm and hand in a hand-raised and elbow-bent position” (limitation [1G]).

iii. Undisputed Limitations

With respect to the undisputed limitations, we have reviewed the record and determine that Petitioner has shown by a preponderance of the evidence that Parks discloses limitations [1A]–[1D], [1H], [2A]–[2D], and [2H]. We consider the arguments regarding the disputed limitations below.

iv. Limitations [1P] and [2P]

We determined above, the preamble is not limiting, so Patent Owner’s arguments that Parks does not disclose limitation [1P] is not persuasive.

v. Limitations [1E] and [2E]

With respect to “wing portions extending laterally from a bodice portion” (limitations [1E] and [2E] above), Patent Owner argues that “Petitioner states in conclusory fashion that ‘[i]t can be seen in the figures that the arm pockets of Parks are at the uppermost portion of the suit and extend laterally from the bodice portion.’” PO Resp. 22 (citing Pet. 33). Patent Owner submits that “Petitioner appears to be relying on Fig. 1, which shows the width of the rectangular sheeting ever-so-slightly wider across the top where the pockets are gathered.” *Id.* Patent Owner asserts that “[g]iven the inaccuracies of drawings courts are loath to rely on drawings alone for determining the teachings of a reference.” *Id.* (citing *Nystrom v. Trex Co.*, 424 F.3d 1136, 1149 (Fed. Cir. 2005)).

As Patent Owner acknowledges, the drawings of Parks do show the pockets as slightly wider than the main part of Parks’s device. *See* PO Resp. 22–23. Patent Owner’s efforts to require some amount or degree of extension is not reflected in the claim language. *Id.* at 22. Indeed, Patent Owner’s own definition of “to extend” includes “to spread.” *See* Ex. 2035. There is no specific amount or degree of spreading required for that definition. Parks’s drawings show the pockets spread out laterally from what the Petitioner has identified as the bodice. *See* Ex. 1003, Fig. 1. Patent Owner’s arguments that we cannot rely on the plain disclosures of the drawings unless described in the Specification are inconsistent with the law. *Nystrom v. Trex*, which Patent Owner relies on, does not stand for the broad proposition that Patent Owner asserts. Instead, that case simply stands for the proposition that “patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the

specification is completely silent on the issue.” 424 F.3d at 1149 (citing *Hockerson-Halberstadt, Inc. v. Avia Group International, Inc.*, 222 F.3d 951, 956 (Fed. Cir. 2000)). Indeed, the law is clear that “a drawing in a utility patent can be cited against the claims of a utility patent application even though the feature shown in the drawing was unintended or unexplained in the specification of the reference patent.” *In re Aslanian*, 590 F.2d 911, 914 (CCPA 1979); *see also In re Mraz*, 455 F.2d 1069, 1072 (CCPA 1972) (“[W]e did not mean that things patent drawings show clearly are to be disregarded.”) (emphasis omitted). Here, we agree with the Petitioner and determine that the drawings of Parks do show the pockets extending in a lateral direction from the bodice, which is sufficient to show by a preponderance of the evidence that Parks discloses limitations [1E] and [2E]. *See* Ex. 1016 ¶¶ 58, 59.

vi. Limitations [1F] and [2F]

Limitations [1F] and [2F] recite “wing portions” that have “a wing tip at an uppermost portion of each of the wing portions that is positioned at a level of the neck hold of said suit.” Patent Owner argues that “Parks, in fact, does not teach ‘wing portions’ at all and therefore cannot also have ‘wing tips.’” PO Resp. 23. Patent Owner asserts that “[t]he ‘pockets’ of Parks are not functionally equivalent in any way to the wing portions of the claimed invention.” *Id.* Patent Owner contends that “each claimed wing portion ‘acts as a position-restricting means to maintain the hands in position relative to the face.’” *Id.* at 24 (quoting Ex. 1001, 6:37–39). Patent Owner argues that “wing portions” accomplishes this “by fitting ‘snugly around the arm thereby hugging the arm towards the infant’s body’ in the ‘hand-raised, elbow bent’ position.” *Id.* (citing Ex. 1001, 6:44–47). “The ‘wing tip’ is an

uppermost portion of a wing portion that ‘assists to further secure the hand and retain it in place once in position.’” *Id.* (quoting Ex. 1001, 6:55–57).

Setting aside the “hands bent, elbow raised position” requirement which we address below with respect to limitations [1G] and [2G], Patent Owner’s arguments are simply not commensurate with the scope of the claims. There is no recitation in the claims requiring that the “wing portions” must act “as a position-restricting means to maintain the hands in position relative to the face” or that do this by “fitting ‘snugly around the arm thereby hugging the arm towards the infant’s body’ in the ‘hand-raised, elbow bent’ position.” PO Resp. 23–24. We decline to read these limitations into the claims from the Specification. *See, e.g., Hill–Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (“[W]e do not import limitations from the embodiments in the specification into the claims.”); *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) (“We do not read limitations from the specification into claims . . . .”); *Phillips*, 415 F.3d at 1320 (describing “reading a limitation from the written description into the claims” as “one of the cardinal sins of patent law”) (internal quotation marks omitted). Nor does Patent Owner provide a reasoned justification for this importation of limitations from the Specification. Reviewing the entire record, we agree with Petitioner that Parks discloses arm pockets that are the claimed “wing portions.” *See* Pet. 33 (citing Ex. 1003, 4:41–54; Ex. 1016 ¶¶ 58, 59). We further agree with Petitioner that Parks shows the pockets as having tips above the level of the neck opening. *See* Pet. 34 (citing Ex. 1003, Fig. 1; Ex. 1016 ¶¶ 60–62).

vii. Limitations [1G] and [2G]

a) Limitation [1G]

As for limitation [1G]—that the “wing portions” must be able to “retain an infant’s arm and hand in a hand-raised and elbow-bent position,” Patent Owner argues that the pockets of Parks “do no such thing.” PO Resp. 25. Petitioner argues that this limitation only imposes the structural requirement that the wings be “large enough” to retain an infant’s hand and arm in a hand-raised and elbow bent position. Reply 17. Petitioner contends that “[t]he term ‘large enough to surround and retain an infant’s arms’ describes a single structural limitation (large enough) having functional capabilities (to surround and retain).” Petitioner submits that “[a]s such, Parks reads on this claim limitation because the wing portions meet the structural limitation of being ‘large enough.’” *Id.* Petitioner asserts that it does not need to separately show disclosure of the claimed functions. *Id.*

In our Institution Decision, we noted that Petitioner’s expert has testified that “[i]t also would have been apparent to a person having ordinary skill in the art, from the position of the arm pockets in Figures 1 and 2 of Parks, that when a baby’s arm is within the pocket, it would be in a hand-raised and elbow-bent position,” and “[t]he hands in the arm pockets must necessarily be raised above the neckhole,” and “because the arm pockets are not so large that they can cover the baby’s face and restrict their breathing, the baby’s arms would not be able to reach full extension—i.e., their elbow would be bent.” Dec. 27–28 (quoting Ex. 1016 ¶ 65). On the preliminary record, we credited this testimony and determined that Petitioner had shown sufficiently, at the institution stage, that Parks accounted for this limitation. We further noted that “this limitation of claim 1 is broader than Patent

Owner contends. The limitation only requires that the wing portion be of a certain size (i.e., “large enough”), so that it has a particular capability (i.e., “to completely surround and retain an infant’s arm and hand in a hand-raised and elbow-bent position”) not that it only do so.” *Id.*

On the complete record, we agree with Patent Owner’s explanation why these preliminary conclusions were incorrect. PO Resp. 25–27. As Patent Owner points out, the pockets of Parks are designed to allow the infant to “freely move its arms.” Ex. 1003, 2:44–50. While Parks may allow an infant to bend its arms, it also allows the infant to sleep with its “arms above the head or extended.” Ex. 1003, 2:49–50; Ex. 2015 ¶ 58. And the infant’s arms are free to move in and out of the pockets at will. Ex. 1003, 2:43–45. Thus, on a complete record, we agree with Patent Owner that nothing in Parks teaches “retaining,” i.e., keeping or holding, the infant’s arms in any one position, let alone in the specific “hand-raised and elbow-bent position.” Ex. 2015 ¶ 58. With Patent Owner’s full explanation and our claim construction above, we also agree with Patent Owner that the testimony of Petitioner’s expert is contrary to Parks’s express disclosure the pockets are large enough for the infant to sleep with its “arms above the head or extended.” Ex. 1003, 2:49–50; Ex. 2015 ¶ 58. We agree with Patent Owner that “[b]ecause the sleeping cover of Parks allows the child to sleep with ‘arms above the head or extended,’” PO Resp. 25, Petitioner’s expert was incorrect to assume that ‘the baby’s arms would not be able to reach full extension’ and therefore “would be bent.” *See* Ex. 1016 ¶ 65. Thus, we credit Patent Owner’s expert, and find Petitioner’s expert’s testimony entitled to no weight on this point.

As for Petitioner’s argument that it need not show that Parks discloses the function, but merely the capability, we do not disagree, but that is beside the point. Reply 17–18. The problem with Petitioner’s argument is not that Parks fails to expressly disclose the function, but Parks expressly discloses that the pockets do not hold or keep the baby’s hands in the hands-up, elbow-bent position—the opposite of the function. Ex. 1003, 2:44–50; Ex. 2015 ¶ 58.

Accordingly, we agree with Patent Owner that Petitioner has failed to show by a preponderance of the evidence that Parks discloses limitation [1G].

b) Limitation [2G]

Although the parties do not really differentiate their arguments regarding “retain[ing]” for claims 1 and 2, these claims differ significantly with respect to this limitation. Claim 2 recites, in relevant part, “each wing portion being large enough to completely surround and retain an infant’s arm.” Ex. 1001, 11:49–51. As we noted in our Decision on Institution, claim 2 does not recite a particular position for the arms or hand as claim 1 does. Dec. 28. Thus, for this claim, Patent Owner’s arguments that Parks does not disclose retaining the baby’s hands in a particular position are not persuasive because they are not commensurate with the scope of the claim. Patent Owner appears to be attempting to read the particular arm and hand position recited in claim 1 into the broader term “retain,” *see* PO Resp. 25–27 (same analysis for both claims 1 and 2 for this limitation); Sur-Reply 7–10 (same analysis for both claims); but as we explained above in adopting Patent Owner’s claim construction for the term retain, “retain” only requires “to hold or to keep.” As Petitioner persuasively explains, the

pockets of Parks do hold and keep the infant's arms and hands. *See* Ex. 1016 ¶¶ 64, 65. Thus, we find that Petitioner has shown by a preponderance of the evidence that Parks discloses limitation [2G].

b. Conclusion

Based on our review of Petitioner's argument and evidence of record, and for all the reasons expressed above, we conclude that Petitioner *has not established* by a preponderance of evidence that claim 1 is unpatentable as anticipated by Parks. Furthermore, we determine that Petitioner *has established* by a preponderance of the evidence that claim 2 is anticipated by Parks.

2. Claims 3–16

Claims 3–16 depend alternatively from claims 1 or 2. Claims 8–11 recite method of use claims for using the device of claims 1 or 2.<sup>7</sup> Petitioner identifies where Parks discloses the limitations of these dependent claims by providing an analysis of each limitation and a comparison of the limitations to the disclosure of Parks. *See* Pet. 49–56, 63–64, 67–69. Although Patent Owner generally argues that the limitations of the dependent claims are not disclosed, it only specifically addresses claims 3 and 16. PO Resp. 28–29.

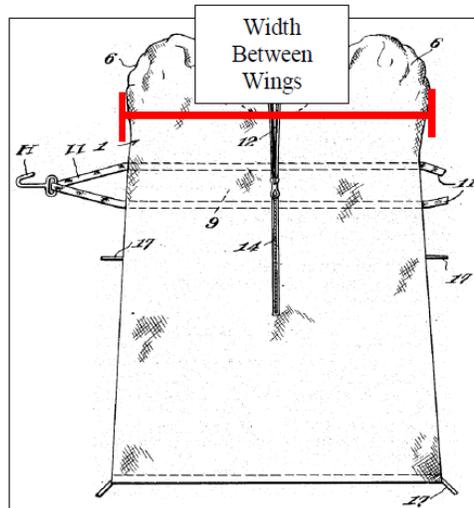
a. Claim 3

Claim 3 depends from claims 1 or 2 and recites “wherein a width of the suit between the wing portions is greater than the width of the bodice

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<sup>7</sup> Claims 3–16 depend alternatively from claims 1 *or* claim 2. Thus, we consider claims 3–16 to be anticipated (or rendered obvious below) by the prior art if *either* version of these claims (the version depending from claim 1 or the version depending claim 2) is described by the prior art.

portion.” Ex. 1001, 12:1–3. Petitioner provides an annotated version of Figure 1 of Parks demonstrating the width between the wings.



*Parks, Fig. 1*

An annotated version of Figure 1 is reproduced above with a red bar showing what Petitioner contends is the width between the wing portions. Pet. 50.

Patent Owner argues, similarly to the limitations [1E] and [2E], that Petitioner cannot rely on the figures of Parks to disclose this limitation. PO Resp. 28. We disagree. As we found above, the figures of Parks are sufficient to disclose that Parks accounts for the “wing portions” that “extend latterly” from the bodice. *See supra* II.F.1.a.v. Here, the limitation is a very broad qualitative limitation. We find that Petitioner’s analysis of Figure 1 is sufficient to show that “width of the suit between the wing portions is greater than the width of the bodice portion.” *See* Pet. 50.

b. Claim 16

Claim 16 depends from claims 1 or 2 and recites that “the suit acts as a fitted garment swaddling the infant in a single layer of material.” Ex. 1001, 12:44–46. Petitioner argues that “[a]lthough the phrase ‘acts as a

fitted garment’ is functional language that does not limit the claims, Parks teaches fitted garments.” Pet. 55 (citing Ex. 1016 ¶ 103). Petitioner asserts that “[a]s shown in Figure 3 of Parks, the front and back of the garment are each a single layer of material[.]” *Id.* Petitioner also contends that “Parks also teaches that the garment of its design acts as a fitted garment, designed to ‘restrain the infant’ while being ‘so constructed as to accommodate all natural movements of the infant during sleep.’” *Id.* at 56.

Parks “does not teach a ‘fitted garment’ at least because: 1) it is not a garment; 2) it does not fully enclose the infant (it is open in the back from the arms down); and 3) it is a rectangular cover, not shaped to cover the infant closely or exactly.” PO Resp. 29 (citing Ex. 2015 ¶¶ 55, 56). Patent Owner notes that “Petitioner’s expert concludes that Parks teaches a fitted garment because ‘it is implied . . . that the garment is constructed so as to accommodate the natural movements of the infant.’” *Id.* (citing Ex. 1016 ¶ 103). But Patent Owner contends that “Parks does so by having ‘roomy pockets’ and an oversized top sheet that allows free movement.” *Id.* (citing Ex. 1003, 2:43; Ex. 2015 ¶¶ 32, 58). Patent Owner argues that “[n]othing about Parks is snug or ‘fitted.’” *Id.*

We agree with Patent Owner that Petitioner has failed to show that Parks is fitted. We disagree with Petitioner’s initial contention that we can ignore “acts as a fitted garment” because it is functional. Pet. 55; Reply 19. Petitioner has simply failed to show how Parks would “act as a fitted garment.” Indeed, as Petitioner’s own analysis later in the Petition confirms, this requires some conformance to the baby’s body. *See* Pet. 61 (“This is supported by Moss, which teaches that the ‘suit 10 is made out of one or more pieces of suitable fabric,” which as the examiner found “is pulled close

to the baby's body' thus forming a fitted garment.""). Accordingly, we agree with Patent Owner that Petitioner has failed to show by a preponderance of the evidence that Parks anticipates claim 16.

c. Claims 4–15

Patent Owner does not specifically argue that Parks fails to disclose the additional limitations recited by claims 4–15. Accordingly, Patent Owner has waived any argument directed to those limitations. *See* Paper 16, 8 ("Patent Owner is cautioned that any arguments for patentability not raised in the response may be deemed waived."). We have reviewed Petitioner's evidence and argument. *See* Pet. 49–56, 63–64, 67–69. We agree with it and adopt it as our own. For the reasons provided therein, Petitioner demonstrates that Parks accounts for the limitations of claims 4–15.

3. *Claims 17 and 18*

Claim 17 depends from claim 1 and claim 18 depends from claim 17. Petitioner relies on the analysis considered above to account for the limitations of claim 1 and does not cure the defect with respect to limitation [1G] explained above. Accordingly, for the reasons explained above for claim 1, we determine that Petitioner has failed to show by a preponderance of the evidence that claims 17 and 18 are anticipated by Parks.

4. *Summary*

For all the reasons expressed above, we conclude that Petitioner has not shown by a preponderance of evidence that Parks anticipates claims 1, 17, and 18, and has shown by a preponderance of the evidence that Parks anticipates claims 2–15.

G. OBJECTIVE INDICIA OF NONOBVIOUSNESS

Petitioner also alleges that challenged claims would have been obvious to a person of ordinary skill in the art. We make our determination of patentability based on the entirety of the evidence before us, both for and against obviousness. Notwithstanding what the teachings of the prior art would have suggested to one skilled in the art, objective evidence of non-obviousness (so called “secondary considerations”) may lead to a conclusion that the challenged claims would not have been obvious. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). Objective evidence of non-obviousness “may often be the most probative and cogent evidence in the record” and “may often establish that an invention appearing to have been obvious in light of the prior art was not.” *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012) (quoting *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983)). First, we review the evidence of nonobviousness submitted by Patent Owner. Then, with the evidence of nonobviousness in mind, we consider Petitioner’s contentions based on the prior art references and the level of ordinary skill in the art. Patent Owner puts forth evidence of commercial success, industry praise, and skepticism. PO Resp. 46–73. We agree with Patent Owner that its proffered evidence, with respect to the objective indicia of non-obviousness, weigh significantly in favor of non-obviousness of claim 1, as explained below.

*1. Nexus*

For us to give substantial weight to objective indicia of obviousness or nonobviousness, a proponent must establish a nexus between the evidence and the merits of the claimed invention. *ClassCo, Inc., v. Apple, Inc.*, 838

F.3d 1214, 1220 (Fed. Cir. 2016). Nexus is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining non-obviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). “[T]here is no nexus unless the evidence presented is ‘reasonably commensurate with the scope of the claims.’” *ClassCo*, 838 F.3d at 1220 (quoting *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013)). A patentee is entitled to a presumption of nexus “when the patentee shows that the asserted objective evidence is tied to a specific product and that product ‘embodies the claimed features, and is coextensive with them.’” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019) (quoting *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed. Cir. 2018)). The Federal Circuit has held that “if the marketed product embodies the claimed features, and is coextensive with them, then a nexus is presumed and the burden shifts to the party asserting obviousness to present evidence to rebut the presumed nexus.” *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000). “Ultimately, the fact finder must weigh the [objective indicia] evidence presented in the context of whether the claimed invention as a whole would have been obvious to a skilled artisan.” *See Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 33 at 33 (PTAB Jan. 24, 2020) (precedential) (citing *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1331–32 (Fed. Cir. 2016)).

Patent Owner provides a detailed limitation-by-limitation mapping of the three iterations of the Swaddle UP and Swaddle UP Transition Bag to claim 1. PO Resp. 59–72.

Petitioner argues that “Patent Owner relies on alleged secondary considerations related only to the ‘arms-up’ aspect of the ’711 Patent’s design,” and “[t]his feature was not only well-known in the art, but was aggressively marketed by Patent Owner, which undermines its value as a secondary consideration.” Reply 25. Petitioner also argues that Patent Owner’s positions are “inconsistent with the secondary indicia identified in its Preliminary Response.” *Id.* at 26. In particular, Petitioner asserts that, in its Preliminary Response, “Patent Owner contended that the non-nutritive sucking aspect of the Patented garment was responsible for Patent Owner’s success and praise.” *Id.* at 27 (citing Prelim. Resp. 56).

Considering all of the evidence of record, we determine that Patent Owner has shown that the Swaddle UP and Swaddle UP Transition Bag embody claim 1 and are coextensive with it. We have reviewed Patent Owner’s mapping of the products to claim 1 and find it sufficient. *See* PO Resp. 60–72. Accordingly, we determine that Patent Owner has shown that it is entitled to a presumption of a nexus between its evidence of commercial success, industry praise, and skepticism related to the Swaddle UP and Swaddle UP Transition Bag products and claim 1. Petitioner’s arguments do not persuade us otherwise. Although Petitioner contends that Patent Owner should not be entitled to a nexus because of “aggressive marketing,” the only evidence of such marketing that Petitioner points to is the product review page from Amazon.com, and the possibility that Patent Owner has obtained trademarks on the term “ARMS UP.” *See* Reply 26 (citing Exs. 1030, 2030). This evidence is insufficient to rebut or overcome the nexus that Patent Owner has shown.

We note that with respect to claim 2, no such nexus has been shown. As we explained above, claim 2 *does not* recite a particular arm position. *See supra* II.F.1.a.vii.b. Claim 2 merely requires that the wing portions “retain an infant’s arms.” Ex. 1001, 11:49–51. There is no recitation of the “hands-up, elbow-bent” position that Patent Owner touts. Indeed, Patent Owner’s own arguments demonstrate this is one of the critical features that connects that objective evidence to the claimed inventions. For example, Patent Owner explains “[u]nlike other swaddles that existed at the time, the swaddle suit of the ’711 Patent *allows an infant to sleep in a hands up position* while allowing access to its hands for self-soothing through non-nutritive sucking.” PO Resp. 44 (citing Ex. 1001, Abstract; Ex. 2017 ¶ 4; Ex. 2038 ¶ 5) (emphasis added). Patent Owner also states that “[a]s discussed below, the evidence of objective indicia of nonobviousness similarly *relates to the arms up feature* of the Swaddle UP and Swaddle UP Transition Bag (previously the Swaddle UP 50/50).” *Id.* at 44–45 (emphasis added). Indeed, every award and review highlighted by Patent Owner emphasizes the “arms up” position of the hands. *See* PO Resp. 47–57. Moreover, Patent Owner emphasizes “[b]oth the Swaddle Up and the Swaddle UP Transition Bag feature wings that ‘completely surround and retain an infant’s arm and hand in a hand-raised and elbow-bent position,’ or hands up position, *which is the unique characteristic of the claimed invention.*” *Id.* at 71 (emphasis added).

As the Federal Circuit explained in *Fox Factory*

To be sure, we have never held that the existence of one or more unclaimed features, standing alone, means nexus may not be presumed. Indeed, there is rarely a *perfect correspondence* between the claimed invention and the product. As we explained, the purpose of the coextensiveness requirement is to ensure that

nexus is only presumed when the product tied to the evidence of secondary considerations “*is* the invention disclosed and claimed.” *Demaco*, 851 F.2d at 1392 (emphasis added). Thus, if the unclaimed features amount to nothing more than additional insignificant features, presuming nexus may nevertheless be appropriate.

Put differently, the degree of correspondence between a product and a patent claim falls along a spectrum. At one end of the spectrum lies perfect or near perfect correspondence. At the other end lies no or very little correspondence, such as where “the patented invention is only a component of a commercially successful machine or process.” *Id.* Although we do not require the patentee to prove perfect correspondence to meet the coextensiveness requirement, what we do require is that the patentee demonstrate that the product is essentially the claimed invention. *See id.*

944 F.3d at 1374 (emphasis in original).

With respect to claim 2, we find that Patent Owner has failed to show that it is entitled to a presumption of a nexus. Just as in *Fox Factory*, Patent Owner has admitted that the Swaddle UP and Swaddle UP Transition Bag contain a feature that is unclaimed in claim 2—the hands-up, elbow bent position—which Patent Owner contends is the “unique characteristic of the claimed invention.” *See id.* at 1374–75 (“It is undisputed that the X-Sync chainrings include unclaimed features that the patentee describes as ‘critical’ . . . and that go to the ‘heart’ of another [patent]”). We find that Patent Owner has not shown claim 2 is coextensive with products that include a critical unclaimed feature claimed in different claims and materially impacts the products’ functionality. *See* Ex. 2038 ¶ 5; Ex. 2017 ¶ 4; Ex. 2024 (“great for babies that prefer to sleep with their arms up.”); Ex. 2025 (“What We Love: The sleep sack’s winged design keeps arms upright when baby’s not moving them, the most natural position for a sleeping infant.”); Ex. 2026

“An innovative swaddle that allows babies to sleep in their natural position with their arms up by their face and a comforting thumb for sucking in easy reach.”); Ex. 2027 (“Lots of babies actually prefer to keep their arms up (‘raise the roof’ style) rather than tucked down at their sides or chest. The Love to Dream creates a secure space, while allowing newborns to position their arms upward.”). Accordingly, we find that Patent Owner has failed to show that claim 2 is entitled to a presumption of nexus because it is not coextensive with the evidence of objective indicia presented. *See Fox Factory*, 944 F.3d at 1375. “A finding that a presumption of nexus is inappropriate does not end the inquiry into secondary considerations”; rather, “the patent owner is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’” *Id.* at 1374 (quoting *In re Huang*, 100 F.3d 125, 140 (Fed. Cir. 1996)). Here, as we explained, the unique characteristic identified by Patent Owner is the “arms up” feature, which claim 2 does not recite. Accordingly, Patent Owner has not demonstrated a nexus, even without the presumption, between claim 2 and the objective evidence offered.

## 2. *Commercial Success*

Commercial success is typically shown with evidence of “significant sales in a relevant market.” *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1312 (Fed. Cir. 2006) (citation omitted). “When a patentee can demonstrate commercial success, usually shown by significant sales in a relevant market, and that the successful product is the invention disclosed and claimed in the patent, it is presumed that the commercial success is due

to the patented invention.” *J.T. Eaton & Co. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997).

Patent Owner presents evidence that when the Swaddle UP first hit the market, demand exceeded supply. Ex. 2017 ¶ 5. And Patent Owner presents evidence that Love To Dream has sold millions of units of the Swaddle UP throughout the world. Ex. 2017 ¶ 7. Patent Owner also submits that the Swaddle UP Transition Bag has sold over a million of the Swaddle UP Transition Bags sold worldwide. Ex. 2017 ¶¶ 7–8.

Petitioner does not separately address Patent Owner’s evidence of commercial success beyond the arguments discussed above with respect to nexus. *See Reply 25–27.*

We have reviewed Patent Owner’s evidence of commercial success. We find that Patent Owner has shown, and Petitioner does not dispute, that the Swaddle Up and Swaddle Up Transition bags are a commercial success. *See Ex. 2017 ¶¶ 7–8.* As we explained above, Patent Owner has shown that it is entitled to a presumption of a nexus between the Swaddle Up and Swaddle Up Transition bags for claim 1, and Petitioner has not rebutted that presumption. Accordingly, we find that Patent Owner has shown that the claimed invention of claim 1 is a commercial success, and find this evidence is entitled to significant weight in our analysis.

### *3. Praise*

Praise from industry participants, especially competitors, is probative as to obviousness because such participants “are not likely to praise an obvious advance over the known art. Thus, if there is evidence of industry praise of the claimed invention in the record, it weighs in favor of the non-

obviousness of the claimed invention.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1053 (Fed. Cir. 2016) (en banc).

Patent Owner presents evidence of a number of awards won by the Swaddle UP and Swaddle UP Transition Bags. *See* PO Resp. 46–48 (citing Ex. 2017 ¶ 11; Exs. 2024–2028). Patent Owner also provides evidence of user reviews from Amazon, Target, Buy Baby, and YouTube. *Id.* at 48–57.

Petitioner responds that “the reviews and awards that Patent Owner relies upon tout the ‘arms-up’ design of Patent Owner’s product because that is how Patent Owner aggressively marketed its product.” Reply 26 (citing Ex. 2030). Petitioner contends that “[o]f course customer reviews are going to mention the ARMS UP aspect of a garment when that phrase appears in the title of Patent Owner’s Amazon.com listing, and is used in all-capital letters repeatedly in advertising and on its website.” *Id.*

As we explained above in our discussion of nexus, we do not find Petitioner’s arguments that advertising negates the connection between Patent Owner’s products and the claimed invention of claim 1 persuasive. Instead, we find that Patent Owner has shown a nexus between its Swaddle Up products and the claimed invention of claim 1. We find Patent Owner’s evidence of the numerous awards won by the Swaddle Up and Swaddle Up Transition Bag to be strong evidence of industry praise and entitled to significant weight. Ex. 2017 ¶ 11; Exs. 2024–2028; PO Resp. 47–48.

As for Patent Owner’s evidence of customer reviews from various retail websites, we give that evidence only limited weight. *See* PO Resp. 48–57. We have no way of knowing whether the people reviewing the products on these general websites actually purchased and used the product. We also have no way of knowing the reviewers’ knowledge about the

industry and other products. Finally, beyond the small sample that Patent Owner highlights, we have no way of knowing whether the thousands of reviews are directed to the inventive features of the product or just its quality of manufacture, or the delivery/shopping experience from the retailer. While we appreciate and give some limited weight to the apparent positive reception the products have received, we find that, because of the uncertainties we mentioned, retail website reviews are only of limited probative value. We contrast these retail website reviews with the various industry awards that Patent Owner highlights. With these industry awards, we have some additional assurance of objectivity and familiarity with the industry.

In sum, we find Patent Owner has presented evidence of meaningful industry praise in the form of the awards, and give that evidence significant weight in our analysis for claim 1.

#### *4. Skepticism*

Evidence of industry skepticism weighs in favor of non-obviousness. *See United States v. Adams*, 383 U.S. 39, 52 (1966). “If industry participants or skilled artisans are skeptical about whether or how a problem could be solved or the workability of the claimed solution, it favors non-obviousness.” *WBIP, LLC*, 829 F.3d at 1335. Patent Owner presents the testimony of Rachel Wilson, “a sale agent with more than 12 years of experience in the baby products industry.” PO Resp. 58 (citing Ex. 2038 (Wilson Declaration) ¶ 7). Ms. Wilson testified that she was initially skeptical of Ms. Krawchuk’s (the inventor’s) design “because it was unlike any other swaddle in the industry” and “[t]he alternative swaddle market was emerging, but all of the new alternatives positioned the baby’s arms down,

mimicking the traditional wrap swaddling method.” Ex. 2038 ¶ 5. Ms. Wilson states that “[t]he deliberate arms up position of the Love Me Baby Swaddle UP worried me because it was so different than anything else offered on the market at the time, and for that reason, I was very hesitant to work with it.” *Id.* ¶ 6. Ms. Wilson testifies that after she considered the inventor’s story and the research associated with how the arms up design allows a baby to access its hands for self-soothing, she agreed to work with Love To Dream. *Id.* ¶ 7. Ms. Wilson states that “[t]he arms up design became one of the lead conversations with retailers and consumers when selling the product to them, and it continues to be the most significant feature to explain during in-store trainings.” *Id.* ¶ 8.

Petitioner notes that Ms. Wilson is Patent Owner’s own sales agent and the alleged skepticism occurred before the filing of the PCT. Reply 26. Petitioner concludes that “Patent Owner cannot plausibly argue that a person who has been with the company since before the product was on sale could be an industry skeptic.” *Id.*

Patent Owner responds that Ms. Wilson was not on Patent Owner’s payroll at the time of the alleged skepticism, and that Petitioner improperly focuses on the PCT filing date and ignores the earlier Australian priority date. Sur-Reply 17.

We determine Patent Owner has shown some evidence of skepticism. *See* Ex. 2038 ¶¶ 4–9. We also agree with Patent Owner that Petitioner’s arguments that the alleged skepticism occurred before the filing of the PCT ignores the earlier Australian priority date, and thus, Petitioner’s date argument is not particularly relevant or persuasive as to the weight the evidence should be given. *See* Sur-Reply 17. However, we find that this

evidence is entitled to only a little weight in our analysis. The only evidence offered to establish this skepticism is the testimony of one sales agent who also works with the Patent Owner. Moreover, this testimony is uncorroborated by any contemporaneous evidence. Thus, we give Patent Owner's evidence of skepticism only little weight.

*5. Summary*

We find that Patent Owner is entitled to a presumption of a nexus between the secondary considerations evidence and claim 1. We further find that Patent Owner has neither shown that it is entitled to a presumption of a nexus, nor otherwise shown a nexus, between the secondary considerations evidence and claim 2. We find the evidence of commercial success and industry praise are entitled to significant weight and the evidence of skepticism is entitled to only a little weight in our analysis. With this objective evidence in mind, we now turn to the evidence and argument regarding the remaining *Graham* factors in evaluating Petitioner's obviousness challenges.

H. OBVIOUSNESS OVER PARKS AND MOSS: CLAIMS 1–6 AND 8–16

Petitioner challenges claims 1–6, 8–11, 12–16 of the '711 patent under 35 U.S.C. § 103(a) as unpatentable over Parks and Moss. Pet. 28–61.

*1. Independent Claims 1 and 2*

a. Petitioner's Contentions

Petitioner argues that, in addition to the disclosures of Parks discussed above, Moss alone teaches or suggests all the limitations of claims 1 and 2 except for the “wing portions having wing tips at an uppermost portion of each of the wing portions that are positioned above a level of the neck hole

of the suit,” wing portions that are “large enough to completely surround and retain an infant’s arm and hand in a hand-raised and elbow-bent position,” and a garment that is tapered in at a waist line below said wing portions and then widening whereby a narrowest region of said suit is at said waist line. Pet. 40–43. For those limitations, Petitioner relies on the combination of Moss and Parks. *Id.* Figure 4 of Moss, as annotated by Petitioner is reproduced below.

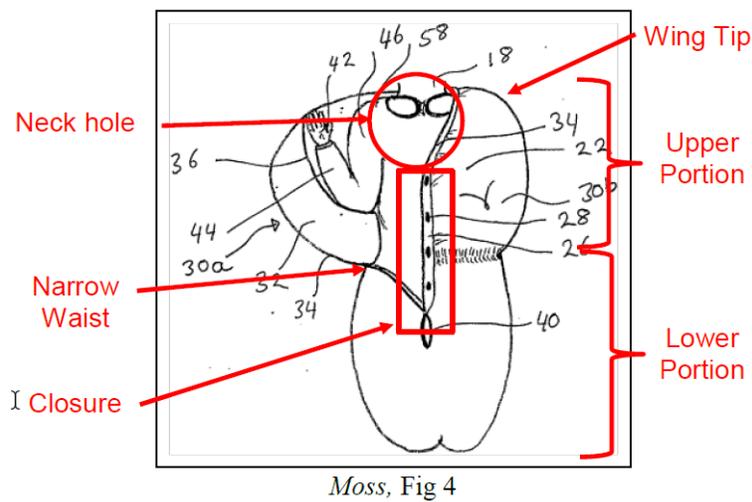


Figure 4 of Moss, as annotated by Petitioner, shows a front view of Moss’s suit with the location of the neck hole, wing tip, upper portion, lower portion, narrow waist, and closure annotated. Pet. 17. In particular, Petitioner submits that Moss discloses: a “a swaddling suit for swaddling an infant,” Ex. 1004, 1:2–3; Ex. 1016 ¶ 117; “an upper portion for enclosing the infant’s upper body,” Ex. 1004, Fig. 4 (*see* annotated figure above), 8:2–3; Ex. 1016 ¶ 118; “a bodice portion,” and “a neck hole at an uppermost central portion of the bodice portion,” Ex. 1004, Figs. 2, 4, 5, 4:11–13; Ex. 1016 ¶¶ 118, 119; “wing portions comprising one wing portion of the swaddling suit on one side of the bodice portion and another wing portion of the swaddling portion on another side of the bodice portion, said one wing

portion and said another wing portion extending laterally from the bodice portion at an uppermost portion of the suit,” Ex. 1004, Fig. 2, 4 (annotated above), 4:22–23 (“two regions, 30a, 30b on either side of the vertical centerline of the suit”); Ex. 1016 ¶ 121. Pet. 37–39.

Petitioner relies on the combination of Parks and Moss to account for the limitations of “each of said one wing portion and said another wing portion having a wing tip at an uppermost portion of each of the wing portions that is positioned above a level of the neck hole of said suit,” Ex. 1003, Fig. 1; Ex. 1004, 5:23–6:8, Fig. 5; Ex. 1016 ¶¶ 122, 123; Ex. 1010, 1:41–43; Ex. 1007; “each of said wing portions being large enough to completely surround and retain an infant’s arm and hand in a hand-raised and elbow-bent position,” Ex. 1003, 2:41–47; Ex. 1004, 2:9–10, 5:18–19; Ex. 1016 ¶¶ 124, 125; and a “swaddling suit being tapered in at a waist line below said wing portions and then widening whereby a narrowest region of said suit is at said waist line,” Ex. 1003, Figs. 1, 2; Ex. 1004, Fig. 4, 2:11–12, 8:17–19; Ex. 1016 ¶¶ 67–69. Pet. 40–43.

Petitioner acknowledges that Moss teaches arm pockets that do not rise above the shoulders, Ex. 1004, 5:23–6:8, Fig. 5, but submits that the garment of Parks, which was designed primarily as a sleeping suit, has pockets rising above the shoulders specifically to allow an infant to suck its hand through the cover, without fear that the garment material would accidentally cover the infant’s face, Ex. 1003, 1:24–30, 2:41–54. Pet. 40–41. Moreover, Petitioner submits that it was well known in the art before the ’711 patent that many infants like to sleep in a hands-up position. *Id.* at 44 (citing Ex. 1010, 1:41–43). Petitioner asserts that it was also known that restricting the movement of the infant’s hands in this position

could suppress the startle reflex. *Id.* (citing Ex. 1010, 1:41–43; Ex. 1007). Thus, Petitioner contends that a person having ordinary skill in the art would have found it obvious to modify Moss with the teachings Parks to arrive at a sleeping garment with pockets rising above the level of the neck hole to attain the benefits known in the art. *Id.* (citing Ex. 1016 ¶¶ 122, 123).

Petitioner contends that the combination of Parks and Moss teaches wing portions that are large enough to completely surround and retain an infant’s arm and hand in a hand-raised and elbow-bent position.

As for the final limitation, Petitioner contends that it would have been obvious to combine the teachings of Moss and Parks to include the narrow waist of Moss, with the wider foot section of Parks, such that the narrowest region of the garment is at the waist. Pet. 43. Petitioner submits that one of the objectives of Parks was to create a garment that infants would be less inclined to kick off of themselves in warm weather. *Id.* (citing Ex. 1003, 2:1–17). Petitioner argues that the wider, “general rectangular form” of the lower portion of Parks provides the infant with plenty of room to move their feet without kicking off the garment. *Id.* (citing Ex. 1003, 3:31–37).

Petitioner asserts that “[a] person having ordinary skill in the art wishing to create a more general purpose sleep garment would find it advantageous to have a more blanket-like lower portion, to provide more coverage for the infant, and make it easier to change the infant’s diaper without removing them entirely from the garment.” *Id.* (citing Ex. 1016 ¶¶ 126–128).

Petitioner also notes that these are simple technologies, and the combination of Moss and Parks amounts to nothing more than the simple substitution of one known prior art element for another, in a predictable way. *Id.* at 41 (citing *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007)).

b. Patent Owner's Arguments

Patent Owner raises several arguments why the combination of Parks and Moss would not render obvious the challenged claims.

i. General Arguments

a) Analogous Art

First, Patent Owner argues that Parks and Moss are not analogous art because they are not in the same field of endeavor or reasonably pertinent. PO Resp. 30. Patent Owner contends that Parks “does not swaddle and is not an item of clothing to wear on the person,” but is instead “a bed cover for securing to a bed or cot.” *Id.* (citing Ex. 2015 ¶¶ 54, 55). Patent Owner submits that the patent defines its field as “swaddles for infants, and in particular to swaddle garments.” *Id.* (quoting Ex. 1001, 1:5–6). Parks is also not “reasonably pertinent to the particular problem with which the inventor is involved,” because “[w]hen Hana Krawchuk invented the '711 Patent she aimed to create a swaddle that still suppressed her infant's startle reflex but allow the infant's hands to access the mouth.” *Id.* (citing Ex. 2017 ¶ 4). Instead, Parks is specifically designed to permit the startle reflex while inhibiting access to the mouth. *See* Ex. 1001, 1:17-18.

We disagree with Patent Owner that Parks and Moss are so fundamentally different that a person of ordinary skill would not look to Parks for ways to improve Moss. The Federal Circuit has explained that “[a]lthough the dividing line between reasonable pertinence and less-than-reasonable pertinence is context dependent, it ultimately rests on the extent to which the reference of interest and the claimed invention relate to a similar problem or purpose.” *Donner Tech., LLC v. Pro Stage Gear, LLC*, 979 F.3d 1353, 1359 (Fed. Cir. 2020). “But a reference can be analogous art

with respect to a patent even if there are significant differences between the two references.” *Id.* at 1361. The ’711 patent explains that it relates to “swaddles for infants” and “in particular, to swaddle *garments*.” Ex. 1001, 1:8–10 (emphasis added). Both Parks and Moss are references directed to sleep garments for infants. *See* Ex. 1003, 1:1–2 (“sleeping cover for infants”); Ex. 1004, 1:3–4 (“invention relates to articles of clothing”). Here, the claimed invention and all the references are sleeping garments for infants. Thus, we find that Petitioner has shown by preponderance of the evidence that Parks and Moss are analogous art to the claimed invention.

b) Alleged Teaching Away

Patent Owner also argues that Parks teaches away “from modification into something that could achieve swaddling,” because “the purpose of swaddling is to limit the Moro or startle reflex,” and “[t]he intended purpose of Parks is to ‘accommodate all natural movements of the infant during sleep.’” PO Resp. 31. Patent Owner contends that “modifying the sleeping cover of Parks to have the features of swaddling—as proposed in each of the petition’s obviousness grounds—would render it inoperable for its intended purpose.” *Id.*

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (quoting *Ricoh Co. v. Quanta Comput. Inc.*, 550 F.3d 1325, 1332 (Fed. Cir. 2008)). “A reference does not teach away if it merely expresses a general preference for an alternative invention but does not criticize, discredit, or otherwise

discourage investigation into the invention claimed.” *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1069 (Fed. Cir. 2018). We disagree with Patent Owner that Parks’s statement that it is “constructed as to accommodate all natural movements of the infant during sleep such as turning, kicking, sleeping with arms above the head, sleeping prone, etc,” Ex. 1003, 1:9–12, teaches away from a combination involving swaddling. At best, this expresses a preference, it does not criticize, discredit, or otherwise discourage the path taken by the inventor. But it is a commonplace fact that design decisions entail making tradeoffs among multiple objectives. *Allied Erecting and Dismantling Co. v. Genesis Attachments, LLC*, 825 F.3d 1373, 1381 (Fed. Cir. 2016) (“A given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine.”). Of course, this preference should be weighed in the obviousness analysis, but that does not amount to a teaching away.

#### c) Claim Construction Standard Applied

Patent Owner also argues that the obviousness grounds should fail because the Petition does not apply the correct claim construction standard. PO Resp. 32. Patent Owner asserts that, although the Petition is unclear and inconsistent (we will discuss that more below), it appears that Petitioner adopts the findings of the Examiner, which were made under the broadest reasonable interpretation claim construction standard and not the *Phillips* claim construction standard. *Id.* We disagree with Patent Owner that this is a basis for denying this ground. The Petition lays out in detail what it is relying on Moss, versus the combination of Moss and Parks, for. *See* Pet. 36–43. The Petition also explains it is applying the *Phillips* claim

construction standard. *Id.* at 26. To the extent that there is any inconsistency or ambiguity with respect to a particular claim limitation, we consider that in our discussion below of the particular claim limitations that Patent Owner disputes.

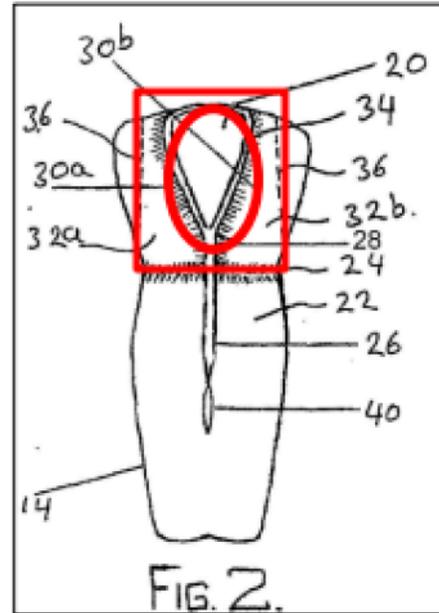
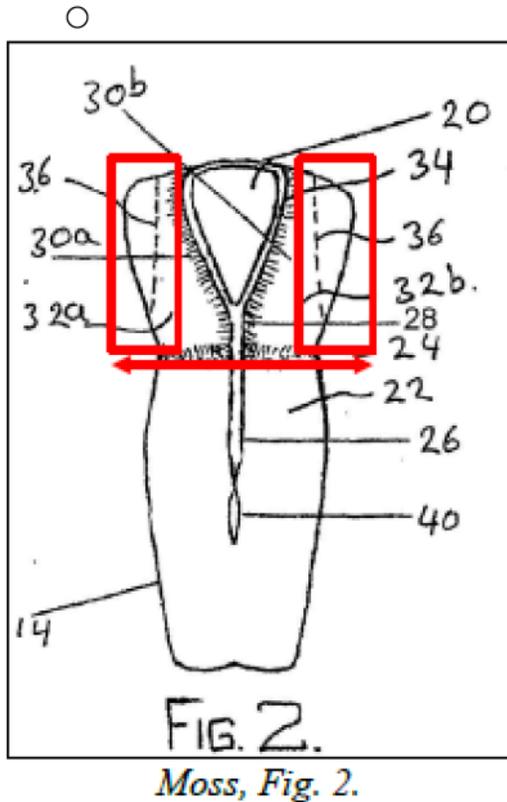
ii. Missing Limitations

Patent Owner disputes that the combination of Moss and Parks teaches or suggests the following limitations: (1) “wing portions” that “extend laterally” from the “bodice portion” (limitations [1E] and [2E]); (2) “wing portions” that “retain an infant’s arm in a hand-raised and elbow-bent position” (limitation [1G]) and “retain an infant’s arm” (limitation [2G]); and (3) “wing portions” that have “a wing tip at an uppermost portion of each of the wing portions that is positioned above a level of the neck hole of said suit” (limitations [1F] and [2F]). PO Resp. 31–39.

a) Limitations [1E] and [2E] — “wing portions extending laterally from a bodice portion”

With respect to limitations [1E] and [2E], Patent Owner argues that Parks does not disclose this limitation for the reasons discussed above and Petitioner is inconsistent in what element of Moss it alleges equates to the “wing portions” of the claims. PO Resp. 33 (citing Ex. 2015 ¶ 70). Patent Owner notes that on page 18 of the Petition, Petitioner submits that the examiner equated the internal “pocket 32” of regions 30a and 30b of Moss with the wing portions of the claims. PO Resp. 33 (citing Ex. 1016 ¶ 115). Patent Owner also notes that on page 38 of the Petition, Petitioner equates regions 30a and 30b with the claimed “wing portions” with citations to its expert, Ms. McMahon. *Id.* This is shown in the annotated version of Figure 2 from page 38 of the Petition, which are reproduced in the Patent

Owner response. We reproduce these version of Figure 2, as annotated by the Petitioner below.



*Moss, Fig. 2*  
*Bodice marked by square*  
*Neck hole marked by circle*

Reproduced above are two annotated versions of Figure 2 of Moss, as annotated by Petitioner, to show the area Petitioner contends are the “wing portions” of Moss (on the left-hand figure) and the areas that Petitioner contends are the bodice portion and neck hole (on the right-hand figure). *Id.* at 33 (reproduced from Pet. 38).

However, Patent Owner notes that Ms. McMahan purported to adopt the Examiner’s analysis of Moss, which as we noted did not identify regions 30a and 30b as the wing portions, but rather the internal “pocket 32.” *Id.* Patent Owner notes the problem with this discrepancy between the competing analyses in the Petition is that Moss’s pockets 32 are “formed by a piece of fabric that is sewn or otherwise attached to the internal surface of

the fabric of the suit.” *Id.* (citing Ex. 1004, 4:25–26). Thus, “the pockets 32 of Moss are smaller than, and completely within the footprint of, the larger regions 30a and 30b, which the Examiner equated with the ‘bodice portion.’” *Id.* at 34 (citing Ex. 2015 ¶ 70). Therefore, Patent Owner argues that they cannot “extend laterally from the bodice portion,” as required by the claims. *Id.*

Petitioner responds that the combination of Parks and Moss discloses a garment having wing portions that extend laterally from the bodice portion because Parks alone discloses this limitation. Reply 21. Petitioner further argues that Patent Owner’s arguments will “require the Board to accept a very different interpretation of the prior art than what Patent Owner conceded to during the prosecution.” *Id.* at 21–22.

Here, we adopt our finding from above that Parks describes this limitation. *See supra* II.F.1.a.iv. We do note that we agree with Patent Owner that Petitioner’s mapping for Moss in the Petition of the alleged “wing portions” is inconsistent with the Examiner’s mapping, and also inconsistent with Moss’s own description of these structures. Moss explains that suit 10 of Figure 2 has two portions—upper torso surrounding shell portion 12 and lower leg surrounding portion 14. Ex. 1004, 4:9–10. Moss explains that “[t]he shell portion does not have any separate arms and the baby’s arms are enclosed within the shell portion 12 and are generally free to move, except for the restraining members described later.” *Id.* at 4:19–21. Moss describes that “upper portion 12 of the suit thus has two regions 30a, 30b on either side of the vertical centreline of the suit.” *Id.* at 4:22–23. Moss further describes that “[t]he inside of each region 30a, 30b is provided with a restraining member 32, which in this embodiment is a pocket.” *Id.* at

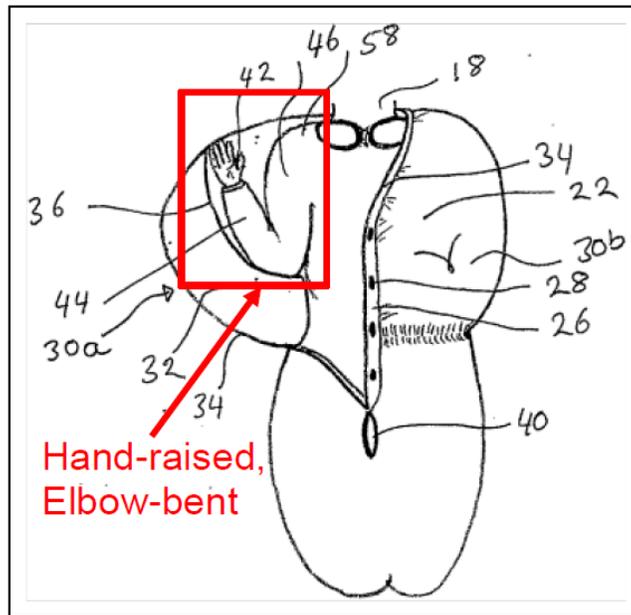
4:23–24. Moss explains “[t]his pocket 32 is formed by a piece of fabric that is sewn or otherwise attached to the internal surface of the suit.” *Id.* at 4:25–26. Thus, we agree with Patent Owner that, properly understood, the portions of Moss which align with the wing portions of the claimed invention and the pockets of Parks are not regions 30a, 30b—as the Petition alleges, but pockets 32—as the Examiner found. *See* Ex. 1002, 149; Ex. 2015 ¶¶ 35, 70. Instead, as Patent Owner explains and we agree, regions 30a, 30b are all part of the shell portion—i.e., bodice—of Moss. Thus, we agree with Patent Owner that Petitioner has failed to show that Moss teaches or suggests “wing portions” that extend laterally from the bodice portion.

However, as we found above, we determine that Parks adequately accounts for this limitation in the combination.

b) Limitations [1G] and [2G]

We agree with Patent Owner that Petitioner has failed to show that the combination of Parks and Moss teach or suggest “wing portions” that “retain an infant’s arm in a hand-raised and elbow-bent position” (limitation [1G]). As we found above, Parks teaches that the arms of the infant are free to move, and therefore, it does not teach “retain[ing]” the infant’s arms in a particular position. *See supra* II.F.1.a.vii.b. We agree with Patent Owner that Moss does not disclose this limitation either. PO Resp. 34–36. If we accept Petitioner’s contention that the “wing portions” are regions 30a and 30b (*see* Pet. 38 (“And because the wing portions, regions 30a and 30b in Moss”)), Moss teaches that this region (what Moss terms the “shell portion”) “substantially encloses the torso and arms of the baby and in which the arms of the baby are generally free to move.” Ex. 1004, 8:2–3.

Petitioner contends that in Figure 4 of Moss “regions 30a and 30b in Moss are shown completely surrounding and retaining an infant’s arm in a hand-raised elbow bent position.” Pet. 38–39. Specifically, Petitioner provides an annotated version of Figure 4, which we reproduce below, as teaching this.



*Moss, Fig. 4.*

Figure 4 of Moss, as annotated by Petitioner, with the annotations “Hand-raised elbow bent.” Pet. 39.

However, as Patent Owner persuasively explains, Figure 4 shows the infant “partially in the garment.” PO Resp. 35. In this this partially open position, the hands are simply not retained as recited in the claims. Ex. 2015 ¶¶ 72–74. As Patent Owner further explains, when the suit is closed (as shown in Figure 5, reproduced below), “Moss tells us that the baby’s hand 42 would be in the ‘triangular end near the junction of the waist and aperture 20’ (Moss, 5:13–17), that is waist level about where ‘52’ is in Figure 5.” PO Resp. 35–36.

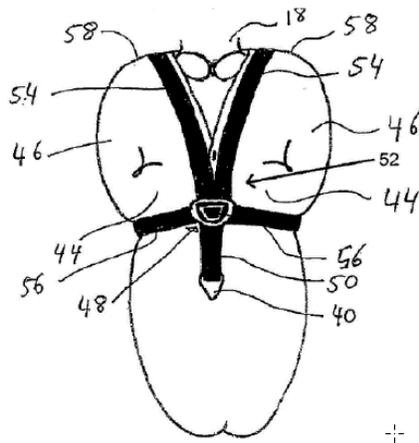


Figure 5

Figure 5 of Moss showing the suit closed is reproduced above.

Thus, Petitioner’s contention that Moss teaches the “hand-raised, elbow-bent” requirement is based on an incomplete or incorrect explanation of what Figure 4 of Moss teaches. We agree with Patent Owner that when we consider the entirety of Moss’s disclosure, Petitioner’s contentions that Moss discloses the “hand-raised, elbow-bent position” is not correct.

Ex. 2015 ¶¶ 72–74.

Petitioner contends that it relies on the combined teachings Moss and Parks, but this conclusion seems based on incorrect understandings of both what the claim requires and what the references disclose. *See* Pet. 41–42. In support of this conclusion Petitioner repeats its contention that Parks alone discloses this limitation, which we rejected above. *See supra* II.F.1.a.vii.a Petitioner then points to the disclosure of Moss’s pockets 32, which is different than what it previously identified as the “wing portion.” *See* Pet. 42; *compare* Pet. 42 *with* Pet. 38. However, Petitioner provides no explanation connecting how pockets 32 relate to its contention that regions 30a and 30b as modified by Parks teaches this limitation. *See* Pet. 40–41. Instead, Petitioner states “[a] person having ordinary skill in the art would

understand that the disclosures of the two references are substantially equivalent, teaching arm pockets that are large enough to comfortably accommodate the infant's arm and hand, while still serving the purpose of restraining the infant." *Id.* at 42. Given the number of inconsistent and incorrect characterizations of Moss that we have documented, we find this statement insufficient to show that the combination of Parks and Moss account for this limitation. *See supra* II.H.1.b.ii.a. Moreover, the significant evidence of commercial success and industry praise further supports our finding that this limitation would not have been rendered obvious by the combination of Parks and Moss. *See supra* II.G.

As we explained above with respect to Parks alone, limitation [2G] differs from limitation [1G] in not requiring a particular hand position. *See supra* II.F.1.a.vii.b. Thus, we find that Petitioner has shown sufficiently that the combination of Parks and Moss accounts for "wing portions" that "retain an infant's arm" as claimed in limitation [2G]. *See id.*

c) Limitations [1F] and [2F]

Finally, we are not persuaded by Patent Owner's arguments regarding limitations [1F] and [2F] "wing portions" that have "a wing tip at an uppermost portion of each of the wing portions that is positioned above a level of the neck hole of said suit." We agree with Patent Owner that what Petitioner has identified as the recited "wing tips" in Moss have nothing to do with any "wing portions" that Moss may have or what the Examiner previously identified as "wing tips." *See* PO Resp. 37–38. We agree with Patent Owner that they are simply the shoulder region of the suit. *See id.* at 38. However, Petitioner relies on the combination of Parks and Moss for this limitation, not Moss alone. As we found above, Parks accounts for this

limitation. *See supra* II.F.1.vi. Thus, we find that Petitioner has adequately accounted for this limitation.

c. Conclusion as to Obviousness of Claims 1 and 2

We determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks and Moss renders claim 1, and has shown by a preponderance of the evidence that claim 2 is obvious. We determine that Petitioner has failed to show that the combination of Parks and Moss accounts for limitations [1G] of claim 1. This conclusion of non-obviousness of claim 1 is further reinforced by the strong evidence of commercial success and industry praise offered by Patent Owner. *See supra* II.G. We also determine that Petitioner has shown by a preponderance of the evidence that claim 2 would have been obvious over the combination of Parks and Moss.

2. *Claims 3–6 and 8–16*

Claims 3–6 and 12–16 depend alternatively from claims 1 or 2. Claims 8–11 recite method of use claims for using the device of claims 1 or 2. Petitioner identifies where Parks discloses the limitations of these dependent claims by providing an analysis of each limitation and a comparison of the limitations to the disclosure of Parks. *See* Pet. 49–56, 63–64, 67–69. Petitioner also identifies where Moss discloses the limitations of claims 3–6 and 12–16. Although Patent Owner generally argues that the limitations of the dependent claims are not disclosed, it only specifically addresses claims 3 and 16. PO Resp. 28–29, 42 (referring back to pages 28–29).

a. Claim 3

Claim 3 depends from claims 1 or 2 and recites “wherein a width of the suit between the wing portions is greater than the width of the bodice portion.” Ex. 1001, 12:1–3. We addressed Patent Owner’s arguments above and found above that Parks adequately accounted for this limitation. *See supra* II.F.2.a.

b. Claim 16

Claim 16 depends from claims 1 or 2 and recites that “the suit acts as a fitted garment swaddling the infant in a single layer of material.” Ex. 1001, 12:44–46. Petitioner submits that “[t]he examiner found that Moss teaches that the garment of its design is ‘made of a single layer of material (page 4, lines 7–8) and is capable of acting as a fitted garment to swaddle an infant’ because the suit is designed so that ‘the fabric is pulled close to the baby’s body and . . . resists movement of the baby’s arms away from its body (page 5, lines 7–9).” Pet. 61 (citing Ex. 1002, 154). Petitioner contends that this finding is supported by Moss, which teaches that the “suit 10 is made out of one or more pieces of suitable fabric,” which as the examiner found “is pulled close to the baby’s body” thus forming a fitted garment. *See* Pet. 61; Ex. 1004, 4:7–8, 5:7–9.

Patent Owner only argues that Parks does not teach this limitation. *See* PO Resp. 28–29, 42. However, Petitioner also relies on Moss as accounting for this limitation in the combination. *See* Pet. 61. We agree with Petitioner that Moss adequately accounts for this limitation. Accordingly, we find that Petitioner has shown by a preponderance of the evidence that claim 16 would have been obvious over the combination of Parks and Moss.

I. OBVIOUSNESS OVER PARKS, MOSS, AND GREIERT:  
CLAIMS 1–6 AND 8–16

Petitioner challenges claims 1–6 and 8–16 of the ’711 patent under 35 U.S.C. § 103(a) as unpatentable over Parks, Moss, and Greiert. Pet. 45–46. Petitioner relies on the prior analysis of the combination of Parks and Moss and further contends that Greiert teaches the final limitation of claims 1 and 2, which claim a suit “tapered in at a waist line below each wing portion and then widening whereby a narrowest region of said suit is at said waist line.” *Id.* at 46. Petitioner submits that Greiert’s reasons for having a wide bottom, thereby placing the narrowest region at the waist line of the suit, also support the combination of Parks and Moss. *Id.* at 45 (citing Ex. 1016 ¶¶ 153–154). Petitioner argues that Greiert teaches that the wide bottom facilitates changing the infant’s diaper without taking the garment off entirely, Ex. 1005, 1:14–17, 2:68–3:4, which Parks also teaches, Ex. 1003, 3:69–4:3. *Id.* at 46. Petitioner asserts that the teachings of Greiert are thus “directly applicable to the garment of Parks, and it would have been obvious to modify Parks with the combined teachings of Moss and Greiert to arrive at the claimed invention.” *Id.*

Petitioner does not rely on Greiert to cure the deficiencies we identified above with respect to the combination of Parks and Moss for claim 1. *See* Pet. 45–46. Patent Owner does not raise any further arguments with regard to this ground beyond those addressed with respect to the combination of Parks and Moss. *See* PO Resp. 41–42. Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, and Greiert renders obvious claim 1, and that Petitioner *has shown* by a preponderance of the evidence

that claims 2–6 and 8–16 of the ’711 patent would have been obvious over the combination of Parks, Moss, and Greiert.

J. OBVIOUSNESS OVER PARKS, MOSS, AND THE KNOWLEDGE OF PERSON OF ORDINARY SKILL IN THE ART: CLAIMS 1–6 AND 8–16

Petitioner challenges claims 1–6 and 8–16 of the ’711 patent under 35 U.S.C. § 103(a) as unpatentable over Parks, Moss, and the common sense of a person of ordinary skill in the art. Pet. 47–49. Petitioner contends that any limitations not present in Parks and Moss are taught by common sense the common sense of a person of ordinary skill in the art.<sup>8</sup> *Id.* Petitioner notes that “[t]he available designs for infant garments are limited by the fact that they must fit an infant.” *Id.* at 47. In particular, Petitioner notes that “[c]ommon sense provides numerous reasons why an ordinarily skilled artisan would place the narrowest part of the swaddling suit at the waist.” *Id.* at 48. Moreover, “it was well known in the art before the ’711 Patent that many infants like to sleep in a hands-up position.” *Id.* (citing Ex. 1010, 1:41–43). Finally, Petitioner contends that the location of the wing portion being “above a level of the neck hole” would have been obvious as a matter of common sense. *Id.* at 49.

This ground suffers from deficiency with respect to limitations [1E] and [2E] discussed above with respect to Parks and Moss. *See supra* II.H.b.ii.a. Petitioner does not remedy those deficiencies with any reasoning based on common sense. *See* Pet. 47–49.

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<sup>8</sup> We only address specific limitations actually raised and analyzed in the Petition under this ground.

Petitioner does attempt to remedy the deficiency identified above with respect to limitation [1G]—“wing portions” that “retain an infant’s arm in the hand-raised, elbow-bent position.” *Id.* at 48–49. Petitioner cites Als<sup>9</sup> to support its assertion that it was well known before the ’711 patent “that many infants like to sleep in a hands-up position.” *Id.* at 48 (citing Ex. 1010, 1:41–43). Petitioner submits that “[a] person having ordinary skill in the art would find it obvious to design a garment that could accommodate the preferred hands-up sleeping position of the infant, while still restricting the movements of the infant’s arms to inhibit their startle reflex.” *Id.* at 48–49 (citing Ex. 1010, 1:41–43). Petitioner argues that “[w]ithin the scope of this guidance, there are a finite number of ways to design sleeves, pockets or wings to accommodate an infant’s arms in a hands-up position, while still restricting their movement, the particular choice of which is arbitrary.” *Id.* at 49 (citing Ex. 1016 ¶¶ 122–125, 178); Reply 24.

Patent Owner argues that common sense cannot be used to meet this limitation. PO Resp. 39–41. Patent Owner asserts that Als does not disclose that infants like to sleep in a hands-up position, and it does not teach an infant’s hands in wing portions that extend laterally from the bodice portion as required by the claims. *Id.* at 39–40. Patent Owner contends that “Petitioner’s argument assumes that one of skill in the art would have known to have a garment with wings that would restrict the startle reflex,” and that this “assumption is not supported by evidence because Petitioner has not shown that the claimed way the hands are retained in the wings was known.” Patent Owner asserts that Petitioner’s expert fails to provide evidence that a

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<sup>9</sup> US Patent No. 4,611,353, iss. Sept. 16, 1986 (Ex. 1010, “Als”).

skilled artisan would “include this limitation to retain the infant’s arms in the claimed position.” *Id.* at 41.

We agree with Petitioner that it has shown some evidence that it was generally known in the art that the hands-raised, elbow-bent was an available hand position. *See* Ex. 1010, 1:41–43. But we find this evidence to be weak, at best. When weighed against the compelling evidence of objective indicia, in particular, the evidence of commercial success and industry praise, we find that Petitioner has failed to meet its burden of showing that it would have been obvious to arrive at the claimed invention of claim 1.

Patent Owner does not raise any further arguments with regard to this ground beyond those addressed with respect to the combination of Parks and Moss. *See* PO Resp. 41–42. Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, and the knowledge of a person of ordinary skill in the art renders obvious claim 1, and that Petitioner *has shown* by a preponderance of the evidence that claims 2–6 and 8–16 of the ’711 patent would have been obvious over the combination of Parks, Moss, and Common Sense.

**K. OBVIOUSNESS BASED ON PARKS, MOSS, AND BEIRING AND PARKS, MOSS, BEIRING, AND THE KNOWLEDGE OF A PERSON OF ORDINARY SKILL: CLAIMS 7, 17, AND 18**

Claim 7 depends from claims 1 or 2, claim 17 depends from claim 1, and claim 18 depends from claim 17. With respect to Parks, Moss, and Beiring and Parks, Moss, Beiring and the knowledge of a person of ordinary skill in the art, we have reviewed Petitioner’s evidence and explanation why Parks, Moss, and Beiring and Parks, Moss, Beiring, and Common Sense,

renders claims 7, 17, and 18 obvious. *See* Pet. 65–66. Patent Owner does not raise any further arguments with regard to this ground beyond those addressed with respect to the combination of Parks and Moss or Parks, Moss, and Common Sense. *See* PO Resp. 41–42. Petitioner does not contend that Beiring corrects the deficiencies identified above with respect to claim 1. *See supra* II.H.1 & II.J. Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, Beiring and Parks, Moss, Beiring, and Common Sense renders obvious claims 17 and 18, and that Petitioner *has shown* by a preponderance of the evidence that claim 7 of the '711 patent would have been obvious over the combinations of Parks, Moss, Beiring and Parks, Moss, Beiring, and Common Sense.

### III. CONCLUSION<sup>10</sup>

In summary,

<b>Claim(s)</b>	<b>35 U.S.C. §</b>	<b>Reference(s)</b>	<b>Claim(s) Shown Unpatentable</b>	<b>Claim(s) Not Shown Unpatentable</b>
1–18	102	Parks	2–15	1, 16, 17, 18

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<sup>10</sup> Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent

<b>Claim(s)</b>	<b>35 U.S.C. §</b>	<b>Reference(s)</b>	<b>Claim(s) Shown Unpatentable</b>	<b>Claim(s) Not Shown Unpatentable</b>
1-6, 8-16	103(a)	Parks, Moss	2-6, 8-16	1
1-6, 8-16	103(a)	Parks, Moss, Greiert	2-6, 8-16	1
1-6, 8-16	103(a)	Parks, Moss, POSITA	2-6, 8-16	1
7, 17, 18	103(a)	Parks, Moss, Beiring	7	17, 18
7, 17, 18	103(a)	Parks, Moss, Beiring, POSITA	7	17, 18
<b>Overall Outcome</b>			2-16	1, 17, 18

#### IV. ORDER

For the reasons given, it is:

ORDERED that Petitioner *has shown* based on a preponderance of evidence that claims 2-16 of U.S. Patent No. 9,179,711 B2 are unpatentable;

ORDERED that Petitioner *has not shown* based on a preponderance of evidence that claims 1, 17, and 18 of U.S. Patent No. 9,179,711 B2 are unpatentable and

FURTHER ORDERED because this is a final written decision, the parties to this proceeding seeking judicial review of our Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

IPR2020-01234  
Patent 9,179,711 B2

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