

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NHK SEATING OF AMERICA, INC.,
Petitioner,

v.

LEAR CORPORATION,
Patent Owner.

Case IPR2014-01200
Patent 6,955,397 C1

Before RICHARD E. RICE, MITCHELL G. WEATHERLY, and
CARL M. DeFRANCO, *Administrative Patent Judges*.

WEATHERLY, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a)

I. INTRODUCTION

A. BACKGROUND

NHK Seating of America, Inc. (“NHK”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 11, 16, 45, 50–53, 59, 60,

63, and 66 of U.S. Patent No. 6,955,397 C1 (Ex. 1001, “the ’397 patent”).¹ NHK supported the Petition with a declaration from Richard W. Kent, PhD (Ex. 1012). Lear Corporation (“Lear”) timely filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). In its Preliminary Response, Lear indicated that it had filed a disclaimer pursuant to 35 U.S.C. § 253(a) and 37 C.F.R. § 1.321(a) of claims 11, 16, 50, 51, and 63, Prelim. Resp. 1 (citing Ex. 2001), which left only claims 45, 52, 53, 59, 60, and 66 in the ’397 patent as candidates for *inter partes* review. On February 3, 2015, based on the record before us at the time, we instituted an *inter partes* review of claims 45, 52, 53, 59, 60, and 66, Paper 7 (“Institution Decision” or “Dec.”), on the following grounds:

References	Basis	Claims
German Published Patent Application No. DE 102 49 265 B3 (“DE ’265”) (Ex. 1003 with certified translation at Ex. 1004)	§ 102(a)	52, 53, and 66
Japanese Unexamined Patent Application Publication No. H11-268566 (“JP ’566”) (Ex. 1009 with certified translation at Ex. 1010) and DE ’265	§ 103	45
Japanese Patent Application Publication No. P10-6832 (“JP ’832”) (Ex. 1005 with certified translation at Ex. 1006) and Japanese Unexamined Patent Application Publication No. 2000-201771 (“JP ’771”) (Ex. 1007 with certified translation at Ex. 1008)	§ 103	52, 53, 59, 60, and 66
JP ’566 and JP ’832	§ 103	45

¹ When we cite to any portion of Exhibit 1001, we will include a reference to the original version of the ’397 patent, series B1, or the reexamination certificate, series C1 as needed for clarity.

Dec. 20.

After we instituted this review, Lear filed a Patent Owner Response in opposition to the Petition (Paper 11, “Resp.”) that was supported by the declaration of David C. Viano, PhD (Ex. 2005). Lear also filed a statutory disclaimer of claims 45 and 66. Resp. 1; Ex. 2007. Accordingly, the only claims remaining for our consideration at trial are claims 52, 53, 59, and 60 (“the challenged claims”). *See* 35 U.S.C. § 253 (disclaimer of claims considered effective as if part of original patent); 37 C.F.R. § 42.107 (Board will not institute trial on disclaimed claims). Because Lear’s disclaimer of claim 45 moots our consideration of the second and fourth challenges listed in the table above, we do not address those challenges in this Decision. NHK filed a Reply in support of the Petition (Paper 13, “Reply”) that was supported by an additional declaration from Dr. Kent (Ex. 1018).

Lear also filed a Motion to Strike and/or Exclude the Testimony of NHK’s Expert, Richard W. Kent. Paper 17 (“Motion” or “Motion to Exclude”). NHK opposed the Motion to Exclude. Paper 21 (“Mot. Opp.”). Lear filed a Reply in support of the Motion. Paper 24 (“Mot. Reply”). Lear filed Patent Owner’s Motion for Observation on the Cross Examination of Dr. Richard W. Kent, Paper 18, and NHK filed Petitioner’s Response to Patent Owner’s Motion for Observation, Paper 22. Lear did not move to amend any claim in the ’397 patent.

We heard oral argument on September 9, 2015. A transcript is entered as Paper 28 (“Tr.”).

For the reasons expressed below, we conclude that NHK has demonstrated, by a preponderance of evidence, that claims 52, 53, 59, and 60 are unpatentable. We also deny Lear’s Motion to Exclude.

B. RELATED MATTERS

NHK identified as a related proceeding the co-pending district court litigation of *Lear Corporation v. NHK Seating of America, Inc.*, No. 2:13-cv-12937-SJM-RSW (E.D. Mich.), filed July 5, 2013. Pet. 1. NHK also identifies as a related proceeding the co-pending *Ex Parte* Reexamination Control No. 90/012,836 originally involving claims 1–9, 11–18, and 20–70 (“the Reexam”). *Id.* at 2. Lear identifies six other *inter partes* review proceedings as being directed to patents alleged to be infringed in the district court litigation with NHK, including: IPR 2014-00925 (U.S. Patent No. 8,434,818), IPR 2014-01202 (U.S. Patent No. 5,378,043); IPR 2014-01079 (U.S. Patent No. 6,631,949); IPR 2014-01101 (U.S. Patent No. 6,631,955); IPR 2014-01026 (U.S. Patent No. 6,655,733); and IPR 2014-00957 (U.S. Patent No. 7,455,357). Prelim. Resp. 1.

C. THE '397 PATENT

The '397 patent is directed to a “vehicle seat assembly having an active head restraint system.” Ex. 1001, B1, 1:7–9. All challenged claims add various limitations to independent claim 11, a claim from which they all ultimately depend. Claim 11² recites:

11. A vehicle seat assembly comprising:
 - a seatback frame;
 - an upper armature including a head restraint;
 - a lower armature;

² Because claim 11 is among the claims that Lear disclaimed, Ex. 2001, claim 11 is no longer subject to NHK’s challenges to its patentability, 37 C.F.R. § 42.107(e). Nevertheless, we consider the claim to be illustrative because it recites many of the limitations at issue in this proceeding.

at least one first linkage moveably connected to said seatback frame at a first coupling point, operatively connected to said upper armature at a second coupling point, and operatively connected to said lower armature at a third coupling point, wherein said first coupling point and said third coupling point are disposed in spaced relation relative to each other;

at least one second linkage moveably connected to said seatback frame at a fourth coupling point and operatively connected to said lower armature at a fifth coupling point, wherein said fourth coupling point and said fifth coupling point are disposed in spaced relation relative to each other; and

at least one biasing member interconnecting said seatback frame and one of said first linkage and said second linkage, said biasing member operable to bias said head restraint toward an upright position;

wherein said lower armature is operable to concurrently move each of said first linkage and said second linkage relative to said seatback frame in response to a predetermined force applied to said lower armature to thereby move said upper armature and move said head restraint toward the occupant.

Id. at C1, 1:47–2:6.

We refer to the colorized versions of Figures 2 and 3 of the '397 patent shown below in describing the claimed vehicle seat assembly.

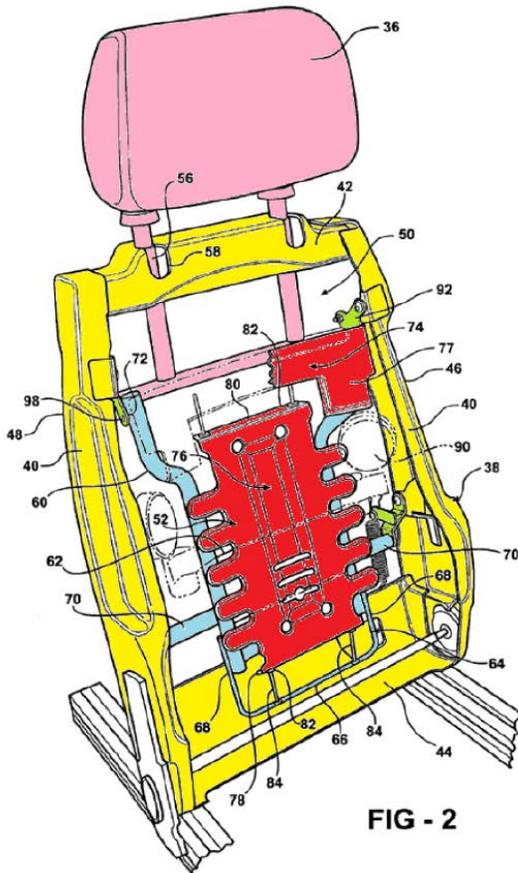


FIG - 2

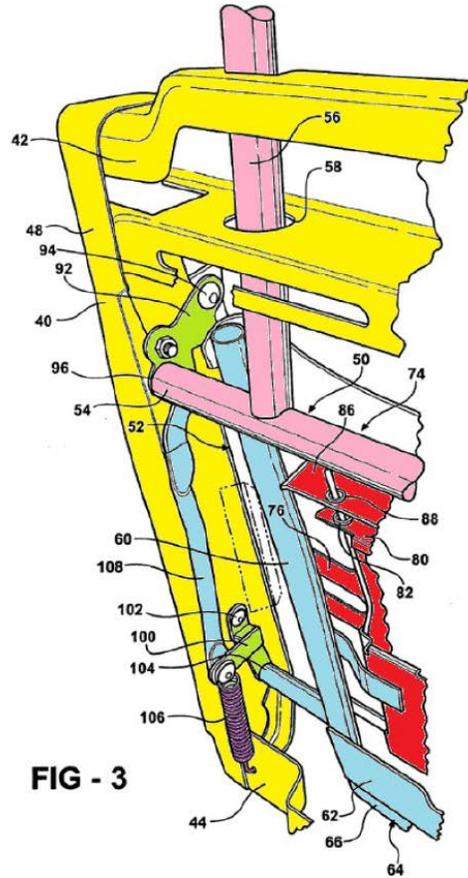


FIG - 3

Figure 2 of the '397 patent illustrates the support frame and activation mechanism of the head restraint.

Figure 3 of the '397 patent is a partial view from behind of the mechanism illustrated in Figure 2.

First linkage 92 (green) is: (a) connected to frame 38 (yellow) at first coupling point 94, (b) operatively connected to upper armature 50 (pink) at second coupling point 96, and (c) operatively connected to lower armature 52 (blue) at third coupling point 98. *Id.* at B1, 6:33–40. Second linkage 100 (green) is: (a) connected to frame 38 (yellow) at fourth coupling point 102 and (b) operatively connected to lower armature 52 (blue) at fifth coupling point 104. *Id.* at B1, 6:60–65. “[T]he first linkage 92, the second linkage 100, and the lower armature 52 are able to freely move relative to each other and are able to freely move relative to the seatback frame 38.” *Id.* at B1, 7:9–11.

Upon a rear collision, the occupant imparts a load upon first and second impact bodies 74, 76 (red) causing rearward movement of the lower armature 52 (blue). *Id.* at B1, 5:16–31. A sufficiently large load overcomes force imparted by biasing member 106 (purple) and causes first and second linkages 92, 100 (green) to pivot rearward. In turn, “[p]ivotal movement of the first linkages 92 moves the cross bar 54 of the upper armature 50, and this ultimately moves the head restraint 36 toward the head and neck area 32 of the occupant 24.” *Id.* at B1, 7:38–41.

II. CLAIM INTERPRETATION

“A claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278 (Fed. Cir. 2015) (“We conclude that Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA.”), *cert. granted sub nom. Cuozzo Speed Techs. LLC v. Lee*, 84 U.S.L.W. 3218 (Jan. 15, 2016) (No. 15-446). When applying that standard, we interpret the claim language as it would be understood by one of ordinary skill in the art in light of the specification. *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010). Thus, we give claim terms their ordinary and customary meaning. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (“The ordinary and customary meaning ‘is the meaning that the term would have to a person of ordinary skill in the art in question.’”). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

NHK proposes interpretations for “operatively connected,” “support,” “stiffener,” “cross member,” “spaced relation relative to each other,” and “pivot.” Pet. 12–17. Of these terms, we determine that only the meaning of “stiffener” has any bearing on a disputed issue between the parties.³ Lear does not contest NHK’s interpretation of “stiffener” as meaning “a structure that reinforces another structure.” Resp. 13. We adopt NHK’s interpretation of the term “stiffener,” as we consider that interpretation to comport with the broadest reasonable interpretation of the term.

III. THE CHALLENGES TO PATENTABILITY

We instituted a review of the patentability of claims 52, 53, 59, and 60 of the ’397 patent on the grounds that those claims may be anticipated or obvious in light of various prior art references including: DE ’265, JP ’832, and JP ’771. Dec. 9–17.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) reaffirmed the framework for determining obviousness as set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). As observed by the Court in *KSR*, the factual inquiries set forth in *Graham*

³ The parties offer competing interpretations for “operatively connected,” “support,” and “spaced relation relative to each other.” *Compare* Pet. 12–14, 15–16 *with* Resp. 9–15. Neither party explains how, if at all, our analysis of the differences between the prior art and the claims depends upon our resolution of their disputes over the meaning of these terms. Accordingly, we do not consider it necessary to interpret expressly any of these terms.

that are applied for establishing a background for determining obviousness under 35 U.S.C. § 103(a) are summarized as follows:

1. Determining the scope and content of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

KSR, 550 U.S. at 406. With these standards in mind, we address each challenge below.

A. THE PARTIES' POST-INSTITUTION ARGUMENTS

In our Institution Decision, we concluded that the argument and evidence adduced by NHK demonstrated a reasonable likelihood that: (1) DE '265 anticipated claims 52 and 53, Dec. 9–13, and (2) the combination of JP '832 and JP '771 rendered claims 52, 53, 59, and 60 obvious, *id.* at 14–17. We must now determine whether NHK has established by a preponderance of the evidence that the specified claims are unpatentable over the cited prior art. 35 U.S.C. § 316(e). In this connection, we previously instructed Lear that “any arguments for patentability not raised in the [Patent Owner Response] will be deemed waived.” Paper 8, 5; *see also* 37 C.F.R. § 42.23(a) (“Any material fact not specifically denied may be considered admitted.”). Additionally, the Board’s Trial Practice Guide states that the Patent Owner Response “should identify all the involved claims that are believed to be patentable and state the basis for that belief.” Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).

Lear does not contest that DE '265 describes all elements of claims 52 and 53. *See* Resp. 16–23 (arguing only that DE '265 is not prior art under 35 U.S.C. § 102(a)). Lear also does not contest that the combination of JP '832 and JP '771 describes all elements of claims 52, 53, 59, and 60. *See id.* at 23–32 (arguing only that combining JP '771 with JP '832 renders JP '832 unfit for its intended purpose). Accordingly, the record now contains unrebutted arguments and evidence presented by NHK regarding the manner in which the asserted prior art teaches all elements of the claims against which that prior art is asserted. As discussed below, Lear contests only whether DE '265 is prior art to claims 52 and 53 and whether it would have been obvious to combine JP '771 with JP '832.

B. ANTICIPATION OF CLAIMS 52 AND 53 BY DE '265

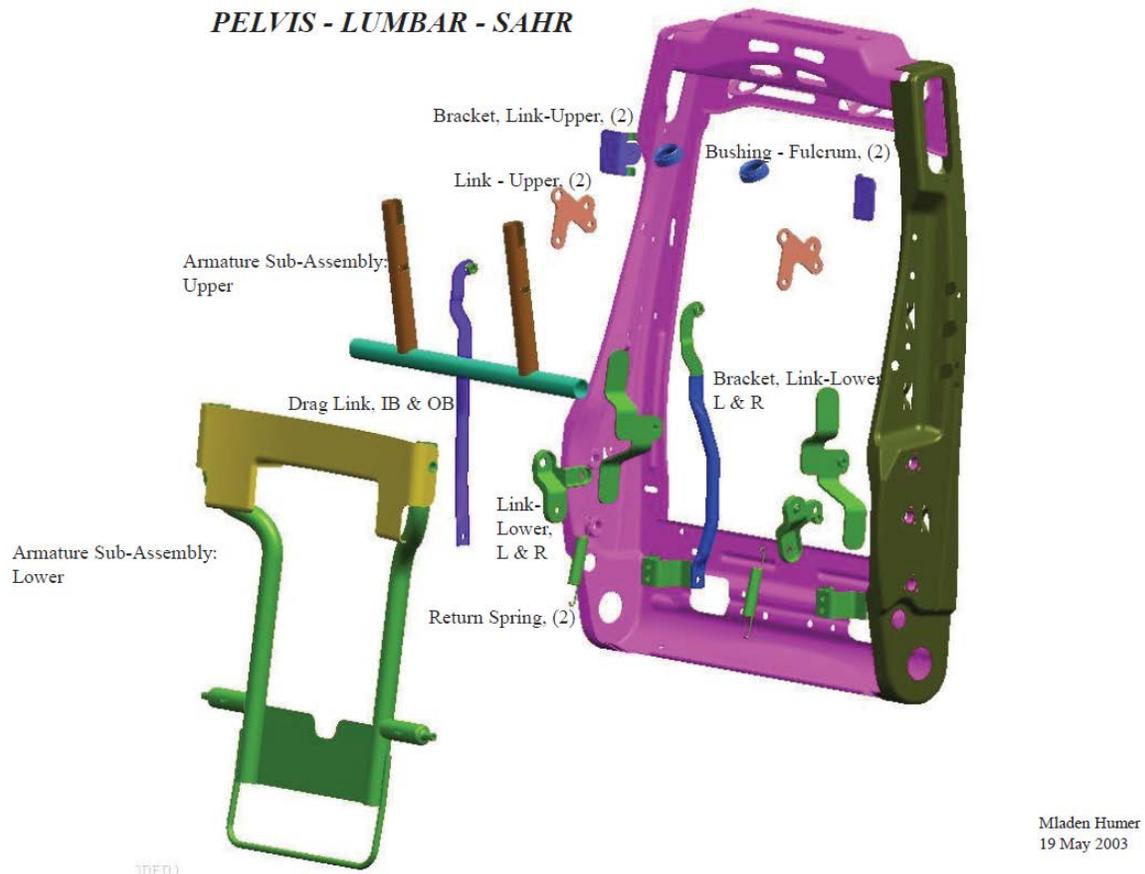
We preliminarily determined that NHK had established a reasonable likelihood of showing that DE '265 anticipates claims 52 and 53. Dec. 9–13 (citing Pet. 21–28, Ex. 1012 ¶¶ 54–61). Lear argues only that DE '265 is not prior art and does not contest that DE '265 describes all elements of claims 52 and 53 as those elements are arranged in those claims. Resp. 16–23. For the reasons expressed below, NHK persuades us by a preponderance of evidence that DE '265 is prior art under 35 U.S.C. § 102(a) and anticipates claims 52 and 53.

Lear contends that DE '265 is not prior art to claims 52 and 53 because Mladen Humer, the inventor, conceived the subject matter of these claims before the effective date of DE '265 and diligently reduced the claimed subject matter to practice within the relevant time period. Resp. 16–23. In support of its contentions, Lear proffers the Declaration of Mladen Humer, which Lear also presented to the Office during the Reexam.

Resp. 16 (citing Ex. 2003 (“the Humer Decl.”)). Mr. Humer testifies, “I conceived of the invention by at least May 19, 2003.” Ex. 2003 ¶ 2. He also testifies:

Attached as Exhibit 1 is an invention disclosure for the invention of the '397 patent, documenting my earlier conception of the claimed invention. The exploded view is dated May 19, 2003. The acronym SAHR stands for Self Aligning Head Restraint. The labeled “Armature Sub-Assembly: Upper” includes upright guides that receive posts of a head restraint.

Id. ¶ 8. The “Exhibit 1”⁴ to which Mr. Humer refers above is reproduced in pertinent part below.



⁴ When citing exhibits to the Humer Decl., we adopt the parties’ convention of citing those exhibits as, for example, Ex. 2003-1 (for Exhibit 1 to the Humer Decl.).

The figure is an exploded view of a selection of internal components of a head restraint system.

Regarding the components shown above and in all other versions illustrated in later-appearing exhibits, Mr. Humer testifies that the “multiple variations discussed below generally include the same active head restraint concept, which is claimed in the patent. The design maintained the overall concept of structure and function through the multiple variations.” Ex. 2003 ¶ 7. Mr. Humer describes Exhibits 5–7, 10, 12, 14–19, and 21–26 to his declaration as illustrating “a variation,” “variations,” “further variations,” or “another variation” of the claimed invention. *E.g., id.* ¶¶ 12–14, 17, 19, 22, 24, 26, 28, 30, 32, 35, 36, 38–41, 45, and 46. The only evidence probative of the relationship between these “variations” of the headrest system and claims 52 and 53 is Mr. Humer’s testimony stating:

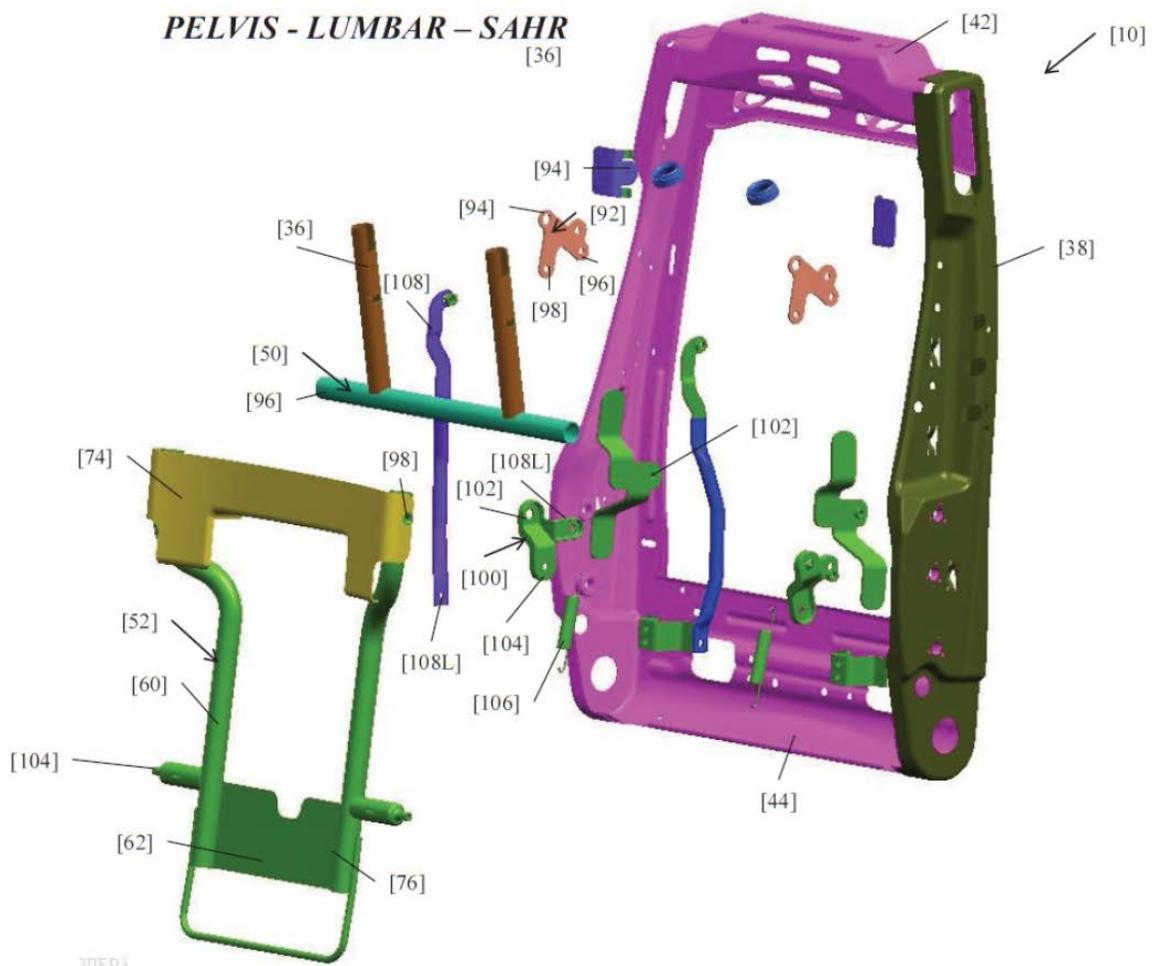
For the period of January 23, 2004, which is prior to the publication of [DE ’265], to the filing of the application for the ’397 patent on September 27, 2004, my colleagues and I worked continuously on developing the invention of claims 1, 2, 4-9, 11-13, 15-18, 20-43, 45-64 and 66 of the '397 patent.

Id. ¶ 3.

The words appearing in Exhibit 2003-1 constitute the only textual description in evidence that potentially explains the manner in which any of the components shown in the Exhibit connect, if at all, to each other. *See id.* ¶¶ 1–46 (only paragraph 7 explaining any aspect of Ex. 2003-1 and failing to address relationship among components in the figure of Ex. 2003-1). Terms appearing in Exhibit 2003-1 such as “link,” “lower armature,” and “upper armature” imply a mechanical relationship among the components shown in Exhibit 2003-1. We determine that those implied relationships are insufficient to establish the manner in which those components connect and

move relative to each other. We also note the Mr. Humer does not testify in any detail about the correlation, if any, between the components shown in Exhibit 2003-1 and the elements of claims 52 and 53.

Nevertheless, Lear contends that the components shown in Exhibit 2003-1 correlate to the elements of claims 52 and 53 as set forth in the numeric annotations appearing in Exhibit 2004, which is reproduced below. Resp. 19 (reproducing Exhibit 2004).



Lear's annotated version of the figure from Exhibit 1 to the Humer Decl. includes reference numerals corresponding to those used in the Specification to identify the elements.

Lear also provides the following versions of claims 11, 52, and 53 with embedded references to the same numerals used in the annotated figure:

11. A vehicle seat assembly [10] comprising:

a seatback frame [38];

an upper armature [50] including a head restraint [36];

a lower armature [52];

at least one first linkage [92] moveably connected to said seatback frame [38] at a first coupling point [94], operatively connected to said upper armature [50] at a second coupling point [96], and operatively connected to said lower armature [52] at a third coupling point [98], wherein said first coupling point [94] and said third coupling point [98] are disposed in spaced relation relative to each other;

at least one second linkage [100] moveably connected to said seatback frame [38] at a fourth coupling point [102] and operatively connected to said lower armature [52] at a fifth coupling point [104], wherein said fourth coupling point [102] and said fifth coupling point [104] are disposed in spaced relation relative to each other; and

at least one biasing member [106] interconnecting said seatback frame [38] and one of said first linkage [92] and said second linkage [100], said biasing member [106] operable to bias said head restraint [36] toward an upright position;

wherein said lower armature [52] is operable to concurrently move each of said first linkage [92] and said second linkage [100] relative to said seatback frame [38] in response to a predetermined force applied to said lower armature [52] to thereby move said upper armature [50] and move said head restraint [36] toward the occupant.

* * *

52. A vehicle seat assembly [10] as set forth in claim 11 wherein the lower armature [52] comprises a stiffener [62].

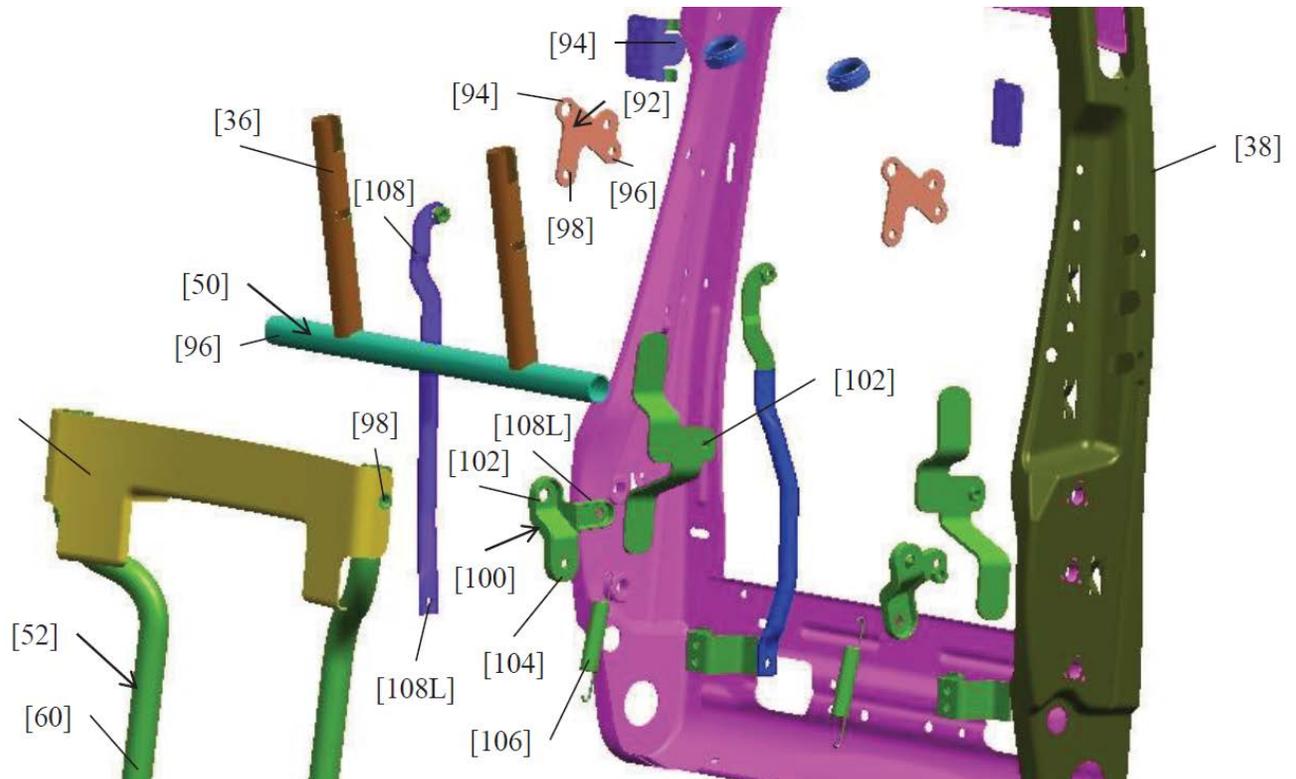
* * *

53. A vehicle seat assembly [10] as set forth in claim 52 wherein the stiffener [62] extends generally horizontally.

Resp. 20–21. Lear fails to submit testimony from Mr. Humer, Dr. Viano, or any other evidence to support its contention that the annotations in Ex. 2004 accurately correlate elements recited in claims 52 and 53 to the components shown in the Exhibit. Accordingly, we consider Lear’s annotations to be attorney argument unsupported by evidence. Without such evidentiary support, Lear’s argument that Mr. Humer conceived the invention of claims 52 and 53 before publication of DE ’265 is unpersuasive.

Additionally, even if we were to ascribe evidentiary weight to Exhibit 2004, NHK persuades us that Exhibit 2004 still fails to demonstrate Mr. Humer’s conception of every feature recited in claims 52 and 53. NHK argues that Exhibit 2004 does not demonstrate Mr. Humer’s possession of every feature recited in claims 52 and 53 and thus fails to establish conception early enough to eliminate DE ’265 as prior art. Reply 5–10. More specifically, NHK contends that Exhibit 2004 fails to describe the ways in which various elements of the claimed seat assembly move relative to each other in response to forces applied to the assembly. *Id.* at 6–8. NHK also contends that Exhibit 2004 fails, for example, to illustrate “at least one first linkage movably connected to said seatback frame at a first coupling point.” *Id.* at 8–9. In that regard, referring to annotations in the pertinent portion of the figure from Exhibit 2004, which is reproduced below, Lear contends that the numbered elements correlate to the claim language as follows:

at least one first linkage [92] moveably connected to said seatback frame [38] at a first coupling point [94], operatively connected to said upper armature [50] at a second coupling point [96], and operatively connected to said lower armature [52] at a third coupling point [98], wherein said first coupling point [94] and said third coupling point [98].



Resp. 20.

NHK argues that “[w]ithout additional explanation or support, it is impossible to determine that this exploded view supports the elements of claim 11.” Reply 9. The claims require that linkage 92 be coupled to frame 38 and lower armature 52 at two different “coupling points.” Exhibit 2004 fails to illustrate whether or how lower armature 52 is connected to frame 38 via linkage 92. Without evidence supporting Lear’s argument, we conclude that Exhibit 2004 and Exhibit 2003-1 do not demonstrate conception of the subject matter of claims 52 and 53, both of which depend from claim 11.

On the evidence before us, NHK persuades us that DE ’265 qualifies as prior art under 35 U.S.C. § 102(a). Lear does not otherwise argue that DE ’265 fails to anticipate claims 52 and 53. As noted in part III.A above, NHK persuades us by a preponderance of evidence that DE ’265 describes all elements of claims 52 and 53. Accordingly, NHK persuades us by a

preponderance of evidence that DE '265 anticipates claims 52 and 53 under 35 U.S.C. § 102(a).

C. OBVIOUSNESS OF CLAIMS 52, 53, 59, AND 60 IN VIEW OF JP '832 AND JP '771

Claim 52 depends from claim 11 and further recites “the lower armature comprises a stiffener.” Ex. 1001, C1, 4:59–60. Claim 53 depends from claim 52 and further recites that “the stiffener extends generally horizontally.” *Id.* at C1, 4:61–62. Claim 59 depends from claim 50, which depends from claim 11, and further recites that “the lower armature further comprises a stiffener mechanically supporting the at least one support.” Ex. 1001, C1, 5:17–18. The “at least one support” is an element introduced in intervening claim 50 as follows: “the lower armature comprises at least one support.” *Id.* at C1, 4:56. Claim 60 depends from claim 59 and further recites “the stiffener extends generally parallel to the lower cross member.” *Id.* at C1, 5:19–21.

We preliminarily determined on the record before us at the time that NHK had established a reasonable likelihood of showing that the combination of JP '832 and JP '771 renders claims 52, 53, 59, and 60 unpatentable as obvious. Dec. 14–16. The dispute at trial focuses upon whether a skilled artisan would have combined the stiffener as described in JP '771 with the head restraint system described in JP '832. For the reasons expressed below, NHK persuades us that claims 52, 53, 59, and 60 are unpatentable as obvious in view of the combination of JP '832 and JP '771.

1. NHK's Argument and Evidence in the Petition

NHK contends that JP '832 describes all elements recited in independent claim 11 and dependent claim 50. Pet. 31–40. NHK relies upon JP '771 as describing the stiffener added in claims 52, 53, 59, and 60.

Id. at 41–46. Lear does not dispute NHK’s contentions. *See* Resp. 1–32 (not addressing any aspect of claims 11, 50, 52, 53, 59, or 60).

a) Claims 52 and 53

NHK contends that JP ’832 describes all elements of independent claim 11 and proffers testimony from Dr. Kent to support its contentions. Pet. 31–39; Ex. 1012 ¶¶ 66–70. Dr. Kent testifies that stiffeners were “well known in the art prior to the critical date of the ’397 patent” and cites JP ’771 as an example to support his conclusion. Ex. 1012 ¶ 71. NHK contends that JP ’771 describes armature pipes 8 connected by a horizontal bar that constitutes the stiffener introduced in claim 52 and further limited in claim 53. Pet. 41–42 (citing Ex. 1012 ¶ 71). NHK contends that a skilled artisan would have known that “adding a supporting means as expressly taught in JP ’771 to the assembly of JP ’832 would stabilize the lower armature and prevent wobbling and other deformation, and would help to more efficiently move the headrest towards the head of the passenger.” Pet. 43 (citing Ex. 1012, ¶ 74). NHK also contends that a skilled artisan “would have recognized these benefits and could have easily implemented the JP ’771 teachings into the structure disclosed in JP ’832.” Pet. 43 (citing Ex. 1012 ¶ 74).

b) Claims 59 and 60

NHK identifies “side support portion 20C” of JP ’832 as the “support” introduced in claim 50. Pet. 40 (citing Ex. 1006 ¶ 12). NHK contends that the claimed stiffener is described for example, by the horizontal portion of armature pipes 8 in JP ’771. Pet. 45. NHK contends, and Dr. Kent testifies, that the horizontal portion of armature pipes 8 describes a stiffener that “extends generally parallel to the lower cross member” as recited in claim

60. Pet. 46 (citing Ex. 1008, Figs. 2, 8; Ex. 1012 ¶ 75). Dr. Kent testifies that a skilled artisan “would have recognized these benefits and could have easily implemented the JP ‘771 teachings into the structure disclosed in JP ‘832. For example, there is room in the JP ‘832 seatback to add a stiffener between supports 20C, e.g., by welding.” Ex. 1012 ¶ 74.

2. Lear’s Arguments

Lear argues that NHK fails to establish that claims 52, 53, 59, and 60 are unpatentable as obvious because adding a stiffener to the seat described in JP ‘832 as NHK proposes “is counter to the intended purpose of the JP ‘832 seat design.” Resp. 30–32. More specifically, Lear argues that JP ‘832 incorporates “S-wire springs” to support the occupant and transfer loads to the linkages in a manner that achieves the “important design considerations” of “occupant comfort.” *Id.* at 31. Lear contends that adding the “rigid body stiffener of JP ‘771 destroys the intended compliance of the S-wire springs.” *Id.* at 32. Lear relies upon Dr. Viano’s testimony that:

The design of JP ‘832 balances comfort and design by employing S-wires for receiving both normal and crash-related input loads. The proposed combination to add a rigid body stiffener such as armature pipes 8 as disclosed in JP ‘771 would worsen the comfort of the seat design of JP ‘832 and negate the very purpose of the S-wire springs.

Id. (citing Ex. 2005 ¶ 103). Dr. Viano cites no documentary evidence to support his conclusions about the intentions of the designers of the system described in JP ‘832.

3. NHK’s Argument in the Reply

In response to Lear’s arguments, NHK argues that JP ‘832 never mentions comfort features but instead focuses upon “a vehicle seat designed to absorb an impact from a rear end of a vehicle.” Reply 16 (citing Ex. 1006

¶ 6). NHK also points out that JP '832 discusses only deploying a headrest to protect the passenger's head in its "PROBLEM" and "SOLUTION" sections. *Id.* at 17 (citing Ex. 1006 ¶¶ 4–9). NHK contends that JP '832, therefore, never expressly indicates that "comfort" is the "intended purpose" of its seating system. *Id.* NHK also contends that, even if we were to accept that comfort is an intended purpose of JP '832, a skilled artisan would have found it obvious to position a stiffener behind support portions 20B of JP '832. *Id.* at 18–19. Positioning the stiffener in this manner would have achieved the added benefit of ensuring that the headrest deploys correctly even when the seat is loaded in an unbalanced manner across the seat width without compromising the comfort of the seat. *Id.* (citing Ex. 1018 ¶¶ 22–24). Dr. Viano, when cross examined by NHK, testified that an occupant likely would not feel the S-wire support in JP '832 when sitting in the seat. Ex. 1017, 35:10–16. NHK concludes, and we agree, that the preponderance of evidence supports our determination that positioning a stiffener behind that S-wire support would not affect the comfort of the seat. Reply 19.

4. Conclusion

As noted in part III.A above, NHK persuades us by a preponderance of evidence that the combination of JP '832 and JP '771 describes all elements of claims 52, 53, 59, and 60. NHK persuades us by a preponderance of evidence that a skilled artisan would have considered it obvious to incorporate a stiffener such as the one described in JP '771 in the structure of JP '832. Lear's argument that the intended purpose of JP '832 was to provide comfort for the occupant is not persuasive. We determine that although comfort may be among the purposes of the seat in JP '832, the primary focus in JP '832 is on supporting the occupant's head during a

collision. Ex. 1006 ¶¶ 4–9. We also determine that NHK has demonstrated by a preponderance of evidence that a skilled artisan would have recognized the advantages of adding a stiffener as described in JP ’771 to the impact structure in JP ’832 and would have been capable of doing so without compromising the comfort of the seat in JP ’832. Accordingly, we conclude that NHK persuades us by a preponderance of evidence that the combination of JP ’832 and JP ’771 renders claims 52, 53, 59, and 60 unpatentable as obvious under 35 U.S.C. § 103.

IV. LEAR’S MOTION TO EXCLUDE

We have reviewed Lear’s Motion to Exclude, NHK’s Opposition to the Motion, and Lear’s Reply in support of the Motion. Based on our review, we deny the Motion in all respects for one or both of the following reasons: (1) the Motion is moot because it seeks to exclude evidence not considered or relied upon in rendering this Decision or (2) the Motion addresses issues more appropriate to determining the weight ascribed to the evidence rather than the admissibility of evidence. In rendering this Decision, we determine and ascribe the appropriate weight to all proffered evidence and, when appropriate, comment upon the weight ascribed.

V. CONCLUSION

For the reasons expressed above, we determine that NHK has shown by a preponderance of the evidence that:

- (1) DE ’265 anticipates claims 52 and 53 of the ’397 patent under 35 U.S.C. § 102(a); and
- (2) the combination of JP ’832 and JP ’771 renders claims 52, 53, 59, and 60 unpatentable as obvious under 35 U.S.C. § 103.

VI. ORDER

For the reasons given, it is:

ORDERED that claims 52, 53, 59, and 60 of the '397 patent are held *unpatentable*;

FURTHER ORDERED that Lear's Motion to Exclude is *denied*; and

FURTHER ORDERED that because 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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