

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

J SQUARED, INC. d/b/a UNIVERSITY LOFT COMPANY,
Petitioner,

v.

SAUDER MANUFACTURING COMPANY,
Patent Owner.

Case IPR2015-00774
Patent 8,585,136 B2

Before LINDA E. HORNER, JOSIAH C. COCKS, and JAMES A.
WORTH, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

Petitioner, J Squared, Inc. d/b/a University Loft Company (“J Squared”), filed a Petition (Paper 1, “Pet.”) requesting institution of an *inter partes* review of claims 1–14 of U.S. Patent No. 8,585,136 B2 (“the ’136 patent,” Ex. 1001). Patent Owner, Sauder Manufacturing Company (“Sauder”), filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

We instituted an *inter partes* review based on the grounds that claims 1, 2, 4, 5, 8, 10, and 11 are unpatentable under 35 U.S.C. § 102 as anticipated by Mackey¹ and claims 1, 2, and 6–14 are unpatentable under 35 U.S.C. § 103 as obvious over Pollack II² and Pollack I.³ Paper 7 (“Decision” or “Dec.”).⁴ Sauder subsequently filed a Patent Owner Response (Paper 13, “PO Resp.”), to which J Squared replied (Paper 21, “Pet. Reply”). An oral hearing was conducted on April 21, 2016, and a transcript of that hearing has been entered into the record (Paper 34, “Tr.”).

For the reasons explained below, and on the record now before us, we determine the following: (1) J Squared has shown by a preponderance of the evidence that claims 1, 2, 8, 10, and 11 are anticipated by Mackey; (2) J Squared has not shown by a preponderance of the evidence that claims 4 and 5 are anticipated by Mackey; (3) J Squared has shown by a preponderance of the evidence that claims 1, 2, 6–8, 10, and 11 are unpatentable as obvious over Pollack II and Pollack I; and (4) J Squared has

¹ U.S. Patent No. 794,461 issued to Mackey (July 11, 1905) (Ex. 1003).

² U.S. Patent No. 2,689,598 issued to Pollack (Sept. 21, 1954) (Ex. 1005).

³ U.S. Patent No. 2,644,506 issued to Pollack (July 7, 1953) (Ex. 1006).

⁴ We did not institute *inter partes* review of claim 3 based on any ground.

not shown by a preponderance of the evidence that claims 9 and 12–14 are unpatentable as obvious over Pollack II and Pollack I.

B. Related Matters

Sauder has sued J Squared for infringing the '136 patent in *Sauder Manufacturing Company v. J Squared, Inc. d/b/a University Loft Company*, Case No. 3:14-cv-00962-JZ, pending in the United States District Court for the Northern District of Ohio (“the infringement litigation”). Pet. 2. The district court issued a Markman Order in the infringement litigation on June 9, 2015. Ex. 3001.

J Squared also challenged claims 1, 2, and 4–14 of the '136 patent in a petition for *inter partes* review filed on March 27, 2015. *J Squared, Inc. v. Sauder Mfg. Co.*, Case IPR2015-00958 (“the related petition”). We instituted *inter partes* review of claims 1, 2, and 4–14 in the related petition and consolidated the proceedings solely for the purpose of conducting an oral hearing. IPR2015-00958, Papers 7, 30. We issue concurrently with this decision a separate Final Written Decision in the related proceeding.

U.S. Patent Application No. 14/596,623, filed January 14, 2015, now U.S. Patent No. 9,370,249, issued June 21, 2016, is a continuation of U.S. Patent Application No. 14/057,781 ('781 application), filed October 18, 2013, now U.S. Patent No. 8,960,787 B2 ('787 patent), which is a continuation of U.S. Patent Application No. 13/277,778, filed October 20, 2011, now the '136 patent, which Petitioner challenges in the present matter. J Squared also challenged claims 1–21 of the '787 patent in a petition for *inter partes* review filed on December 29, 2015. *J Squared, Inc. v. Sauder Mfg. Co.*, Case IPR2016-00413 (“the '413 IPR”). Sauder filed a Patent Owner Preliminary Response, and the Board issued a decision in the '413 IPR denying institution on June 9, 2016.

180 extend generally downward from lower portion 106 and are configured as rockers, so as to render the chair portion capable of use as a floor rocker when the chair is set upon a generally horizontal supporting surface. *Id.* at 6:36–39, 45–46. Upper portion 104 provides a back rest and lower portion 106 includes a sitting portion. *Id.* at 4:33, 61–62. Base portion 300 has saddle 310, which is connected via post 334 to five legs 330. *Id.* at 7:20–28.

Figures 11 and 12 depict coupling of chair portion 100 and base portion 300. Figures 11 and 12 are reproduced below.

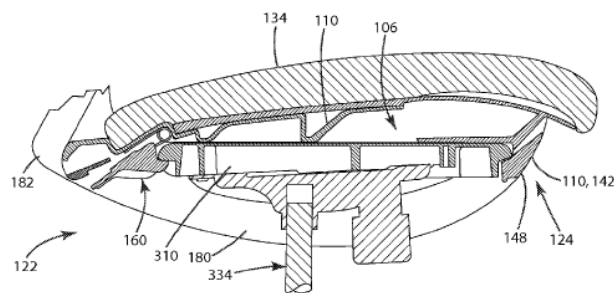
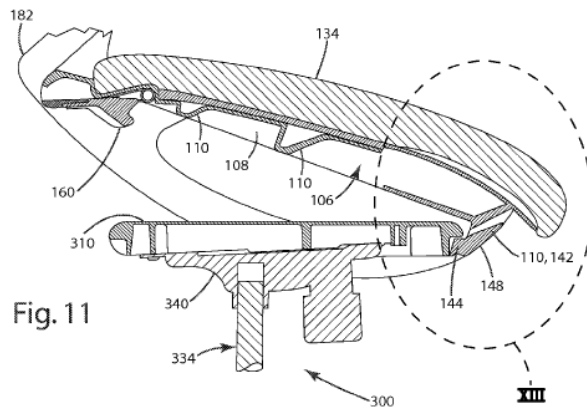


Fig. 12

Figures 11 and 12 depict side elevation views showing coupling and uncoupling of chair portion and companion stool base portion, with a portion chair portion and stool base portion in cross section.

As depicted in Figures 11 and 12, lower portion 106 includes claw 142 and clip clamp latch 160. *Id.* at 4:64–67. Claw 142 and clip clamp latch

160 function to engage releasably with saddle 310 of base 300. *Id.* at 5:24–26, 60–62. Claw 142 is a fixed member, and latch 160 is connected hingedly so as to be movable. *Id.* at 5:62–67. Lower portion 106 also includes receptacle 190 (not visible in the figures reproduced above) that has a generally trapezoidal geometry which corresponds with saddle 310 for unitary keying alignment of chair portion 100 with base portion 300. *Id.* at 6:63–7:5. In use, chair portion 100 and base portion 300 may be separate, with chair portion 100 providing casual rocker seating to a user, and base portion 300 engaged by the user or another user as a work surface, a writing surface, or a sitting surface. *Id.* at 8:12–19.

D. Illustrative Claim

Claims 1 and 12 are independent. Claim 1 is illustrative and is reproduced below.

1. A combination of a chair and a stool base portion, said chair comprising:

an upper portion providing a backrest for support for a first user;

a lower portion connected to said upper portion and having a sitting portion for supporting said first user in a seated position;

said stool base portion adapted to support said chair, and comprising a saddle adapted to releasably engage said chair;

said combination is configurable in a first configuration with said chair being coupled to said saddle, and said sitting portion being positioned above said saddle;

said combination is manually convertible between said first configuration and a second configuration, where said second configuration comprises said chair still functioning as a chair for said first user, and said stool functioning so that said saddle is accessible to said first user as a work surface or, alternatively, so that said saddle is accessible to a second user as a sitting surface; and

said combination further comprises an assembly positioned below said sitting portion and forming at least a pair of base legs which are structured so as to function as rockers for said chair when said combination is in said second configuration.

Ex. 1001, 10:22–46.

II. ANALYSIS

A. Claim Construction

The Board interprets a claim of an unexpired patent using the “broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.100(b); *see also* *Cuozzo Speed Techs, LLC v. Lee*, No. 15–446, ___ S. Ct. ___, 2016 WL 3369425, at *12 (U.S. June 20, 2016) (upholding the use of the broadest reasonable interpretation standard). Claim terms also are given their ordinary and customary meaning as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

In the Petition, J Squared proposed constructions for “coupled,” “engaged,” “assembly,” “positioned below,” “function as rockers,” “rotationally asymmetric,” “latch moving between closed and open positions,” “a pedestal that . . . includes a connector,” and “means for releasably engaging said chair to said base portion.” Pet. 10–18. Sauder contested several of J Squared’s proposed constructions for these claim terms and additionally proposed its own constructions for “combination of a chair and a stool base portion,” “first configuration,” and “accessible.” Prelim. Resp. 10–17. In the Decision instituting trial, we preliminarily

construed “assembly,” “positioned below,” “structured so as to function as rockers,” “coupled,” “engaged,” “first configuration,” “accessible,” “perimeter edge . . . with a rotationally asymmetric geometry,”⁵ “latch moving between closed and open positions,” “pedestal that . . . includes a connector,” and “means for releasably engaging said chair to said base portion.” Dec. 10–22. In doing so, we considered constructions of “coupled,” “assembly,” and “rockers” that were issued by the district court in a Markman Order issued in the corresponding district court litigation involving the ’136 patent. Ex. 3001.

In its Patent Owner Response, Sauder proffered constructions of the terms “combination,” “user,” “stool base,” “saddle,” “assembly,” “or, alternatively,” “generally arcuately downward from,” “pedestal,” and “manually operable means for releasably engaging said chair to said base portion.” PO Resp. 15–23. In its Petitioner Reply, J Squared contested many of Sauder’s proposed constructions for these claim terms. Pet. Reply 5–12.

For purposes of reaching our determination as to the patentability of the instituted claims over the prior art, we provide a final construction of the following claim language.

1. “*combination*”

The preamble of claim 1 recites “A combination of a chair and a stool base portion, said chair comprising:” Ex. 1001, 10:22–23. The body of

⁵ This claim language appears only in dependent claim 3, on which the USPTO did not institute an *inter partes* review.

the claim recites elements of the chair and stool base, and also calls for the combination to further comprise an assembly. *Id.* at 10:24–46.

Sauder argues that the claim is limited to the combination of only a chair and a stool base portion as the two units that make up the claimed “combination.” PO Resp. 15 (noting that the preamble does not use the open-ended term “comprising” immediately after the word “combination”).

Sauder is, in essence, seeking to have the Board rewrite the claim to recite, “A combination consisting of a chair and a stool base portion.” We see no reason to narrow the claim, particularly when the body of the claim itself recites “said combination further comprises an assembly”

Ex. 1001, 10:42. For these reasons, we construe “combination” to include, but not be limited to, a chair and a stool base portion.

2. “user”

The claim language refers to the combination chair and stool base portion being used by a first user and a second user. *Id.* at 10:24–46. Sauder contends that the meaning of “user” in the claimed combination does not encompass “infants, toddlers or invalids.” PO Resp. 16. Sauder posits that the broadest reasonable interpretation of “user” means “full sized, normally active persons capable of working, writing, and sitting in open seated desk chairs.” *Id.* Sauder points to alleged descriptive support in the ’136 patent for this interpretation. *Id.* at 17 (citing Ex. 1001, 1:49–57, 8:36–38).

The ’136 patent describes the invention as “a chair with a coupling companion stool base” that is “directed to the contemporary lifestyle needs of active users, including a range of functions from task seating at a work surface to casual relaxation” and that the “multi-tasking seating unit of the invention” is “suitable in any environment.” Ex. 1001, 1:49–57. Although the ’136 patent refers to the combination chair portion 100 and base portion

300 providing “a task chair or desk chair for a user,” the patent refers to the chair with coupling companion stool base shown in Figures 1–23 as a “preferred embodiment.” *Id.* at 4:18–20, 8:36–38. As such, the ’136 patent does not make clear that the “invention” is limited to a particular type of chair used by a particular user.

As noted by J Squared, Sauder’s declarants do not agree as to the specific user to which the claimed chair is directed. Pet. Reply 5 (citing PO Resp. 16 (positing that the invention was designed for college students); Ex. 1027, 22:9–23:11 (Mr. Warncke testifying that although the user described in the ’136 patent is different from the user of the Mackey chair, there is no explicit requirement in the claims of the ’136 patent for a specific type of user); Ex. 1028, 54:7–62:16 (Mr. Bontrager testifying that the claimed user is an individual that is 12 years of age or older)). The intrinsic and extrinsic evidence does not support an interpretation of “user” that is limited to a particular class of user. As such, we decline to limit the “user” referred to in the claims to a specific intended user that is not explicitly recited in the claim language and is not supported by the Specification.

3. “stool base portion”

Claim 1 recites, “[a] combination of a chair and a stool base portion . . . said stool base portion adapted to support said chair.” Sauder argues that “stool base” has a clear meaning, and further asserts that “ ‘[s]tool,’ although it can have different leg configurations, is a seating unit with a top surface upon which a person can sit.” PO Resp. 17 (citing Ex. 1001, 8:14–17; Ex. 2039, ¶ 17:D-E (Mr. Harting’s testimony proposing a definition of “stool base” as “a seating device which is armless and backless with a flat level surface and appropriate legs”); Ex. 2008, 24–26 (Mr. Bontrager’s testimony proposing a definition of “stool” as “a backless, armless item of furniture for

use as a seat”). Sauder further posits that a reasonable construction does not include a chest of drawers or table with a rotatable surface. *Id.* at 18 (citing Ex. 2008, 24–26; Ex. 2022 (Google Image Search of “stool seat”)).

J Squared agrees with Sauder’s construction of “stool” as being a seating unit with a top surface upon which a person can sit. Pet. Reply 6. J Squared argues that the definitions proffered by Messrs. Harting and Bontrager contradict other exhibits and are unduly narrow. *Id.* (citing Ex. 1027, 31:10–22; Ex. 2021; Ex. 2022; Ex. 1, 37:8–9).

As pointed out by J Squared (Pet. Reply at 6), the full definition of stool is “a seat *usually* without back or arms supported by three or four legs or by a central pedestal.” Ex. 2021 (definition 1a) (emphasis added). Further, as noted by J Squared (Pet. Reply at 6), the Google Image Search shows some stools having backs. Pet. Reply at 6 (citing Ex. 2022 (green stool on page 1; silver, yellow, red, and wood stools on page 2)). Indeed, even Sauder’s own product literature uses the term “stool” for chairs having backs. Ex. 2047 (Sauder PlyLok sales literature showing counter and bar “stools” having backs).

The ’136 patent shows a preferred embodiment of stool base portion 300 that is backless and armless; however, the ’136 patent does not define explicitly “stool” to mean an armless and backless seating device. The ordinary meaning of stool encompasses seating devices at least having backs. We decline to incorporate the preferred embodiment disclosed in the Specification into “stool” to limit the term to a meaning narrower than the ordinary meaning. Thus, the claim term “stool base portion” is not limited to a seating device that is backless and armless. Rather, we interpret “stool

base portion” as a lower portion of the claimed combination that is a seating device capable of supporting the chair atop it.

4. “saddle”

Claim 1 recites “said stool base portion . . . comprising a saddle adapted to releasably engage said chair . . . said stool functioning so that said saddle is accessible to said first user as a work surface or, alternatively, so that said saddle is accessible to a second user as a sitting surface.”

Sauder argues that “saddle” has “a special meaning in the ‘136 Patent.” PO Resp. 18 (citing Ex. 1001, 7:45–56). Sauder notes that claim 1 recites that the saddle is the base component to which the chair is “releasably engaged” and “coupled.” *Id.* Sauder posits that “[t]o satisfy the ‘configurations’ enumerated in claim 1, the saddle must have a level, flat surface with a specially configured perimeter edge” and that “[i]t must fit, in at least one orientation, between the rocker legs and cooperatively receive the latch and claw to engage with and be coupled to the seat structure.” *Id.* (citing Ex. 2008, 27–29). J Squared disagrees that “saddle” has a “special meaning” and argues that Sauder’s interpretation impermissibly substitutes the description of the “saddle” from the Specification into the plain language of the claim. Pet. Reply 6–7.

The term “saddle” is not a term of art in the art of seating. Ex. 2008, 27. The word “saddle” has many meanings.⁶ The ordinary meaning that makes the most sense in the context of the ’136 patent is “a device mounted as a support and often shaped to fit the object held.” Ex. 3004 (definition 2). The ’136 patent does not provide an explicit lexicographical definition of

⁶ The full definition of “saddle” in the Merriam-Webster on-line dictionary includes six different meanings. Ex. 3004 (full definition from www.merriam-webster.com/dictionary/saddle).

“saddle.” The ’136 patent describes a preferred embodiment of saddle 310 as “a generally planar member” having “a top surface 312” with a perimeter edge with front and back edges 314 and 316. Ex. 1001, 7:45–51. The ’136 patent describes that the front edge 314 cooperates with the frame lower portion claw 142 whereby the front edge is releasably captured in the claw, and the back edge 316 cooperates with the frame lower portion latch 160 whereby the back edge is releasably captured by the latch. *Id.* at 7:52–56.

Mr. Bontrager testifies that “[t]he term saddle implies it can be straddled just as a person straddles a saddle when on a horse” and that in the second configuration, the person using the stool base as a stool straddles the stool base, capturing the saddle between their legs, and in a first configuration, the base rocker legs straddle the stool base.” Ex. 2008, 27. Mr. Bontrager also discusses several aspects of the “saddle” that are recited in some of the dependent claims. *Id.* at 27–29 (discussing features of claims 2, 3, 7, 8, and 9).

As noted by J Squared (Pet. Reply at 7), Sauder’s special meaning ascribed to “saddle” is belied by the doctrine of claim differentiation. Several of the features attributable by Sauder to the term “saddle” are specifically recited in the dependent claims. For example, dependent claim 3 further defines the saddle having a top surface and a perimeter edge that defines the top surface with a rotationally asymmetric geometry that corresponds with the receptacle on the lower portion to allow the base and frame to couple only in one specific rotational orientation. Dependent claim 7 further recites that the saddle cooperates with a lower portion latch so that the saddle is releasably captured by said latch. Dependent claim 8 further

recites that the saddle comprises a top surface that faces upward and defines at least one of a working surface, a writing surface, and a sitting surface.

The '136 patent shows a preferred embodiment of saddle 310 having a flat surface with a specially configured perimeter edge and that fits, in at least one orientation, between the rocker legs and cooperatively receives the latch and claw to engage with and be coupled to the seat structure. The '136 patent, however, does not define “saddle” to be limited to the described preferred embodiment. As such, we decline to import limitations from the preferred embodiment into the interpretation of “saddle,” particularly in light of the fact that several of the dependent claims further recite the features asserted by Sauder to be encompassed by the word “saddle.”

Mr. Bontrager also posits that “the saddle functions as a level work surface, sitting surface, and writing surface.” *Id.* at 29 (citing Ex. 1001, claim 1, 10:40–41 and claim 8, 11:16–19). Neither claim 1 nor claim 8 uses the term “level” when reciting the saddle. Sauder’s counsel acknowledged at the oral hearing that the '136 patent does not describe the saddle as having to be level, and that the saddle is described as being able to tilt with respect to the base. Tr. 36:16–25.

We interpret “saddle” in keeping with its ordinary meaning and in light of the Specification to be a generally flat support on the stool base portion that is shaped to fit the chair atop it.

5. “*assembly*” and “*positioned below*”

Claim 1 recites, “said combination further comprises an assembly positioned below said sitting portion and forming at least a pair of base legs which are structured so as to function as rockers for said chair when said combination is in said second configuration.” Ex. 1001, 10:42–46.

As we noted in our Decision on Institution:

The district court construed “assembly” to mean a “structural unit positioned below [a] seat to support [the] seat and provide rockers.” Ex. 3001, 3 (referring to the assembly shown in Figure 17 and noting that it is a “single molded plastic assembly”). The district court declined to adopt Petitioner’s proffered construction of “assembly” as being “a collection of manufactured parts fitted together, distinct from the lower portion and its sitting portion, and from the upper portion.” *Id.*

Dec. 10.

We interpreted “assembly” in our Decision on Institution as follows:

The ’136 patent does not use the term “assembly” in describing the combination chair and stool base portion. The ’136 patent describes an exemplary embodiment in which chair portion 100 is formed with frame 102, which has upper portion 104 and lower portion 106. Ex. 1001, 4:21–26. Upper portion 104 provides a back rest and lower portion 106 includes a sitting portion and two frame legs 180. *Id.* at 4:33, 4:61–5:3. Legs 180 appear to be an integrally formed part of frame 102 in the exemplary embodiment. *Id.* at Fig. 17.

The language of claim 1, however, simply calls for the assembly to be “positioned below” said sitting portion, where said sitting portion is defined to be part of the lower portion of the chair. The claim language does not call for the assembly to be integrally formed as part of the lower portion.

Further, the ordinary meaning of the term “assembly” implies a chair formed from multiple parts. Ex. 3002. The breadth of the claim language is such that any means of attaching/incorporating the base legs so that they are positioned below the sitting portion of the chair and so that the legs function as rockers for the chair when the chair is in the second configuration, would be encompassed by the language of the claim.

Id. at 10–11 (footnote omitted). Based on these findings, we determined that, under the broadest reasonable interpretation of the claim language,

“assembly” encompasses “both base legs formed integrally with the lower portion and base legs otherwise incorporated into or attached to so that they are positioned below the sitting portion of the chair.” *Id.* at 11.

We also interpreted “positioned below” in our Decision on Institution as follows:

We do not feel constrained under the broadest reasonable interpretation to confine the claim language to the specific exemplary embodiment described in the Specification. Rather, under the broadest reasonable interpretation of the term “below,” the claim language requires only that at least a portion of the base legs are lower than the sitting portion of the chair such that when the chair is set upon a supporting surface such as the ground, the chair is supported by the base legs, as opposed to the sitting portion, such that the base legs can function as rockers, as called for the claim. As such, we interpret “positioned below” to call for at least a portion of the base legs to be lower than the lowest portion of the sitting portion of the chair, such that when the chair is in the second configuration, the base legs can function as rockers for the chair.

Id. at 13.

Sauder asserts that “[r]easonably construed, the ‘assembly’ must be below the seat, engaging the saddle when coupled, and have integral rocker legs wide enough apart to accept the saddle but still more or less within a vertical projection of the seat surface lateral edges to fit into the kneehole of a desk.” PO Resp. 19. The portions of the ’136 patent cited by Sauder as support for this definition seek to have us improperly import limitations from the preferred embodiment into the claim. For example, Sauder cites to the description provided in column 6, lines 35–62 of the ’136 patent as support for its assertion that the claim must be read to encompass only an instances in which the rockers are formed integrally with the base legs. PO Resp. 19. The written description does not support Sauder’s proffered

interpretation. Rather, the patent describes that “[t]he legs 180 may have various configurations” and that “the legs 180 are *desirably configured* as rockers” and that “the legs are *preferably* artfully incorporated into the chair frame 102 and extend to stops 182 at a very back of the frame lower portion 106.” Ex. 1001, 6:3–40, 45–45, 50–52 (emphasis added). We see no reason presented in Sauder’s Patent Owner Response to deviate from the interpretations presented in our Decision on Institution and recited *supra*.

6. “engage”

Claim 1 calls for the combination to include a “stool base portion adapted to support said chair, and comprising a saddle adapted to releasably *engage* said chair.” Ex. 1001, 10:29–31 (emphasis added). J Squared asserts that under the broadest reasonable interpretation, “‘engaged’ should be construed simply to require contact.” Pet. 10. Sauder acknowledges that the term is used in several different ways within the ’136 patent to include simple contact, in the context of the rocker surfaces engaging the floor, and as a synonym for coupled, in the context of joining of the saddle (base) with the chair. Prelim. Resp. 17. Patent Owner asserts that “engaged,” when construed in the context of joining of the saddle (base) with the chair, means “locked together by virtue of the structure that is provided for achieving that purpose.” *Id.*

We noted in the Decision on Institution that the ’136 patent uses the term “engage” in the context of the joining of the saddle and chair to refer to engagement via the claw and latch. *See, e.g.*, Ex. 1001, 3:4–33, 5:19–26, 49–54, 60–62, 6:27–29. In light of this description in the ’136 patent, we interpreted “engage” for purposes of institution to mean more than mere contact and to refer to the saddle and chair being “locked together.”

Dec. 17–18.

Sauder did not proffer any other meaning for “engage,” as that term is used in claim 1, in its Response. PO Resp. 15 (characterizing the Board’s interpretation of “releasably engaged” as meaning “locked together” as “accurate”). For purposes of this Final Written Decision, we adopt the meaning to “engage” provided in the Decision on Institution.

Although Sauder does not challenge the Board’s interpretation of “engage,” it argues that the prior art components are not “releasably engaged” because the chair can be lifted straight up and off the base without unlocking any structure. PO Resp. 28 (arguing that one of ordinary skill in the art reading the ’136 patent would understand that the claw and latch “provide[] a lock that is operable in all directions”) (citing Ex. 2008, 36–37, 59–60; Ex. 2039, 6:15). This argument raises the issue of to what extent the chair and base must be “locked together” in order to satisfy the claim language “releasably engage.”

J Squared argues in its Reply that “Patentee’s claims do not recite ‘locking in all directions.’” Pet. Reply 13. We agree with J Squared that the claim language “releasably engage” does not require locking together of the saddle and chair portion in all directions, e.g., front and back and side-to-side. Further, although the Specification provides a disclosure of a preferred embodiment in which the claw and latch cooperate with the saddle to prevent movement when the chair is tilted forward and back and the perimeter of the saddle and corresponding receptacle couple to prevent movement when the chair is moved side-to-side with respect to the base, we decline to limit the meaning of “releasably engage” to this particular preferred embodiment of the Specification, particularly in light of dependent claims that further narrow claim 1 and recite features of this particular preferred embodiment.

7. *“first configuration”*

Claim 1 calls for the combination to be “configurable in a first configuration with said chair being coupled to said saddle, and said sitting portion being positioned above said saddle.” Ex. 1001, 10:32–34. The ’136 patent describes chair 100 of the exemplary embodiment, when coupled to base 300, to provide a task chair or desk chair. *See, e.g.*, Ex. 1001, 3:38–41, 8:36–38. The claims, however, are directed broadly to a “combination of a chair and a stool base portion” and are not limited to a desk chair or task chair. We interpreted “first configuration” in the Decision on Institution to encompass chairs other than desk or office chairs. Dec. 18.

Sauder argues that the prior art “does not pretend to be a task chair in the assembled configuration; it is a high chair.” PO. Resp. 33 (arguing that the relative dimensions of the prior art preclude use with a desk). We find no requirement in the language of claim 1 that the chair be dimensioned to be used with a desk. For purposes of this final written decision, we adopt the interpretation of “first configuration” provided in the Decision on Institution.

8. *“or, alternatively”*

Claim 1 recites “said second configuration comprises said chair still functioning as a chair for said first user, and said stool functioning so that said saddle is accessible to said first user as a work surface or, alternatively, so that said saddle is accessible to a second user as a sitting surface.” Ex. 1001, 10:36–41. In Sauder’s preliminary response, Sauder asserted that this claim language calls for the saddle to be “accessible” to the user when the user is seated in the floor rocker. Prelim. Resp. 13 (arguing that the saddle must be “at an appropriate height so that the stool top can be effectively used as a writing table”). We declined to adopt Sauder’s

interpretation because it is not commensurate with the claim language, which provides for an alternative use of the saddle in the second configuration as being accessible to a second user to use as a sitting surface. Dec. 19 (further interpreting this claim language to encompass the first user using the floor rocker and the work surface of the saddle at different times).

Sauder, in its Patent Owner Response, asks us to reconsider this interpretation, arguing that “the described alternatives accurately list the capabilities of the invention based on a single structure.” PO Resp. 20. We agree with J Squared that Sauder is asking the Board to interpret “or, alternatively” to mean “as well as.” Pet. Reply 8. Sauder chose to claim the functionality of the saddle in the second configuration in the alternative, i.e., as being accessible as a work surface “or, alternatively” as a sitting surface. If Sauder had intended to require the saddle to be accessible as both a work surface and a sitting surface, it could have made that clear by using “and” or “as well as.” We do not find adequate support in the intrinsic evidence, or the extrinsic evidence presented by Sauder, that would call for interpreting “or, alternatively” contrary to its ordinary meaning.

As to the Board’s determination that the claim does not require that the chair and the stool are accessible to be used by the first user as a chair and a work surface simultaneously (PO Resp. 20), we do not need to reach this issue because we find *infra* that the prior art is capable of such simultaneous use.

9. “*two base legs*”

Claim 4 depends from claim 2⁷ and further recites:

wherein a first of the two base legs extends generally arcuately downward from a lower portion left side and second portion, and from the lower portion left side and first portion, and a second of the two base legs extends generally arcuately downward from a frame lower portion right side and second portion, and from the frame lower portion right side and first portion, with the base legs defining the rockers.

Ex. 1001, 10:62–11:3.

Sauder argues that this claim language requires that the base legs, which are structured to function as rockers, themselves extend “generally arcuately downward” from forward and rearward points under the seat. PO Resp. 21 (arguing that the claim is not met by merely edge surfaces extending arcuately downward) (citing Ex. 1001, 6:45–54; Ex. 2039, 7:18; Ex. 2008, 43–45). J Squared argues that Sauder improperly “attempts to infuse the term ‘underside’ to the claims based upon the specification drawings.” Pet. Reply 13.

The plain language of claim 4 recites that the base legs extend generally arcuately downward “from” the recited sides and portions of the lower portion of the chair. An ordinary meaning of “from” is “used as a function word to indicate the starting point of a physical movement or a starting point in measuring or reckoning or in a statement of limits.”⁸ Based on this definition, the plain language of claim 4 recites the arcuate

⁷ Claim 2 depends from independent claim 1 and further recites, “said lower portion comprises a first portion near said upper portion, and a second portion spaced away from said first portion; and said base portion extends generally upward to said saddle.” Ex. 1001, 10:47–52.

⁸ Ex. 3005 (full definition from www.merriam-webster.com/dictionary/from) (definition 1(a)).

downward extension of the base legs start at the recited sides and portions on the lower portion of the chair. This understanding of the claim language is consistent with the description of the preferred embodiment provided in the '136 patent. Ex. 1001, 6:47–54, Figs. 17–19 (describing and depicting the legs 180 extending generally arcuately downward from second portion 124 to first portion 122 along the left and right side of the chair, and extending to stops 182 at the very back of frame lower portion 106).

10. “pedestal”

Claim 9 depends from claim 1 and recites, “wherein the base portion further includes a pedestal that extends generally upward to the saddle and includes a connector that operatively connects the saddle with the pedestal, the connector including at least one of a tilt mechanism whereby the saddle tilts relative to the pedestal and a swivel mechanism whereby the saddle swivels relative to the pedestal.” Ex. 1001, 11:20–27.

J Squared asserts that “the broadest reasonable construction [of ‘pedestal’] should include a pedestal with multiple legs.” Pet. 16 (citation omitted). Sauder argues that a “pedestal” is explained in the Specification as being one of several different types of bases; i.e., a base with radial “star legs” and a single vertical support.” PO Resp. 21. Sauder argues that the Specification distinguishes a pedestal from other kinds of bases. *Id.* (citing Ex. 1001, 7:9–19; Ex. 2008, 38–40; Ex. 2039, 8:20).

We agree with Sauder that the '136 patent distinguishes a pedestal base from a legged base and a sled base. In particular, the '136 patent describes that “[o]ne having ordinary skill in the art understands that a broad variety of adaptations of chair bases, including categories of legged, sled, and pedestal, are available to support a chair frame above the supporting

surface.” Ex. 1001, 7:13–17. As such, a pedestal base does not encompass a chair base that has four downwardly projecting legs.

11. “manually operable means for releasably engaging said chair to said base portion”

Claim 12 recites, “said sitting portion including manually operable means for releasably engaging said chair to said base portion.” Ex. 1001, 12:4–5. In our Decision on Institution, the panel interpreted this claim limitation under 35 U.S.C. § 112, sixth paragraph.⁹ Dec. 21–22. Upon initial review of the Specification of the ‘136 patent, we determined that the structure corresponding to the function of “releasably engaging said chair to said base portion” is latch 160. In particular, we found that latch 160 is described in the ‘136 patent as a “movable member” and thus is “manually operable” to releasably couple the chair and base. *Id.* at 22. As such, we construed “manually operable means for releasably engaging said chair to said base portion” for purposes of institution as covering hinged latch 160 and equivalents thereof. *Id.*

J Squared and Sauder agree with the Board that this claim limitation contains a means plus function limitation which must be construed in accordance with 35 U.S.C. § 112, sixth paragraph. Pet. 17; Pet. Reply 9; PO Resp. 21. J Squared and Sauder disagree as to the structure corresponding to the recited function. Sauder’s interpretation focuses on the “engaging” portion of the recited function, while J Squared’s interpretation focuses on the “releasably” aspect of the recited function. J Squared asserts that the

⁹ Section 4(c) of the Leahy-Smith America Invents Act (“AIA”) redesignated 35 U.S.C. § 112, ¶ 6, as 35 U.S.C. § 112(f). Pub. L. No. 112-29, 125 Stat. 284, 296 (2011). Because the ‘136 patent has a filing date before September 16, 2012 (effective date of § 4(c)), we refer to the pre-AIA version of § 112.

structure is limited to only that structure which is “manually operable,” i.e., latch 160. Pet. 17; Pet. Reply 9. J Squared proposes that the structure described in the ’136 patent for performing the recited function is “a latch with a component (160) on the chair and a component on the base.” Pet. 17 (citing Ex. 1001, Figs. 15–17, 4:66–5:1, 5:55–62).

Sauder asserts that the user touches latch 160 only when the user *disengages* the chair from the base, and that to *engage*, i.e., lock, the chair with the base, the user simply places the chair atop the base in such a manner that the claw 142 and latch 160 releasably engage the corresponding portions on the saddle of the base, and the “latch opens itself!” PO Resp. 22 (describing “the ‘manipulation’ performed by the user to couple the floor rocker to the saddle”) (quoting Ex. 1001, 5:19–26, 5:58–62; Ex. 1001, 7:1–10:8, Figs. 9–13; Ex. 2039, ¶ 14). J Squared argues that Sauder’s interpretation improperly ignores the “release” function in favor of an unrecited “lock together” function and that the manually operable structure allowing for the release of the chair from the base is latch 190. Pet. Reply 9.

We reconsider our claim interpretation in light of the additional arguments and evidence provided by Sauder in its Patent Owner Response and by J Squared in its Reply. The function called for in this means plus function claim limitation is “releasably engaging said chair to said base portion.” Ex. 1001, 12:4–5. We think Sauder has the correct interpretation of the functional recitation of claim 12. The focus of the language of claim 12 is on the verb “engaging,” while the adverb “releasably” modifies the verb “engaging” to simply require that the engagement is effected in such a way that it is not permanent. This understanding is consistent with the claim language used in the remainder of this clause, which focuses on releasable engagement of the chair “to” the base portion. We note that during

prosecution of claim 12 (application claim 20) of the '136 patent before the examiner, Sauder amended the claim language “manually operable means for releasably engaging said chair from said base portion” to recite instead “manually operable means for releasably engaging said chair to said base portion,” thereby clearly shifting the focus of this functional language from one of disengagement to engagement. Ex. 1013, 210. Consistent with our interpretation of “engage,” we construe the term “engaging” to mean locked together.

The '136 patent describes the structure corresponding to the function of releasable engagement, i.e., locking together of the chair to the base as being effected by the claw and the latch engaging the underside of the saddle:

The claw 142 (illustrated in FIGS. 9, 10, 13 and 14) extends generally downward from the frame lower portion 106, near the second portion 124 of the frame lower portion 106, and is adapted for cooperating releasable engagement with the base 300. More specifically, and as will be discussed in greater detail in subsequent paragraphs herein, the claw 142 will function so as to releasably engage with a saddle 310 of the base 300.

. . .

More specifically, the clip clamp latch 160 extends generally downward from the frame lower portion 106, near its first portion 122, and is adapted for cooperating releasable engagement with the base 300 and more specifically with the saddle 310 of the base, discussed further below.

Ex. 1001, 5:19–26, 5:58–62.

The question still remains as to what meaning to ascribe to the words “manually operable” that precede the word “means.” In the Decision on Institution, these terms weighed heavily in our initial interpretation limiting the corresponding structure to the latch. Dec. 22 (noting that latch 160 is

described as a “movable member” that “hinges between closed and open positions”). At the time of the decision on institution, the Board understood “manually operable” to mean a structure moved by the user’s hand to unlock or disengage the chair from the base. In light of our current understanding of the functional language being focused on *engagement* of the chair to the base, however, we acknowledge that our prior understanding of “manually operable” as requiring the latch to be moved by hand excludes the preferred embodiment in which the latch is not moved by the user’s hand during engagement of the chair to the base. In particular, in the preferred embodiment, the user simply holds the chair and manipulates the chair to engage the claw with the saddle and then rocks the chair forward until the latch, through the action of the ramp surface against the saddle, ramps open and clips on to the saddle. Ex. 1001, 8:38–43, 8:64–9:4. We are not inclined to interpret claim 12 to exclude the preferred embodiment, even if, in this case, an alternative embodiment is described in which the user manipulates the latch by hand to the open position. *Id.* at 9:2–4. The ordinary meaning of “manual” is “of, relating to, or involving the hands” and “worked or done by hand and not by a machine.”^{10, 11} We understand “manually operable,” when construed in keeping with its ordinary meaning and in light of the Specification of the ’136 patent, to mean that the user can

¹⁰ Ex. 3006 (full definition from www.merriam-webster.com/dictionary/manually (definitions 1(a) and (b))).

¹¹ See also Ex. 1001, 11:30–33 (claim 10, which depends from claim 1, reciting the chair and base portion are “manually convertible between said first configuration and said second configuration, without requiring any manual manipulation of bolts, screws or nuts, or the use of any tools by said first user”). This limitation was found in claim 1 as originally filed.

operate the means for releasably engaging the chair to the base portion by hand, without resort to tools.

Sauder further argues that the latch and receptacle alone do not create the necessary lock of the chair to the base, and assert that the structure for releasably engaging the chair to the base must further include the receptacle 190 because it prevents side-to-side movement of the chair and is part of the coupling function that contributes to the engaging function of claim 12. PO Resp. 23 (citing Exs. 2008, 31–37; 2046, 24:563–583; 2053; 2024; 2039, 5:15, 25). We are not persuaded that the structure for releasably engaging the chair to the base portion, as described in the Specification, must include the receptacle 190. The '136 patent describes that the receptacle 190 and the saddle 310 have corresponding asymmetric geometry to provide for only one rotational orientation of the chair and base portion. Ex. 1001, 7:2–5 (describing the “corresponding geometry of the receptacle 190 and the saddle 310 may be selected for unitary keying alignment of the chair portion 100 with the base portion 300”), 8:44–63 (describing that the asymmetric geometry of the saddle perimeter edge and receptacle 190 allow for coupling of base portion 300 with frame 102 “only in one specific rotational orientation”). The '136 patent does not describe the receptacle 190 as providing for releasable engagement of the chair to the base portion. Rather, receptacle 190 is described as providing for proper orientation of the chair and the base portion.

For the reasons provided *supra*, we interpret the structure corresponding to the “manually operable means” to cover the claw 142 and latch 160 and equivalents thereof for performing the recited function of “releasably engaging said chair to said base portion.”

B. Anticipation by Mackey

Anticipation requires that every element in a claim must be found in a single prior art reference, and arranged as recited in the claims. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001). We instituted review of claims 1, 2, 4, 5, 8, 10, and 11 under 35 U.S.C. § 102 as anticipated by Mackey. Dec. 25. In light of the claim interpretation *supra*, and for the reasons that follow, we find that Petitioner has met its burden to show by a preponderance of the evidence that claims 1, 2, 8, 10, and 11 are anticipated by Mackey, and that Petitioner has not met its burden to show by a preponderance of the evidence that claims 4 and 5 are anticipated by Mackey.

1. Mackey

Mackey discloses a combination of upper and lower parts forming a child's high chair. Ex. 1003, 1:7–13.

Figures 1–3 of Mackey are reproduced below.

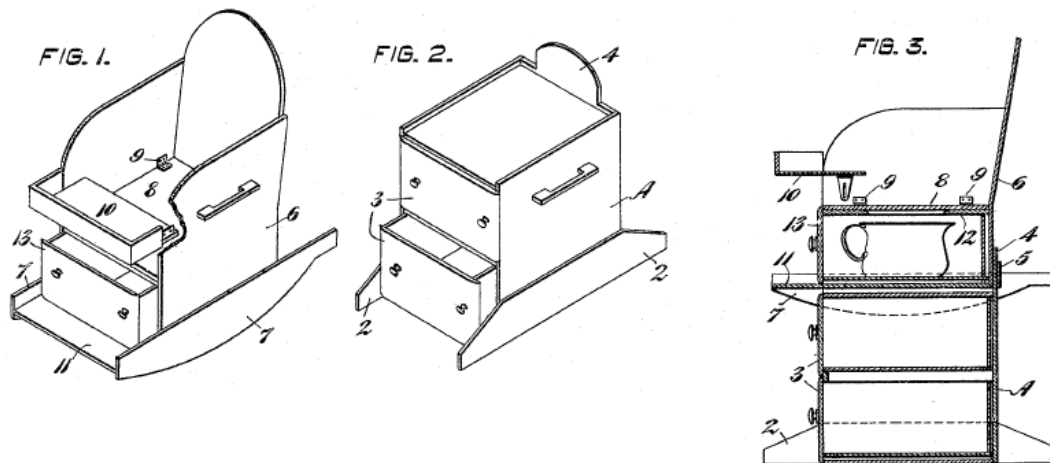


Figure 1 shows a perspective view of an upper part of the chair. Figure 2 shows a perspective view of a lower part of the chair. Figure 3 shows a sectional view of the combined upper and lower parts forming a high chair.

Mackey discloses a first and lower section or base (shown in Figure 2). *Id.* at 1:15. The base has a back 4 extended upwardly from the base, which is shaped to be engaged by a slotted cleat 5, fixed upon the back of the upper and second section 6 to “lock the two parts together.” *Id.* at 1:31–41, Fig. 3. The upper section 6 has side cleats 7, fixed so as to project below the bottom, and when the upper and lower parts are put together, these sides cleats clasp over the top of the lower section, and “in conjunction with the engagement at the back they serve to hold the two parts rigidly together.” *Id.* at 1:42–48. Mackey discloses that when upper part 6 is removed, the lower part “serves as an ordinary seat” and when the upper and lower parts are united, the upper part forms a high chair or seat for a child. *Id.* at 1:49–54. Mackey discloses that “[t]he side cleats 7 may have the lower edges curved into such an arc as to form a rocking-chair, so that by lifting the upper section off the lower section and placing it upon the floor the child will then have a rocker.” *Id.* at 1:66–71.

2. Claim 1

On this record and based upon the claim interpretation discussed *supra*, J Squared has demonstrated by a preponderance of the evidence that Mackey discloses every element of claim 1. Pet. 22. In particular, Mackey discloses the claimed combination of a chair (upper portion 6) and a stool base portion (Mackey’s base A shown in Figure 2). *Id.* (citing Ex. 1003, Figs. 1, 2). Mackey’s chair has an upper portion providing a backrest for supporting a first user (the child), and a lower portion connected to the upper portion and having a sitting portion (seat 8) for supporting the first user in a seated position. *Id.*; Ex. 1003, Figs. 1–3.

In keeping with our interpretation *supra* of “stool base portion,” Mackey’s base A is a “stool base portion” in that the base of Mackey is a

lower portion of the combination that is a seating device and is capable of supporting the chair atop it. Because Mackey's base is capable of supporting the chair atop it with a user in it, it is likewise capable of supporting a user sitting upon it. Further, for the reasons discussed *supra*, the term "stool base portion" does not exclude Mackey's base, which has an upwardly extending back 4 and small upwardly extending edges on the sides of the top stool surface.

Mackey's stool base portion is adapted to support the chair and comprises a saddle (top of base A) adapted, via upwardly extending back 4, to releasably engage the chair via slotted cleat 5. Pet. 22; Ex. 1003, 1:31–41, Fig. 3. In keeping with our interpretation *supra* of "saddle," the top surface of Mackey's base provides a generally flat support shaped to fit the chair atop it. Also, Mackey's base A is adapted to releasably engage and be coupled to the chair and is capable of being used as a work surface or a sitting surface. Further, in keeping with our interpretation *supra* of "engage," Mackey's base A is adapted to lock together the chair and the base. In particular, Mackey discloses that the back of base A includes an upwardly extending portion 4, and the chair 6 includes a slotted cleat 5, such that when the chair 6 is placed upon the base A, extending portion 4 "fits into the slot or cleat 5, and thus serves to lock the two parts together." Ex. 1003, 1:31–41. Mackey further discloses that side cleats 7 disposed on chair 6 clasp over the top of base A, "and in conjunction with the engagement at the back they serve to hold the two parts rigidly together." *Id.* at 1:42–48.

The combination of Mackey's chair and stool base portion is configurable in a first configuration, as shown in Figure 3, with the chair being coupled to the saddle and the sitting portion positioned above the

saddle. Pet. 22 (citing Ex. 1003, Fig. 3). The combination also is configurable to a second configuration in which the chair functions as a chair for a first user and the stool functions so that the saddle is accessible to a second user as a sitting surface. *Id.* (citing Ex. 1003, Figs. 1, 2); Ex. 1003, 1:49–54. The upwardly facing top surface of the saddle is generally flat, and as such, is capable of being used as a work surface. *Id.* (citing Ex. 1003, Figs. 1, 2). Further, we find that this work surface is accessible to the first user while the first user is sitting in the uncoupled rocker chair. In keeping with the claim interpretation of “or, alternatively” discussed *supra*, however, the claim is anticipated as long as the saddle is accessible as either a work surface or a sitting surface.

Mackey’s combination further comprises an assembly, including side cleats 7, which form a pair of base legs that are structured so as to function as rockers for the chair when the combination is in the second configuration. Pet. 22 (citing Ex. 1003, Fig. 1); Ex. 1003, 1:66–71 (describing the lower edges of side cleats 7 may be curved into an arc as to form a rocker). In keeping with our interpretation of “assembly” discussed *supra*, the side cleats 7 are positioned below the sitting portion of Mackey’s chair, as shown in Figure 1 of Mackey, in that at least a portion of the cleats 7 are lower than the sitting portion of the chair such that when the chair is set upon a support surface such as the ground, the chair is supported by the side cleats 7, as opposed to the sitting portion. Further, in keeping with our interpretation of “assembly” discussed *supra*, it does not make a difference to our finding of anticipation whether the side cleats 7 are formed integrally with the lower portion of the chair or otherwise attached to the lower portion of the chair so that they are positioned below the sitting portion of the chair. Still further in keeping with our interpretation of “assembly” discussed *supra*, it does not

make a difference to our finding of anticipation that Mackey's side cleats 7 extend beyond the vertical projection of the seat surface lateral edges.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that claim 1 is anticipated by Mackey.

3. Claim 2

Claim 2 depends from claim 1 and recites, "said lower portion comprises a first portion near said upper portion, and a second portion spaced away from said first portion; and said base portion extends generally upward to said saddle." Ex. 1001, 10:47–52. J Squared asserts that the lower portion of chair 6 of Mackey has a first (rear) portion near the upper portion backrest, and a second (front) portion spaced away from the first portion and that the base extends upward to the saddle. Pet. 22–23 (citing Ex. 1001, Figs. 1, 3). Sauder does not present any arguments specifically directed to the subject matter of claim 2. We find that Mackey discloses in Figures 1 and 3 the claimed subject matter. In particular, we agree with J Squared that Mackey's chair 6 is depicted in these Figures as having a lower portion (on which the user sits) that extends from a first portion near the backrest to a second portion located at the front of the lower portion that is spaced away from the first portion. We further agree with J Squared that Mackey's base, as shown in Figures 2 and 3, extends upwardly to the saddle. For these reasons, J Squared has met its burden to show by a preponderance of the evidence that claim 2 is anticipated by Mackey.

4. Claims 4 and 5

Claim 4 depends from claim 2 and recites, "wherein a first of the two base legs extends generally arcuately downward from a lower portion left side and second portion, and from the lower portion left side and first portion, and a second of the two base legs extends generally arcuately

downward from a frame lower portion right side and second portion, and from the frame lower portion right side and first portion, with the base legs defining the rockers.” Ex. 1001, 10:62–11:3. J Squared asserts that Mackey’s rocker rails 7 “are arcuate and extend down from the front and rear of the chair.” Pet. 23. This assertion does not comport with the claim language, which, as interpreted *supra*, does not call simply for the legs to “extend down,” but rather calls for the legs to “extend arcuately downward from” the lower portion of the chair. Although the bottom edge of Mackey’s rocker rails 7 are curved and thus arguably arcuate along the bottom edge, the rocker rails 7 do not “extend arcuately downward from” the lower portion. The arcuate portion of the rocker rails 7 is disposed only along the bottom edge of the rails and thus although the rails may extend below the lower portion, they do not extend arcuately downward from the lower portion as called for in claim 4. For these reasons, J Squared has not met its burden to show by a preponderance of the evidence that claim 4 is anticipated by Mackey. Claim 5 depends from claim 4, and thus J Squared has likewise not met its burden to shown anticipation of claim 5 by Mackey for the same reasons.

5. Claim 8

Claim 8 depends from claim 1 and recites, “the saddle further comprises a top surface that faces upward, and that defines at least one of a working surface, a writing surface and a sitting surface.” Ex. 1001, 11:15–19. J Squared asserts that Mackey’s saddle (top of base A) has an upwardly facing top surface that defines a working surface, a writing surface, and a sitting surface. Pet. 23. Sauder argues that Mackey’s saddle surface is not accessible for writing or working purposes to a person simultaneously seated in the adjacent rocker, as allegedly required by claim 1 from which claim 8

depends, and thus does not define a writing or working surface. PO Resp.

31. Sauder further argues that because Mackey's saddle has upwardly projecting rims on the sides and an extension 4 on the back, such a configuration "would discourage reasonable persons from using the cabinet top as a sitting surface." *Id.*

Mackey discloses in Figures 1–3 the claimed subject matter. Pet. 23. In particular, we agree with J Squared that the top portion of Mackey's base A comprises a top surface that faces upward. Further, the upwardly facing top surface is generally flat, and as such, is capable of being used as a working surface. This working surface is accessible to the first user while the first user is sitting in the chair. We also note that claim 8 calls for the saddle to define "at least one of" the enumerated surfaces. Mackey discloses that "[w]hen the upper part is removed, the lower part serves as an ordinary seat, the extension 4 forming a sufficient back therefor." Ex. 1003, 1:49–51. Based on this disclosure, we find that this upwardly facing top surface defines a sitting surface. For these reasons, J Squared has met its burden to show by a preponderance of the evidence that claim 8 is anticipated by Mackey.

6. Claim 10

Claim 10 depends from claim 1 and recites, "said combination is manually convertible between said first configuration and said second configuration, without requiring any manual manipulation of bolts, screws or nuts, or the use of any tools by said first user." Ex. 1001, 11:28–33.

J Squared asserts that Mackey's chair 6 and base A can be coupled and decoupled without using tools, bolts, screws, or nuts. Pet. 23–24 (citing Ex. 1003, 1:31–48, 66–71). Sauder does not present any arguments specifically directed to the subject matter of claim 10. We agree with

J Squared that Mackey discloses this limitation. Mackey discloses that the back of base A includes an upwardly extending portion 4, and the chair 6 includes a slotted cleat 5, such that when the chair 6 is placed upon the base A, extending portion 4 “fits into the slot or cleat 5, and thus serves to lock the two parts together.” Ex. 1003, 1:31–41. Mackey further discloses that side cleats 7 disposed on chair 6 clasp over the top of base A, “and in conjunction with the engagement at the back they serve to hold the two parts rigidly together.” *Id.* at 1:42–48. Mackey discloses decoupling the chair and base “by lifting the upper section off the lower section.” *Id.* at 1:68–69. Based on this disclosure, we find that Mackey’s combination chair and base is manually convertible between a first coupled configuration and a second decoupled configuration, without requiring any manual manipulation of bolts, screws, or nuts, or the use of any tools by said first user. For these reasons, J Squared has met its burden to show by a preponderance of the evidence that claim 10 is anticipated by Mackey.

7. Claim 11

Claim 11 depends from claim 1 and recites, “said pair of base legs are spaced laterally from one another.” Ex. 1001, 11:34–36. J Squared asserts that Mackey’s rocker rails 7 are spaced laterally from one another. Pet. 24. Sauder does not present any arguments specifically directed to the subject matter of claim 11. We find that J Squared has met its burden to show by a preponderance of the evidence that Mackey discloses in Figure 1 the claimed subject matter. In particular, Mackey’s rocker rails 7 are spaced laterally from one another in that Figure 1 of Mackey shows the rails 7 extending below each of the left and right sides of the chair 6. Ex. 1001, Fig. 1. For these reasons, J Squared has met its burden to show by a preponderance of the evidence that claim 11 is anticipated by Mackey.

In conclusion, J Squared has met its burden to show that claims 1, 2, 8, 10, and 11 are anticipated by Mackey, and has not met its burden to show that claims 4 and 5 are anticipated by Mackey. We turn now to the second instituted ground based on obviousness.

C. Obviousness in view of Pollack II and Pollack I

Section 103 forbids issuance of a claim when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103.¹²

The ultimate determination of obviousness under § 103 is a question of law based on underlying factual findings. *In re Baxter Int’l, Inc.*, 678 F.3d 1357, 1362 (Fed. Cir. 2012) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)). These underlying factual considerations consist of: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) “secondary considerations” of non-obviousness such as “commercial success, long-felt but unsolved needs, failure of others, etc.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966)). A claimed invention may be obvious even when the prior art does not teach each claim limitation, so long as the record contains some reason why one of skill in the art would modify the prior art to obtain the claimed invention. *See Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1307 (Fed. Cir. 2006).

¹² Because the ’136 patent has an effective filing date before the effective date of the applicable AIA amendments, we refer to the pre-AIA version of 35 U.S.C. § 103.

J Squared must prove unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). Against this background, we review J Squared's contentions that claims 1, 2, and 6–14 of the '136 patent are unpatentable.

1. Level of Ordinary Skill in the Art

In determining the level of skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962–63 (Fed. Cir. 1986)). The court in *GPAC* held that the Board did not err in failing to make a specific finding as to the level of skill in the art and relying instead on the references of record to inform it as to the level of skill in the art. *Id.*; see also *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (holding that the absence of specific findings on the level of skill in the art does not give rise to reversible error where the prior art itself reflects an appropriate level and a need for testimony is not shown).

J Squared did not proffer a specific level of skill of one of ordinary skill in the art, and relied instead on the prior art to reflect an appropriate level of skill. Tr. 78:15–20. We find no need for testimony as to the level of skill in the art, as it is demonstrated aptly by the prior art of record. For purpose of this Final Written Decision, we resort to the prior art of record to assess the level of skill of one of ordinary skill in the art. In particular, as discussed below, the prior art explicitly proposes the combination of the teachings of the Pollack references.

2. Scope and Content of the Prior Art

i. Pollack II

Pollack II discloses a convertible article of furniture comprised of a combination of an understructure and a removable superstructure capable of serving as a chair. Ex. 1005, 1:1–4.

Figure 1 of Pollack II is reproduced below.

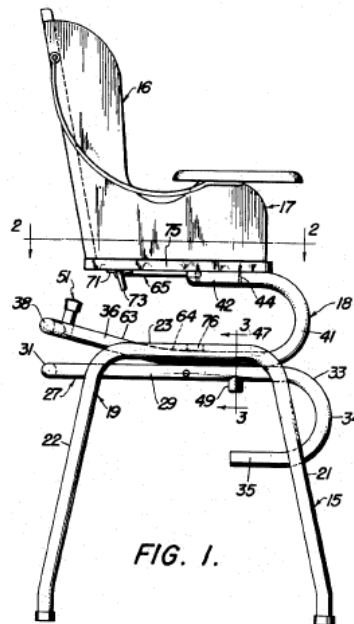


Figure 1 shows a side elevation view of a high chair that includes under and superstructures in assembled relation

Pollack II is a continuation-in-part of Pollack I, with an improvement to structure the upper component to be capable of use as a rocker when used as a separate and independent member. Ex. 1005, 1:5–19. Pollack II describes that the upper chair component is “operatively employable with the understructure of our said prior invention.” *Id.* at 1:22–23.

Understructure 15 described in Pollack II comprises two inverted U-shaped leg members 19 and 20, each having front leg 21, 24, rear leg 22, 25 and lateral connecting bar 23, 26, respectively. *Id.* at 3:1–6. Attached to inner surfaces of leg members 19 and 20 are rail members 27 and 28 containing

parallel rails 29 and 30, respectively, joined by rear bar 31 and containing hand-gripping loops 32 and 33, respectively. *Id.* at 3:6–12.

Superstructure 16 includes supporting member 18, which contains two base rocker bars 36 and 37 connected together by rear connecting bar 38. *Id.* at 3:21–24. The forward portions of rocker bars 36, 37 are joined to hand gripping portions 39 and 40. *Id.* at 3:24–26. The article includes “stop and lock means . . . for stopping the forward or rearward movement of the superstructure upon the understructure, and releasably locking it in said predetermined assembled position.” *Id.* at 3:30–36. The means includes elongated element 45 extending through rail 29 and entering aperture 46 in forward flat portion 47 of rocker bar 36. *Id.* at 3:37–41. Spring 48 is positioned within rail 29 and cam knob 49 is fixedly mounted on element 45. *Id.* at 3:42–45. Rotation of cam knob 49 either causes locking element 45 to enter aperture 46 and effect interlocking of rail 29 and rocker bar 36, or allows locking element 45, by virtue of spring 48, to retract from aperture 46. *Id.* at 3:46–57.

ii. *Pollack I*

Pollack I includes a similar understructure, having inverted U-shaped leg members 18, 19, each with front leg 20, 23, rear leg 21, 24, and lateral connecting bar 22, 25, rail members 26 and 27 containing parallel rails 28 and 29, rear bar 30, and loops 31 and 32. Ex. 1006, 3:5–16.

Figures 7 and 11 of Pollack I are reproduced below.

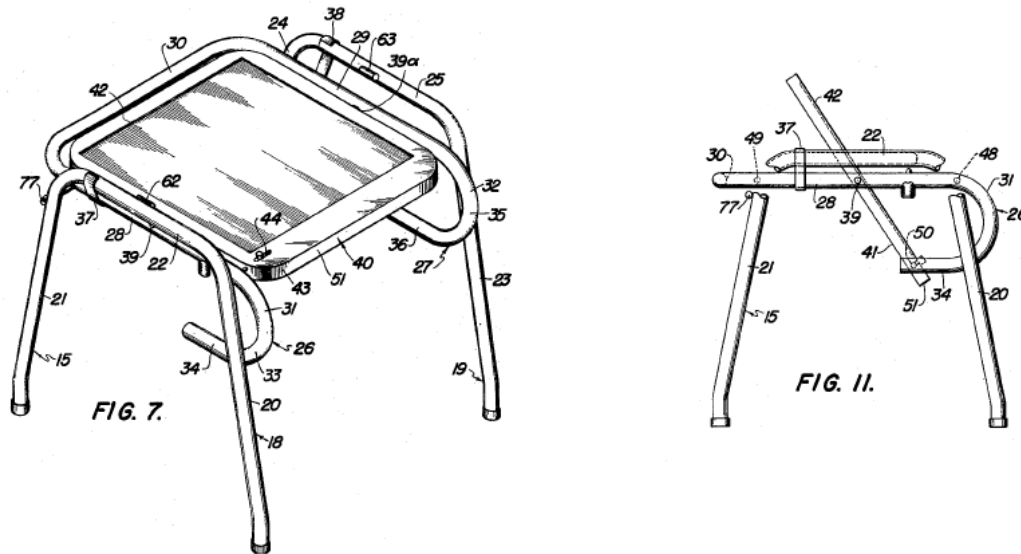


Figure 7 is a perspective view of the understructure section with the table locked in one horizontal position, and Figure 11 shows a side view of the understructure with the table in an inclined position.

Pivotaly mounted at 39 and 39a of rails 28 and 29, and disposed therebetween, is table 40. *Id.* at 3:28–30. Upper surface 41 of table 42 is flat and may be used for feeding, and opposite surface 42 may be used as a writing surface. *Id.* at 3:31–37. Table 40 “is revolable into three operative positions,” including an inclined position shown in Figure 11. *Id.* at 3:37–40, Figs. 7, 10, 11. The understructure of Pollack I contains a stop and lock means similar to Pollack II. *Id.* at 4:38–67, Figs. 4–6.

3. Differences between the Prior Art and the Claims at Issue

i. Claim 1

On the present record and based upon the claim interpretation discussed *supra*, J Squared has demonstrated by a preponderance of the evidence that Pollack II comprises a combination of a chair (Pollack II’s superstructure 16) and a stool base portion (Pollack II’s understructure 15). Pet. 32 (citing Ex. 1005, 1:2–4, Figs. 1, 7). Pollack II’s chair 16 has an

upper portion providing a backrest for supporting a first user (the child), and a lower portion connected to the upper portion and having a sitting portion (seat 75) for supporting the first user in a seated position. *Id.* at 32–33 (citing Ex. 1005, Figs. 1, 7). Pollack II does not disclose that understructure 15 includes a table, and thus that it is capable of being used as a work surface in a second configuration, as called for in claim 1.

Pollack I discloses a similar combination chair (superstructure 16) and stool base portion (understructure 15). Pet. 33; Ex. 1006, 2:34–39.

J Squared also has demonstrated by a preponderance of the evidence that Pollack II explicitly teaches that the understructure 15 of Pollack I can be used to support the chair 16 of Pollack II. Pet. 31 (citing Ex. 1005, 1:19–29). The understructure 15 of Pollack I includes a table 40. Ex. 1005, 3:28–30.

Sauder argues that “Pollack’s furniture does not pretend to be a task chair in the assembled configuration; it is a high chair.” PO Resp. 33 (citing Ex. 2008, 63; Ex. 2039, 9:26). For the reasons discussed *supra* in the claim construction analysis, we do not interpret claim 1 to be limited to a task chair for use at a desk.

In keeping with our interpretation *supra* of “stool base portion,” the understructure 15 of Pollack I is a “stool base portion” in that the understructure 15 is a lower portion of the combination that is a seating device capable of supporting the chair atop it. In particular, the understructure is configured support the chair 16 of Pollack II with a user sitting in it, and thus it is likewise capable of supporting a user sitting upon it. Sauder argues Pollack I does not disclose a stool base portion because the table 40 is not fit to sit upon. PO Resp. 33 (arguing table 40 is only latched in one corner) (citing Ex. 2008, 65–66). The entire understructure 15,

however, of Pollack I, which includes Pollack I's rail members 26, 27 with rails 28–30, is a seating device, in that it is capable of supporting the chair 16 of Pollack II with a user in it, and thus these portions of the understructure are capable of bearing the weight of a user. While, admittedly, the understructure 15 may not make a particularly comfortable stool base if sat upon directly, the understructure 15 qualifies as a stool base in that it supports the weight of the chair with a user in it.

Further, the understructure 15 of Pollack I comprises a saddle. Pet. 33 (citing Ex. 1006, 3:5–14, Fig. 7, describing Pollack I's rail members 26, 27 with rails 28–30 and table 40). In keeping with our interpretation *supra* of “saddle,” the top surface of Pollack I's understructure 15, comprised of rail members 26, 27 with rails 28–30 and table 40, provides a generally flat support shaped to fit the chair atop it. Sauder contends that “there is no ‘saddle’ [in Pollack I's understructure] that can be coupled to the chair seat; all connecting functions in Pollack I and II are via the legs; the seat is not coupled or releasably engaged to anything, and the legs are not latched to the table top 40.” PO Resp. 32, 34. This argument is not commensurate with the language of claim 1, which recites, “a saddle adapted to releasably engage said chair.” The rocker legs of Pollack II's superstructure 16 comprise a part of the chair and thus the attachment of the chair legs of the superstructure to the “saddle” of the understructure meets the claim language because the claim does not require the saddle to engage the lower or sitting portion of the chair. The saddle is adapted, via stop and lock means, to releasably engage the chair. Pet. 33 (citing Ex. 1006, 3:5–14, Fig. 7). In keeping with our interpretation *supra* of “engage,” Pollack I's understructure 15 is adapted to lock together with Pollack II's chair 16 via stop and lock means.

The combination of Pollack II's chair and Pollack I's stool base portion is configurable in a first configuration, as shown in Figure 1 of Pollack II, with the chair being coupled to the saddle and the sitting portion positioned above the saddle. Pet. 33 (citing Ex. 1005, Fig. 1). The combination is configurable to a second configuration, as shown in Figures 7 and 8 of Pollack II and Figures 7 and 11 of Pollack I, in which the chair functions as a chair for a first user and the stool functions so that the saddle is accessible to the first user as a work surface. *Id.* (citing Ex. 1005, Fig. 7; Ex. 1006, 3:28–40, Fig. 7). In keeping with the claim interpretation of “or, alternatively” discussed *supra*, it is sufficient to meet this claim limitation if the saddle of Pollack I is capable of being used as either a work surface or a sitting surface. Further, even if the claim required simultaneous use of the rocker chair and the work surface of the saddle by the first user, the combined base of Pollack I and chair of Pollack II is capable of such use. In particular, the first user would be able to position Pollack's II chair adjacent to and/or beneath the legs of Pollack I's understructure, such that the first user could use the table 40 of the base as a work surface while the user is sitting in Pollack II's chair. We find that Pollack I's disclosure of an alternate embodiment of the understructure 15 that includes a sling seat 73 is not the only configuration in which a child can play with table 40. Pet. 31.

The combination further comprises an assembly, including base rocker bars 36 and 37 on the chair of Pollack II, which form a pair of base legs that are structured so as to function as rockers for the chair when the combination is in the second configuration. Pet. 33–34 (citing Ex. 1005, 2:46–55, 3:21–24, Figs. 1, 7). In keeping with our interpretation of “assembly” discussed *supra*, the rocker bars 36 and 37 are positioned below the sitting portion of Pollack II's chair 16, as shown in Figure 11 of Pollack

II, in that the rocker bars 36 and 37 are lower than the seat 75 of the chair 16 such that when the chair 16 is set upon a support surface such as the ground, the chair is supported by the rocker bars 36 and 37, as opposed to the sitting portion. Further, in keeping with our interpretation of “assembly” discussed *supra*, it does not make a difference whether the rocker bars 36 and 37 are formed integrally with the lower portion of the chair 16 or otherwise attached to the lower portion of the chair 16 so that they are positioned below the sitting portion of the chair 16. Still further in keeping with our interpretation of “assembly” discussed *supra*, it does not make a difference to our finding that Pollack II’s rocker arms 36 and 37 extend beyond the vertical projection of the seat surface lateral edges. See Ex. 1005, Fig. 11.

Sauder further argues that combining Pollack II’s superstructure with Pollack I’s understructure would require removal of bumpers 15, and this would result in “extra parts to keep track of, [in] violation of the two-unit interpretation” of claim 1. PO Resp. 32–33. We find that any such modification, if necessary, would have been well within the level of skill of one of ordinary skill in the art, and we decline to adopt, for the reasons explained *supra* in the claim interpretation of “combination,” that the claim is limited to two units.

Sauder further argues that J Squared has failed to articulate adequate reasoning to make the modifications to the combined chair and base of Pollack II and Pollack I to meet the claimed subject matter. PO Resp. 36–37. The argued necessary modifications are based on Sauder’s proposed claim constructions that we declined to adopt. As such, these arguments are

not persuasive because the asserted modifications to the combined chair and base are not necessary to meet the language of claim 1.¹³

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 1 are disclosed in the combination of Pollack II and Pollack I. We weigh this evidence of obviousness against Sauder’s evidence of secondary considerations of non-obviousness, *infra*, to reach our final determination as to patentability.

ii. Claim 2

Claim 2 depends from claim 1 and recites, “said lower portion comprises a first portion near said upper portion, and a second portion spaced away from said first portion; and said base portion extends generally upward to said saddle.” Ex. 1001, 10:47–52. J Squared asserts that the chair (superstructure 16) of Pollack II includes a first portion near the backrest and a second portion, and that the base (understructure 15) of Pollack I extends upward to the saddle. Pet. 34 (Ex. 1005, Figs. 1, 2). Sauder does not present any arguments specifically directed to the subject matter of claim 2. Pollack II’s superstructure 16 is depicted in Figures 1 and 2 as having a lower portion (on which the user sits) that extends from a first portion near the

¹³ We limited our review to the portions of evidence specifically addressed in Sauder’s Patent Owner Response. PO Resp. 31–34. To the extent any additional evidence was presented in the declarations as to non-obviousness over the combination of Pollack II and Pollack I, we decline to consider such information presented in a supporting declaration, but not discussed sufficiently in Patent Owner’s Response. See PO Resp. 31, 32 (citing generally the entire discussion of Pollack I and II as set forth in Exs. 2008 and 2046). Among other reasons, our rules prohibit a party from incorporating by reference from one document (such as a supporting declaration) into another document (such as Patent Owner’s Response). See 37 C.F.R. § 42.6(a)(3).

backrest to a second portion located at the front of the lower portion that is spaced away from the first portion. We agree with J Squared that Pollack I's understructure 15, as shown in Figures 7 and 11, extends upwardly to the saddle. Pet. 34. We rely on the same explicit teaching in Pollack II, articulated above in the analysis of claim 1, to use the understructure of Pollack I to support the superstructure of Pollack II. The resulting combination meets the limitations of claim 2.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 2 are disclosed in the combination of Pollack II and Pollack I. We weigh this evidence of obviousness against Sauder's evidence of secondary considerations of non-obviousness, *infra*, to reach our final determination as to patentability.

iii. Claim 6

Claim 6 depends from claim 2 and recites, "said lower portion further comprises a latch moving between closed and open positions." Ex. 1001, 11:7–10. As discussed *supra*, both Pollack II and Pollack I disclose a stop and lock means, in the form of a cammed pin, which extends and retracts to engage and disengage a mating aperture on the chair. See Pet. 34. This stop and lock means defines a latch moving between closed and open positions. We rely on the same reasons articulated above in the analysis of claim 1 for the combination of the superstructure of Pollack II with the understructure of Pollack I. The structure resulting from the combination of Pollack II and Pollack I includes a latch on the understructure that engages an aperture in the chair.

Sauder argues that the claimed "latch is on the seat; whereas Pollack mounts his latches on the base" and that a modification to move Pollack's latch to the superstructure is "hindsight per se." PO Resp. 35. J Squared

responds there are “two possible locations to put the latch (*i.e.*, base or seat)” and that “rearranging known elements in a configuration recognized as functionally equivalent to known configuration is *per se* obvious.” Pet. Reply 15 (citations omitted). We agree with J Squared that rearranging the latch and aperture such that the aperture is disposed on the understructure and the latch is disposed on the superstructure is not a patentable distinction over the art, and such a modification would have been well within the level of skill of one of ordinary skill in the art and would have led to predictable results, namely, the locking together of the two stacked structures in a manner functionally equivalent to that disclosed in the Pollack references.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 6 are disclosed in or rendered obvious by the combination of Pollack II and Pollack I. We weigh this evidence of obviousness against Sauder’s evidence of secondary considerations of non-obviousness, *infra*, to reach our final determination as to patentability.

iv. Claim 7

Claim 7 depends from claim 6 and recites, “said saddle cooperates with said lower portion latch so that said saddle is releasably captured by said latch.” Ex. 1001, 11:11–14. J Squared asserts that the combination of Pollack II and Pollack I, as further modified to reverse the location of the latch to the superstructure and the aperture to the saddle on the understructure, as discussed with regard to claim 6 above, results in Pollack’s latch (e.g., pins) engaging the corresponding apertures to releasably capture the saddle (e.g., rail members 26, 27 with rails 28–30 and table 40). Pet. 35. Sauder does not present any arguments specifically directed to the subject matter of claim 7. We agree with J Squared, in the

light of the determination made above as to claim 6, that the structure resulting from the proposed combination of Pollack II and Pollack I, renders obvious a saddle that cooperates with and is releasably captured by, a latch on the seat.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 7 are disclosed in or rendered obvious by the combination of Pollack II and Pollack I. We weigh this evidence of obviousness against Sauder's evidence of secondary considerations of non-obviousness, *infra*, to reach our final determination as to patentability.

v. *Claim 8*

Claim 8 depends from claim 1 and recites, "the saddle further comprises a top surface that faces upward, and that defines at least one of a working surface, a writing surface and a sitting surface." Ex. 1001, 11:15–19. J Squared asserts that Pollack I's understructure includes a saddle that has an upwardly facing top surface (defined by table 40) that can be used as at least one of a working surface, a writing surface, and a sitting surface. Pet. 34–35. Although Sauder does not present any arguments specifically addressing claim 8, Sauder argues, with respect to claim 1, that Pollack's table 40 is not fit to sit upon. PO Resp. 33. The claim language, however, calls for the upwardly facing top surface of the saddle to be capable of being used as "at least one of" the enumerated surfaces. Thus, even if Sauder is correct that Pollack's table 40 is not a sitting surface, we agree with J Squared that there is sufficient evidence that Pollack's table 40 is a working surface and a writing surface. Pet. 34–35 (citing Ex. 1006, 3:28–40, Fig. 7). Specifically, Pollack I discloses that table 40 has an ordinary flat surface 41, which may be used for feeding or other purposes, and has an opposite

surface 42, which may contain a slate wall or other writing surface.

Ex. 1006, 3:31–37. Pollack I discloses that table 40 is revolvable such that either surface 41 or surface 42 may serve as the upwardly facing top surface. *Id.* at 3:37–40, Figs. 7, 10. We rely on the same explicit teaching in Pollack II, articulated above in the analysis of claim 1, to use the understructure of Pollack I to support the superstructure of Pollack II. The resulting combination meets the limitations of claim 8.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 8 are disclosed in the combination of Pollack II and Pollack I. We weigh this evidence of obviousness against Sauder’s evidence of secondary considerations of non-obviousness, *infra*, to reach our final determination as to patentability.

vi. Claim 9

Claim 9 depends from claim 1 and recites, *inter alia*, that the base portion includes a “pedestal that extends generally upward to the saddle.” Ex. 1001, 11:20–22. J Squared asserts that the understructure of Pollack I “includes a four-legged pedestal, formed at least partially by leg members 18 and 19, that extends upward to the saddle.” Pet. 35. As discussed in the claim interpretation *supra* of “pedestal,” when read in light of the Specification of the ’136 patent, a “pedestal” base is different from a “legged” base, such that “pedestal” does not encompass a base having four legs. See PO Resp. 35. Thus, J Squared has not demonstrated that the understructure of Pollack I includes a pedestal. Further, although J Squared asserts that “Patentee concedes five-star, pedestals are well known in the art” (Pet. Reply 15 (citing Ex. 1027, 16:4–25; Ex. 2046, 5)), J Squared does not provide any explanation as to why one having ordinary skill in the art would have been led at the time of the invention to modify the combined Pollack

II/Pollack I structure, which is directed generally to a child's high chair, to use a pedestal base, which is well known for use on desk or task chairs. For these reasons, J Squared has not met its burden to show by a preponderance of the evidence that Pollack II and Pollack I render obvious the subject matter of claim 9.

vii. Claim 10

Claim 10 depends from claim 1 and recites, "said combination is manually convertible between said first configuration and said second configuration, without requiring any manual manipulation of bolts, screws or nuts, or the use of any tools by said first user." Ex. 1001, 11:28–33.

J Squared asserts that Pollack II's superstructure 16 can be attached to Pollack I's understructure 15 without using tools, bolts, screws, or nuts. Pet. 36 (citing Ex. 1005, 4:59–66, 5:12–24). Sauder does not present any arguments specifically directed to the subject matter of claim 10. As discussed *supra*, the stop and lock means disclosed in both Pollack II and Pollack I serve to engage and disengage the chair and base by a user simply turning the cam knob to either extend or retract the pin into or out of the aperture. Pet. 35–36 (citing Ex. 1005, 4:59–66, 5:12–24). Based on this disclosure, we find that Pollack II's superstructure and Pollack I's base are manually convertible between a first coupled configuration and said second decoupled configuration, without requiring any manual manipulation of bolts, screws, or nuts, or the use of any tools by said first user. We rely on the same explicit teaching in Pollack II, articulated above in the analysis of claim 1, to use the understructure of Pollack I to support the superstructure of Pollack II. The resulting combination meets the limitations of claim 10.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 10 are disclosed

in the combination of Pollack II and Pollack I. We weigh this evidence of obviousness against Sauder's evidence of secondary considerations of non-obviousness, *infra*, to reach our final determination as to patentability.

viii. Claim 11

Claim 11 depends from claim 1 and recites, "said pair of base legs are spaced laterally from one another." Ex. 1001, 11:34–36. J Squared asserts that the rocker legs 36, 37 of Pollack II are spaced laterally from one another. Pet. 36. Sauder does not present any arguments specifically directed to the subject matter of claim 11. Pollack II shows in Figures 1 and 2 the claimed subject matter. In particular, we agree with J Squared that Pollack II's rocker legs 36, 37 are spaced laterally from one another in that Figure 2 of Pollack II shows the rocker legs 36, 37 extending below each of the left and right sides of the rocker chair member 17. We rely on the same explicit teaching in Pollack II, articulated above in the analysis of claim 1, to use the understructure of Pollack I to support the superstructure of Pollack II. The resulting combination meets the limitations of claim 11.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 11 are disclosed by the combination of Pollack II and Pollack I. We weigh this evidence of obviousness against Sauder's evidence of secondary considerations of non-obviousness, *infra*, to reach our final determination as to patentability.

ix. Claims 12–14

Independent claim 12 recites, *inter alia*, "said sitting portion including manually operable means for releasably engaging said chair to said base portion." Ex. 1001, 12:4–5. With respect to this limitation of independent claim 12, J Squared asserted that the structure corresponding to this means plus function element is a latch, and that "Pollack II discloses a latch in the

form of pin 45 with mating aperture 46 in rocker bar 36 as shown . . . in Fig[ures] 3 and 4.” Pet. 36.

Based on the interpretation discussed *supra* of the structure corresponding to the means plus function claim language as being both a claw and a latch and equivalents thereof, J Squared has failed to show in either its Petition or its Reply, how the stop and lock means disclosed in Pollack II and Pollack I, which comprises a cammed pin that extends and retracts to engage and disengage a mating aperture in the chair rocker bar, includes both a claw and latch or is at least equivalent to the claw and latch structure disclosed in the ’136 patent. Tr. 23:10–24:4 (counsel for J Squared acknowledging that Petitioner did not present an argument in its briefing about either Pollack reference disclosing a claw).

For these reasons, we find that J Squared has not met its burden to show by a preponderance of the evidence that the subject matter of claim 12 is rendered obvious by Pollack II and Pollack I. Claims 13 and 14 depend from claim 12, and thus, for the reasons provided for claim 12, J Squared also has not met its burden to show by a preponderance of the evidence that the subject matter of claims 13 and 14 are rendered obvious by Pollack II and Pollack I.

4. *Secondary Considerations*

Sauder argues that commercial success, industry praise, and evidence of copying indicate that the claims would not have been obvious to a person of ordinary skill in the art. PO Resp. 37–42. Factual inquiries for an obviousness determination include secondary considerations based on evaluation and crediting of objective evidence of non-obviousness. *Graham*, 383 U.S. at 17–18. Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the art at the time of the

invention, the totality of the evidence submitted, including objective evidence of non-obviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill in the art. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). Secondary considerations may include any of the following: long-felt but unsolved needs, failure of others, unexpected results, commercial success, copying, licensing, and praise. *See Graham*, 383 U.S. at 17; *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007).

To be relevant, evidence of non-obviousness must be reasonably commensurate in scope with the claimed invention. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (citing *In re Tiffin*, 448 F.2d 791, 792 (CCPA 1971)); *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998). To be accorded substantial weight, there must be a nexus between the merits of the claimed invention and the evidence of secondary considerations. *In re GPAC*, 57 F.3d 1573, 1580 (Fed. Cir. 1995) (emphasis added). “Nexus” is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining non-obviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). The burden of showing that there is a nexus lies with the patent owner. *Id.*; see *Paulsen*, 30 F.3d at 1482.

To support its argument, Sauder proffers the declaration of Mr. Philip Bontrager, Chief Executive Officer of Sauder (Ex. 2008, 87–102 “Bontrager Decl.”). Sauder also proffers excerpts from depositions taken during the related litigation of two individuals employed by J Squared during the development of J Squared’s accused infringing chair (Ex. 2042, deposition transcript of Justin Davis, dated January 28, 2015 (“Davis Depo.”) and Ex.

2043, deposition transcript of Adam L. Anderson, dated July 24, 2015 (“Anderson Depo.”)).

i. Commercial Success

Sauder argues that evidence of commercial success of Sauder’s TREY® chair demonstrates non-obviousness of the claimed invention. PO Resp. 37–38. In support of this assertion of commercial success, Sauder provides evidence of gross sales of the TREY® chair since its introduction to the education market in 2006 and evidence purporting to show that sales of the TREY® chair “revers[ed] the decline in Sauder’s sales of chairs for student dorm rooms.” *Id.* Sauder also provides evidence of the percentage of Sauder’s total sales for student dorm room and government agency housing seating products attributable to sales of the TREY® chair. *Id.* (citing Ex. 2008, 92–94).

Sauder’s evidence consists of the declaration of Sauder’s CEO, Mr. Bontrager, including contentions that the asserted sales of Sauder’s TREY® chair constitute evidence of commercial success. At the outset, Sauder’s “evidence related solely to the number of units sold provides a very weak showing of commercial success, if any.” *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996). Sauder’s evidence purporting to show that the sales of the TREY® chair “dramatically revers[ed] the decline in Sauder’s sales of chairs for student dorm rooms” is not persuasive because Sauder has not established adequately that the reason for the asserted reverse in the decline of Sauder’s sales was due to the merits of the claimed invention. For example, Mr. Bontrager testified that during the time period of 2000–2005, several Sauder customers and sales representatives in the education market were expressing dissatisfaction with bent plywood chairs for student dorm rooms, and that as an alternative solution, “some customers began

purchasing traditional office desk chairs from office supply stores.” Ex. 2008, 15. When questioned during his deposition, Mr. Bontrager explained that these office desk chairs had casters with a five-star base and were height adjustable and may have had a tilt or pivot capability, all features not found in a standard wood frame chair. Ex. 1028, 25:13–26:6. Thus, prior to Sauder’s 2006 introduction of its TREY® chair into the educational market, the market had started to shift away from standard wood frame chairs to chairs having features of traditional office desk chairs. Based on this evidence, it is not surprising that when Sauder started selling the TREY® chair, which included these features of traditional office chairs, the sales of the TREY® chair would reverse Sauder’s declining sales.¹⁴ However, these features of traditional office chairs are not the focus of the claims at issue in the ’136 patent. For example, the claims at issue, i.e., claims 1, 2, 6, 7, 8, 10, and 11, do not recite the stool base portion having casters with a five-star base, or a stool base portion that is height adjustable or having a tilt or pivot feature.

Further, the evidence purporting to show that “[i]n fiscal year 2015, the TREY® chair has accounted for 76% of [Sauder’s] sales for student dorm room and government agency housing seating products,” does not demonstrate Sauder’s sales in the larger relevant market. PO Resp. 38. For example, this evidence does not demonstrate what portion of the overall relevant market represents sales of Sauder’s TREY® chair and whether Sauder’s market share relative to its competitors has grown. *See Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1026–27 (Fed. Cir. 1985)

¹⁴ See Ex. 1028, 33:22–34:5 (Mr. Bontrager testifying that prior to the TREY® chair, Sauder was not actively marketing a chair with tilt and swivel features).

(finding that sales of 5 million units represent a minimal showing of commercial success because “[w]ithout further economic evidence . . . it would be improper to infer that the reported sales represent a substantial share of any definable market”). In other words, Sauder has not shown that the increase in chair sales that Sauder purports to have experienced was not due to an increase in the overall market for such chairs. While the sales of the TREY® chair may represent “a significant commercial success for [Sauder]” (Ex. 2008, 93), it would be improper to infer that these sales represent a substantial share of the student dorm room and/or government agency housing seating markets.

Although the Bontrager Declaration purports to provide evidence as to an increase in Sauder’s market share after introduction of the TREY® chair (Ex. 2008, 93), Sauder does not specifically rely on this evidence in its arguments in the Patent Owner Response. PO Resp. 39–40 (containing no assertions that commercial success is evidenced by an overall increase in Sauder’s market share). We limited our review to the portions of evidence specifically addressed in Sauder’s Patent Owner Response. PO Resp. 39–40. We decline to consider market share information presented in a supporting declaration, but not discussed in Patent Owner’s Response. Among other reasons, our rules prohibit a party from incorporating by reference from one document (such as a supporting declaration) into another document (such as Patent Owner’s Response). See 37 C.F.R. § 42.6(a)(3). In any event, as explained above, Sauder’s purported increase in market share could have been attributable to the fact that the TREY® chair possessed features of a traditional office desk chair that were not provided previously by Sauder. As such, the recapture of this market share is not adequately tied to the merits of the *claimed* invention.

For these reasons, the evidence of commercial success is entitled to little weight in demonstrating non-obviousness of the claimed invention.

ii. Industry Praise

Sauder argues that evidence of industry praise of Sauder's TREY® chair is a further indicator of non-obviousness of the claimed invention. PO Resp. 38–39. In support of this assertion, Sauder cites to the Bontrager Declaration. *Id.* at 38 (citing Ex. 2008, 87–91).

Industry praise for an invention may provide evidence of non-obviousness where the industry praise is linked to the claimed invention. *See Geo. M. Martin Co. v. Alliance Mach. Sys. Int'l LLC*, 618 F.3d 1294, 1305 (Fed. Cir. 2010); *Asyst Techs., Inc. v. Emtrak, Inc.*, 544 F.3d 1310, 1316 (Fed. Cir. 2008).

The Bontrager Declaration discusses asserted instances of “unsolicited public media coverage of the Trey® [chair] in the months following its introduction.” Ex. 2008, 87. In particular, Mr. Bontrager points to mentions of the TREY® chair by PC Gamer Magazine (Ex. 2013), PCWorld (Ex. 2017), GIZMODO (Ex. 2016), Treehugger.com (Ex. 2018), and the Wall Street Journal (Ex. 2014). *Id.* at 88–90. Mr. Bontrager asserts that “the public media citations provide convincing evidence that following market introduction, the [TREY® chair] received significant media exposure due to its unique functionality as described in the '136 patent.” *Id.* at 90.

The mentions of the TREY® chair in these publications appear to be the result of product reviews of new products introduced into the gaming or desk chair markets in 2007. Because the TREY® chair was newly introduced to these markets at the time of these product reviews, it is not surprising that the TREY® chair was included on the list of new products on

the market. The media coverage of the TREY® chair, based on the newness of the product, is weak evidence of industry praise.

Mr. Bontrager also discusses two awards received by Sauder for the TREY® chair at the New Products Design Competition held in conjunction with the Alliance for Plastic Processors April 2007 Plastic Parts Innovation Conference. Ex. 2008, 90. Mr. Bontrager testifies that the TREY® chair was selected by the conference attendees for The People's Choice Award as their choice for the most innovative entry. *Id.* Mr. Bontrager also testifies that at the same conference, the TREY® chair was selected by a panel of four designers for an award in the Retail and Consumer Category for being the most innovative commercial product entry in the market category. *Id.* Mr. Bontrager testified that in giving the award, the judges cited the following features of the TREY® chair:

The chair can be used as a standard desk chair, or the user can lift the seat from its base. The curved support frame on the bottom of the chair makes it a rocking chair when it is placed on the floor, while the flat base can be used as a table or stool.

Id. at 91 (citing Ex. 2015, article in Plastics News).

First, to make the record clear, the quote from Plastics News article appears to be the author's description of the TREY® chair, and is not attributed in the article to the judges or the reason for the awards. Second, Sauder provides no criteria by which the relevance of these awards can be assessed. In other words, it is not clear that the awards are linked to the '136 patent claims as opposed to other aspects of the plastic design. The claims, however, are not limited to plastic as the manufacturing material. Ex. 1001, 4:26–32.

Sauder asserts that “[t]he nexus linking the commercial success and praise factors to the patented invention is *prima facie* demonstrated by the

fact that the patented invention is the successful Sauder TREY chair.” PO Resp. 38 (citing Ex. 2008, 8–13 as asserted evidence of proof of identity between the novel features of the chair disclosed and claimed in the ’136 patent and the TREY® chair). To the extent Mr. Bontrager’s testimony is tied to the novel features of the chair, as noted by J Squared, no novel features of subject matter of claims 1, 2, 8, 10, and 11, exist. *See supra*, analysis of anticipation of these claims by Mackey. Of the relevant claims at issue, only claims 6 and 7 remain. These claims are directed to the placement of the latch on the lower portion of the chair, instead of on the base portion as disclosed in the prior art, and the cooperation of the latch with the saddle. These features are not the features highlighted in the media coverage of the TREY® chair. As such, Sauder’s evidence asserting a nexus between the “novel features” of the claimed invention and the media coverage of or industry awards given to the TREY® chair is unavailing.

For these reasons, the evidence of media recognition and industry acclaim is entitled to little weight in demonstrating non-obviousness of the claimed invention.

iii. Copying

Sauder argues that evidence of copying of Sauder’s TREY® chair by J Squared is a further indicator of non-obviousness of the claimed invention. PO Resp. 39–42. In support of this assertion, Sauder cites to the deposition testimony of Davis and Anderson.¹⁵ Sauder also provides testimony in the Bontrager Declaration purporting to show that J Squared’s VECTOR chair and WAVE chair are copies of Sauder’s TREY® chair. PO Resp. 40 (citing

¹⁵ These depositions were taken as part of the related district court litigation. Sauder provided excerpts of these deposition transcripts as Exhibits 2042 and 2043.

Ex. 2008, 96–101). Sauder further provides copies of J Squared’s advertising material. *Id.* (citing Exs. 2035, 2036, 2037, and 2057).

“[C]opying by a competitor may be a relevant consideration in the secondary factor analysis.” *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004) (citing *Vandenberg v. Dairy Equip. Co.*, 740 F.2d 1560, 1567 (Fed. Cir. 1984)). “[A] nexus between the copying and the novel aspects of the claimed invention must exist for evidence of copying to be given significant weight in an obviousness analysis.” *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*, 683 F.3d 1356, 1364 (Fed. Cir. 2012) (internal quotation omitted). “[M]ore than the mere fact of copying by an accused infringer is needed to make that action significant to a determination of the obviousness issue.” *Cable Elec. Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1028 (Fed. Cir. 1985). *Accord Vandenberg*, 740 F.2d 1567 (where copying of a patented device, despite the failure of protracted efforts by the copyist to design a similar device, was found to be an admission of the mechanical superiority of the patented version, but “not strong evidence of nonobviousness”).

As noted by the court in *Cable Electric*:

Rather than supporting a conclusion of obviousness, copying could have occurred out of a general lack of concern for patent property, in which case it weighs neither for nor against the nonobviousness of a specific patent. It may have occurred out of contempt for the specific patent in question, only arguably demonstrating obviousness, or for the ability or willingness of the patentee financially or otherwise to enforce the patent right, which would call for deeper inquiry. Even widespread copying could weigh toward opposite conclusions, depending on the attitudes existing toward patent property and the accepted practices in the industry in question. It is simplistic to assert that copying per se should bolster the validity of a patent.

770 F.2d at 1028. *But see id.* n.14 (noting the copying is not always irrelevant in the context of other evidence of non-obviousness).

Sauder alleges that the evidence accompanying its Patent Owner Response shows that: (1) “[f]or months, [J Squared] tried without success to develop a competitive chair,” (2) J Squared experienced “problems designing and developing a suitable latching arrangement that would not compromise product safety,” (3) a large sale opportunity to sell a chair like Sauder’s TREY® chair to government agencies “put the heat on [J Squared] to get a product ready in a hurry,” and (4) J Squared “sen[t] a Sauder chair to China” and told its manufacturer “to ‘simulate’ the function of the Sauder chair.” PO Resp. 39–40. Sauder asserts that the resulting J Squared WAVE chair “is similar in appearance, structure, and function to the patented Sauder TREY® chair” and that “it is a case of actual, intentional and direct copying of a successful product by a hungry competitor.” *Id.* at 40. Sauder asserts that J Squared’s WAVE chair “does not follow the teachings of the prior art” and “bears little or no resemble to any of” the prior art in the Petition. *Id.* at 41.

Sauder provided only excerpts from the Anderson and Davis deposition transcripts in support of its contentions. In some cases, the pages before and after the portions of the deposition transcripts cited by Sauder, which would provide necessary context, are missing. In other cases, the portions of the deposition transcripts do not clearly support Sauder’s contentions. For example, Sauder asserts that “[f]or months, [J Squared] tried without success to develop a competitive chair.” PO Resp. 39 (citing Ex. 2043, 28:2–29:24, 36:6–25). The portions of the Anderson Deposition transcript cited in support of this statement do not support this contention. In particular, the cited testimony does not provide any dates to inform us as

to how long J Squared engaged in product development and does not support Sauder's contention that J Squared had no success in developing a product. In particular, in the cited testimony on pages 28–29, Mr. Anderson describes that J Squared had a team in the United States engaged in development of a chair and a group in China assisting with injection molding and design work associated with the molding. In the cited testimony on page 36, Mr. Anderson stated that J Squared's efforts to develop a chair took a long time because the U.S. team and the group in China sent many drawings, renderings, and communications back-and-forth during the product development, which Mr. Anderson characterized as “a normal process with any product development.” Ex. 2043, 36:14–15.

In this case, we have no way to assess the priority that J Squared gave to this development project at the outset. According to the deposition testimony provided, J Squared's CEO expressed interest in developing a chair similar to Sauder's TREY chair in 2008 (Ex. 2042, 13:18–20, Ex. 2065), yet the development emails between the product development team members occurred in 2010. *See* Exs. 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2066, 2067, 2068, and 2069. This timing coincides with an opportunity that arose in April, 2010 for J Squared to respond to a request for bid to supply a chair similar to the TREY® chair. Ex. 2042, 74:16–75:6. As noted by Sauder, this bid opportunity gave J Squared a short amount of time to get a product ready. Pet. 39. Mr. Anderson testified that in July, 2010, J Squared sent a Sauder TREY® chair to the production group in China and requested that they simulate the function of the Sauder chair. Ex. 2043, 84:18–86:19.

Sauder further asserts that “[t]here were a number of setbacks and mistakes in [J Squared's] development program, in particular, problems

designing and developing a suitable latching arrangement that would not compromise product safety.” PO Resp. 39 (citing Ex. 2043, 47:3–23, 52:21–54:6, 59:1–61:13, 87:5–25, 95:21–96:25). The cited testimony on page 47 does not mention anything about problems developing a latching arrangement; instead, it discusses the challenge of injecting molding strong back pieces. The cited testimony on pages 52–54 discusses a single proposed latching mechanism that was not adopted by J Squared. The cited testimony on pages 59–61, 87, and 95–96 discusses the final latching design that included one latch on the front and two latches on the back of the J Squared chair. As to this design, Mr. Anderson testified that he did not know whose idea it was for this latch design and that it was probably the result of collaboration among the development team. Also, the communications between the design team members about the development of the latching mechanism show that the final design was not arrived upon until sometime after December, 2010, several months after the production group in China received a copy of the Sauder TREY® chair. Ex. 2060 (dated December 24, 2010, showing that the chair latching mechanism was still under development at this time). The evidence tends to show independent development of a latching arrangement by J Squared, rather than slavish copying of Sauder’s chair.

For these reasons, Sauder’s proffered evidence of copying is not especially probative as to the non-obviousness of the claimed invention, particularly in light of the dearth of other compelling objective evidence of non-obviousness. As such, we find that the evidence of copying is entitled to little weight in demonstrating non-obviousness of the claimed invention.

i. Conclusion - Obviousness

We have weighed the entirety of the evidence in this proceeding, including J Squared's evidence of obviousness and Sauder's evidence of non-obviousness. On balance, we conclude that J Squared has shown by a preponderance of the evidence that the subject matter of claims 1, 2, 6–8, 10, and 11 would have been obvious over Pollack II and Pollack I, but has not shown that the subject matter of claims 9 and 12–14 would have been obvious over this prior art.

III. CONCLUSIONS

For the foregoing reasons, we determine the following:

- A. J Squared has shown by a preponderance of the evidence that claims 1, 2, 8, 10, and 11 are anticipated under 35 U.S.C. § 102 by Mackey;
- B. J Squared has not shown by a preponderance of the evidence that claims 4 and 5 are anticipated under 35 U.S.C. § 102 by Mackey;
- C. J Squared has shown by a preponderance of the evidence that claims 1, 2, 6–8, 10, and 11 are unpatentable under 35 U.S.C. § 103 as obvious over Pollack II and Pollack I; and
- D. J Squared has not shown by a preponderance of the evidence that claims 9 and 12–14 are unpatentable under 35 U.S.C. § 103 as obvious over Pollack II and Pollack I.

IV. ORDER

After due consideration of the record before us, it is:

- I. ORDERED that claims 1, 2, 6–8, 10, and 11 are held unpatentable as anticipated by Mackey and/or as obvious over Pollack II and Pollack I;
- II. FURTHER ORDERED that claims 4, 5, 9, and 12–14 are not held unpatentable based on the prior art on which trial was instituted in this proceeding.

This is a Final Written Decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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