IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

WONDERLAND SWITZERLAND AG, Plaintiff, v. EVENFLO COMPANY, INC., Defendant.	Civil Action No. 18-1990-RGA

MEMORANDUM OPINION

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September 29, 2021

/s/ Richard G. Andrews
ANDREWS, U.S. DISTRICT JUDGE:

Before the Court is post-trial briefing regarding infringement, damages, and invalidity. (D.I. 175, 179, 176, 180, 181, 182). The briefing followed a four-day bench trial, held from Feb. 3, 2021 to Feb. 8, 2021. (D.I. 168–71, hereinafter referred to as "Tr."). My findings of fact and conclusions of law follow. *See* Fed. R. Civ. P. 52(a).

I. PROCEDURAL BACKGROUND

Plaintiff Wonderland Switzerland AG filed this lawsuit against Defendants Evenflo Company, Inc. and Goodbaby U.S. Holdings[1] on December 14, 2018, asserting infringement of U.S. Patent Nos. 7,862,117 ("the '117 patent"), 8,087,725 ("the '725 patent"), and 8,123,294 ("the '294 patent") (collectively, "the Asserted Patents"). (D.I. 1).

II. FACTUAL BACKGROUND

Plaintiff argues that Defendant's EveryStage LX, DLX, and Gold models of car seats ("the accused product") infringe claims 1, 6, 8, 10, 12, 13, and 15 of the '294 patent, claim 1 of the '725 patent, and claim 9 of the '117 patent under 35 U.S.C. § 271. (D.I. 176 at 1). For purposes of evaluating infringement, the parties do not dispute that the three models are the same in the relevant features. (Tr. at 300:20–302:4).

The '117 and '725 patents are titled "Headrest and Harness Adjustment for Child Car Seat" and share a common specification. (D.I. 1-1, Ex. A, B). The asserted apparatus claims of these patents are directed to "transporting children in an automobile" using a "positionally adjustable head rest cooperable with a movable harness that relocates in response to the positional adjustment of the head rest." (*Id.*, Ex. A, at 2:47–51). The '294 patent is titled

[1] Goodbaby was terminated as a party when it was not named as a defendant in the First Amended Complaint. (D.I. 36).

"Harness Storage System for Child Car Seats." (*Id.*, Ex. C). The asserted claims for the '294 patent are directed to "a harness storage system in a child's car seat to allow the five-point harness to be stowed out of the way without requiring the harness to be removed from the car seat shell." (*Id.*, Ex. C, at 2:13–16). Claims 13 and 15 are method claims; the rest are apparatus claims. The accused product, the EveryStage, is a convertible car seat that can be used interchangeably in rear-facing, front-facing, and booster seat configurations.

III. LEGAL STANDARD

A. Literal Infringement

A patent is infringed when a person "without authority makes, uses, offers to sell, or sells any patented invention, within the United States . . . during the term of the patent . . . ." 35 U.S.C. § 271(a). A two-step analysis is employed in making an infringement determination. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). First, the court must construe the asserted claims to ascertain their meaning and scope. *See id.* The trier of fact must then compare the properly construed claims with the accused infringing product. *See id.* at 976. This second step is a question of fact. *See Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

"Literal infringement of a claim exists when every limitation recited in the claim is found in the accused device." *Kahn v. Gen. Motors Corp.*, 135 F.3d 1472, 1477 (Fed. Cir. 1998). "If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law." *Bayer AG v. Elan Pharm. Research Corp*., 212 F.3d 1241, 1247 (Fed. Cir. 2000). If an accused product does not infringe an independent claim, it also does not infringe any claim depending thereon. *See Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989). However, "[o]ne may infringe an independent claim and not infringe a claim dependent

on that claim." *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007) (internal quotations omitted). The patent owner has the burden of proving infringement and must meet its burden by a preponderance of the evidence. *See SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988) (citations omitted).

B. Doctrine of Equivalents

A product that does not literally infringe a patent claim may still infringe under the doctrine of equivalents if the differences between an individual limitation of the claimed invention and an element of the accused product are insubstantial. *See Warner–Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 24 (1997). Alternatively, an element in an accused product can be shown to infringe under the doctrine of equivalents if that element "performs substantially the same function [as the missing limitation] in substantially the same way to obtain substantially the same result." *Voda v. Cordis Corp.*, 536 F.3d 1311, 1326 (Fed. Cir. 2008) (quotations and citations omitted).

C. Induced Infringement

"Whoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b). "To prevail under a theory of indirect infringement, [plaintiff] must first prove that the defendant's actions led to direct infringement of the [patent-in-suit]." *Dynacore Holdings Corp. v. U.S. Phillips Corp.*, 363 F.3d 1263, 1274 (Fed. Cir. 2004) (citation omitted). A finding of induced infringement requires not only evidence of inducement but also evidence of direct infringement. *Id.*

D. Obviousness

A patent is invalid as obvious under 35 U.S.C. § 103 if "the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was

made." *Kahn v. Gen. Motors Corp.*, 135 F.3d 1472, 1479 (Fed. Cir. 1998). "Obviousness is a question of law based on underlying factual findings: (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the art; and (4) objective considerations of nonobviousness." *In re Morsa*, 713 F.3d 104, 109 (Fed. Cir. 2013) (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966)).

To show a patent is obvious, a party "must demonstrate by clear and convincing evidence that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." *InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1347 (Fed. Cir. 2014) (cleaned up). The overall inquiry into obviousness, though, must be "expansive and flexible." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415 (2007).

E. Reasonable Royalty Damages

Reasonable royalty damages usually involve consideration of the relevant *Georgia-Pacific* factors. Those factors are:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
7. The duration of the patent and the term of the license.

8. The established profitability of the product made under the patent; its commercial success; and its current popularity.
9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.
10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.
11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.
12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
14. The opinion testimony of qualified experts.
15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).

The second *Georgia-Pacific* factor looks at "[t]he rates paid by the licensee for the use of other patents comparable to the patent in suit." *Id*. "This factor examines whether the licenses relied on by the patentee in proving damages are sufficiently comparable to the hypothetical license at issue." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325 (Fed. Cir. 2009). A patentee cannot rely on license agreements that are "radically different from the hypothetical agreement under consideration." *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1316 (Fed. Cir. 2011). "[T]here must be a basis in fact to associate the royalty rates used in prior licenses to the particular hypothetical negotiation at issue." *Id.* at 1317. "[C]omparisons of past patent licenses to the infringement must account for the 'technological and economic differences' between them." *Wordtech Sys., Inc. v. Integrated Network Solutions, Inc.*, 609 F.3d

1308, 1320 (Fed. Cir. 2010). "When relying on licenses to prove a reasonable royalty, alleging a loose or vague comparability between different technologies or licenses does not suffice." *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 79 (Fed. Cir. 2012).

IV. DISCUSSION

A. Infringement

Plaintiff argues that the EveryStage literally infringes the asserted claims of the '294, '117, and '725 patents. The parties contest a limited set of issues regarding literal infringement. For its uncontested assertions, I think Plaintiff has shown that it is more likely than not that the EveryStage meets the relevant limitations. I therefore focus my analysis on the contested issues.

1. '294 Patent

The '294 patent specification recites the general description of the invention as a child car seat that includes a five-point harness storage system that "allow[s] the car seat to be converted from a car seat for small children to a belt positioning booster for larger children." (D.I. 1-1, Ex. C at 1:14–19). The seat includes a "harness storage cavity" that allows "the five-point harness to be stowed out of the way without requiring the harness to be removed from the car seat shell." (*Id.* at 2:14–16). All asserted claims of the '294 patent require a "harness storage cavity." (*Id.* at 6:16–8:64).

Plaintiff argues that the EveryStage infringes claims 1, 6, 8, 10, 12, 13, and 15 of the '294 patent.[2] Defendant, in response, presents three noninfringement theories. It argues that the EveryStage does not infringe the '294 patent because it does not have, literally or under the doctrine of equivalents: (1) the claimed "harness storage cavity," (2) "a cover forming a smooth

[2] My reading of the briefing is that the claims of infringement of the two method claims, Claims 13 and 15, is limited to induced infringement.

support over said harness storage cavity," or (3) "a harness storage cavity formed with slots to permit said shoulder straps and said belt straps to project from said harness storage cavity when said cover is closed." (D.I. 180 at 3).

First, Plaintiff argues that the EveryStage seat includes the claimed "harness storage cavity." (D.I. 176 at 4). The Court's construction of "harness storage cavity," Plaintiff asserts, requires only that the cavity be a "volume or space for storing harnesses" without imposing additional "intent" requirements. (*Id.*) (citing D.I. 152 at 12). But even if such an intent requirement were applied, Plaintiff maintains that Defendant designed the cavity to store harnesses and instructed users of the EveryStage to store the harness in that cavity. (*Id.*) (citing Tr. at 384:20–385:22, 214:7–24; JTX-2 at EVE-000341).

Defendant, on the other hand, asserts that the EveryStage does not meet the "harness storage cavity" limitation of the '294 patent. (D.I. 180 at 3–4). Specifically, Defendant argues that the cavity in the EveryStage was designed with the purpose of accommodating an in-seat recline feature rather than to store the harness. (*Id.* at 6) (citing Tr. at 243:2–24, 245:15–246:20, 765:19–25; JTX-132; JTX-142). The cavity therefore is not a "harness storage cavity," Defendant maintains, because it was not designed for the purpose of storing harness hardware. (*Id.* at 5).

I construed the term "harness storage cavity" to mean "volume or space for storing harnesses." (D.I. 152 at 12). That construction does not require a cavity to have been designed for the purpose of storing harnesses to meet the limitation. Although I have acknowledged that a "harness storage cavity" being "sized to receive" a harness *suggests* the cavity was designed with that purpose in mind (*id*.), that is not a requirement to meet the limitation. Defendant's arguments rely on differentiating what it argues is an intent requirement in the construction;

Defendant does not dispute that the cavity in the EveryStage was in fact a "volume or space for storing harnesses." I therefore find that the EveryStage has a "harness storage cavity."

Second, Plaintiff argues that the EveryStage has a cover that forms a smooth support over the harness storage cavity. (D.I. 176 at 5). Plaintiff maintains that although the EveryStage has a shallow H-shaped indentation in the cover of the harness storage cavity (shown below in PTX 516), the cover is nevertheless "smooth." (*Id.*).

Fig. 1 (PTX-516)

For further support, Plaintiff cites its expert, Mr. Myers, who testified that the cover is smooth because there is nothing that "scratches [him] or impedes the travel" of his hand on the cover, and because the cover does not cause discomfort to a child as a result of the indentation. (*Id.* at 5–6) (citing Tr. at 361:7–362:24, 420:11–421:17). Even if the EveryStage does not

literally infringe, Plaintiff argues, its cover infringes under the Doctrine of Equivalents because it accomplishes substantially the same function (allowing a child to be seated for comfortable transportation) in substantially the same way (covering the harness storage cavity and, in doing so, providing a smooth support for the child) to obtain substantially the same result (protecting the child from protrusion of the harness hardware into her back). (*Id.* at 27).

Defendant asserts that the cover cannot literally infringe because it has indentations that render the cover not smooth. (D.I. 180 at 7) (citing Tr. at 670:10–14, 671:2–9). In response to Plaintiff's argument that the seat does not cause discomfort, Defendant argues that the plain and ordinary meaning of "smooth" does not include "comfortable," and the absence of discomfort, therefore, should not be used as indicia of smoothness. (*Id.* at 8). Defendant also maintains that the cover does not infringe under the Doctrine of Equivalents because when the EveryStage headrest is in its uppermost positions, there is a gap in coverage over the cavity which necessitates an additional insert in the backrest pads. (D.I. 180 at 11) (citing Tr. at 669:16–21, 727:12–16; DTX-571).

I do not find that the cover is literally smooth. Neither party disputes that there are indentations along the surface of the cover plate. That the indentations are "shallow" does not change the fact that they render the cover plate not literally smooth. I also agree with Defendant that even if the indentations do not affect the comfort of a seated child, that is not relevant to whether the cover is "smooth."

I do, however, find that the cover meets the claimed "smooth support" limitation by the Doctrine of Equivalents. The '294 patent explains that the purpose of the smooth cover over the harness storage cavity is to protect the child from discomfort, because if the harness hardware were left out, "the child would have an uncomfortable seat and would not be provided with a

smooth supporting surface on which the child may be secured." ('294 patent, 4:38–44). I agree with Plaintiff that the EveryStage cover, notwithstanding its shallow indentations, serves substantially the same purpose—and achieves substantially the same result—of providing a smooth support that protects a seated child from protrusions caused by the harness hardware. And it does so in substantially the same way as the "smooth support" of the '294 patent claims, through use of a cover over a harness storage cavity.

Defendant argues that the uppermost configurations of the headrest expose a gap that requires additional inserts to cover the harness storage cavity, but this does not refute Plaintiff's argument that, at the least, the cover is infringing in the EveryStage's other modes of operation (i.e., aside from those uppermost configurations). "Infringement is not avoided merely because a non-infringing mode of operation is possible." *Core Wireless Licensing S.A.R.L. v. Apple Inc.*, 899 F.3d 1356, 1363 (Fed. Cir. 2018). Where a product is configured to be readily capable of an infringing mode of operation, the product is infringing. *Id.* Defendant does not dispute that the EveryStage can be readily used in all its headrest configurations. I therefore find that the cover provides a "smooth support" as claimed in the '294 patent under the Doctrine of Equivalents.

Third, the parties dispute whether the EveryStage meets the requirement that the harness storage cavity be "formed with slots to permit said shoulder straps and said belt straps to project from said harness storage cavity when said cover is closed." (D.I. 176 at 9–10; D.I. 180 at 9). These "slots" are only relevant to limitations in claims 1, 10, 12, 13, and 15. (D.I. 180 at 9). I do not, however, need to reach this limitation because Defendant does not dispute that there are "belt straps projecting out of said harness storage cavity along said rigid shell," as recited in claim 6 of the '294 patent (and dependent claim 8).

Because the EveryStage has the claimed "harness storage cavity," a cover forming a "smooth support" that meets the claimed limitation under the Doctrine of Equivalents, and "belt straps projecting out of said harness storage cavity along said rigid shell," I find that the EveryStage infringes claims 6 and 8 of the '294 patent.

2. '725 Patent

Plaintiff asserts that the EveryStage infringes claim 1 of the '725 patent. Defendant presents three noninfringement theories in response. It argues that the EveryStage does not include: (1) a control rack on the rear surface of a seat back, (2) a lock bar that can be moved into engagement with engagement portions on the control rack, or (3) harness belts that move vertically and are connected to a lock bar. (D.I. 180 at 14).

First, Plaintiff argues that the EveryStage has a control rack that is on the rear surface of the seat back. Mr. Myers testified that the rear surface is "the backside or the area behind the occupants." (D.I. 176 at 17). The control rack, Plaintiff asserts, resides on this rear surface, as shown in Defendant's CAD drawings of the EveryStage (shown below) (*Id.*).

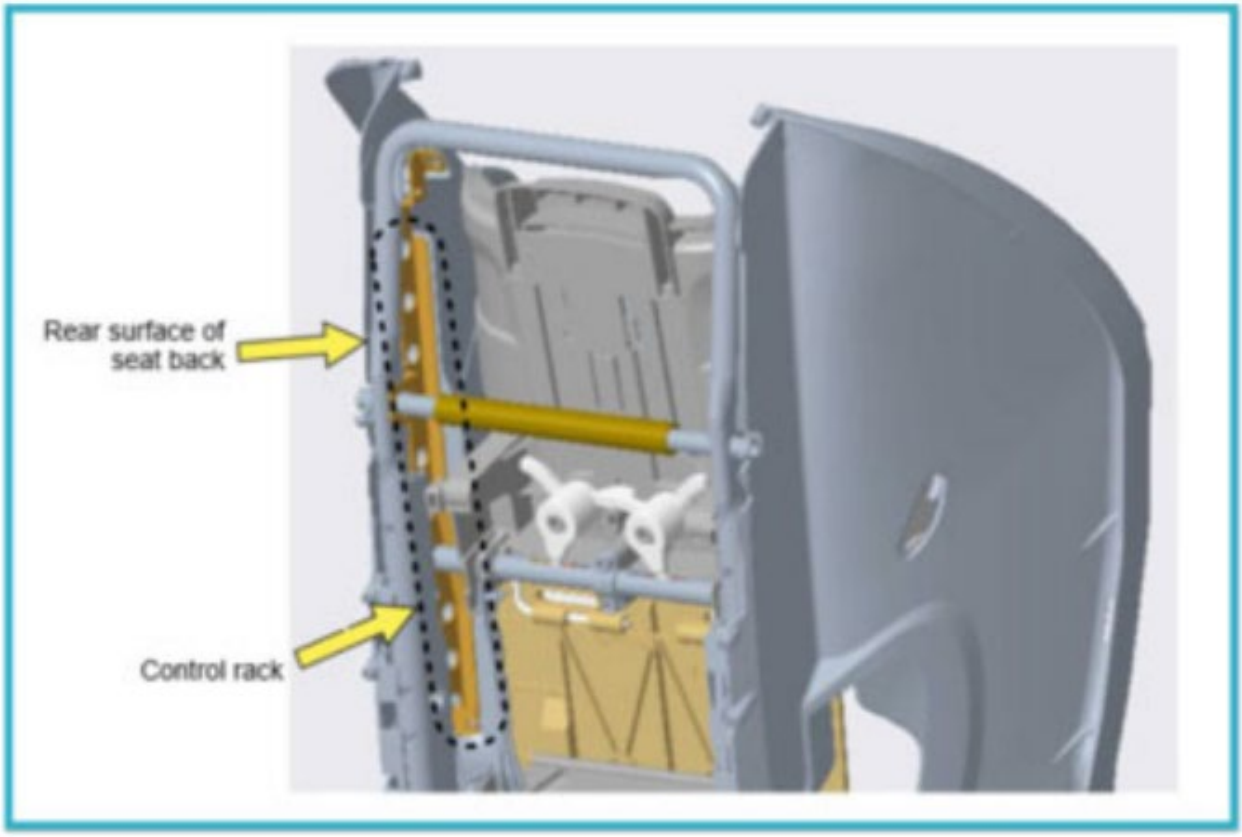

Fig. 2 (JTX-351 at 17)

Defendant, on the other hand, maintains that the control rack is not on the rear surface of the seat back because, "given the hinged nature of the EveryStage seat back," the control rack is placed in the "backside corners of the EveryStage substructure" but not on the rear surface of the seatback itself. (D.I. 180 at 15).

The CAD drawings indicate that the control rack is on the back portion of the seat. I therefore find that the control rack is on the rear surface of a seat back.

Second, Plaintiff argues that the lock bar can be moved into engagement with engagement portions of the control rack. (D.I. 176 at 18). Defendant, on the other hand, asserts that Plaintiff inconsistently defines the "lock bar" and the "lock bar assembly," of which the lock bar is a part, and that the lock bar assembly is what engages the control rack, not the lock bar itself. (D.I. 180 at 16). Defendant specifically argues that the lock bar assembly includes the

plungers, spring, and other components of the locking mechanism in addition to the tube that constitutes the lock bar. Plaintiff responds that its expert, Mr. Myers, consistently described the "lock bar" as consisting of "the tube, the plungers, and the spring" as part of the "locking mechanism." (D.I. 182 at 11) (citing Tr. at 394:12–395:12, 482:11–16).

Claim 1 of the '725 patent recites a "locking mechanism," of which one component is a "lock bar that can be moved into engagement with a selected one of said engagement portions to fix said head rest in the corresponding selected vertical position." ('725 patent at 7:53–59). The purpose of the claimed lock bar is to engage with the engagement portions (i.e., the control rack) and allow for vertical adjustment of the head rest position. The lock bar in the EveryStage performs the claimed purpose—dynamically shifting the vertical position of the head rest—by engaging with the control rack. The parties do not argue that engagement requires physical contact of the control rack with the tube, nor does the claim language indicate that the lock bar must be limited to the tube and not the plungers. I therefore find that the lock bar in the EveryStage can be moved into engagement with engagement portions of the control rack.

Third, Plaintiff argues that the EveryStage includes harness belts that contact the lock bar and "move vertically in response to a corresponding vertical movement of said head rest." (D.I. 176 at 18; '725 patent at 7:65–67). Plaintiff cites testimony by its expert, Mr. Myers, asserting that the harness belts contact the lock bar and, therefore, that the lock bar affects the position of the belts. (*Id.* at 18) (citing Tr. 397:14–400:7).

Defendant, on the other hand, asserts that contact between the harness belts and the lock bar is incidental and does not cause the harness belts to move. (D.I. 180 at 18). Defendant argues that the belt guides (i.e., the apertures through which the harness seat belts egress into the front

of the seat; shown below in JTX-351) control the position of the harness belts rather than the lock bar. (*Id.*) (citing Tr. at 662:5–24, 667:17–20).

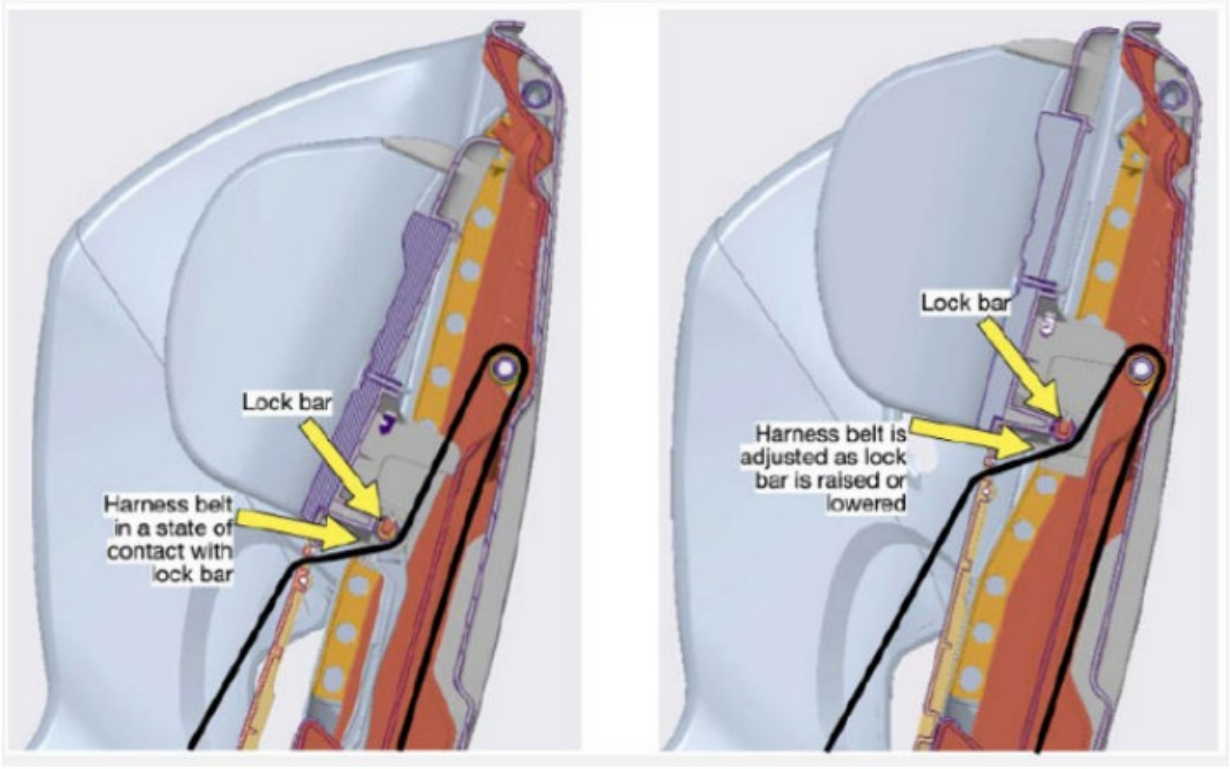

Fig. 3 (JTX-351 at 22)

I construed "connected" to mean "in a state of contact between elements sufficient to cause one element to affect the position or operation of the other element." (D.I. 72 at 5–6). Both parties agree that there is the required "contact" between the harness seat belt and the lock bar. The parties' dispute focuses on whether that contact *causes* the change in position of the harness belt such that, when the headrest is vertically adjusted, the harness belts move vertically as a result of contact with the lock bar. Fig. 3 (above) shows that the harness belt contacts the lock bar and exits to the front of the car seat through the belt guides. Although the belt exits at the belt guide, the position of the belt guide is dependent on the position of the lock bar. Put differently, moving the lock bar also moves the belt guide, which directly impacts where the harness belt sits

when the head rest is vertically adjusted. The lock bar is "connected to" the harness seat belt, then, because movement of the lock bar causes a change in position of the harness seat belt.

I therefore find that the EveryStage has harness seat belts that are "connected to" the lock bar in such a way that the "harness belts will move vertically in response to a corresponding vertical movement of said head rest."

The EveryStage includes: (1) a control rack on the rear surface of a seat back, (2) a lock bar that can be moved into engagement with engagement portions on the control rack, and (3) harness belts that move vertically and are connected to a lock bar. I therefore find that the EveryStage infringes claim 1 of the '725 patent.

3. '117 Patent

Plaintiff asserts that the EveryStage infringes claim 9 of the '117 patent. Defendant, in response, argues that it does not infringe because the EveryStage does not include: (1) a seat back with a pair of laterally spaced openings therethrough; (2) a movable guide bar positioned "in register"[3] with laterally spaced openings in a seat back; (3) a movable guide bar "that directs" harness belts through the openings; and (4) a fixed guide bar "mounted above" the openings. (D.I. 180 at 19).

First, Plaintiff argues that the EveryStage has two laterally spaced openings in the seat back. (D.I. 176 at 20). Plaintiff maintains that the existence of other laterally spaced openings does not negate Mr. Myers' testimony that the openings that he identified in JTX-351 constitute the claimed feature. (*Id.*). Defendant, on the other hand, argues that the seat back constitutes the portion of the seat that the child rests on, and that the belt guides, therefore, would constitute the

[3] I did not construe "in register" and its meaning is not entirely clear to me. At trial, Plaintiff's expert testified it was met, and Defendant's expert did not address it.

laterally spaced openings. (D.I. 180 at 19) (citing Tr. at 658:2–25; 659:1–10). Defendant argues that the openings identified by Plaintiff are part of the rear structural portion of the seat rather than this "seat back." (*Id.* at 20).

Plaintiff's alleged laterally spaced openings are shown below:

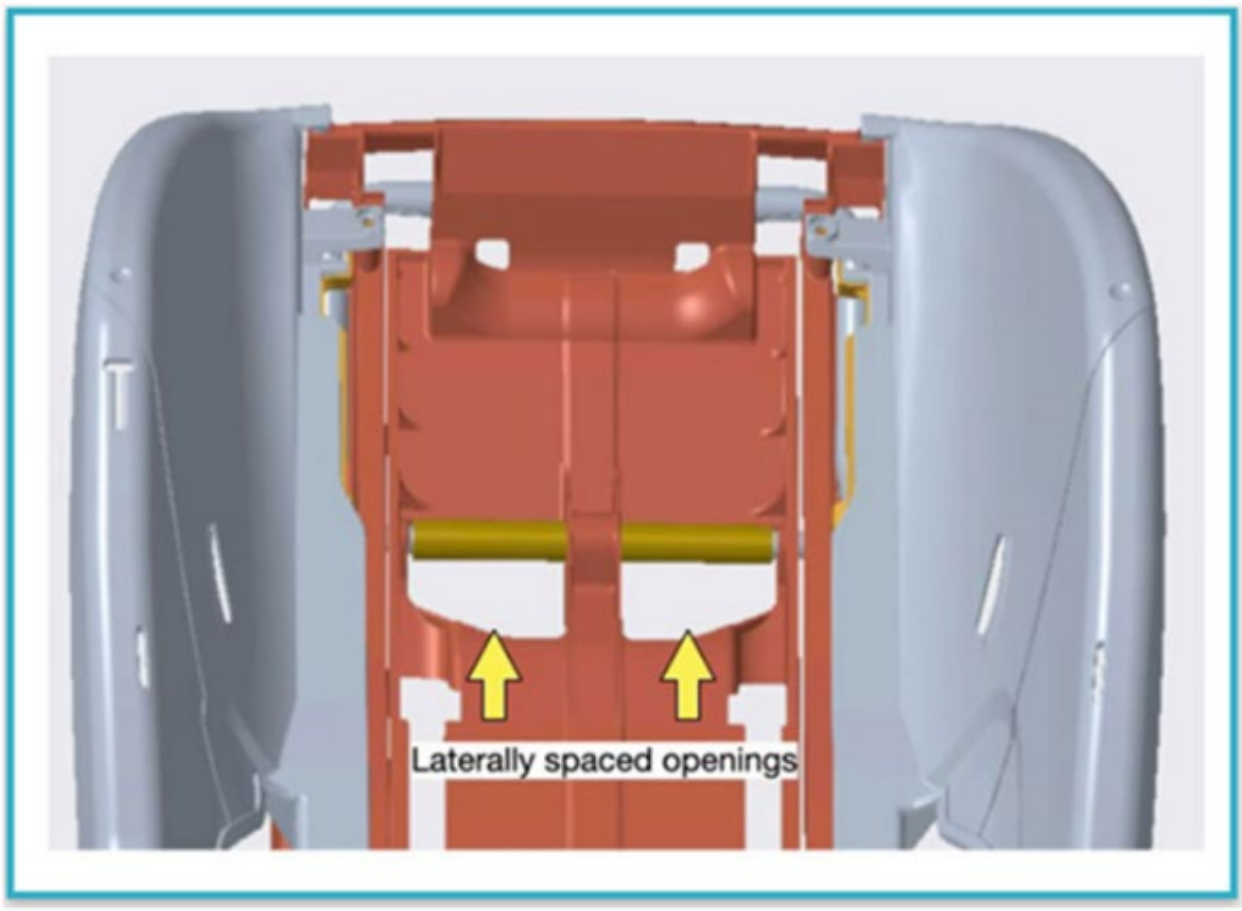

Fig. 4 (JTX-351 at 4)

The indicated openings are in the portion of the seat upon which the child would rest his or her back. Nothing in the claim language indicates that components in the "seat back" need to be in direct contact with the child using the seat. Defendant does not provide any other reason for preferring the belt guide apertures to the ones shown in Fig. 4 for designation as the laterally spaced openings. The openings shown in Fig. 4 go through the seat back and are most appropriately positioned with regard to the other claimed parts (such as the movable guide bar)

('117 patent at 9:8–10). I therefore find that the EveryStage meets the limitation that there is a "seat back being formed with a pair of laterally spaced openings therethrough."

Second, Plaintiff argues that the movable guide bar is positioned in register with laterally spaced openings in the seat back. Specifically, Plaintiff cites testimony from Mr. Myers that the movable guide bar is "positioned in register with the openings. It has a relative position in regard to that opening and it basically moves vertically up and down along the opening." (D.I. 182 at 14) (citing Tr. 417 at 9–13). Defendant, on the other hand, argues that the movable guide bar is not in register with the laterally spaced openings but rather the seat belt guides.

Defendant did not raise this issue at trial, and Defendant cites no testimony in support of its assertion that the "movable guide bar" is in register with the belt guides rather than the openings identified by Plaintiff. I therefore credit Mr. Myers's expert testimony that the movable guide bar is positioned in register with the laterally spaced openings identified by Plaintiff.

Third, Plaintiff argues that the EveryStage has a movable guide bar that directs harness belts through the openings in the seat back. (D.I. 176 at 23). Defendant asserts the opposite, citing arguments it made earlier: (1) the identified openings are not in the seat back, and (2) for the same reasons that Defendant argued the "lock bar" in the '725 patent was not "connected to" the harness belts, it now argues that the "movable guide bar" does not "direct" the harness belts. (D.I. 180 at 22).

For the same reasons as I held earlier, I find that the openings are in the seat back, and that the "movable guide bar" does direct the harness belts through those openings.

Fourth, Plaintiff asserts that the EveryStage has a "fixed guide bar" mounted in the seat back above the laterally spaced openings, citing testimony by Mr. Myers. (D.I. 176 at 22–23) (citing Tr. at 413:5–414:17). Even if the "fixed guide bar" is not literally above the openings,

Plaintiff maintains, it nevertheless meets the limitation under the Doctrine of Equivalents, because the fixed guide bar and its position are not substantially different than that of the fixed guide bar in the ’117 patent.

Defendant, on the other hand, cites its expert, Mr. Campbell, to argue that the “fixed guide bar” is not literally above but rather in line with the openings. (D.I. 180 at 25) (citing Tr. 661:14–16) (“The position of the fixed guide bar in what Mr. Myers has claimed is within the openings, and not above the openings.”). Defendant also argues that the EveryStage should not be considered to infringe this limitation under the Doctrine of Equivalents in light of Plaintiff’s argument during prosecution, which highlighted the importance of the fixed guide bar being placed above the openings in the seat back. (D.I. 180 at 26) (citing D.I. 58-5 at JA0088) (“Furthermore, the positioning of the fixed guide bar above the openings in the seat back is not a mere design choice, as the operation and function of Applicants’ harness mounting system is substantially different than that taught in the Kain reference.”). Given the importance Plaintiff placed on the positioning of the fixed guide bar above the openings in the seat back, it should not now, according to Defendant, be allowed to argue that insubstantial difference is sufficient.

Plaintiff responds to this argument, pointing out that at prosecution, Plaintiff distinguished the Kain reference by arguing that the “harness mounting system is substantially different” because the system in Kain was “anchored to the fixed bar 44, not wrapped over it.” (D.I. 182 at 16) (citing D.I. 58-5 at JA0088).

The fixed guide bar of the EveryStage relative to the laterally spaced openings is shown below:

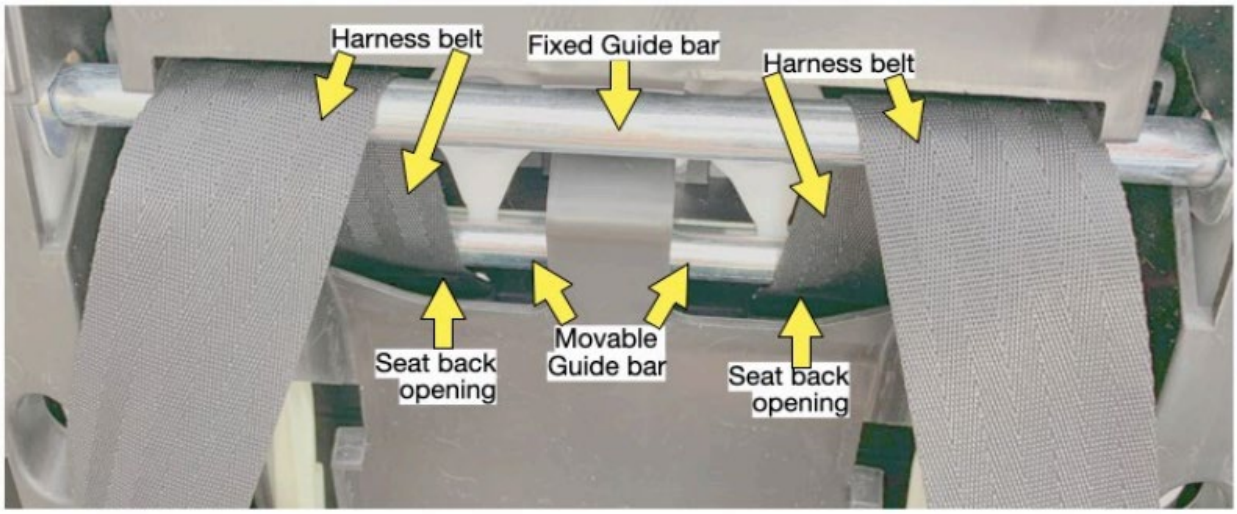

Fig. 5 (JTX-351 at 12)

Based on the relative position of the "fixed guide bar" and the openings in the seat back as seen in Fig. 5, it seems to me that although the "fixed guide bar" is higher up, there is at least some overlap in the vertical position of the "fixed guide bar" and the openings in the seat back. I therefore agree with Defendant that the "fixed guide bar" is not literally "above" the openings in the seat back.

I do, however, think that any differences between the placement of the fixed guide bar in the EveryStage and the fixed guide bar being "above" the openings in the seat back in claim 9 of the '117 patent are insubstantial. The '117 patent describes a "fixed guide bar mounted within the seat back above the control rack" in order for it to adjustably raise or lower the harness belts as the head rest is vertically adjusted. (D.I. 1-1 at Abstract). As can be seen in Fig. 5, the fixed guide bar in the EveryStage, while not completely above the openings, is mostly above them. It performs the same function. It similarly raises and lowers the harness belts it contacts as the head rest is vertically adjusted. The results are the same, and they are obtained in the same way. The functional difference between the "fixed guide bar" claimed in the '117 patent and the fixed guide bar in the EveryStage is therefore insubstantial.

Moreover, Defendant's sole challenge to the Doctrine of Equivalents argument is its assertion of Plaintiff's statements regarding the Kain reference at prosecution. Fig. 6 of the Kain reference is reproduced below:

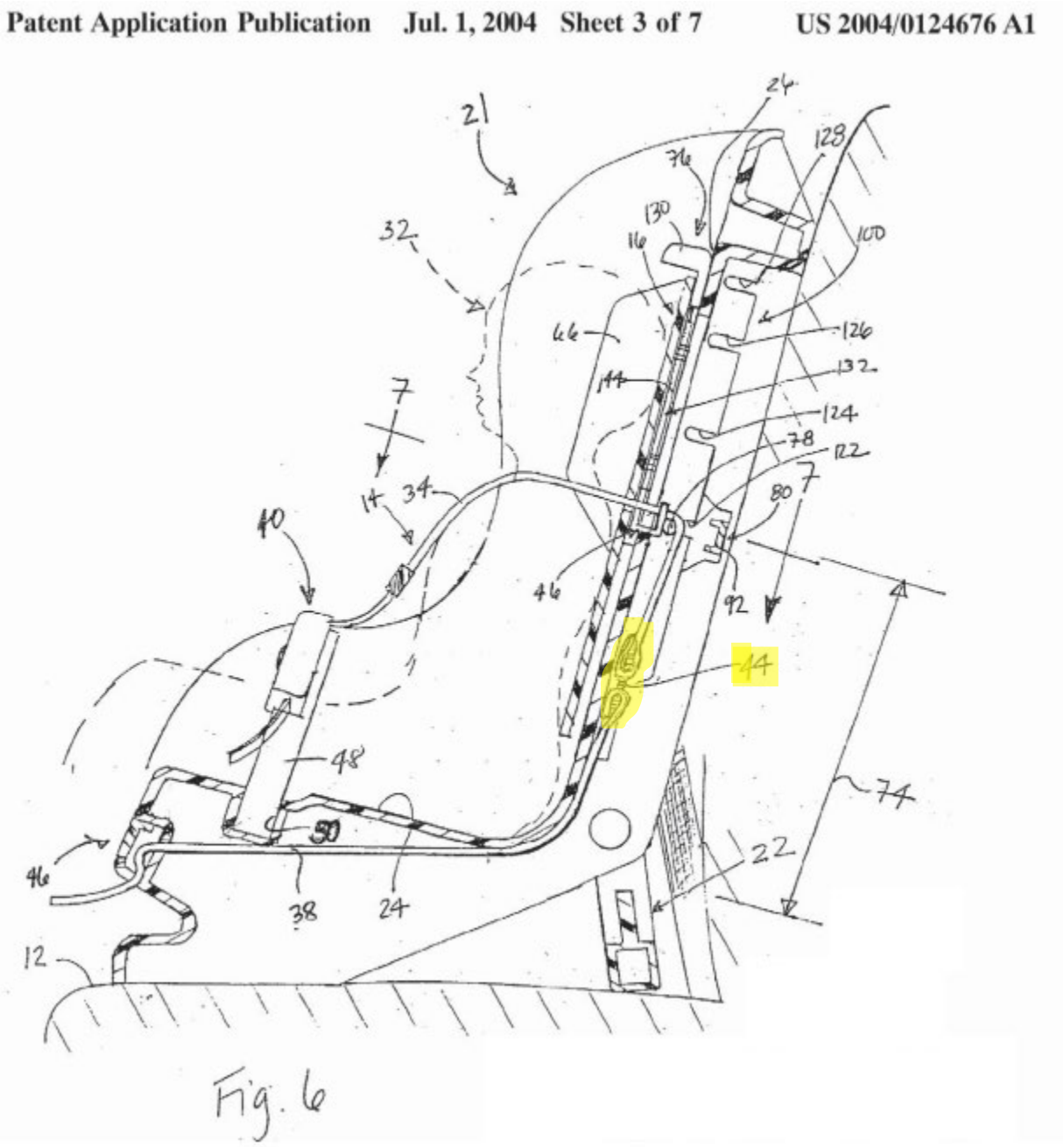

Fig. 6 (U.S. Patent Appl. Pub. No. 2004/0124676 at Fig. 6)

Plaintiff's distinction of its invention from the Kain reference centered on "fixed bar 44" (highlighted in Fig. 6). It argued that the harness mounting system in the application was substantially different from that of Kain because the harness seat belts in the application go over the fixed guide bar rather than being affixed to it, as is the case in Kain. (D.I. 182 at 16) (citing D.I. 58-5 at JA0088). The difference between the system described in the '117 patent (a fixed guide bar near the top of the seat, over which the harness seat belts flow) and that of the Kain reference (a fixed guide bar substantially lower in the seat, affixed to the harness seat belts) does not rely on the fixed guide bar literally being over the openings in the seat back. I do not think Plaintiff surrendered the arrangement that appears in the EveryStage by its distinguishing of the Kain reference.

I therefore find that the EveryStage meets this limitation—that the "fixed guide bar" is above the openings in the seat back—under the Doctrine of Equivalents.

The EveryStage includes: (1) a seat back with a pair of laterally spaced openings therethrough; (2) a movable guide bar positioned in register with laterally spaced openings in a seat back; (3) a movable guide bar "that directs" harness belts through the openings; and (4) a fixed guide bar "mounted above" the openings. I therefore find that the EveryStage infringes claim 9 of the '117 patent.

B. Induced Infringement

Plaintiff argues that Defendant induced infringement of method claims 13 and 15 of the '294 patent. (D.I. 176 at 14). Specifically, as circumstantial evidence of direct infringement, Plaintiff points to Defendant's user manuals that show customers how to convert the EveryStage into booster mode. (*Id.* at 13) (citing JTX-1 at EVE-000262, JTX-2 at EVE-000341).

Defendant, on the other hand, maintains that Plaintiff has not shown that there is an underlying act of direct infringement, which is required to make an induced infringement claim. (D.I. 180 at 13). Because there is no evidence of customers ever converting the EveryStage into booster mode, Defendant argues, there is no showing of direct infringement. (*Id.*).

Although direct infringement can be shown by circumstantial evidence, user manuals alone have repeatedly been found insufficient to make this showing because the manual shows only that the product is capable of infringing, not that infringement has taken place. *Mirror Worlds LLC v. Apple Inc.*, 692 F.3d 1351, 1360 (Fed. Cir. 2012) ("It is well settled that excerpts from user manuals as evidence of underlying direct infringement by third parties of products that can be used in a non-infringing manner are by themselves insufficient to show the predicate acts necessary for inducement of infringement.") (citation omitted).

Plaintiff's proffered evidence here includes the user manual and testimony by its expert that the user manual describes the claimed process (Tr. at 384:20–385:6)—these are functionally equivalent for purposes of showing direct infringement. Even taken together as circumstantial evidence, these are insufficient to show that customers or others have directly infringed. Plaintiff would have needed to provide some evidence of actual infringing uses (e.g., customer testimony or expert testimony indicating actual infringing use). Plaintiff has not met this burden of proof.

I therefore find that Defendant has not induced infringement of claims 13 and 15 of the '294 patent.

C. Obviousness

Defendant asserts three obviousness combinations against claims 1, 6, 8, 10, 12, 13, and 15 of the '294 patent: (1) the IMMI SafeGuard car seat ("SafeGuard") in view of U.S. Patent Application No. 2009/0127902 ("Meeker"); (2) the Evenflo Triumph car seat ("Triumph") in

view of Meeker; and (3) Japanese Patent No. 3,127,638 ("Nakagawa") in view of Meeker. (D.I. 175 at 3). The Meeker and Nakagawa references are undisputedly prior art. The parties dispute whether the SafeGuard and the Triumph are prior art.

Defendant asserts that it has provided clear and convincing evidence that the SafeGuard was publicly available before the priority date of Sep. 10, 2008 and is therefore prior art. (D.I. 175 at 13–14). Defendant cites a *Safe Ride News* publication dated September/October 2005, which states, "The SafeGuard is available directly from the company at the retail price of $429." (*Id.* at 13) (citing DTX-544 at 4). Defendant also notes the 2006 date of the manufacturing stamps on the SafeGuard models demonstrated by both Mr. Campbell and Mr. Myers. (Tr. at 683:10–16; 864:4–25). Finally, Defendant cites a guide by *SafetyBeltSafe U.S.A*., which lists the SafeGuard as having been made in 2005 and discontinued in 2009. (D.I. 175 at 13) (citing Tr. at 674:25–676:3).

Plaintiff, on the other hand, argues that the manufacturing stamps on the SafeGuard models indicate only when they were made, not when they were publicly available. (D.I. 179 at 19). Specifically, Plaintiff points to testimony by Mr. Myers indicating his thoughts that the SafeGuard seat he was using was possibly a prototype and not for market use. (*Id.*) (Tr. at 865:12–866:3). Plaintiff also argues that industry newsletters rely on information from manufacturers and do not independently confirm dates of public sale. (*Id.* at 20) (citing Tr. at 861:13–862:5).

Although the manufacturing stamps alone do not indicate that the SafeGuard was available to the public prior to the priority date of the '294 patent, I do find convincing the *Safe Ride News* publication's statement that the SafeGuard was available for purchase from the company in 2005. The *SafetyBeltSafe* publication's statement that the SafeGuard was

manufactured for four years, in between 2005 and 2009, further suggests that the SafeGuard was produced for sale. Taken together, I think there is clear and convincing evidence that the SafeGuard was available for purchase by the public prior to the priority date of the '294 patent.

Defendant asserts that it has also provided clear and convincing evidence that the Triumph is prior art. (D.I. 175 at 16). Defendant provides two pieces of evidence: (1) the Triumph model used by Mr. Campbell has a manufacturing date of Feb. 12, 2007 (DTX-553), and (2) the *SafetyBeltGuide* publication lists the Triumph's date of manufacture as 2007 (DTX-542 at 21).

Plaintiff argues that evidence of the manufacturing date alone is insufficient to show that the Triumph was publicly available before the priority date. (D.I. 179 at 18). Mr. Campbell's testimony that the Triumph is prior art, Plaintiff maintains, is also insufficient because it recited in conclusory fashion the date on the documents without explaining why the manufacturing date showed that the Triumph was publicly available. (*Id.* at 18–19).

I agree with Plaintiff that the manufacturing dates alone indicate only that the Triumph was produced in 2007. There is no evidence in the record that indicates when the Triumph reached market and was available for purchase by the public. I therefore do not think Defendant has provided clear and convincing evidence that the Triumph is prior art. I will nevertheless assume that it is prior art in the rest of the analysis.

As the obviousness combinations are affirmative defenses (D.I. 54 at 8), I need only consider them in relation to claims 6 and 8.

The SafeGuard is a "forward-facing toddler car seat that utilizes a five-point harness that does not include a booster seat configuration." (*Id.*) (citing Tr. at 674:5–7, 718:9–11; DTX-572;

DTX-559; JTX-371). The SafeGuard is the commercial embodiment of U.S. Patent No. 7,246,854 ("the '854 patent"), which issued on July 24, 2007. (*Id.*) (citing Tr. at 679:7–18).

The Triumph is a "forward and rear-facing convertible car seat with a five-point harness that does not extend into the belt positioning booster use mode." (Tr. at 703:12–14). The Triumph's back panel is removable, allowing for vertical adjustment of seat belt harness height. (Tr. at 703:21–704:5).

Nakagawa discloses a car seat, integrated into a vehicle seat, that uses a five-point harness and can convert into booster mode by storing the harness hardware into the back of the seat into which it is integrated. (D.I. 175 at 3; DTX-541 at (0007)-(00010)).

Meeker is a patent application that discloses "a child restraint which is a forward-facing toddler seat with a five-point harness that can be converted to a booster seat" without disconnecting the harness. (*Id.*) (citing Tr. at 688:9–689:2; DTX-540 at [0001], [0007]). Meeker was filed on November 19, 2007, and published May 21, 2009. (Tr. at 680:12–16).

Obviousness requires a showing by clear and convincing evidence that a POSA would have had motivation to combine the asserted prior art references into the claimed invention. *InTouch Techs.*, 751 F.3d at 1347. Defendant has not met this burden, so I will resolve the obviousness inquiry on this issue.

Defendant cites to testimony by its expert, Mr. Campbell, as evidence that a POSA would have had motivation to combine each of the three asserted combinations.

For the combination of SafeGuard and Meeker:

> Q: So there would be no reason to store the harness because the SafeGuard seat is not being transitioned to a booster seat; correct?
>
> A: That is correct. A POSA looking at this design and seeing the storage and the need and the advantages of doing that and seeing the SafeGuard would understand

> that there are other places, strategic voids and locations where the harness could be stored. So a POSA would be taking advantage and learning from both of these.
>
> Q: But a POSA would never look to store the harness in SafeGuard because the SafeGuard would never be a booster seat; correct?
>
> A: SafeGuard would never be a booster seat, but a POSA—
>
> Q: And it's the same?
>
> A: -- would be aware of the design and would see the available storage space that's in the back of the SafeGuard.

(Tr. at 718:17–719:8.)

For the combination of Triumph and Meeker, Mr. Campbell relied on the same analysis as that of SafeGuard and Meeker. (Tr. at 705:7–12).

For the combination of Nakagawa and Meeker:

> A: Again, Nakagawa is showing a storage system for a harness that is built into a child restraint that allows you to store the harness without removing any of the components. And Meeker shows an alternative storage means; however, it's stored in several different locations. Where Nakagawa, it's all in one place. So there's an advantage to – and Meeker, the components are stored separately as opposed to all being stored in one location which would be shown under Nakagawa.

(Tr. at 710:20–711:4.)

Plaintiff, on the other hand, argues that Mr. Campbell's testimony at best amounts to statement that a POSA could have combined the asserted references, not that a POSA would have been motivated to do so. (D.I. 179 at 11–12). As to SafeGuard and Meeker (as well as Meeker and Triumph), Plaintiff argues that Mr. Campbell's statements merely indicate that it could be interesting to look at the potential space where harness components could be stored. (*Id.* at 11) (citing Tr. at 690:23–691:4). They do not indicate how precisely "a POSA would be taking advantage and learning from" the asserted combination. (*Id.*). Similarly, as to Nakagawa and Meeker, Plaintiff argues that Mr. Campbell's testimony merely states the differences between the

two (i.e., that Meeker stores the harness elements in several locations whereas Nakagawa stores it in one place) rather than explaining why a POSA would be motivated to combine the two. (*Id.* at 12).

Plaintiff further argues that its expert, Mr. Myers, provides ample reason why a POSA would *not* have had motivation to combine the references in the asserted combinations. Because the SafeGuard cannot be converted into a booster seat, Mr. Myers argued that a POSA would not have had an interest in storing the harness with respect to that reference. (*Id.* at 13) (citing Tr. at 858:4–14). Mr. Myers also testified that a POSA would not have thought to combine the SafeGuard and Meeker because the combination would have required considerable work and redesigning of the SafeGuard seat to account for changes in the weight of the child when the seat is in use as a booster seat. (Tr. at 869:15–870:5). Mr. Myers provided the same reasoning as to the combination of Triumph and Meeker. (Tr. at 870:13–23).

Plaintiff also asserts that a POSA would not have been motivated to use the "space" presented in the SafeGuard and Triumph seats to store harness components because those spaces had other componentry of the car seat that could feasibly be damaged, and therefore, as a designer, one would not want the consumer to have access to those spaces. (Tr. at 867:21–868:6).

As to the combination of Meeker and Nakagawa, Plaintiff argues that each reference has a method of storing harnesses that corresponds to their respective purposes. (D.I. 179 at 16) (citing Tr. at 877:17–22). A POSA would not have thought to combine them, according to Mr. Myers, because both storage mechanisms accomplish similar roles within the respective purposes of those inventions. (*Id.*).

I credit Mr. Myer's testimony and find that a POSA would not have had motivation to combine any of the three asserted combinations to arrive at the claimed invention. Mr. Myers's testimony offered more concrete reasons as to why a POSA would not have thought to combine. For example, he explains that a POSA would not have thought to combine the SafeGuard and Meeker because the available spaces expose componentry that could be damaged by a user. (Tr. at 867:21–868:6). This provides a cogent technical reason for why a POSA would not have wanted to combine these two references.

Mr. Campbell's testimony, on the other hand, does not as cogently tie together the facts about the references that he presents with the analysis as to why a POSA would have had motivation to combine. Mr. Campbell's testimony as to the combination of Meeker and Nakagawa, for example, notes that Nakagawa stores its harness in one location, whereas Meeker stores its harness components in multiple locations. This does not provide a clear reason for why a POSA would choose one system over the other or analyze the technical advantages and disadvantages in doing so. Mr. Campbell's testimony seems to have a strong component of hindsight.

Defendant carries the burden to prove motivation to combine the asserted combinations by clear and convincing evidence. The testimony it has provided is insufficient to do so. I therefore find that Defendant's asserted combinations of the Meeker/SafeGuard, Meeker/Triumph, and Meeker/Nakagawa do not invalidate the '294 patent for obviousness.

D. Damages

1. Reasonable Royalty Rate

Plaintiff seeks reasonable royalty damages of $845,528. This was based on the sale of 105,691 units and a royalty rate of 8%. (Tr. at 558, 570). The hypothetical negotiation would

have occurred in June 2018. (Tr. at 533). The parties dispute the reasonable royalty rate to be awarded for infringement of the Asserted Patents. The parties agree generally that the "analytical approach" to calculating reasonable royalties is acceptable, but they disagree as to how that approach should properly be applied in this case. The parties also disagree as to whether prior Defendant licenses should be taken into consideration.

Defendant had three prior licenses that were brought up by both parties in the context of damages analyses: Meeker (DTX 548), Scotty (DTX 549), and Siebert (DTX 550). The Meeker agreement ceded intellectual property developed by an individual, Meeker, in exchange for a flat monthly payment and fixed royalty rates. (Tr. at 562:14–563:22). The Scotty license covers a patent related to folding strollers (D.I. 176 at 34), and the Siebert license covers Defendant's SensorSafe technology, which involves embedded chips that can alert a parent as a child safety feature (D.I. 180 at 27).

Although these licenses deal generally with childcare products, I do not think they provide a sound basis for calculating reasonable royalties here. The Meeker agreement involved hiring the inventorship services of an individual; the parties here are direct competitors. Licensing terms and applicable royalty rates in that agreement, therefore, are inapposite to the dynamics here. The Scotty and Siebert licenses cover products that are not technologically comparable to the Accused Products. "When relying on licenses to prove a reasonable royalty, alleging a loose or vague comparability between different technologies or licenses does not suffice." *LaserDynamics, Inc.*, 694 F.3d at 79. Neither party has made clear why the folded stroller in Scotty or the chip-based child safety feature of Siebert is sufficiently technologically or economically similar to the claimed invention as to warrant using the terms of those licenses

as a basis for calculating royalties in this case. I therefore disregard these licenses in the reasonable royalty analysis.

Plaintiff argues that, under the "analytical approach," it is entitled to reasonable royalty rates between $5.28 and $12.98 per EveryStage unit. First, its damages expert, Mr. Schoettelkotte, examines a 2017 marketing brief prepared by Defendant, which compares the expected profits from introduction of the EveryStage to the actual profits of the Symphony product (the EveryStage's predecessor). (D.I. 176 at 35) (citing Tr. at 549:5–14; JTX-230). In this document, Defendant projected a 3.7% difference in profitability for the EveryStage LX over the Symphony. (Tr. at 549:24–550:11). Because Defendant's expected price for the EveryStage LX in that marketing brief was $142.59, Mr. Schoettelkotte calculated $5.28 per unit in expected profit for the EveryStage LX. (Tr. at 601:7–15). In addition, Mr. Schoettelkotte examines Defendant's projected profits from the EveryStage LX in April 2018 and performs his own analysis to compare these to the actual profits of the Symphony from January 2018 to May 2018, coming to a final figure of $12.98 per unit as the additional profitability of the EveryStage LX. (D.I. 182 at 18).

Defendant's expert, Ms. Bennis, on the other hand, argues that the "analytical approach" should not mix expected profits with actual profits. (D.I. 180 at 31). The *Georgia Pacific* factors, Defendant asserts, direct experts to consider the actual profits when calculating reasonable royalties. (*Id.*). Defendant also asserts that Mr. Schoettelkotte failed to properly apportion the benefits derived from patented as opposed to non-patented features. (*Id.* at 33). Specifically, Defendant maintains that the harness storage feature was not actively marketed, whereas the in-seat recline (which is a non-patented feature) was marketed. (Tr. at 731:18–744:25, 813:10–814:8).

Defendant itself makes the argument, "To calculate a reasonable royalty under the analytical approach preferred by Mr. Schoettelkotte, the patentee must 'calculate[] damages based on the infringer's own internal profit projections for the infringing item at the time the infringement began, and then apportion[] the projected profits between [itself] and the infringer.'" (D.I. 180 at 33) (citing *Lucent*, 580 F.3d at 1324) (internal quotations omitted). As this is precisely what Defendant itself did in the marketing brief that Mr. Schoettelkotte cites in his analysis (JTX-230), I will use as a starting point the 2017 comparison of expected EveryStage LX profits to actual Symphony profits, which indicates an expected increase in profitability of $5.28 per unit.

I agree with Defendant that there needs to be apportionment of that $5.28 figure to account for patented versus non-patented features in the EveryStage. Neither party has provided clear quantitative data to perform such an analysis. Based on the available evidence, Defendant did not preferentially market the patented harness storage or headrest/harness adjust features (Tr. at 742:4–10). Defendant does not dispute, however, that the marketed in-seat recline feature requires the headrest harness adjust feature to operate. (D.I. 182 at 19).

Given the little emphasis Defendant has put on marketing the patented features, I disagree with Plaintiff's assessment that the entire difference in profitability should be attributed to the patented features. Taking into consideration that the marketed in-seat recline feature requires the patented features to operate, however, an apportionment of sixty percent for the patented features and forty percent for the non-patented features seems reasonable. This brings the reasonable royalty rate to $3.17 per unit.

Based on the *Georgia Pacific* factors, I will adjust this rate upwards to $4 because the parties are direct competitors in the industry of the patented invention, which both parties agree typically warrants a higher royalty rate. (Tr. 560:22–561:5; 805:8–10).

2. Marking

"The patentee bears the burden of pleading and proving he complied with § 287(a)'s marking requirement." *Arctic Cat Inc. v. Bombardier Rec. Prods.*, 876 F.3d 1350, 1366 (Fed. Cir. 2017). "If a patentee who makes, sells, offers for sale, or imports his patented articles has not 'given notice of his right' by marking his articles pursuant to the marking statute, he is not entitled to damages before the date of actual notice." *Id.* (citing *Dunlap v. Schofield*, 152 U.S. 244, 248 (1894)).

Plaintiff does not dispute that the patentee did not mark its products with designations for the patents-in-suit. (D.I. 176 at 38). Nor does Plaintiff dispute that it did not plead that it marked its products. Defendant's burden to produce would only have been triggered if it were challenging the patentee's compliance with the §287 requirement; the patentee carries the burden in the first instance to plead that it had marked its products.[4] And when the patentee fails to mark its products, it is entitled to damages only as of the date of actual notice. *Arctic Cat*, 876 F.3d at 1366. The date of actual notice in this case would be December 14, 2018, the filing date of the Complaint. (D.I. 1). The number of units sold since that date is 85,920. (Tr. at 815 (inferred)).

Thus, the damages proved at trial is 85,920 x 4, or $343,680.

[4] Thus, I do not find Plaintiff's argument that Defendant waived the marking requirement in the pretrial order to be compelling. Defendants do not have to preserve defenses that are not responsive to issues that plaintiffs have not pled.

V. CONCLUSION

For these reasons, I find that Defendant's Accused Products infringe claims 6 and 8 of the '294 patent, claim 1 of the '725 patent, and claim 9 of the '117 patent. Defendant did not prove that claims 6 and 8 of the '294 patent are invalid as obvious. Plaintiff is entitled to damages in the amount of $343,680.

The parties should meet and confer about how to proceed from this point. The parties are asked to submit a joint status report within one week.