

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 IPR2015-00958
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, 2, and 4–14 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, 9, and 11 are unpatentable under 35 U.S.C. § 103(a) as unpatentable over Yu¹ and Clark² and claims 6, 7, 10, and 12–14 are unpatentable under 35 U.S.C. § 103 as obvious over Yu, Clark, and Kassai³. Paper 7 (“Decision” or “Dec.”). 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, 9, and 11 are unpatentable as obvious of Yu and Clark; (2) J Squared has not shown by a preponderance of the evidence that claims 4 and 5 are unpatentable as obvious of Yu and Clark; (3) J Squared has not shown by a preponderance of the evidence that claims 6, 7, 10, and 12–14 are unpatentable as obvious over Yu, Clark, and Kassai.

¹ U.S. Patent No. 6,554,353 B1 issued to Yu (Apr. 29, 2003) (Ex. 1002).

² U.S. Patent No. 4,285,543 issued to Clark (Aug. 25, 1981) (Ex. 1004).

³ U.S. Patent No. 4,723,813 issued to Kassai (Feb. 9, 1988) (Ex. 1005).

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. 2001.

J Squared also challenged claims 1–14 of the '136 patent in a petition for *inter partes* review filed on February 19, 2015. *J Squared, Inc. v. Sauder Mfg. Co.*, Case IPR2015-00774 (“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. 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.

C. The '136 Patent

The '136 patent is directed to “a chair with a coupling companion stool base.” Ex. 1001, 1:49. “The chair portion has a frame that may be supported above a generally horizontal surface by the base, which base releasably couples with the frame.” *Id.* at 1:58–60. The '136 describes:

When the frame is decoupled from the base, the frame forming the chair portion is adapted for use as casual floor rocker seating, and the base is adapted to provide a companion stool upon which a user may sit or, alternatively a side table which may be positioned adjacent to the chair portion.

Id. at 2:17–22.

Figures 1 and 18 depict chair portion 100 and base portion 300 in coupled and uncoupled configurations, respectively. *Id.* at 4:21–23.

Figures 1 and 18 are reproduced below.

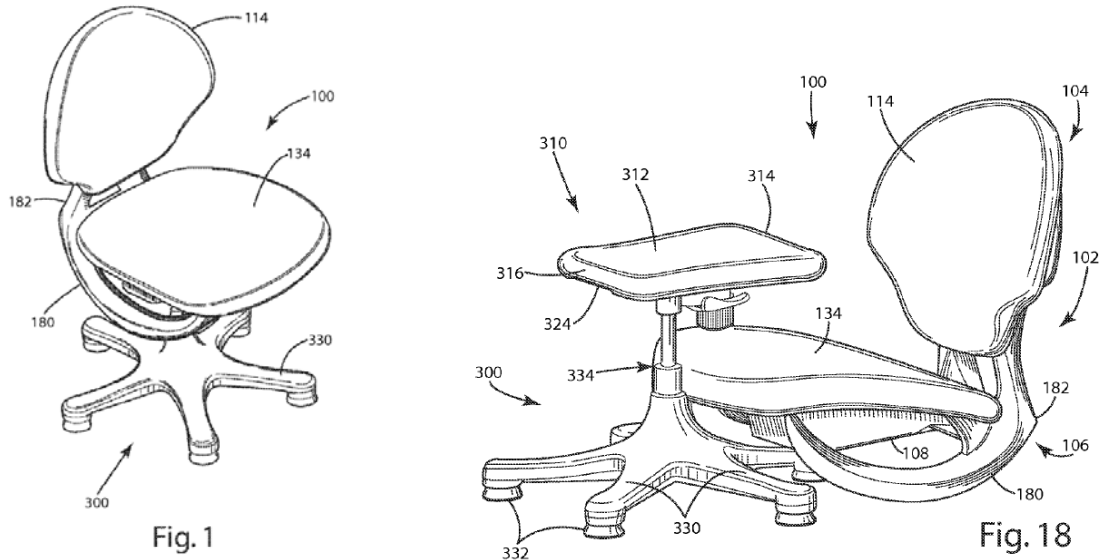


Figure 1 depicts a perspective view of a chair coupled to a companion stool base in a task chair configuration. Figure 18 depicts a perspective view of an uncoupled chair and companion stool base in a nested configuration.

As depicted in Figures 1 and 18, chair portion 100 includes frame 102, which has upper portion 104 and lower portion 106. *Id.* at 4:24–26. Legs 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, 6:45–46. Upper portion 104 provides a back rest and lower portion 106 includes a sitting portion. *Id.* at 4:33, 4:61–62. 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.

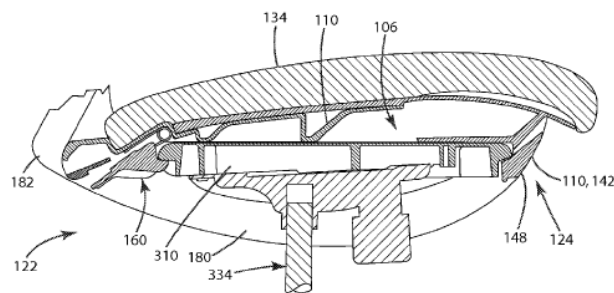
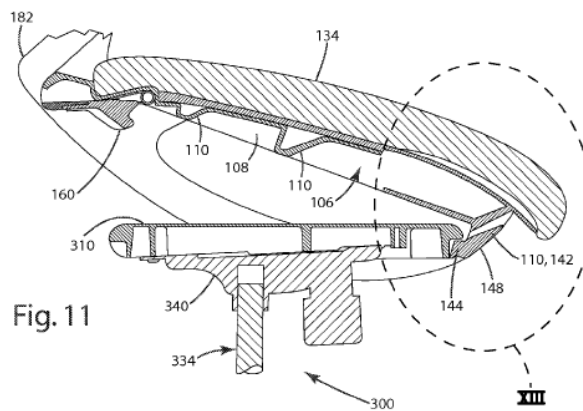


Fig. 12

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, 5:60–62. 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 the claims of an unexpired patent using the “broadest reasonable construction in light of the specification of the patent in which they appear[.]” 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,” “engage,” “assembly,” “positioned below,” “function as rockers,” “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. 9–15. Sauder contested several of J Squared’s proposed constructions for these claim terms and additionally proposed its own

construction for “combination of a chair and a stool base portion.” Prelim. Resp. 5–16. In the Decision instituting trial, we preliminarily construed “assembly,” “positioned below,” “structured so as to function as rockers,” and “means for releasably engaging said chair to said base portion.” Dec. 9–16. In doing so, we considered constructions of “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. 2001.

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. 14–23. In its Petitioner Reply, J Squared contested many of Sauder’s proposed constructions for these claim terms. Pet. Reply 5–11. Many of these claim terms were argued to distinguish over the prior art addressed in the related ’774 IPR. To the extent that we do not discuss a claim term explicitly here, we adopt the claim interpretation as set forth in the final written decision of the ’774 IPR.

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 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. 15–16 (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. *“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:

Patent Owner further notes that the district court construed “assembly” to mean a structural unit that includes the rockers. *Id.*; see also Ex. 2001, 3 (adopting the definition of “assembly” as a “[s]tructural unit positioned below [a] seat to support [the] seat and provide rockers”). The district court further noted that the assembly shown in Figure 17 is a “single molded plastic assembly” and 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.” Ex. 2001, 3.

Dec. 9–10.

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. 3001. 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 (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 only 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 rests on the base legs, as opposed to the sitting portion, such that the base legs can function as rockers, as called for [in] 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 12.

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 knee hole 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 instances in which the rockers are formed integrally with the base legs. PO Resp. 18. 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 180 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, 6:39–40, 45–46, 50–52 (emphasis added). We see no reason presented in Sauder’s Patent Owner Response to deviate from the interpretations of “assembly” and “positioned below” presented in our Decision on Institution and recited *supra*.

3. “*two base legs*”

Claim 4 depends from claim 2⁴ 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. 20 (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. 2072, 43–45).

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 a starting point of a physical movement or a starting point in measuring or reckoning or in a statement of limits.”⁵ Based on this definition, the plain language of claim 4 recites the arcuate 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

⁴ 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.

⁵ Ex. 3002 (full definition from www.merriam-webster.com/dictionary/from) (definition 1(a)).

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).

B. Obviousness

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. § 103.⁶

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, 1361 (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*, 338 U.S. 1, 17–18 (1966)). A claimed invention may be obvious even when the prior art does not teach

⁶ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), took effect on March 16, 2013, and amended 35 U.S.C. § 103. Because the '136 patent has an effective filing date before the effective date of the applicable AIA amendments, we refer to the pre-AIA versions of 35 U.S.C. § 103.

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).

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 contention that claims 1, 2, and 4–14 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 (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 provides the suggestion itself for the modification of Yu's deck chair with the rocker attachment of Clark.

2. Scope and Content of the Prior Art

i. Yu

Yu discloses a dual-purpose chair that serves as an office chair when seat structure 10 and base structure 20 are fastened together, and serves as a deck chair when the structures 10, 20 are unfastened. Ex. 1002, 2:22–27.

Figures 1 and 2 of Yu are reproduced below.

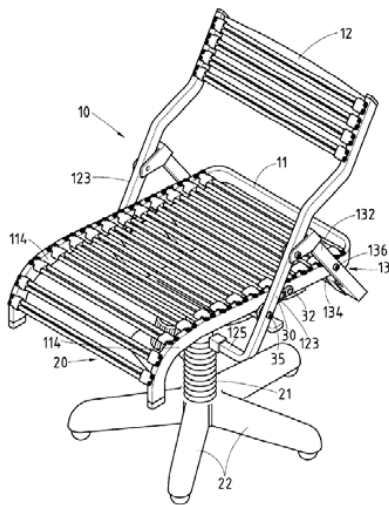


FIG. 1

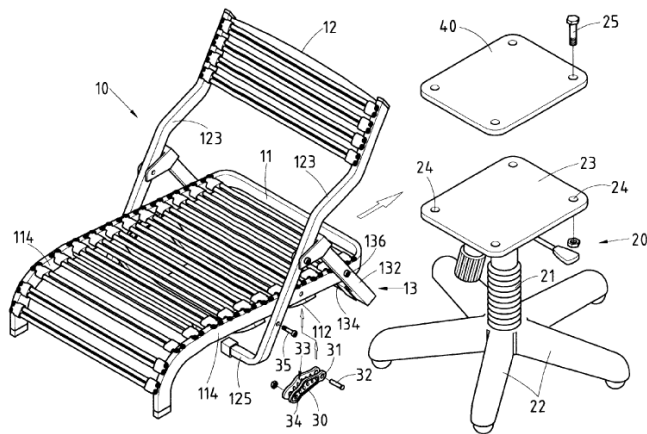


FIG. 2

Figure 1 shows a perspective view of the chair being used as an office chair.

Figure 2 shows an exploded view of the chair of Figure 1.

Yu discloses seat structure 10 formed of seat 11, backrest 12, and backrest support frame 13. Ex. 1002, 1:59–60. Two inverted U-shaped support rods 112 are provided on the underside of seat 11. *Id.* at 1:60–61. Seat structure 10 also includes two longitudinal side rods 114. *Id.* at 2:4.

Yu's backrest 12 is provided with two long side rods 123, which are connected with each other at the top end and provided at the bottom end with support portion 125. *Id.* at 1:63–67. Backrest support frame 13 has

crown portion 134 located under one longitudinal end of seat 11. *Id.* at 2:4–6.

Base structure 20 is formed of upright rod 21, caster seat arms 22, support plate 23 mounted on the top end of upright rod 21, and cover plate 40. *Id.* at 2:7–12. Base structure 20 is fastened with support rods 112 of seat 11 by fastening bolts 25. *Id.* at 2:19–21.

Figure 5 is reproduced below.

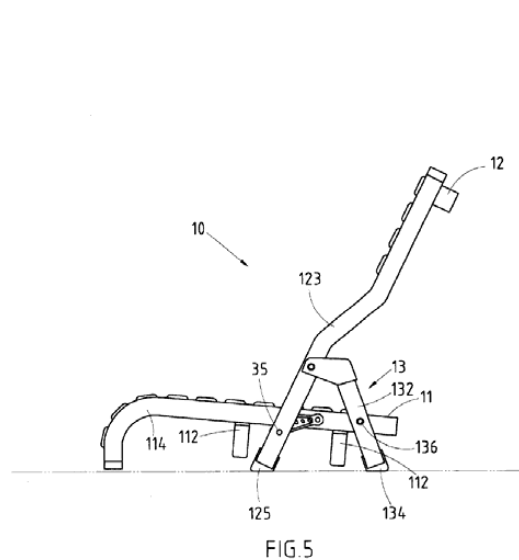


Figure 5 shows the seat structure in use as a deck chair.

As shown in Figure 5, when seat structure 10 is used as a deck chair, two support portions 125 and crown portion 134 rest on the floor surface. *Id.* at 2:26–31. Also, the forward ends of each longitudinal side rail 114 rest on the floor surface. *Id.* at Fig. 5. Two side rods 123 of backrest 12 are pivotally fastened with longitudinal side rods 114 of seat 11 such that the backrest 12 can be swiveled in relation to seat 11, to fold the chair. *Id.* at 2:32–48, Figs. 4, 6.

ii. *Clark*

Clark discloses a rocker assembly for attachment to a stationary folding lawn chair. Ex. 1004, 1:6–10. Figure 1 of Clark is reproduced below.

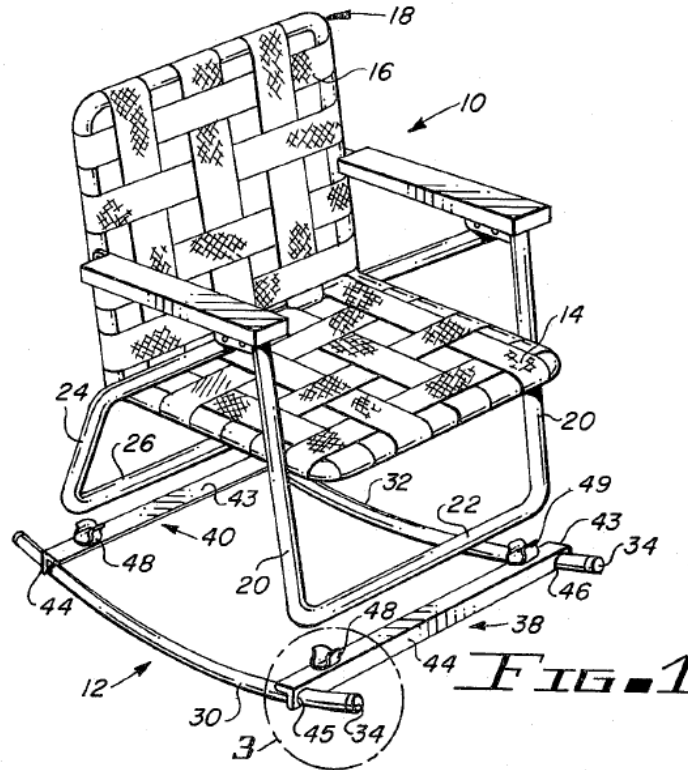


Figure 1 is an exploded perspective view of a folding lawn chair and a rocker attachment.

As shown in Figure 1 above, rocker attachment 12 includes a pair of rocker elements 30, 32, that are bowed into an arcuate configuration. Ex. 1004, 4:11–15. Rocker members 30, 32 are in spaced parallel relationship with each other and are transversely connected by front and rear beam means 38, 40. *Id.* at 4:17–22. Spring clips 48, 49 are mounted on the upwardly facing surface of beams 38, 40. *Id.* at 4:41–47.

iii. *Kassai*

Kassai discloses high chair 10 having seat member 12, table support frames 14, 15, and 16, and table 17 disposed on the table support frames.

Ex. 1005, 2:55–3:5, Fig. 1. Figure 1 of Kassai is reproduced below.

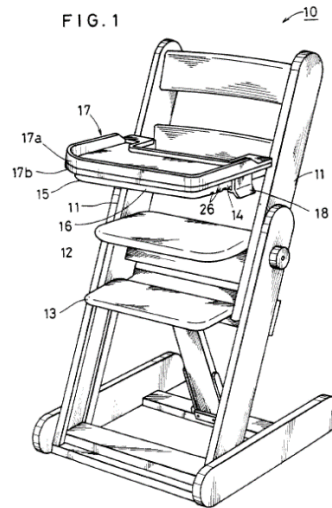


Figure 1 is a perspective view of a high chair with a table joined to the chair via operating levers.

On opposite sides of table 17 are operating levers 18 and 19, which are movable between first and second positions. *Id.* at 3:10–14, Fig. 1. Levers 18 and 19 include engaging projections 25 to embrace corresponding engaging recesses 26 on the table support frames so as to firmly fix table 17 in position. *Id.* at 3:37–42, 3:60–63, Figs. 1, 3.

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

i. *Claim 1 (Yu and Clark)*

On the present record and based upon the claim interpretation discussed *supra*, we find that Yu comprises a combination of a chair (Yu's seat structure 10) and a stool base portion (Yu's base structure 20). Pet. 24 (citing Ex. 1002, Figs. 2, 3). Yu's chair 10 has an upper portion providing a backrest 12 for supporting a first user, and a lower portion connected to the

upper portion and having a sitting portion 11 for supporting the first user in a seated position. *Id.*; see also Ex. 1002, 1:59–60, 2:22–27. The stool base portion 20 is adapted to support the chair 10 and comprises a saddle (plates 23, 40) adapted, via bolt holes, to releasably engage the chair. Pet. 25; see also Ex. 1002, 2:7–12, 19–21.⁷

Yu’s combination of the chair and stool base portion is configurable in a first configuration, as shown in Figures 1 and 3, with the chair being coupled to the saddle and the sitting portion positioned above the saddle. *Id.* at 25. The combination is configurable to a second configuration, as shown in Figure 2, 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.* Although Yu does not disclose explicitly secondary uses for its pedestal base 20, we find that Yu’s base does not differ structurally from the claimed stool base portion, in that the top surface of Yu’s saddle (plate 40) is accessible to a second user as a sitting surface and is accessible to the first user as a work surface. Specifically, the top surface of Yu’s base 20 is flat and thus could be used to rest items upon it for use as a work surface. Also, Yu’s base 20 is capable of holding chair 10 atop it and to support a user seated in chair 10, and thus Yu’s base 20 is also capable of supporting a user seated directly atop the upper surface of base 20. As such, the top surface of Yu’s base 20 is capable of being used as a sitting surface.

⁷ Although Sauder proposes interpretations for “stool base portion” and “saddle” (PO Resp. 17–18), Sauder does not appear to argue that Yu lacks these features (PO Resp. 24–28). We find that even if we were to adopt Sauder’s proposed constructions, Yu’s base constitutes a “stool base portion” and comprises a “saddle” as claimed.

Yu's chair 10 further comprises an assembly, including crown portion 134, side rods 114, and support portions 125, which form base legs for the chair when the combination is in the second configuration. Ex. 1002, 2:26–31, Fig. 5. Yu does not disclose that the base legs are structured to function as rockers.

We also find that Clark discloses a clip-on rocker attachment 12 designed for a folding chair 10. Pet. 25; *see also* Ex. 1004, 3:67–4:3, Fig. 1. In particular, Clark discloses a “rocker assembly for use on folding chairs of the type commonly referred to as ‘lawn chairs[.]’” Ex. 1004, 1:8–10. Clark provides evidence of a desire in the art to develop a simple low-cost rocker assembly for converting a stationary chair, such as a foldable lawn chair, into a rocker. *Id.* at 1:12–62.

J Squared asserts that “[i]t would have been obvious to one having ordinary skill in the art at the time of the invention to modify Yu to have rockers as taught by Clark, because Yu discloses a folding chair and Clark discloses a clip-on rocker attachment that is designed specifically to attach to a folding chair.” Pet. 25. J Squared posits that “[a] skilled person would obviously size and position the front clips appropriately to fit onto Yu's front legs when the rear clips are on Yu's transverse rear bar,” and that “[w]ith Clark's rockers attached, Yu's chair would have base legs that naturally function as rockers when the chair is on the floor.” *Id.* at 26. J Squared further notes that “[t]he clip-on rocker attachment could be attached indefinitely, i.e., in both the first and second configurations and while changing from one to the other.” *Id.* J Squared also contends that “[t]he claimed invention is merely a combination of known prior art elements according to known methods to yield predictable results.” *Id.*

We agree with J Squared that there is sufficient motivation found in the references themselves for the proposed combination of teachings from Yu and Clark. Both Yu and Clark are directed to folding deck chairs, and Clark demonstrates that it was desirable at the time of the invention to have a deck chair that is structured to function as a rocking chair. Further, we agree with J Squared that the clip-on rocker attachment of Clark could be attached indefinitely, i.e., in both the first and second configurations and while changing from the office chair configuration to the deck chair configuration. Sauder has not provided persuasive evidence to contradict this finding. We agree with J Squared's reasoning that the modification of Yu with the rocker rails of Clark is merely a combination of known prior art elements according to known methods to yield predictable results.

Sauder asserts that attaching Clark's rocker attachment to the existing legs of Yu's foldable deck chair after it has been detached from its pedestal base "would lock the legs in place and prohibit the folding character of Yu's deck chair that [Yu] deems critical to its intended function." PO Resp. 24 (citing Ex. 1002, Figs. 5, 6; Ex. 2039, 12:36–37; Ex. 2072, 80). We disagree with Sauder's reading of Yu. We find no asserted criticality to the folding aspect of Yu's deck chair. Instead, we understand Yu to focus on the dual-purpose nature of the chair, serving as both an "office chair" and, when unfastened from the base, the seat structure 10 capable of use as a "deck chair." Ex. 1002, 1:19–27, 2:22–31. Although Figure 6 of Yu depicts the seat structure 10 in a folded configuration, this is nowhere described in Yu as a critical feature of Yu's chair. Even if the proposed modification were to render the seat structure 10 incapable of being folded, the proposed modification also improves Yu's seat structure 10 by rendering it capable of being used as a rocker, an improvement that was, as evidenced by Clark,

desirable in the art of lawn chairs. *See In re Urbanski*, 809 F.3d 1237, 1244 (Fed. Cir. 2016) (affirming a determination of obviousness based on motivation of one of ordinary skill to pursue the desirable properties taught by a secondary prior art reference, even at the expense of foregoing a benefit taught by a primary reference).

We also disagree with Sauder’s contention that the proposed modification would render Yu’s chair unfit for its intended purpose. PO Resp. 24 (citing *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984)). In *Gordon*, the Board affirmed an examiner’s rejection of a claim directed to a blood filter with an inlet and outlet on the bottom over the prior art, French, which taught a gasoline filter with the inlet and outlet on the top. 733 F.2d at 901. The Board reasoned that “it would have been obvious to turn the French device upside down to have both the inlet and outlet at the bottom, rather than at the top.” *Id.* at 902. The Federal Circuit reversed, noting that “French teaches a liquid strainer which relies, at least in part, upon the assistance of gravity to separate undesired dirt and water from gasoline and other light oils.” *Id.* (explaining that “if the French apparatus were turned upside down, it would be rendered inoperable for its intended purpose”).

Yu’s chair, as modified to include the rocker attachment of Clark, would still be capable of functioning as a dual purpose chair. Further, Clark provides the motivation to modify Yu’s chair and suggests the desirability of such a modification, and Sauder’s claims do not require the benefit (foldability) of Yu that is arguably lost by modification with the rocker attachment of Clark.

Sauder asserts that the modification is based on impermissible hindsight “because neither Yu nor Clark teaches a non-folding chair or a top chair whose legs function as a rocker.” *Id.* at 24–25. Sauder’s claims do not

call for a non-folding chair, and Clark discloses the applicability of its rocker attachment to a folding chair, akin to the folding chair of Yu. This disclosure in Clark provides a suggestion in the prior art itself to apply the teachings of Clark to the chair of Yu. As such, impermissible hindsight is not being employed in the proposed combination.

As to Sauder's second argument, we understand Sauder to argue that even if Yu were modified by the rocker attachment of Clark, the result would not be "a top chair whose legs function as rockers." See PO Resp. 27 (arguing that the modification would not result in the claimed invention because the claims "explicitly require[] that the chair's 'base legs' are the rocker legs").⁸ 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 discussed *supra* in our interpretation of "assembly," the claim language and the Specification do not require the rocker portion of the base legs to be formed integrally with the portion of the base legs positioned below the sitting portion of the chair. In other words, the language of claim

⁸ Sauder also asserts that J Squared improperly relied on Mackey for providing a reason to add "J-shaped" rocker rails to Yu's folding deck chair. PO Resp. 25–27 (citing Pet. 18–19). The portion of the Petition argued by Sauder pertains to the first proposed ground of unpatentability based on Yu and Mackey. Pet. 16–23. We denied institution on this first ground in our Decision on Institution. Dec. 16–17. J Squared presented a different proposed modification and different reasoning in the Petition for the proposed modification of Yu with the rocker attachment of Clark. Pet. 24–27. As such, Sauder's arguments pertaining to the proposed modification of Yu based on the teaching of Mackey are not responsive to the ground upon which review was instituted.

1 does not limit the claimed subject matter to base legs formed integrally with the lower portion of the chair. As such, the “assembly” of the modified chair of Yu includes Yu’s side rods 114 and 123 and Clark’s rocker attachment, which, when combined, form base legs that function as rockers.

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 Yu and Clark. 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 (Yu and Clark)

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 Yu’s chair 10 includes a first portion near the backrest and a second portion, and that Yu’s base 20 extends upwardly to the saddle. Pet. 27 (citing Ex. 1002, Fig. 1). Sauder does not present any arguments specifically directed to the subject matter of claim 2. Yu’s chair 10 is depicted in Figures 1 and 2 as having a lower portion 11 (on which the user sits) that extends from a first portion near the backrest 12 to a second portion located at the front of the lower portion that is spaced away from the first portion. Yu’s base 20, as shown in Figure 2, extends upwardly to the saddle. 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 Yu and Clark. 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. Claims 4 and 5 (Yu and Clark)

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 “[t]he rocker rails of Yu modified by Clark extend generally arcuately downward from the front and rear of the chair.” Pet. 27. J Squared has not demonstrated by a preponderance of the evidence that the modified chair of Yu would result in base legs that “extend arcuately downward from” the lower portion of the chair. Although the bottom edge of Clark’s rocker rails are curved and thus arguably arcuate along the bottom edge, the rocker attachment, when attached to the side rods 114 and 123 of Yu’s chair, would not necessarily “extend arcuately downward from” the lower portion of Yu’s chair. The arcuate portion of the rocker rails is disposed only along the bottom edge of the rails, and, thus, although the rails as attached to Yu’s chair 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 rendered unpatentable as obvious over Yu and Clark. Claim 5 depends from claim 4, and thus J Squared has likewise not met its burden to show obviousness of the subject matter of claim 5 over Yu and Clark for the same reasons.

iv. Claims 6 and 7 (Yu, Clark, and Kassai)

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*, Yu as modified by Clark, does not disclose a latch on the lower portion of the chair. J Squared asserts that Kassai’s “downwardly, depending, pivotally mounted latches are readily substituted for the bolted connection of the Yu chair” to obtain “the predictable result of a readily removable chair.” Pet. 30. J Squared reasons that “[c]onsidering that chair 10 [of Yu] is designed to be detachably fastened to base 20, it would have been obvious to substitute a latch as taught by Kassai for the bolted connection in order to make conversion of the convertible chair easier, faster and more convenient.” *Id.* at 29; *see also id.* at 30 (arguing that this modification is “a matter of common sense”). J Squared also asserts that Kassai itself provides motivation because it “suggests using a latch to lock a chair part – a table or tray – on a support frame such that it is firmly secured but readily removable.” *Id.* at 31. J Squared further contends that “the modification involves nothing more than the simple substitution of one known fastener element for another to obtain predictable results.” *Id.*

In response, Sauder argues that J Squared has failed to provide adequate evidence or reasoning to support a proposed modification to substitute the latch mechanism of Kassai for the bolts of Yu in the manner claimed. PO Resp. 28 (arguing that “[i]t is pure speculation to say where [the latch] would go if it were to replace the sandwiched plate arrangement of Yu, or whether it would be safe to do so”) (citing Ex. 2046, 29:641–651). Mr. Warncke testified that Kassai suggests attaching the latches to the left and right sides of the plate and that such a modification would be unsafe because it would not prevent uncoupling if a user leaned rearward in the

chair, and that even if Kassai's pivoting latches were attached to the front and rear edges of the plate 23, they would not be adequate to withstand safety testing required in the art for seating. Ex. 2046, 29:641–651. Mr. Warncke also testified that “vital elements of a well-designed and effective releasable coupling system include safety, error-proofing, and ease of use” and that safety for releasably coupled components “means that when coupled, it cannot be decoupled without intentional manual interaction with the chair.” Ex. 2046, 18:396–397, 19:402–403.

As noted *supra*, Kassai's spring-biased latch mechanism is disclosed for attaching a tray table to a child's high chair. We find no explicit suggestion in Kassai itself to use such a latch mechanism for coupling other parts of a chair, such as a chair and base. Further, J Squared's articulated reasons to modify Yu's deck chair, as modified by Clark, to substitute Kassai's latch mechanism in place of Yu's bolts, i.e., based on simple substitution of one known fastener element for another to obtain predictable results and as a matter of common sense to enable easier, faster or more convenient conversion of the convertible chair, are not supported by adequate evidence to demonstrate unpatentability by a preponderance of the evidence. In particular, J Squared has not provided adequate explanation or evidence to persuade us that one having ordinary skill in the art would have been led to use the latch mechanism of Kassai to attach the deck chair to the base of Yu. J Squared provides insufficient evidence or reasoning to show that one of ordinary skill in the art, aware of the safety considerations involved with coupling a chair to a base, would have been motivated to replace the bolts of Yu with such a latch mechanism. Further, J Squared provides no declaratory evidence from one having ordinary skill in the art to

demonstrate that the modification would have been a matter of common sense or would have led to a predictable result.

For these reasons, J Squared has not met its burden to show by a preponderance of the evidence that claim 6 is rendered unpatentable as obvious over Yu, Clark, and Kassai. Claim 7 depends from claim 6, and thus J Squared has likewise not met its burden to show obviousness of the subject matter of claim 7 over Yu, Clark, and Kassai for the same reasons.

v. Claim 8 (Yu and Clark)

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 Yu’s saddle “has a top surface that defines a working surface, a writing surface and a sitting surface.” Pet. 27. Sauder does not present any arguments specifically addressing claim 8.⁹ The claim language calls for the upwardly facing top surface of the saddle to be capable of being used as “at least one of” the enumerated surfaces. We agree with J Squared that the top surface 40 of the saddle of Yu’s base 20 is capable of being used one or more of a working surface, a writing surface, and a sitting surface. Specifically, the top surface of Yu’s base 20 is flat and thus could be used to rest items upon it for use as a working surface or to rest a piece of paper upon it to use as a writing surface. Also, Yu’s base 20 is capable of holding chair 10 atop it and to support a user seated in chair 10, and thus Yu’s base 20 is also capable of supporting a user seated directly

⁹ Sauder mistakenly includes claim 8 along with claim 7 in a heading in its response. PO Resp. 29. Claim 8 does not depend from claim 7, and the arguments presented by Sauder as to the patentability of claim 7 are not applicable to claim 8.

atop the upper surface of base 20. As such, the top surface of Yu's base 20 is capable of being used as a sitting surface.

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 Yu and Clark. 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 (Yu and Clark)

Claim 9 depends from claim 1 and recites, *inter alia*, that the base portion 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. Sauder acknowledges that Yu “shows a ‘pedestal chair.’” PO Resp. 29. Sauder argues, however, that J Squared has failed to meet its burden to show by a preponderance of the evidence that Yu's base includes “swivel and/or tilt capabilities.” *Id.*

J Squared asserts that Yu discloses “an upright rod 21 and a tilt mechanism recognized by the knurled knob and the contoured plate above it on the top of rod 21.” Pet. 22–23, 28 (citing Ex. 1002, Fig. 4; Ex. 1008, 102 (¶ 12), 149 (lines 14–16) (admitting that Yu discloses a tilt mechanism)).

We agree with J Squared that Figure 4 of Yu shows plates 23 and 40 tilted with respect to rod 21. Further, the knurled knob and component to which it is attached (unnumbered) shown beneath plate 23 in Yu are identical in appearance and placement of the knurled knob and component 340 shown in the '136 patent, which are described as being a chair control

that provides “tilt or swivel movements as is known.” Ex. 1001, Figs. 21–23, 7:30–32. Further, Sauder’s declarant testified that “[m]any task chairs include a mechanism to tilt and swivel the chair relative to the base and to provide adjustable chair height.” Ex. 2072, 23 n.24. Given that: (1) it was conventional in the art of office chairs to include a tilt and/or swivel mechanism; (2) the ’136 patent acknowledges that such mechanism was known in the art; (3) the ’136 patent illustrates such a mechanism in a manner identical to the mechanism that is shown, but not described, in Yu; and (4) Yu shows the saddle (plates 23, 40) tilted with respect to the base, we find adequate evidence to support a finding that Yu discloses a tilt mechanism on its pedestal base.

For these reasons, J Squared has met its burden to show by a preponderance of the evidence that all the elements of claim 9 are disclosed in the combination of Yu and Clark. 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.

vii. Claim 10 (Yu, Clark, and Kassai)

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 relies on the same evidence and reasoning to support the modification of Yu with the latch of Kassai as discussed *supra*, in the analysis of claim 6. Pet. 32. For the same reasons discussed with respect to claim 6, J Squared has not met its burden to show by a preponderance of the evidence that claim 10 is rendered unpatentable as obvious over Yu, Clark, and Kassai.

viii. Claim 11 (Yu and Clark)

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 “[t]he rocker rails of Yu modified by Clark are spaced laterally from one another.” Pet. 28. Sauder does not present any arguments specifically directed to the subject matter of claim 11. Yu, as modified by Clark as discussed *supra* with respect to claim 1, results in the claimed subject matter. In particular, we agree with J Squared that Clark’s rocker rails, when attached to Yu’s seat 10 in the manner proposed by J Squared, result in rocker rails that are spaced laterally from one another. Ex. 1004, Fig. 1. 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 in the combination of Yu and Clark. 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 (Yu, Clark, and Kassai)

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 Yu provides a way to detachably fasten the chair to the base, e.g., via plate 40, support rods 112, and bolts, and alternatively, Kassai shows latches 18 and 19. Pet. 33.

We instituted the review of claim 12 based on the alternative ground proposed by J Squared, including Kassai. Dec. 24. J Squared relies on the same evidence and reasoning to support the modification of Yu with the latch of Kassai as discussed *supra* in the analysis of claim 6. For the same reasons discussed with respect to claim 6, J Squared has not met its burden

to show by a preponderance of the evidence that claim 12 is rendered unpatentable as obvious over Yu, Clark, and Kassai. Claims 13 and 14 depend from claim 12, and thus, 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 Yu, Clark, and Kassai.

4. *Secondary Considerations*

Sauder argues that commercial success, industry praise, and evidence of copying indicate that the subject matter of the claims would not have been obvious to a person of ordinary skill in the art. PO Resp. 30–35. 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 at 1580. “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 *In re Paulsen*, 30 F.3d at 1482.

To support its argument, Sauder proffers the declaration of Mr. Philip Bontrager, Chief Executive Officer of Sauder (Ex. 2072, 86–102 (“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. 31. 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. 2072, 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. 2072, 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.¹⁰ However, these features of traditional office chairs are not the focus of the claims at issue in

¹⁰ 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).

the '136 patent. For example, claims 1, 2, 8, 9, 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.

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. 31. 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) (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. 2072, 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. 2072, 93), Sauder does not specifically rely on this evidence in its arguments in the Patent Owner Response. PO Resp. 31 (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. 31. 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. 31. In support of this assertion, Sauder cites to the Bontrager Declaration. *Id.* (citing Ex. 2072, 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. 2072, 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 “[t]he 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. 2072, 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. 31–32 (citing Ex. 2072, 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, no novel features of subject matter of claims 1, 2, 8, and 11 exist. *See* Final Written Decision in related '774 IPR (determining claims 1, 2, 8, and 11 to be anticipated by prior art). Of the relevant claims at issue, only claim 9 remains. This claim is directed to a pedestal base having a conventional tilt and/or swivel mechanism. 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. 32–35. In support of this assertion, Sauder cites to the deposition testimony of Davis and Anderson.¹¹ 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. 33–34 (citing Ex. 2072, 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.”).

¹¹ These depositions were taken as part of the related district court litigation. Sauder provided excerpts of these deposition transcripts as Exhibits 2042 and 2043.

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. 32–33. 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 33–34. 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 34.

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. 32 (citing Ex. 2043, 28:2–29:24, 36:6–25). The portions of the Anderson Deposition transcript cited 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. PO Resp. 33. 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. 32–33 (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.

iv. 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, 8, 9, and 11 would have been obvious based on Yu and Clark, but has not shown that the subject matter of claims 4 and 5 would have been obvious over this prior art and has not shown that the subject matter of claims 6, 7, 10, and 12–14 would have been obvious over Yu, Clark, and Kassai.

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, 9, and 11 are unpatentable under 35 U.S.C. § 103 as obvious over Yu and Clark;
- B. J Squared has not shown by a preponderance of the evidence that claims 4 and 5 are unpatentable under 35 U.S.C. § 103 as obvious over Yu and Clark; and

C. J Squared has not shown by a preponderance of the evidence that claims 6, 7, 10, and 12–14 are unpatentable under 35 U.S.C. § 103 as obvious over Yu, Clark, and Kassai.

IV. ORDER

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

- I. ORDERED that claims 1, 2, 8, 9, and 11 are held unpatentable as obvious over Yu and Clark;
- II. FURTHER ORDERED that claims 4–7, 10, 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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