## UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

KOLCRAFT ENTERPRISES, INC.,	)	
Plaintiff,	)	No. 09 C 03339
v.	)	Lalas Elassal E Chassa
CHICCO USA, INC.,	)	Judge Edmond E. Chang
Defendant.	)	

#### MEMORANDUM OPINION AND ORDER

Kolcraft Enterprises, Inc. manufactures and sells a variety of baby products, including play gyms (comprised of arches from which toys dangle) and play yards (basically, an enclosed play pen). Kolcraft owns patent number 7,376,993 (the '993 patent), which covers a method for using a play gym with a mat, a bassinet (a cradle where a baby sleeps), a play yard, or any combination of the three products. Kolcraft alleges that Chicco USA, Inc. (which does business as Artsana USA, Inc.) has infringed on the patent. The parties have briefed the construction of the patent's disputed claims, and the Court held an in-court claim-construction hearing where the parties presented argument. The Court's construction of those claim terms is set forth below.

 $<sup>^{1}\</sup>mbox{The Court}$  has subject matter jurisdiction over this case under 28 U.S.C. §§ 1331, 1338.

#### I. Background

### A. Procedural History

This case, which has a long-winded history, involves two competitors in the baby-products industry. R. 1, Compl. ¶¶ 2, 5.² Kolcraft owns the '993 patent, which was issued in May 2008 and covers "play gyms and methods of operating the same." R. 147-1, Joint App'x at JA-000001, '993 Patent. The '993 patent originally consisted of 31 claims, including apparatus claims 1-27 and method claims 28-31. *Id.* In June 2009, Kolcraft sued Artsana for making products that allegedly infringed the '993 patent, including "at least" apparatus claims 1-12 and 18-27. Compl. ¶ 9.³ (Because the defense refers to Chicco as Artsana, the Court will do so as well.) Upon learning of the suit, Artsana filed a Request for Reexamination with the Patent and Trademark Office, raising challenges to all 31 claims of the '993 patent. R. 46. In December 2009, this case was put on hold pending the patent reexamination. R. 57, 12/10/09 Minute Entry.

The PTO proceedings continued throughout 2010 and 2011, R. 77, 79, 81, 83, and even proceeded beyond then. In February 2010, the PTO rejected claims 1-12 and 18-27, which were the claims that Kolcraft asserted in its Complaint. R. 87, Def.'s Resp. to Pl.'s Mot. to Lift Stay ¶ 7. At the PTO, Kolcraft amended some claims and added claims 32-68. *Id.* ¶ 8. In December 2010, the PTO confirmed the patentability of claims 28-31 and deemed some of the new and amended claims

<sup>&</sup>lt;sup>2</sup>Citations to the record are noted as "R." followed by the docket number and the page or paragraph number.

<sup>&</sup>lt;sup>3</sup>Kolcraft voluntarily dismissed another defendant, Graco Children's Products, Inc., in August 2009. R. 25-26.

patentable, while rejecting others. *Id.* ¶ 17. After additional challenges by the parties, the PTO issued another decision in November 2011 again confirming claims 28-31, and deeming claims 1-27, 32, 34, 37-50, 52-60, and 63-67 patentable. *Id.* ¶ 22; R. 84-1, Pl.'s Exh. 1, 11/2/11 PTO Action Closing Prosecution. In March 2012, even though the PTO had not yet issued a reexamination certificate or an appeal notice (meaning that the PTO proceedings were not officially complete), the Court lifted the stay because it had the benefit of the PTO's reexamination, and because waiting until the end of the appeals process "will likely require a years-long additional delay." R. 96, 3/7/12 Minute Entry. With that, the case proceeded and discovery began. *Id.* 

In April 2012, Kolcraft issued its initial infringement contentions, alleging that in addition to the claims originally asserted in its Complaint, Artsana had also infringed claims 28-31, 43-49, and 68 of the '993 patent. R. 112-2, Pl.'s Exh. B, 4/3/12 Infringement Contentions ¶ a. (Remember that Kolcraft originally asserted infringement of "at least" claims 1-12 and 18-27. Compl. ¶ 9.) Artsana then moved to dismiss the action for lack of subject matter jurisdiction, arguing that claims 43-49 and 68 were not yet part of the '993 patent because the PTO had not yet issued a reexamination certificate that officially incorporated these claims into the patent. R. 127, Def.'s Mot. to Dismiss Br. The Court denied Artsana's motion, but clarified that only claims 28-31, which were originally a part of the '993 patent and were later confirmed by the PTO, could be litigated at this time. R. 142, 5/31/12 Minute Entry.

In the meantime, Artsana had appealed the PTO's reexamination and was awaiting a decision from the Board of Patent Appeals.<sup>4</sup> R. 144, 9/19/12 Minute Entry.

The parties then began the claim-construction process for claims 28-31. After the parties briefed the issue, the Court held a *Markman* hearing on February 19, 2013, R. 163, and accepted additional post-hearing submissions, R. 166-67. In December 2015, the Patent Trial and Appeal Board issued a new decision on several claims, and affirmed the patentability of claims 28-31. R. 206, Pl.'s Notice of Decision; R. 206-1, Pl.'s Exh. 1, 12/7/15 PTAB Decision. Artsana then filed a request for rehearing of this PTAB decision. R. 208. Recently, in August 2016, the PTAB "considered the Original Decision [from December 2015] in light of the Request for Rehearing, and [] elaborated on certain aspects of it," but "decline[d] to modify the Original Decision in any respect." R. 214-1, 8/8/16 PTAB Decision. So the PTAB again confirmed the patentability of claims 28-31 of the '993 patent. *Id*.

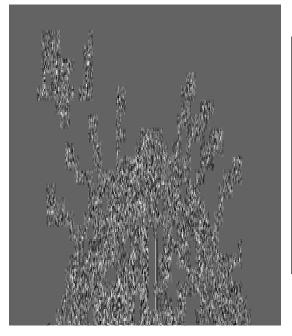
#### B. The '993 Patent

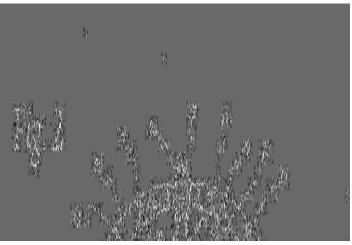
The '993 patent involves play gyms, play yards, bassinets, and mats. See generally '993 Patent. A play gym is a popular baby product that has "flexible arches for suspending objects such as toys." '993 Patent col. 1 ll. 53-57. The arches cross over each other and form a dome-like shape. Id. When the play gym is placed over a baby, "the suspended objects tend to bounce and move in response to vibrations ... caused by the child batting his/her hands and/or feet at the objects." Id. col. 1 ll. 57-62. (A drawing of a play gym appears on the next page.)

<sup>&</sup>lt;sup>4</sup>The Board of Patent Appeals was the precursor to the Patent Trial and Appeal Board, the latter of which was formed as part of the America Invents Act of 2012. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 7(a)(1), 125 Stat. 284 (2011).

The '993 patent explains that a play gym can be used in combination with other baby products, such as a play yard, bassinet, or mat. A play yard is an enclosed playpen that "typically include[s] a frame, a fabric supported by the frame, and removable floor board or mat." *Id.* col. 1 ll. 18-20. A portable bassinet, which is a cradle where an infant sleeps, can also be placed inside the top of the play yard. *Id.* col. 1 ll. 28-39. The bassinet typically has the same length and width as the play yard, but it is shallower than the yard, so there is empty space between the bottom of the bassinet and the bottom of the play yard. *Id.* The floor mat of the play yard can also be used inside the bassinet, or it can be removed and used separately from the play yard or the bassinet. *Id.* col. 1 ll. 46-51.

The play gym can be used any number of ways with the play yard, bassinet, floor mat, or with a combination of the three products. *Id.* col. 1 ll. 46-62. The figures below show some of the combinations:





'993 Patent at Sheet 1-2. Figure 1, for example, shows the play gym placed over a bassinet, while the bassinet is sitting inside the play yard. Id. col. 1 ll. 66-67 ("FIG. 1 is a perspective view of an example play yard, an example bassinet, and an example play gym."). In this example, the floor mat serves as the base of the bassinet. (The bottom of the bassinet is labeled 16,5 which is the number representing the floor mat.) Although not shown in Figure 1, the play gym can also be used with the play yard (whose base is comprised of the mat), but without the bassinet. E.g., col. 1 ll. 44-46 (explaining that the play gym can be used "above any or all of the bassinet 12, the play yard 14, and the mat 16" (emphasis added)); id. col. 7 ll. 1-2 ("In operation, a user wishing to use the play gym 10 may first erect a bassinet 12 and/or a play yard 14." (emphasis added)). Similarly, although not shown in the figures, the play gym can also be used with only the bassinet (whose base is comprised of the mat), but without the play yard. Id. Figure 2 shows a different combination—the play gym is used with only the floor mat, and is completely outside of the play yard/bassinet setup. Id. col. 2 ll. 1-3 ("FIG. 2 is a perspective view of the example play gym of FIG. 1 when removed from the play yard and bassinet, and coupled to a floor mat of the play yard and bassinet.").

When the play gym is in use, it is secured in an arched position to the play yard, bassinet, or the mat with some type of "connector." *Id.* col. 5 ll. 39-43 (noting "connectors" of some kind on the bassinet or the play yard). The force of the connection keeps the play gym's legs bent into the arched position shown above in

<sup>&</sup>lt;sup>5</sup>The numbers match the item described in the specification with the corresponding item in the drawings.

Figures 1 and 2; otherwise, without some force applied, the legs will spring back into a straight position shown here in Figure 3:

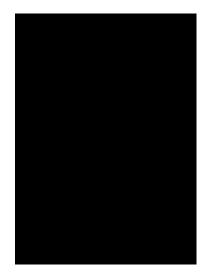


See id. col. 3 ll. 61-65 ("[T]he legs 22 of the play gym 12 are flexible such that they can be bent into the arched position shown in FIGS. 1 and 2, but will spring back to the generally planar position shown in FIG. 3 when released from the mat 16, the bassinet 12, and/or the play yard 14."); id. col. 5 ll. 15-20 ("As shown in FIG. 1 ... the legs must be bent into an accurate shape thereby causing the play gym to form a pair of arches crossing one another at the hub 20 ... ."); id. col. 6 ll. 56-58 ("When the legs 22 are released, they will attempt to move from their bent position toward a straight position ... ."). To secure the play gym in this arched position, a user can attach it to the bassinet or the play yard "in any number of ways." Id. col. 5 ll. 4-9. For example, the play gym's legs may be inserted into fabric pockets in the corners of the bassinet or the play yard; the legs try to push out but the pockets keep them in place. Id. col. 5 ll. 26-38. In other words, "[t]hese forces act to ... bias the free ends of the legs 22 into tight engagement with the sides of the pockets 50 (and, thus, with the frame of the bassinet 12 and/or play yard 14) to thereby securely hold

the play gym 10 above the bassinet 12 and/or the play yard 14." *Id.* col. 5 ll. 32-38. But if the bassinet or play yard lacks pockets or other connectors, the play gym can instead be directly "coupled to the corners of a rectangular mat via snaps or the like." *Id.* col. 1 ll. 52-56; *see also id.* col. 5 ll. 43-47 ("Alternatively, no connectors 50 may be located on the bassinet 12 and/or the play yard 16, and the play gym 10 can instead be coupled to the bassinet 12 and/or the play yard 14 via direct connection to the mat 16."). Another possibility is that the play gym can be wedged into the play yard or bassinet and held there by friction alone, such as by the resistance from the walls of the bassinet or play yard. *Id.* col. 5 ll. 26-38 (explaining that the play gym's legs will be "bias[ed] ... into tight engagement ... with the frame of the bassinet 12 and/or the play yard 14[] to thereby securely hold the play gym 10 above the bassinet 12 and/or the play yard 14").

Finally, when the child is done using the play gym, the caretaker can store the gym by folding the legs into a parallel position. The play gym's legs are attached directly to each other or to a central hub; for example, the legs may be "pivotably coupled to a hub 20 such that they can be pivoted between a stored position wherein the legs 22 are positioned generally parallel to each other as shown in FIG. 4, and an extended position herein the legs 22 extend generally radially outward from the hub 20 as shown in FIG 3." *Id.* col. 4 ll. 5-10. Below, Figure 3 shows the legs in an extended position when they are disconnected from a play yard, bassinet, or mat. And Figure 4 shows the legs in a closed position for storage.





#### C. Claims 28-31

The parties dispute the meaning of Claims 28-31, all of which are process claims. As explained above, these are the only finalized claims that can be litigated at this juncture, because the PTO has not yet issued a reexamination certificate finalizing the other relevant claims. The Court recites Claims 28-31 below, emphasizing the disputed terms in italics. First, Claim 28 describes

#### A method comprising:

securing a play gym at least partially above at least one of a bassinet and a play yard;

removing the play gym from the at least one of the bassinet and the play yard;

securing the play gym to a mat apart from the play gym and the bassinet;

removing the play gym from the mat; and

collapsing the play gym, wherein collapsing the play gym comprises:

pulling a leg of the play gym in a direction away from a hub; and

pivoting the leg into a stored position.

'993 Patent col. 10 ll. 6-18. The remaining claims 29-31 elaborate on the process for collapsing and storing the play gym:

- 29. A method as defined in claim 28 wherein pulling the 20 leg of the play gym comprises pulling the leg of the play gym against a spring force.
- 30. A method as defined in claim 28 further comprising moving the leg of the play gym toward the hub to secure the leg in the stored position.
- 31. A method as defined in claim 30 wherein moving the leg toward the hub comprises moving the leg toward the hub under the influence of a spring force.

Id. col. 10 ll. 19-27.

## II. Legal Standard

To construe claim language in a patent, courts "first look to, and primarily rely on[] the intrinsic evidence," which "includ[es] the claims themselves, the specification, and the prosecution history of the patent." Sunovion Pharms., Inc. v. Teva Pharms. USA, Inc., 731 F.3d 1271, 1276 (Fed. Cir. 2013) (citations omitted). When analyzing the intrinsic evidence, the Court begins with the language of the claims themselves, applying a "heavy presumption that claim terms take on their ordinary meaning as viewed by one of ordinary skill in the art." Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed. Cir. 2003) (citations and quotations omitted). A claim term takes on its ordinary meaning unless the patentee demonstrates an intent to deviate from that meaning, such as by "act[ing] as his own lexicographer," or by "disavow[ing] the full scope of a claim term either in the

specification or during prosecution." Starhome GmbH v. AT&T Mobility LLC, 743 F.3d 849, 856 (Fed. Cir. 2014) (citations and quotations omitted).

"In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996); see also Sunovion Pharms., 731 F.3d at 1276 (noting that the intrinsic evidence is "usually dispositive" (citations omitted)). In such cases, "it is improper to rely on extrinsic evidence," which includes dictionary definitions, expert testimony, inventor testimony, and other "evidence that is external to the patent and file history." Vitronics, 90 F.3d at 1583-84 (citations omitted). Extrinsic evidence, however, may be considered "if needed to assist in determining the meaning or scope of technical terms in the claims." Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1216 (Fed. Cir. 1995) (citation omitted). In other words, it may be consulted to ensure that a court's construction of a claim "is not inconsistent with clearly expressed, plainly apposite and widely held understandings in the pertinent technical field." Plant Genetic Sys., N.V. v. DeKalb Genetics Corp., 315 F.3d 1335, 1346 (Fed. Cir. 2003) (citation and quotations omitted). Extrinsic evidence in general, however, is considered "less reliable than the patent and its prosecution history in determining how to read claim terms," SkinMedica, Inc. v. Histogen Inc., 727 F.3d 1187, 1195 (Fed. Cir. 2013) (citation and quotations omitted), and "may not be used to vary or contradict the claim language" and specification, Vitronics, 90 F.3d at 1584 (citation omitted).

### III. Analysis

# A. Securing a play gym at least partially above at least one of a bassinet and a play yard

Artsana argues that the first clause in Claim 28—"securing a play gym at least partially above at least one of a bassinet and a play yard"—is indefinite and overly broad because it does not explain how, and to what, the play gym is secured. R. 146, Def.'s Br. at 10-13. In Artsana's view, the claim language potentially covers hanging the play gym from a ceiling or cantilevering it from a fixture other than the play yard, bassinet, or mat; in both cases, the play gym could technically be "partially above" the bassinet and/or the play yard. *Id*.6

In order to be sufficiently definite, a patent must set forth "one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112(b). The purpose of this requirement is to ensure that the public is on notice as to what is covered by the patent, which in turn enables competitors to avoid infringement. *Halliburton Energy Servs. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008) ("[T]he patent statute requires that the scope of the claims be sufficiently definite to inform the

<sup>&</sup>lt;sup>6</sup>The parties disagree about the level of experience of a person of ordinary skill in the art. Artsana defines the ordinary artisan as "someone with two (2) years of formal education in the mechanical arts or two (2) years of industry experience in the baby gear field." Def.'s Br. at 8. But Kolcraft defines the individual as "someone with a B.S. degree in mechanical engineering or industrial design, and two to three years' experience in the juvenile products industry." R. 150, Pl.'s Resp. at 9 n.2.

The Court does not choose one definition over another, however, because the parties have not explained how they arrived at these particular definitions. Nor do the parties argue that any differences in the ordinary artisan's skill level would impact the claim-construction outcome. So whether the Court adopted Kolcraft or Artsana's definition, the analysis would remain the same.

public of the bounds of the protected invention, i.e., what subject matter is covered by the exclusive rights of the patent.") Because a claim's definiteness affects a court's ability to construe a claim, it sometimes makes sense to address an indefiniteness challenge, which is a legal question, during claim construction. E.g., 3M Innovative Props. Co. v. Tredegar Corp., 725 F.3d 1315, 1333 (Fed. Cir. 2013) ("In order to be indefinite, reasonable efforts at claim construction must result in a definition that does not provide sufficient particularity or clarity to inform a skilled artisan of the bounds of the claim." (citation omitted)); Praxair, Inc. v. ATMI, Inc., 543 F.3d 1306, 1319 (Fed. Cir. 2008) ("Indefiniteness is a matter of claim construction, and the same principles that generally govern claim construction are applicable to determining whether allegedly indefinite claim language is subject to construction." (citation omitted)). Consistent with the statutory presumption of patent validity, the patent's challenger must show indefiniteness by clear and convincing evidence. Wellman, Inc. v. Eastman Chem. Co., 642 F.3d 1355, 1366 (Fed. Cir. 2011) (citations omitted). Specifically, the challenger must show that the patent's claims fail, when "viewed in light of the specification and prosecution history, [to] inform those skilled in the art about the scope of the invention with reasonable certainty." Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2129 (2014).

Here, the first clause of Claim 28 is sufficiently definite, because the claim and the specification make it reasonably certain that the play gym must be secured to the play yard, bassinet, or the mat (taking care of Artsana's question, to what is

the play gym secured?), and the term "secured" also has a reasonably certain meaning (taking care of Artsana's question, *how* is the play gym secured?), as explained below.

The specification shows that one way of practicing the claim is by directly attaching the play gym to the play yard, bassinet, or floor mat by using "connectors" of some kind. '993 Patent col. 7 ll. 5-9 ("The user may then secure the play gym 10 at least partially above one or both of the bassinet 12 and the play yard 14 by, for example, inserting the feet 68 of the legs 22 into the connectors 50 of the bassinet 12 and/or play yard 14 or into the connectors of the mat 16."). These connectors can be "implemented in any number of ways," including "fabric pockets 50 which are sewn or otherwise fastened adjacent the corners of the bassinet 12 and/or the play yard 14," id. col. 5 ll. 7-12, or by "snaps" on the mat, id. col. 1 ll. 53-56. The presence of some sort of connection is also supported by the specification's repeated use of the word "coupled." See id. col. 1 ll. 53-56 (play gym "is coupled to the corners of a rectangular mat via snaps or the like"); id. col. 2 ll. 2-3 (play gym is "coupled to a floor mat of the play yard and bassinet"); id. col. 5 ll. 45-47 ("[T]he play gym 10 can instead be coupled to the bassinet 12 and/or the play yard 14 via direct connection to the mat 16."). The term "coupled" requires that the play gym be directly connected to the bassinet, play yard, or mat, and not suspended in mid-air or cantilevered above them. Similarly, Figures 1 and 2, see supra Section I.B, also suggest that Claim 28 does not cover a play gym that is suspended over and not in contact with the mat, bassinet, or play yard. See Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1324 (Fed. Cir. 2002) ("The words used in the claims are interpreted in light of the intrinsic evidence of record, including the written description, the drawings, and the prosecution history, if in evidence." (citations omitted)).

The only other way that the specification demonstrates the securing of the play gym likewise requires that the play gym be in direct contact with the bassinet, play yard, or mat. Specifically, the play gym can be wedged into the play yard or bassinet and held there by friction alone, such as by the resistance from the walls of the bassinet or play yard. Id. col. 5 ll. 26-38 (explaining that the play gym's legs will be "bias[ed] ... into tight engagement ... with the frame of the bassinet 12 and/or the play yard 14[] to thereby securely hold the play gym 10 above the bassinet 12 and/or the play yard 14"). In this scenario, the play gym's legs are held in an arched position by the sides of the play yard or the play mat, and will spring back into a straight position when pulled out of the play yard/bassinet. '993 Patent col. 5 ll. 26-32 ("[A]fter being bent, the legs 22 will seek to return to their original, generally straight condition ... . As a result, when the legs 22 are bent into the arched position ..., each of the ends of the legs 22 will apply a force away from the center of the bassinet 12 and/or the play yard 14 seeking to return the legs 22 into the straight position."); id. col. 6 ll. 56-58 ("When the legs 22 are released, they will attempt to move from their bent position toward a straight position ... ."). Even though the play gym is not attached to another object in this friction-fit option, the play gym is still in *direct contact* with the mat, play yard, or bassinet—otherwise,

its legs return to a straight position, rendering the play gym unusable. See id. So under this construction too, this claim does not cover a cantilevered, suspended, or otherwise hovering play gym.<sup>7</sup>

In sum, Claim 28's plain language and specification both show that "securing a play gym" means that the play gym must be connected to, attached to, or otherwise in direct contact with the play yard, bassinet, or mat, such that the play gym's legs are arched in a fixed position.<sup>8</sup>

But this written-description argument is premised on Artsana's claim-construction argument, which the Court has rejected: the claim does *not* cover a play gym that is hung from the ceiling or cantilevered from a fixture other than the play yard, bassinet, or mat. See supra. As described above, the specification and the claim language are consistent in requiring some sort of physical connection or direct contact. Id. Thus, the claim meets the written-description element because the patent "clearly allow[s] persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." Ariad Pharm., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (citations and quotations omitted). (It is worth noting that the rejection of this written-description argument does not preclude Artsana from making some other written-description invalidity argument at a future stage of the litigation.)

<sup>&</sup>lt;sup>7</sup>Kolcraft's position at the *Markman* hearing was consistent with this claim construction. Kolcraft agreed that the play gym has to be connected in some fashion to the play yard, bassinet, or play mat, and that the claim does not cover a cantilevered or otherwise suspended device. R. 176, 2/19/13 Hr'g Tr. 16:8-12 ("Well, the specification talks about securing [the play gym] by connectors to the play yard, bassinet, or the mat. You could also have it where it is connected, where it is like a friction fit, and it just kind of sits in there with the legs and through friction is maintained."); *id.* 16:20-24 ("[I]f the play gym is secured to the wall and is cantilevered out or from the ceiling, it is not going to infringe that claim ... ."); *id.* 17:17-19 ("I would agree, the cantilever design would not be covered ... .").

<sup>&</sup>lt;sup>8</sup>Artsana also argues that the phrase "securing a play gym at least partially above at least one of a bassinet and a play yard" is invalid for lack of written description under 35 U.S.C. § 112(a). Because the '993 patent's specification does not say that the play gym can be hung from the ceiling or cantilevered from another fixture, so Artsana's argument goes, the first clause of Claim 28—which does not explicitly require the play gym to be *connected* to the play yard, bassinet, or mat—is impermissibly broader than the specification. *See* Def.'s Br. at 13 ("Because claim 28 omits an essential element for 'securing' the play gym, it is broader than the invention described in the '993 Patent and the '993 Patent lacks the required written description pursuant to 35 U.S.C. § 112, first paragraph."); R. 158, Def.'s Reply at 3 (arguing that the "claim overreaches the scope of the ... specification").

# B. Securing the play gym to a mat apart from the play gym and the bassinet

Next, Artsana argues that the third clause of Claim 28, "securing the play gym to a mat apart from the play gym and the bassinet," is nonsensical and renders the whole claim indefinite. That is, "[i]f the play gym is secured to a mat, then by definition, the mat cannot be 'apart' from the play gym." Def.'s Br. at 13. Kolcraft argues that there is an obvious typographical error, and that the claim should say: "securing the play gym to a mat apart from the play gym yard and the bassinet." R. 150, Pl.'s Resp. at 11-14.

The Court agrees with Kolcraft that this clause includes a clear typographical error that, when fixed, renders the term definite. A court can correct a typographical error in a patent "if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims." Novo Indus., L.P. v. Micro Molds Corp., 350 F.3d 1348, 1354 (Fed. Cir. 2003); see also Hoffer v. Microsoft Corp., 405 F.3d 1326, 1331 (Fed. Cir. 2005) ("When a harmless error in a patent is not subject to reasonable debate, it can be corrected by the court, as for other legal documents." (citation omitted)). Here, the error—the use of the term "play gym" instead of "play yard"—is obvious from the face of the patent and is not subject to reasonable debate. The '993 patent repeatedly describes using the play gym in two "modes"—in the first, the play gym is used inside the bassinet and/or the play yard, as is demonstrated in Figure 1. '993 Patent col. 2 ll. 36-39 ("[A]s shown in FIG. 1, the illustrated play gym 10 has a first mode in which it

suspends an object above the mat 16 when the mat is positioned in the bassinet 12 and/or the play yard 14."). In the second mode, the play gym is used "above the mat 16, but not above the play yard 14 or the bassinet 12." *Id.* col. 2 ll. 46-48; *see also id.* col. 6 ll. 33-35 (noting that it may be "desired to use the mat 16 with the play gym 10 *apart from* the bassinet 12 and/or *the play yard* 14" (emphases added)). For example, "the mat 16 [can be] positioned on *another surface* such as the floor of a house." *Id.* col. 2 ll. 43-44 (emphasis added). One part of the specification provides a sensible explanation of the intent of the claim language:

If the user wishes to use the play gym 10 apart from the bassinet 12 and the play yard 14, the user may remove the play gym 10 from the bassinet 12 and/or the play yard 14 .... If the user desires to use the play gym 10 with the mat 16, the user may then remove the mat 16 from the bassinet 12 and/or the play yard 14 and position the mat 16 in a desired location of use. ... The user may then secure the play gym 10 to the floor mat 16 ....

Id. col. 7 ll. 10-24 (emphases added). The figures also show that the claim meant to say "apart from the play yard" instead of "apart from the play gym." Figure 2, see supra Section I.B, shows the play gym used with only the mat, which is separated from the play yard. Id. col. 2 ll. 1-3 ("FIG. 2 is a perspective view of the example play gym of FIG. 1 when removed from the play yard and bassinet, and coupled to a floor mat ... " (emphasis added)); id. col. 2 ll. 31-33 ("Additionally, the play gym 10 is structured to suspend the same or a different object above a mat 16 separate from the bassinet 12 and the play yard 14 as shown in FIG. 2." (emphasis added)). Thus, the patent's context would lead an ordinary artisan to understand that "securing

the play gym to a mat apart from the play gym" should say "securing the play gym to a mat apart from the play *yard*."

In addition, the prosecution history does not suggest a different interpretation of the claims. Artsana argues that the language in Claim 28 is not a typo because the patent examiner rejected a similarly-worded claim in Kolcraft's original patent application and thus found that the prior art had already disclosed the process of "securing the play gym to a mat apart from the *play gym*." R. 158, Def.'s Reply at 7-8. During patent prosecution, the patent examiner wrote the following:

Claims 36 are rejected under 35 U.S.C. 102(b) as being anticipated by 4,188,745 to Harvey et al.

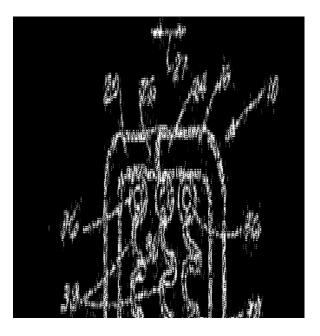
Claim 36, Harvey discloses a method comprising:

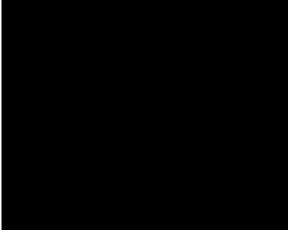
securing a play gym 10 to a play yard (col. 3 lines 14-17); such that the play gym is connected to separate floor mat defined by a base 34 and not in direct contact with a floor mat of the at least one bassinet and the play yard;

removing the play gym from the play yard; removing the floor mat from the play yard; and securing the play gym to the mat defined by the base 34 apart from the play gym.

Joint App'x at JA-000051 (emphasis added). According to Artsana, the patent examiner did not make a typographical error in writing "the play gym ... apart from the play gym," and explicitly found that this was disclosed by the Harvey reference. Def.'s Reply at 8. But a closer look at patent number 4,188,745 (the '745 patent or "the Harvey reference") shows that this patent does not actually disclose "securing the play gym to the mat defined by the base apart from the play gym," whatever

that might mean. The Harvey reference discloses "[a]n infant toy for mounting on an infant seat, car seat, infant bed, stroller, or the like." R. 167, Def.'s Exh. A, '745 Patent at [57]. That toy is made from plastic tubes forming an inverted-U shape; the two legs of the toy then attach to two clamps connected to a base. *Id.* col. 1 ll. 35-47. The toy can be removed from the base and then clamped on the two sides of a car seat or infant seat. *Id.* col. 2 ll. 46-68. The Harvey patent also discloses clamping the toy to the base, placing the base at the bottom of an infant bed, and then placing the child above the flat base so that the child can play with the toy. *Id.* col. 3 ll. 1-18. The portion of the specification cited by the patent examiner further explains that "[w]hile an infant bed is shown, it could be appreciated that the toy 10 as shown in FIG. 4 could also be used in a playpen, stroller, or any other flat surface used for placing the infant thereon." *Id.* col. 3 ll. 14-17. Below, Figure 1 shows the toy attached to the base, and Figure 4 shows the toy and the base placed inside an infant bed:





#### '745 Patent at 2.

But neither the patent examiner nor Artsana explains how the Harvey reference specifically discloses "securing a play gym to a mat apart from the play gym." Instead, the patent examiner focused on Harvey's disclosure of a toy that was "clearly capable of being connected to the separate mat defined by a base 34 and may not come into direct contact with a floor mat of the bassinet or the play yard since the base 34 is capable of being placed on top of a flat surface such as a mattress wherein the infant is placed on top of the flat base 34 while being used in a playpen or bassinet." Joint App'x at JA-000057. In other words, the Harvey reference disclosed attaching the toy to a base other than the base of the play yard or bassinet, which was described in this part of Kolcraft's rejected Claim 36: "securing a play gym 10 to a play yard ... such that the play gym is connected to a separate floor mat defined by a base 34 and not in direct contact with a floor mat of the at least one bassinet and the play yard." Joint App'x at JA-000051 (emphasis added). But the patent examiner did not explain how this equated to "securing the play gym to a mat apart from the play gym." Thus, the patent prosecutor's citation of the Harvey reference does not show that the phrase "securing the play gym to a mat apart from the play gym" was deliberate or had any significance.

Therefore, the context and specification of the '993 patent show that Claim 28 intended to say "securing the play gym to a mat apart from the *play yard* and the bassinet." The Court modifies the claim accordingly, and there are no indefiniteness problems with the new construction. *E.g.*, *Hoffer*, 405 F.3d at 1331 (claim's

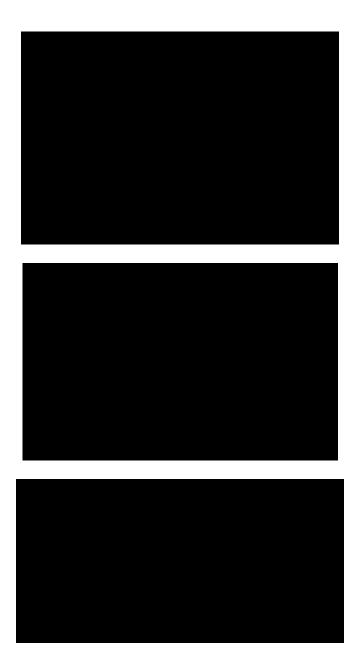
reference to "claim 38" was a typo, where it was "apparent from the face of the patent" that it meant to reference "claim 21"); *Ultimax*, 587 F.3d at 1350 (claim not indefinite for including nonexistent chemical compound C<sub>9</sub>S<sub>3</sub>S<sub>3</sub>Ca(f cl)<sub>2</sub>, when it was obvious that there should be a comma between fluorine and chlorine).

### C. Pivoting the leg into a stored position

Next, Artsana argues that Claim 28's last phrase, "pivoting the leg into a stored position[,]' must be construed to require that the leg be connected to a fixed member, such as a shaft or a pin, and turned or rotated about the fixed member to a stored position." Def.'s Br. at 18. The parties agree that the "stored position" requires the legs to be parallel to each other, as illustrated above in Figure 4. See supra Section I.B; see Pl.'s Resp. at 23 ("[T]he phrase 'stored position' of claim 30 merely requires that the legs are positioned generally parallel to each other ...."); Def.'s Reply at 11 n.4 ("Artsana agrees with Kolcraft that the phrase 'stored position' in claims 28 and 30 should be construed to 'require that the legs are positioned generally parallel to each other ...."). But Kolcraft argues that Artsana's construction is too limited; although Kolcraft does not offer a definition of "pivot," it essentially argues that any sort of movement of the legs satisfies the "pivoting" requirement, as long as the legs are eventually parallel to each other. See Pl.'s Br. at 23.

The Court construes this claim as requiring the leg to be turned or rotated about a fixed point. The term "pivoting" must do some work; otherwise, the claim could have said "moving the leg into a stored position." The Court must place

importance on the terms in the claim, "for it is that language that the patentee chose to use to 'particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention." Interactive Gift Exp., Inc. v. Compuserve Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001) (quoting 35 U.S.C. § 112(b)). The patent specification also supports the interpretation that pivoting must mean more than simply *moving*; it emphasizes the leg's rotation around some fixed point, such as a pin. The specification offers this example of how the play gym is constructed: "[T]he hub 20 includes a plurality of pins 32. Each of the pins 32 is positioned in a respective one of the slots. 30. The pins 32 and slots 30 are dimensioned such that each of the legs 22 may pivot about its respective pin 32 ...." '993 Patent col. 4 ll. 14-18. As a result, the legs often move along a fixed path defined by that central anchoring point. See id. col 4 ll. 19-21 ("The permitted slide distance is defined by the size of the corresponding slot 30 and pin 32."); id. col. 8 ll. 29-32 (claiming an apparatus where the "legs must be moved along its longitudinal axis"). Below, the cross-sectional figures show the action of pivoting around a pin (the pin is highlighted in yellow). The figures portray the legs in the stored (parallel) position (Figure 7), in movement towards the extended position (Figure 8), and in the extended position (Figure 9):



Id. at Sheet 5. In these figures, the leg (part 22) moves from the extended to the closed positions by rotating around a pin (part 32), which is fixed to the central hub. It is true, as Kolcraft points out, that the specification states that "the legs 22 may be coupled to the hub 20 in any number of ways," and not necessarily with a pin. Id. col. 4 ll. 12-13. But the specification's examples and the repeated use of the word "pivot," which must be ascribed its ordinary meaning, suggest that even if the leg is

not moving around a pin, it must be around some sort of fixed point involving a hinge, joint (such as ball and socket), or other similar mechanism.

This construction is also supported by the dictionary definition of "pivot": "a shaft or pin on which something turns." R. 146-1, Def.'s Exh. A, Merriam-Webster at 1. The verb "pivot" similarly means "to turn on or as if on a pivot." Id. at 2. This definition emphasizes that something moves or turns around some other fixed point. Kolcraft, however, argues that the verb definition of "pivot" is broader than the noun definition because the former includes turning "as if on a pivot," so it does not necessarily require turning "on a pivot." Pl.'s Resp. at 20-21. But this argument is rejected for two reasons. Mostly importantly, the dictionary definition, which is extrinsic evidence, must "not contradict any definition found in or ascertained by a reading of the patent documents," Vitronics, 90 F.3d at 1584 n.7, and Kolcraft's reading of the definition is inconsistent with the '993 patent's specification and claims, as explained above. Plus, it is not even clear that Kolcraft's interpretation of the verb definition is correct. "Pivot" as a noun is defined as "a shaft or pin on which something turns," Merriam-Webster at 1, and "as if on a pivot" simply refers to an action that mimics the rotation around a shaft or pin, without necessarily involving a shaft or a pin. For instance, the dictionary gives this example of pivoting: "The quarterback pivoted and threw the ball to the running back." Id. at 2 (emphasis omitted). Although there is no shaft or pin involved (unless the quarterback has had some drastic ankle surgery), the quarterback is moving one foot while keeping the other fixed to the ground—in other words, pivoting. See also id. at 1 ("the action of pivoting" includes "stepping with one foot while keeping the other foot at its point of contact with the floor"). So the dictionary definition of "pivot" supports the movement around some fixed point, a meaning that is also reinforced by the specification language and drawings.

## D. Moving the leg of the play gym toward the hub to secure the leg in the stored position

The parties also dispute the meaning of the following phrase in Claim 30: "moving the leg of the play gym toward the hub to secure the leg in a stored position." '993 Patent col. 10 ll. 23-24. The main dispute is what is meant by the phrase "to secure the leg" in a stored position. (Remember that the parties do agree that the "stored position" means that the legs are parallel to one another.) Artsana argues that "to secure the leg" means that the leg is substantially fixed or immovable without the application of a countervailing force to remove it from that stored position. Def.'s Br. at 21-23. Kolcraft argues that this goes far beyond the meaning of the word "secured," which simply "requires that the legs are positioned generally parallel to each other ...." Pl.'s Resp. at 23.9

The Court rejects Kolcraft's construction because it would render useless the word "secure," and again, the Court must give weight to the words that the patentee chose to use. See Interactive Gift, 256 F.3d at 1331. If the claim simply meant placing the legs in a parallel position, then the claim could have said "moving the

<sup>&</sup>lt;sup>9</sup>Artsana also argues that the term "toward" must "be construed to require that the leg of the play gym be displaced toward the hub; it cannot be displaced away from the hub in the stored position." Def.'s Br. at 21. But the meaning of the word "toward" is not in dispute and Artsana does not explain why any elaboration on the word "toward" is needed, so the ordinary meaning applies.

leg of the play gym toward the hub in a stored position," without any mention of securing the leg in a stored position. The patent specification also supports the interpretation that the legs are fixed in place. In describing the stored and extended positions, the specification provides that the hub can have "a plurality of cavities, 40, 44. A first set of the cavities 40 is positioned to prevent the legs 22 from pivoting when the legs 22 are in the stored position. The second set of cavities 44 is positioned to prevent the legs 22 from pivoting when the legs 22 are in the extended position." '993 Patent at col. 4 ll. 35-39; see also id. col. 4 ll. 49-54 (explaining that in the stored position, the cavity walls "prevent the leg 22 from pivoting out of the stored position"). The cavities are pockets of space that enclose the end of the leg and keep the leg from budging. Below, they are shaded in yellow and shown in the stored position (Figure 7) and in the extended position (Figure 9):





While in the cavities, the legs cannot move on their own, so a user must apply some force to move the legs between the extended and stored positions: "[A] user must pull that leg 22 against the force of the spring 36 a distance away from the hub 20 such that the end of the leg 22 can be pivoted out of one of the cavities 40, 44 and into the other one of the cavities 40, 44 ... " *Id.* col. 4 ll. 58-62; *id.* col. 7 ll. 29-38 ("To move a leg 22 to the stored position, the user may pull the leg 22 ... in a direction away from the hub 20" and then "pivot the leg 22 ... and permit the spring 36 to pull the end of the leg 22 into the corresponding cavity 40 ... into the stored position."); *id.* col. 4 ll. 30-33 ("In other words, the springs 36 force their respective legs 22 toward the hub 20 *unless a countervailing force is applied* pulling the legs away from the hubs 20." (emphasis added)).

What's more, the term "secure" should be interpreted consistently throughout the claim language, and the Court explained earlier that "securing a play gym at least partially above at least one of a bassinet and a play yard" means that the play gym must be connected to, attached to, or otherwise in direct contact with the play yard, bassinet, or mat, such that the play gym's legs are arched in a fixed position. See supra Section III.A; Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005)

("Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims." (citations omitted)). It would be inconsistent to now read "secure" to mean that the legs are simply placed in a parallel position, without requiring that the legs be fixed. Similarly, the dictionary definition of "secure" is to "put (something) in a place or position so that it will not move," Merriam-Webster Online http://www.merriam-webster.com/dictionary/secure Dictionary, visited alsoOxford September 1. 2016); English Online Dictionary, seehttp://www.oed.com/view/Entry/174648?rskey=oTc5eN&result=3#eid (last visited September 1, 2016) ("To fix or attach (something) so as not to become loose, give way, fall off, or come apart; to hold firmly in place; to fasten or do up; to close (a door, window, etc.) tightly; to lock."). Thus, the Court construes "secur[ing] the leg in a stored position" to mean that the legs are positioned generally parallel to each other, and are substantially fixed without the application of a countervailing force to remove it from this position.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup>Kolcraft argues that no construction is necessary for almost all of the disputed terms in Claims 28 and 30 (except for the phrase in Claim 28 involving a typographical error), because the claims should be given their plain and ordinary meaning. See generally R. 150, Pl.'s Resp. But the interpretations described in this Opinion do give further meaning to the disputed terms, and without the further elaboration, the parties would still dispute what is meant by the supposedly "ordinary" meaning. See Eon Corp. IP Holdings v. Silver Spring Networks, 815 F.3d 1314, 1318 (Fed. Cir. 2016) ("[a] determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute" (citation and quotations omitted)).

### E. Order of Steps in Claim 28

Finally, Artsana argues that the steps in Claim 28 must be performed in the precise order in which they are listed. Def.'s Br. at 9-10. The Court reproduces Claim 28 below, numbering the steps for ease of reference only:

- (1) securing a play gym at least partially above at least one of a bassinet and a play yard;
- (2) removing the play gym from the at least one of the bassinet and the play yard;
- (3) securing the play gym to a mat apart from the <del>play gym</del> play yard and the bassinet;
- (4) removing the play gym from the mat; and
- (5) collapsing the play gym, wherein collapsing the play gym comprises:
- (6) pulling a leg of the play gym in a direction away front a hub; and
- (7) pivoting the leg into a stored position.

'993 Patent col. 10 ll. 6-18.

The Court disagrees that the seven steps must be performed in this precise order. "Unless the steps of a method actually recite an order, the steps are not ordinarily construed to require one." *Interactive Gift*, 256 F.3d at 1342-43 (citations omitted). To be sure, there are some exceptions; one is "if, as a matter of logic or grammar, [the claims] must be performed in the order written." *Altiris*, 318 F.3d at 1369 (citations omitted). "If not, [the Court] next look[s] to the rest of the specification to determine whether *it* directly or implicitly requires such a narrow construction." *Id.* (emphasis in original) (citation and quotations omitted). If there is

no such requirement in the specification, then the steps need not be performed in the order in which they were written in the claims. *Id*.

The parties agree that the steps in Claim 28 are not explicitly ordered. There is no statement that the steps need to be performed in a certain order, and the steps are not numbered or otherwise sequenced. Nor does logic nor grammar require that the steps be performed in the order that they are listed. For example, a user can: secure the play gym to the mat placed on the floor (step 3); remove the play gym from the mat (step 4); secure the play gym to the bassinet and/or play yard (step 1); remove the play gym from the bassinet and/or play yard (step 2); and then collapse and store the play gym (steps 5, 6, and 7). Or, the user can secure the play gym to the mat placed on the floor (step 3); remove the play gym from the mat (step 4); collapse and store the play gym (steps 5, 6, and 7); set up the play gym again and secure it to the bassinet and/or play yard (step 1); and remove the play gym from the bassinet and/or the play yard (step 2). Another possibility: secure the play gym to the mat inside the play yard (step 1); remove the mat from the play yard, with the play gym still attached to the mat (step 2); remove the play gym from the mat (step 4); collapse the play gym (steps 5, 6, and 7); and then set up the play gym and secure it to only the mat (step 3).

In addition, nothing in the specification directly or implicitly requires the steps to be completed in the order listed. In fact, the opposite is true: the whole purpose of the patent is versatility. The user has the flexibility to use the products in any manner and order that suits his or her needs, and the products can be used

in several combinations. *E.g.*, '993 Patent col. 2 ll. 34-36 (explaining that the mat can be used with both the bassinet and the play yard); *id.* col. 3 ll. 9-13 (same); *id.* col. 3 ll. 36-42 (same); *id.* col. 5 ll. 9-4-15 (explaining that the play gym can be used with the bassinet or play yard); *id.* col. 5 ll. 43-47 (explaining that the play gym can be directly connected to the mat). Requiring the products to be used in the order listed—that is, first using the play gym with the play yard and/or bassinet, then using the play gym with only the mat, then collapsing the play gym, and then repeating the same cycle again—defies the day-to-day realities of how someone would care for a child and use these products.

Artsana's main argument in favor of the specific order is not in its briefs, but was raised in the *Markman* hearing: because step 1 refers to "a play gym," "a bassinet," and "a play yard," and because steps 2-7 then refer to "the play gym," "the bassinet," and "the play yard," the use of the word "the" necessarily refers to the specific products in step 1. R. 176, 2/19/13 Hr'g Tr. 9:21-10:4. And reference to an antecedent, as the argument goes, only makes sense if the steps are to be performed in order. *Id.* For support, Artsana cites *NTP*, *Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1306 (Fed. Cir. 2005), which cited this proposition in a parenthetical: "[A] preamble usually does not limit the scope of the claim unless the preamble provides antecedents for ensuing claim terms and limits the claim accordingly." (quoting *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1350 (Fed. Cir. 1998) (quotations omitted)); R. 167, Def.'s Post Hr'g Br. at 1-2. In *NTP*, because the preamble of the claim included the phrase "a plurality of destination processors in

the electronic mail system," the claim's later mention of "the at least one of the plurality of destination processors" was a reference to the destination processor in the preamble. 418 F.3d at 1306. But NTP is not directly applicable here because the Federal Circuit was not explaining the ordering of steps, but rather that the limitations in a patent's claim "derive[d] their antecedent basis from the claim['s] [] preamble." Id. (citation omitted). Here, there is no preamble in Claim 28; and in any event, it is undisputed that the play gym, play yard, bassinet, and mat mentioned throughout the claim refer to the same play gym, play yard, bassinet, and mat. So NTP does not help Artsana. Nor is W.L. Gore & Associates, Inc. v. Medtronic, Inc., 874 F. Supp. 2d 526 (E.D. Va. 2012), another case Artsana cites, applicable; there, the district court held that the plain language of claims 12 and 15 of the '870 patent required a sequential order. But the steps in those claims were actually sequenced by a, b, c, and so on, and the logic of the claim language matched the ordered sequence. Id. at 532, 547-48. Again, that is not the case here. In sum, Artsana's hyper-technical argument—that the word "the" refers to some antecedent, and thus implies an order—cannot overcome the explicit text of Claim 28, which requires no order, and the implicit focus of the specification, which focuses on the versatility and flexibility of the products.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup>In a footnote, Artsana string cites a few more cases allegedly supporting the antecedent argument, but does not elaborate on how these cases are directly analogous. Def.'s Post-Hr'g Br. at 2 n.2.

IV. Conclusion

In sum, the Court construes the disputed terms as follows:

Claim	Disputed Term	Construction
28	Order of Claim 28	The steps of Claim 28 need not be performed in the specific sequential order recited in the claim.
28	"Securing a play gym at least partially above at least one of a bassinet and a play yard"	"Securing a play gym" means that play gym must be connected to, attached to, or otherwise in direct contact with the play yard, bassinet, or mat, such that the play gym's legs are arched in a fixed position by the presence of some countervailing force caused by the play yard, bassinet, or mat.
28	"Securing the play gym to a mat apart from the play gym and the bassinet"	Claim should state "securing the play gym to a mat apart from the play yard and the bassinet."
28	"Pivoting the leg into a stored position"	"Pivoting" means that the leg must rotate, turn, or move about a fixed point into a stored position. The "stored position" is when the legs are generally parallel to each other.
30	"Moving the leg of the play gym toward the hub to secure the leg in a stored position"	"Secure the leg" means that the legs are substantially fixed in the stored position without the application of a countervailing force. The "stored position" is when the legs are generally parallel to each other.

ENTERED:

s/Edmond E. Chang
Honorable Edmond E. Chang
United States District Judge

DATE: September 2, 2016