

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MILLERKNOLL, INC.,
Petitioner,

v.

AARON DEJULE ~~AND SCOTT PADIAK~~,¹
Patent Owner.

Case IPR2023-01428

Patent 10,292,498

AMENDED PATENT OWNER'S PRELIMINARY RESPONSE

¹ Mr. DeJule is the sole patent owner (Ex. 2006). This case should be re-captioned accordingly.

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EXHIBITS

Exhibit	Description
Ex. 2001	Restriction Requirement (68-73 of Ex. 1102)
Ex. 2002	Restriction Response & Election (74-75 of Ex. 1102)
Ex. 2003	Reserved
Ex. 2004	U.S. Provisional Patent Application 62/114,706
Ex. 2005	Aaron DeJule Mutual Confidentiality Agreement (“MCA”)
Ex. 2006	Assignment Record
Ex. 2007	Complaint
Ex. 2008	IPR2023-0147 Petition For ’753 Patent
Ex. 2009	Cosm by Studio 7.5, HermanMiller.com, https://www.hermanmiller.com/products/seating/office-chairs/cosm-chairs/design-story/ (last visited Dec. 22, 2023)
Ex. 2010	MillerKnoll, Inc. Form 10-K for Year Ending June 3, 2023, (available at https://millerknoll.gcs-web.com/static-files/748f2490-52a0-4833-b27f-de8e810bf261) (last visited Dec. 27, 2023)
Ex. 2011	Transcript of District Court Hearing on Dec. 11, 2023

I. INTRODUCTION

Pursuant to 37 C.F.R. § 42.107(a), Aaron DeJule (“Patent Owner” or “Mr. DeJule”),² hereby submits the following Preliminary Response to the Petition for *Inter Partes* Review of U.S. Patent No. 10,292,498 (“the ’498 Patent”).

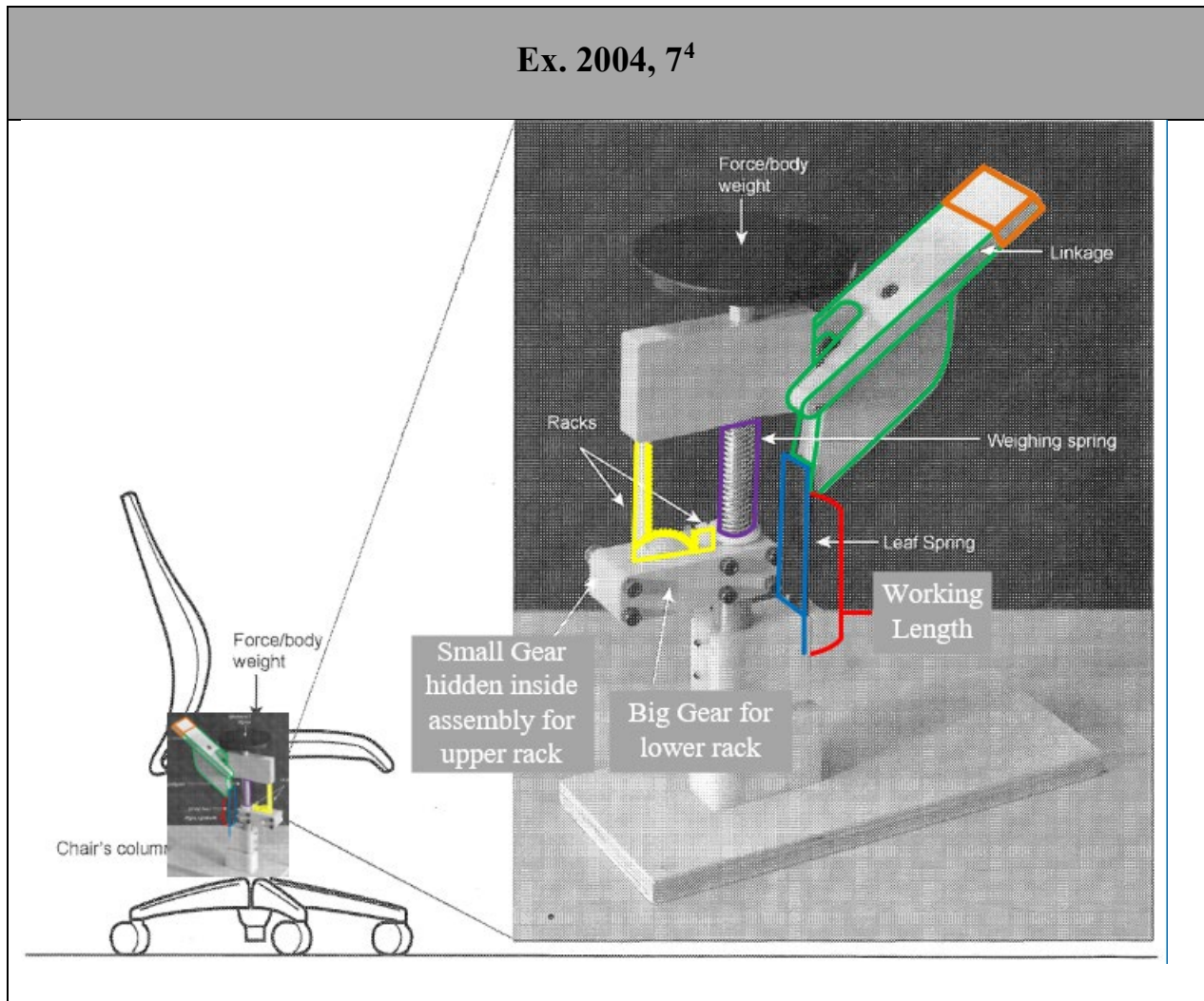
For years, task chairs have had the ability for the back rest to recline. Because each person is different (*i.e.*, different weight), the optimal force required to tilt the backrest is different for different people. In the past, chairs included a manual adjustment lever to change the resistance/force necessary to tile the back rest. This was not the best solution, in particular because many people simply never manually adjust the settings on their chairs. Mr. DeJule created a new way to solve this problem. He developed a clever and innovative design for a chair that automatically adjusts the force needed to tilt a back rest³ based on a user’s weight. This innovative design keeps a back rest portion (orange below) directly linked (by way of a linkage,

² While Petitioner incorrectly listed a second owner, Mr. DeJule is the sole owner (Ex. 2006) and this case should be re-captioned accordingly.

³ The terms back rest (two words) and backrest (one word) are used interchangeably herein. Petitioner also used these terms interchangeably.

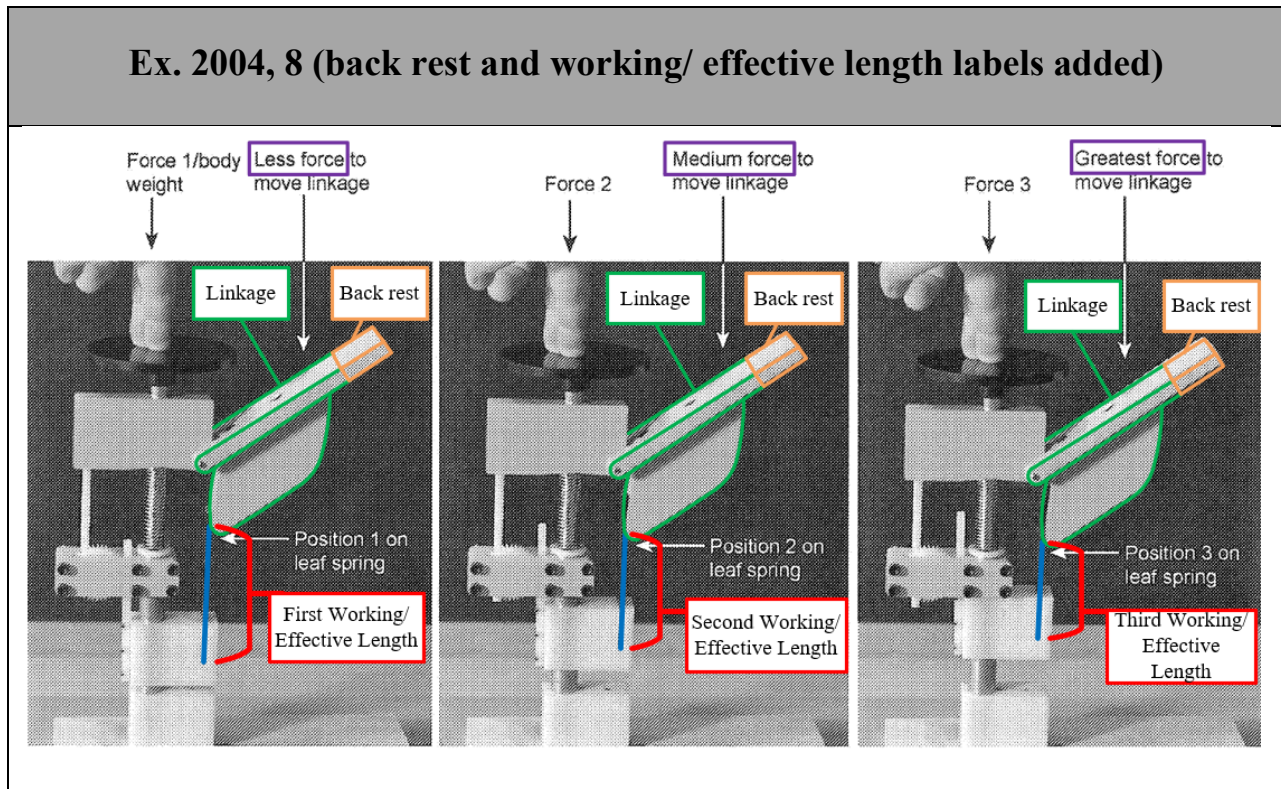
Compare Petition at 4 (mentioning “backrest 16” from the patent) with Ex. 1001 at 6:23 (the patent mentioning the “back rest 16”) and 6:39-43 (same).

green below) to a leaf spring (blue below) with an effective/working length (red below) that automatically shortens after engagement of gears (yellow below) as an incident of weight being applied over a weighing spring (purple below).



⁴ Colors in figures and emphasis in textual quotations have been added throughout, unless indicated otherwise.

A shorter effective working length means that the leaf spring more forcefully resists tilting of the back rest at a point of contact between the leaf spring and the linkage, as is shown in the sequence of figures below:



Shortly after filing a provisional application (Ex. 2004, hereinafter “provisional application”) describing this approach, Mr. DeJule was invited by Petitioner to share his chair innovations, so he signed their mutual confidentiality agreement (MCA) (Ex. 2005) and then shared his innovative design with their senior representatives in the hopes of collaborating on commercialization efforts. Rather than reciprocate that collaborative hope, Petitioner told Mr. DeJule that his innovation would never work. Ex. 2007 at 36. In reality, Petitioner had a different plan. They copied Mr. DeJule’s

design, filed their own patent applications on concepts derived from Mr. DeJule, created a commercially-successful product embodying his design (the Cosm chair), and then told the world that Mr. DeJule's self-adjusting tilt innovations were the "holy grail" and key feature of their successful Cosm chair. Ex 2007 at 40-42. Faced with a co-pending lawsuit to resolve this "theft" (as stated by the District Court judge at a recent hearing, Ex. 2011 at 9-10), Petitioner is seeking to avoid the terms of their own MCA (which specifies Michigan as the forum for resolving all disputes), and they seek to avoid Mr. DeJule's patents by mischaracterizing the claims in an attempt to rewrite the claims to cover their chosen prior art.

Specifically, the entire petition is based on a half-baked means-plus-function analysis that ignores the complete corresponding structure identified in the patent. By ignoring the full structure of Mr. DeJule's claims, Petitioner is intentionally omitting the key limitations that make Mr. DeJule's innovation the "holy grail" (Ex. 2009) as compared to the prior art. Once the proper corresponding structure is identified, the elegance and brilliance of Mr. DeJule's innovative self-adjusting tilt design is revealed and Petitioner's prior art falls by the wayside. *Infra* Sections III-IV. Thus, Petitioner failed to carry its burden to show a reasonable likelihood of prevailing with respect to at least one of the challenged claims.

Institution is also improper because of the fact-intensive secondary considerations analysis and contractual disputes at issue in the district court matter.

These represent additional independent reasons to deny institution pursuant to the efficiency and fairness considerations of § 314(a). *Infra* Section VI.

For at least these reasons, institution would be a wasteful use of the Board's limited reasons. The Board should deny institution.

II. LEVEL OF ORDINARY SKILL

Even under Petitioner's definition of the level of ordinary skill in the art, Petitioner's challenges fail to establish a reasonable likelihood of prevailing as to any claim of the '498 Patent. As such, and for the purposes of this Preliminary Response only, Patent Owner forgoes offering a competing definition of the level of ordinary skill. Patent Owner reserves the right to offer a competing definition in the unlikely event that the Board institutes review.

III. CLAIM CONSTRUCTION

Petitioner argues that the limitation "adjusting assembly" requires means-plus-function treatment. Paper 2 (hereinafter "Petition") at 9. Petitioner then selectively chooses corresponding structure. However, these structures do not perform the full function stated in the claims for the "adjusting assembly." As such, Petitioner failed to identify the correct corresponding structure. Correct identification of the corresponding structure is required, and once the complete corresponding structure is determined, that distinguishes the claims from

Petitioner's chosen prior art.⁵

A. Petitioner Incompletely Identified the Claimed Function Performed by the “Adjusting Assembly” Recited in Claim 1, as well as the Relevant Embodiments of the Patent

Petitioner uses an incorrect means-plus-function claim construction to change the scope of the claims. However, a means-plus-function term does not provide Petitioner with the freedom to omit structure or functionality from the claim so they can mold the claims to suit their preferred prior art arguments. As noted by Petitioner “tribunals should not ‘adopt[] a function different from that explicitly recited in the claim.’” Petition at 13 (citing *Generation II Orthotics Inc. v. Medical Technology Inc.*, 263 F.3d 1356, 1364-65 (Fed. Cir. 2001)). Despite correctly stating the law, Petitioner then goes on to violate it.

Indeed, Petitioner says that claim 1 states “an adjusting assembly...configured so that as an incident of the force being applied in the first manner changing in magnitude, the force required to be applied in the second manner to reconfigure the apparatus and move the second component relative to the first

⁵ For purposes of this proceeding only, Patent Owner agrees that means-plus-function treatment is appropriate for the “adjusting assembly.” The parties will extensively brief claim construction issues in the Michigan Litigation this spring and summer.

component changes in magnitude.” Petition at 9. The ellipsis in this quote omits a required function performed by the adjusting assembly: “*cooperating between the first component [seat] and the at least second component [backrest]*.” Ex. 1101, Claim 1 (reproduced below, with Petitioner’s omitted functions highlighted in green).

1. A reconfigurable apparatus for supporting at least part of a user’s weight with the user in an operative position with respect to the reconfigurable apparatus, the reconfigurable apparatus comprising:
a frame;
a first component on the frame upon which a force is applied by a user in a first manner as an incident of the user assuming the operative position;
at least a second component on the frame that is movable relative to the first component and upon which a force can be applied by a user in the operative position in a second manner to reconfigure the apparatus by moving the at least second component relative to the first component; and
an adjusting assembly cooperating between the first component and the at least second component and configured so that as an incident of the force being applied in the first manner changing in magnitude, the force required to be applied in the second manner to reconfigure the apparatus and move the second component relative to the first component changes in magnitude.

Ex. 1101, Claim 1. Additionally, in its search for corresponding structure, Petitioner relies on *Figure 3*, but ignores that there was an election of species during prosecution, in which *Figure 7* was elected for further prosecution. Exs. 2001 (Examiner’s request for an election of species); and 2002 (Patent Owner indicating that it “elects to prosecute Species IV (Fig. 7)”). Consistent with this election, and

as Petitioner itself observes in a related IPR, the provisional application “discloses a mechanism that resembles that of Figure 7” of the patent. Ex. 2008 at 8. Thus, the corresponding structure that the patent links or associates with the claimed functions for the “adjusting assembly,” is depicted in the embodiment Figure 7 and in the provisional application’s figures.

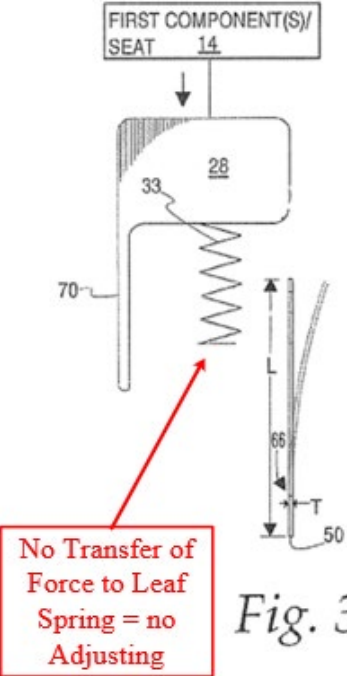
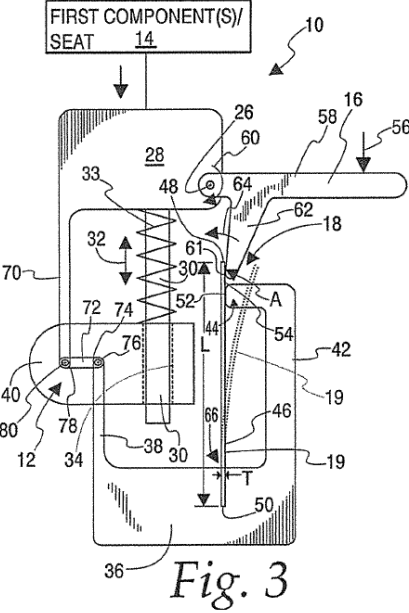
Thus, in properly identifying the corresponding structure for claim 1’s “adjusting assembly,” the claimed function in its entirety, as well as the pertinent embodiment of Figure 7 (and the provisional application’s figures) need to be accounted for, as is done below.

B. Petitioner’s Identified Corresponding Structure for the “Adjusting Assembly” is Incomplete and Would Not Perform the Full Identified Function

Petitioner concludes that the corresponding structure is “(1) tilting springs in the form of leaf springs, coil springs, or torsion components, and (2) weighing springs in the form of coil springs, along with equivalents thereof.” Petition at 14. As a threshold matter, the term “tilting springs” does not even appear in the patent. That term only appears in Petitioner’s cited prior art, which tellingly reveals that Petitioner was not trying to correctly identify the patent’s corresponding structure for the “adjusting assembly,” it was only interested in redrafting the claims in an attempt to match its prior-art arguments. *Compare* Ex. 1103 (mentioning “tilting control spring” more than 60 times) 1104 (also mentioning “tilting control spring”

more than 60 times) *with* Ex. 1101 (the patent never mentioning the term).

Additionally, two disconnected spring structures are not sufficient structure to provide the full functionality of “an adjusting assembly cooperating between the first component and the at least second component and configured so that as an incident of the force being applied in the first manner changing in magnitude, the force required to be applied in the second manner to reconfigure the apparatus and move the second component relative to the first component changes in magnitude.” Ex. 1101, Claim 1. This is visually apparent when comparing Petitioner’s interpretation of the adjusting assembly (Figure 3 shown in modified form below on the left) as compared to the full structure in the specification (shown below on the right).

Ex. 1101, Fig. 3 (modified)	Ex. 1101, Fig. 3
 No Transfer of Force to Leaf Spring = no Adjusting Fig. 3	 Fig. 3

Petitioner's identified structure for the "adjusting assembly" (shown on the left) has just two disconnected springs, and would be incapable of adjusting anything, let alone performing the specifically-recited functions of "cooperating between the first component and the at least second component" such that "as an incident of the force being applied in the first manner changing in magnitude, the force required to be applied in the second manner to reconfigure the apparatus and move the second component relative to the first component changes in magnitude."

Ex. 1101, Claim 1. Notably, the patent itself describes the weighing spring 33 as being a biasing assembly (Ex. 1101 at 6:10-13), describes the leaf spring 19 as being

a spring assembly 19 (Ex. 1101 at 60-64), and describes the adjusting assembly 18 as including these structural components as well as other structural components to perform the recited functions. Patent Owner could have claimed only the spring assembly or only the biasing assembly, or a combination of those structures, but it did neither in claim 1—instead it claimed an entire structure referred to as the adjusting assembly 18 in the patent and its claims. This distinction is critical. One purpose of Mr. DeJule’s invention is to use the weight of the user to automatically adjust the tilting resistance on the backrest through gears and springs. This is what is claimed and this is why the Patent Office allowed the claims. In an attempt to evade the claims, Petitioner is trying to use its half-baked means-plus-function to (1) omit the gears because they are not present in certain prior art references, and (2) exclude the key structure that requires the spring to adjust the tilting resistance on the *backrest* by using a leaf spring that directly contacts a linkage that also contacts the backrest.

In short, and as will be explained below, the patent clearly “links or associates” more structures with the full functions attributed to the adjusting assembly to ensure proper and complete performance of the entire function. *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1210 (Fed. Cir. 2003) (cleaned up) (noting that “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history **clearly**

links or associates that structure to the function recited in the claim.’’).

C. Complete Identification of the Specification’s Corresponding Structure for the “Adjusting Assembly” Pursuant to 37 CFR 42.104(b)(3)

Patent Owner identifies the corresponding structure that resolves the issues identified above by correctly including the structural components that the patent itself links or associates with performance of the complete function attributed to the “adjusting assembly” in claim 1. As explained in more detail below, the structure that the patent links or associates with the claimed “adjusting assembly” (*i.e.*, its corresponding structure) is adjusting assembly 18 in Figure 7,⁶ which includes: (a) a weighing spring 33’;⁷ (b) a leaf spring 19’ with an effective/working length that

⁶ Aspects of Figures 1-2 and 3-4 remain relevant when discussing the elected embodiment of Figure 7, as the patent explains that Figure 7 is “a modified form of chair ... with elements corresponding to FIGS. 3 and 4 identified with like reference numerals and a “” designation.” Ex, 1101 at 7:55-57.

⁷ As noted above, the weighing spring in the patent is referred to as a biasing assembly, *i.e.*, it serves to weight-bias the adjusting assembly 18, but is not necessarily a part of assembly 18. For simplicity, and given that petitioner included this structure in its incomplete corresponding structure (Petition at 11),

shortens as weight is applied to the weighing spring 33'; (c) gears 94, 96 and associated racks 98, 100 that cooperate and move relative to one another to cause shortening of the effective/working length of the leaf spring 19'; and (d) a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19'; and equivalents thereof.

**1. Detailed Explanation of Corresponding Structure of
“Adjusting Assembly” Pursuant To 37 C.F.R. § 42.104(b)(3)**

As will now be shown, each structural element identified above is a necessary part of the corresponding structure disclosed in the provisional application and the '498 patent for performing the full function of the “adjusting assembly” of claim 1.

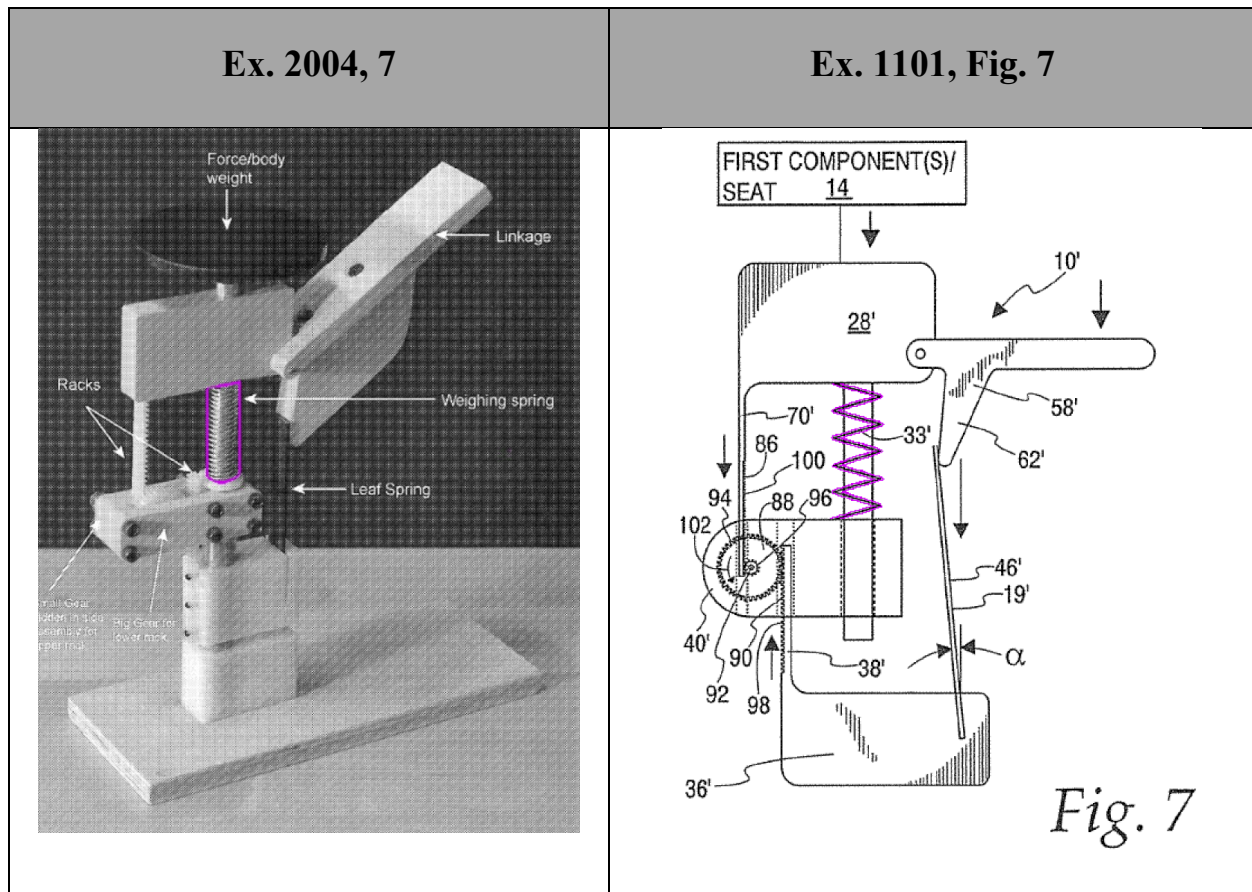
a. Weighing Spring 33'

First, a weighing spring is linked or associated with the function of “as an incident of the force being applied in the first manner [e.g., force/body weight applied via the seat] changing in magnitude [e.g., heavier or lighter user sitting on the seat]...” The structural component that receives the force applied in the first manner is weighing spring 33'. The provisional application explains that “[t]he weighing spring compresses proportional to the weight of the person sitting.” Ex.

Patent Owner does so as well here, while also adding in the relevant structural pieces that Petitioner improperly omitted from the corresponding structure.

2004, 7. In addition, Figure 7 which is substantially similar to the arrangement of parts in the provisional application, also includes a weighing spring—described as “[a] biasing assembly, shown in one exemplary form as a coil spring 33, [which] normally biasably urges the seat 14 upwardly relative to the frame 12.”⁸ Ex. 1101 at 6:10-13. Thus, both the provisional application and the ’498 patent indicate that the adjusting assembly uses a weighing spring (purple below) for performance of a part of its function. *See also* Ex. 1101 at 6:58-61 (describing “an equilibrium position for the chair 10 resulting from the balancing of the user’s weight and the upward biasing force generated by the spring 33...”) and 6:62-67 (indicating that after “an individual of greater weight assumes a sitting position on the seat 14, the support 28 and component 58 will translate further downwardly against the force of the spring 33...”).

⁸ As noted above, aspects of the Figures 1-2 and 3-4 are present in the embodiment of Figure 7 as well. This includes weighing spring 33/33'.

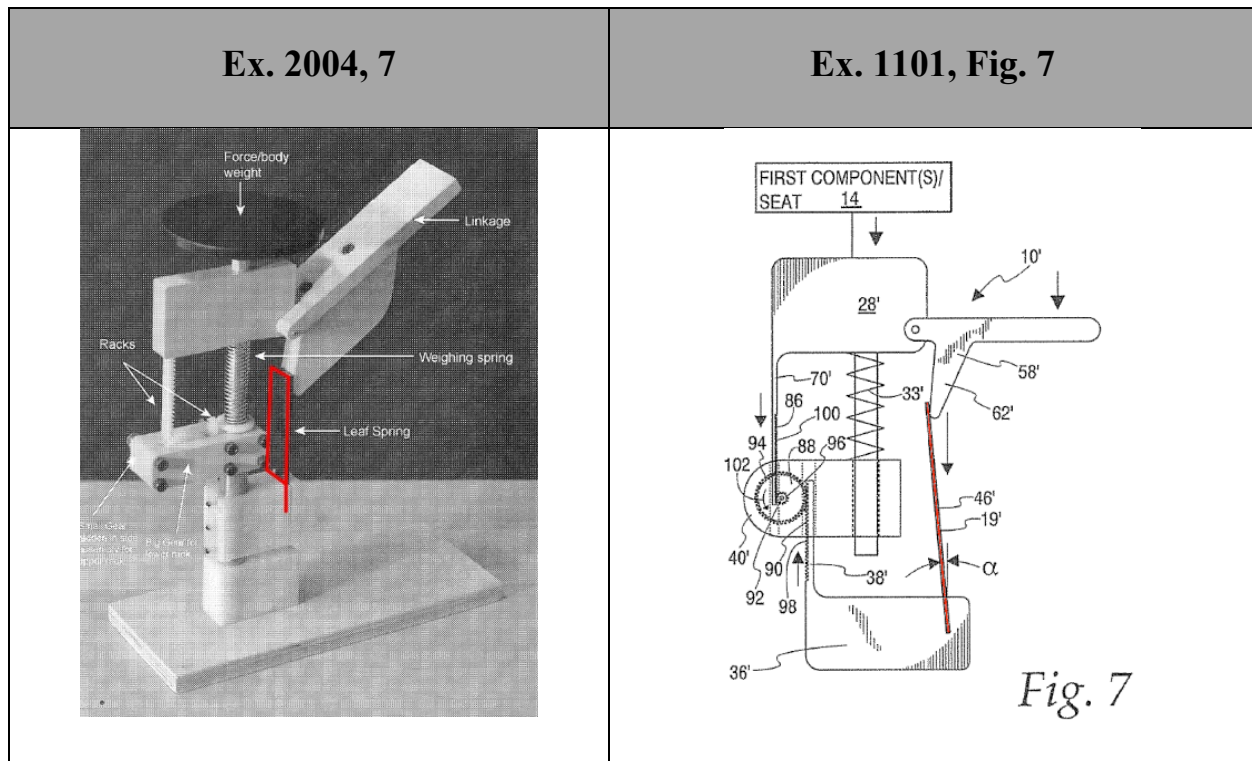


- b. Leaf Spring 19' with an effective/working length that shortens as weight is applied to the weighing spring 33'

Second, leaf spring 19' is also linked or associated with the claimed functions for the adjusting assembly. The leaf spring 19' aids in performing the function of adjusting “the force required to be applied in the second manner to reconfigure the apparatus and move the second component relative to the first component changes in magnitude.” Ex. 1101, claim 1.

The patent explains that the “adjusting assembly 18 includes a spring assembly 19” and that the “spring assembly 19 is configured to exert a force that

resists movement of the at least second component 16 that varies as a magnitude of the force applied in the first manner varies.” Ex. 1101, 4:60-64. In the context of Figure 7, the patent explains that “spring assembly 19 in this embodiment is in the form of a leaf spring,” and then notes that the “leaf spring 19 thus biasably resists movement of the component 58, and the back rest 16 of which the component 58, is a part, with a first force.” *Id.* at 6:51-53. Continuing, the patent also indicates that, when “an individual of greater weigh assumes a sitting position on the seat 14,” the following occurs to shorten an effective/working length of the leaf spring: “the support 28 and component 58 will translate further downwardly against the force of the spring 33, which causes the edge 61 on the back rest component 58 to bear upon the leaf spring 19 at a location below the location A. As a result, a shorter moment arm is established between the location where the edge 61 on the part 62 contacts the surface 54 and the fulcrum location at 66. Thus, the leaf spring 19 has an effectively shorter length, whereby a greater force is required to be applied to the leaf spring 19 to effect bending thereof as would in turn allow movement of the back rest 16 to reconfigure the chair 10.” Ex. 1101 at 6:63-7:7.

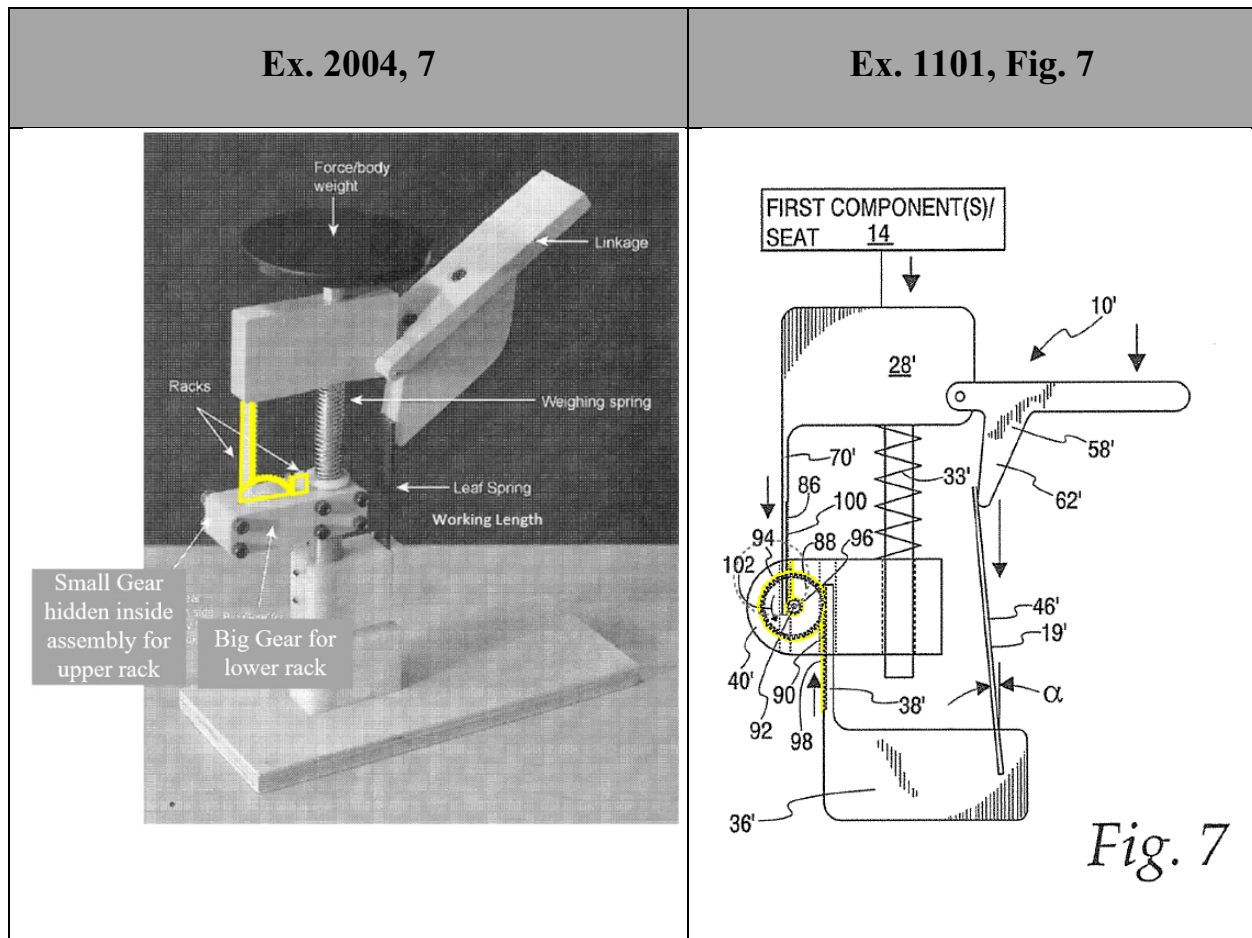


Similarly, the provisional application states that “as an individual sits down, the position on the leaf spring self-adjusts thereby adjusting the tension of the chair’s kinematic control.” Ex. 2004 at 4. The provisional application also notes that the “invention’s racks and gears changes the working length of the leaf spring” and also that, in the depicted example of the provisional application, “the Disk/seat moves 0.25 while the working length of the leaf spring moves 0.75.” *Id.* at 5.

Thus, in both the provisional application and the '498 patent, the leaf spring 19' with an effective/working length that shortens as weight is applied to the weighing spring 33' is clearly linked or associated with performance of a part of the function attributed to the adjusting assembly.

c. Gears 94, 96 and associated racks 98, 100 that cooperate and move relative to one another to cause shortening of the effective/working length of the leaf spring 19'

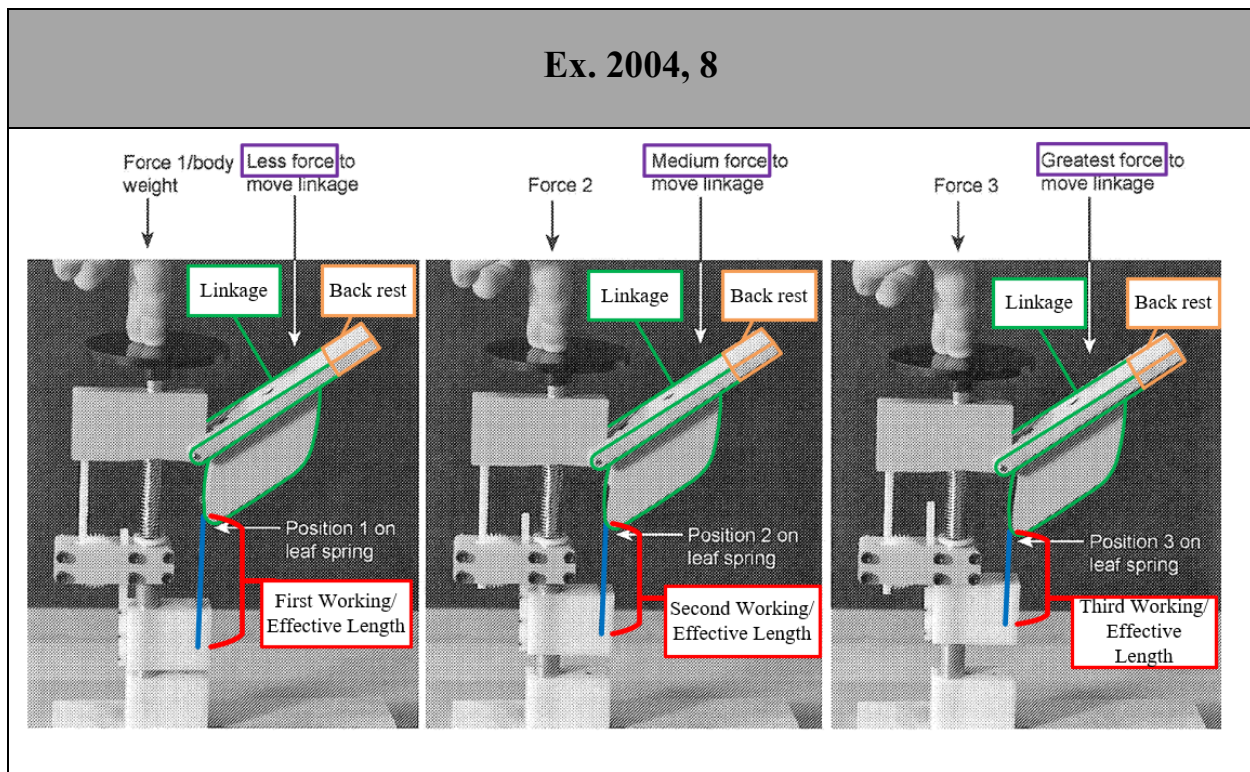
Third, gears 94, 96 and associated racks 98, 100 are also a part of the corresponding structure. The provisional application states the “invention’s racks and gears changes the working length of the leaf spring.” Ex. 2004 at 5. This changing of the working/effective length of the leaf spring is what allows the adjusting assembly to perform the claimed function of adjusting “the force required to be applied in the second manner and move the second the second component relative to the first component,” and the structure that is linked or associated with achieving this function are the gears 94, 96 and associated racks 98, 100 of Figure 7.



This is also done by the gears and racks “as an incident of the force being applied in the first manner changing in magnitude,” which is a part of the function for the adjusting assembly, as the weight applied to the seat and then to the weighing spring is the incident that begins movement of the gears that then transfers to an adjustment of the working/effective length of the leaf spring. As the patent explains with reference to Figure 7, “[l]arger and smaller diameter toothed portions 94, 96, respectively, engage toothed racks 98, 100, respectively” and thus, “increasing user weight causes simultaneous upward movement of the member 36' [which carries leaf spring 19'] and downward movement of the support 28' [which carries the weighing

spring 33’].” Ex. 1101 at 8:4-11.

The provisional application also labels and describes “Racks,” “Small Gear hidden inside assembly for upper rack,” and “Big Gear for lower rack” (yellow in the figures above). Ex. 2004 at 4. As noted earlier, the provisional further recites that “[t]he invention’s *racks and gears changes the working length of the leaf spring.*” *Id.* at 8 (emphasis added). The provisional also depicts how the gears and racks are operated to cause the shortening of the effective/working length of the leaf spring as different weights are applied to the seat:



The provisional application and the '498 patent both link or associate the gears 94, 96 and associated racks 98, 100 with performing the functions attributed to the “adjusting assembly” of claim 1. Thus, these structures are part of the corresponding

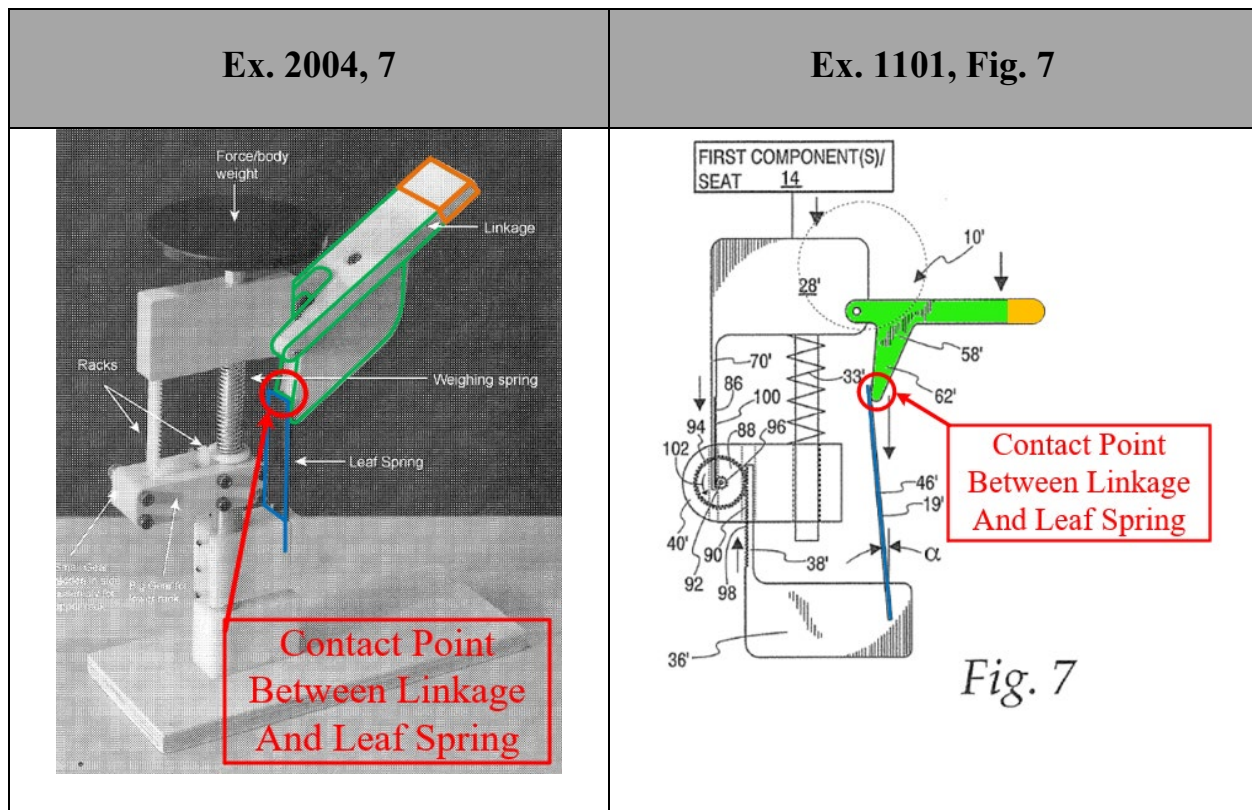
structure.⁹ Even Petitioner appears to admit that the gears and racks are a necessary part of the corresponding structure in the context of Figure 7: “in Figure 7 of the ’498 Patent, the mechanism includes rack gears and pinion gears that convert downward movement of the seat into upward movement of the leaf spring... [i]n this way, the effective length of the leaf spring is decreased...” Petition at 5.

d. A linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19'

Fourth, a linkage that is in direct contact with both the leaf spring and the back rest 16 (or is a part of that backrest) is a required part of the corresponding structure because it acts as the structural conduit to transmit “the force required to be applied in the second manner to reconfigure the apparatus and move the second component relative to the first component changes in magnitude.” The leaf spring 19', weighing

⁹ It is also worth noting here that the functional aspects related to “cooperating” that Petitioner omitted from its identification of the claimed function is an aspect that the patent plainly attributes to the gears and racks that provide the adjusting assembly with this “cooperating” function as well. *See, e.g.*, Ex. 1101 at 3:64-67 (mentioning “cooperating toothed elements”); *id.* 7:66-8:11 (describing operation of “cooperating toothed elements” in adjusting the leaf spring’s effective/working length).

spring 33', gears 94, 96 and associated racks 98, 100 are all part of the corresponding structure (as explained above), but without the linkage to the backrest, a critical structure that is linked or associated with the full function, the “adjusting assembly” cannot perform its function. Stated plainly, a direct mechanical connection between the leaf spring and the backrest by the linkage is required. The patent and the provisional application clearly depict the linkage must be (a) in direct contact with the leaf spring and (b) in direct contact with the backrest and/or formed with the backrest to perform the entire claimed function.



As shown in the provisional patent application, a linkage (shown above in green) is in direct contact with the leaf spring 19' (blue above) to provide resistance to tilting

of the back rest 16. The '498 patent also explains that “ [a]s a result, a shorter moment arm is established between the location where the edge 61 on the part 62 contacts the surface 54 and the fulcrum location at 66. Thus, the leaf spring 19 has an effectively shorter length, whereby a greater force is required to be applied to the leaf spring 19 to effect bending thereof as would in turn allow movement of the back rest 16 to reconfigure the chair 10.” Ex. 1101 at 6:67 and 7:1-7.

The '498 patent also states that “[f]or purposes of simplicity, the support 28 and member 36 can be considered to be part of the frame 12 and/or the adjusting assembly 18. Similarly, the component 58 can be considered to be part of the back rest 16 and/or the adjusting assembly 18.” Ex. 1101 at 6:17-21 (emphasis added). Thus, component 58 (described and illustrated as the “linkage” in the provisional application), and its contact point with the leaf spring 19' to ensure that entire function attributed to the “adjusting assembly” is performed, are clearly linked or associated with the claimed function for the “adjusting assembly.”

In sum, and as noted above, the complete corresponding structure necessary to perform the entire function recited for the “adjusting assembly” in claim 1 must be included in the claim construction. This is not just a corresponding structure, but one of the key innovations by Mr. DeJule, and Petitioner’s attempt to omit this structure fundamentally alters the claims and is inconsistent with his invention, the claims, the specification, and the provisional.

D. Petitioner’s Reliance on Case Law to Support its Deficient Identification of Corresponding Structure is Unavailing

Apparently recognizing that it failed to perform a proper means-plus-function analysis, Petitioner attempts to gloss over that flaw by suggesting that “corresponding structure is limited to that which is ‘necessary to perform the claimed function,’ *Micro Chemical, Inc. v. Great Plains Chemical Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999), and does not include structures that ‘merely enable the pertinent structure to operate as intended,’ *Asyst Techs., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1371 (Fed. Cir. 2001)”. Petition at 13. But Petitioner misuses that line of cases. In *Asyst Technologies*, the Federal Circuit considered (in the context of software-related claims) whether various means elements required a “communication line 51” *Id.* at 1370. The Federal Circuit determined that certain means elements found in respective claim 1 of each of the U.S. Patent Nos. 5,097,421 and 4,974,166 (“the ’166 patent”) did not require the communications line 51, but that a means element in another claim did require that communications line 51 in Claim 5 of the ’166 Patent. In particular, the Federal Circuit explained that “[b]ecause the ‘fourth means’ encompasses both the local process controller 20 and the communication means 50, *it also necessarily encompasses structure that connects the two, i.e., communication line 51.*” *Asyst Technologies, Inc. v. Empak, Inc.*, 268 F.3d 1364, 1372 (Fed. Cir. 2001) (emphasis added).

The same is true here—the claimed function for the “adjusting assembly” does make use of a weighing spring 33' and a leaf spring 19', but it is not limited to those structures as Petitioner argues. The recited function “necessarily encompasses structure that connects the two” springs, *i.e.*, the gearing arrangement depicted in Figure 7 and in the figures of the provisional application. Without those structures, none of the claims function is possible because the mechanism would not work.

* * * *

In sum, the structure that the patent links or associates with the claimed “adjusting assembly” (*i.e.*, its corresponding structure) is adjusting assembly 18 in Figure 7, which includes: (a) a weighing spring 33'; (b) a leaf spring 19' with an effective/working length that shortens as weight is applied to the weighing spring 33'; (c) gears 94, 96 and associated racks 98, 100 that cooperate and move relative to one another to cause shortening of the effective/working length of the leaf spring 19'; and (d) a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19'; and equivalents thereof.

E. “On the Frame” – No Construction is Necessary

As explained below, the issues concerning proper corresponding structure for the “adjusting assembly” term in claim 1 disposes of the entire petition. “The Board is required to construe ‘only those terms. . . that are in controversy, and only to the extent necessary to resolve the controversy.’” *Realtime Data, LLC v. Iancu*, 912

F.3d 1368, 1375 (Fed. Cir. 2019). Therefore, Patent Owner respectfully submits that it is unnecessary for the Board to consider a construction for “on the frame” now.

IV. THE PETITION MUST BE DENIED DUE TO PETITIONER’S DEFICIENT SHOWINGS AS TO THE “ADJUSTING ASSEMBLY” OF CLAIM 1

A. Petitioner’s Failure to Completely Identify the Corresponding Structure is Reason Enough to Deny Institution

The Petition should also be denied because Petitioner failed to identify the correct corresponding structure for the “adjusting assembly” term that the parties agree in this proceeding requires means-plus-function treatment. This alone merits denial of the Petition under 37 C.F.R. § 42.104(b)(3) as that rule requires that “the construction of the claim **must identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function,**” not merely some incomplete identification thereof (which is what Petitioner advanced here). There is no wiggle room in the rule for incomplete identifications of the required corresponding structure. In attempting such a partial means-plus-function analysis, Petitioner violates the rules and the Petition can be appropriately denied on that basis.

B. Regardless, Petitioner’s Grounds Fail to Establish Presence of the Complete Corresponding Structure in Any Reference (Grounds I and II) or Combination of References (Ground III)

Even if the Board considers the correct corresponding structure in the context of the arguments advanced by Petitioner in Grounds I-III, Petitioner’s arguments fall

short of demonstrating a reasonable likelihood of prevailing as to any of the challenged claims because none of its references has been shown to teach the correct corresponding structure. The Board should deny all of the grounds.

Each of Petitioner's three grounds fails to establish presence of the complete corresponding structure for the "adjusting assembly" claim term in the prior art. As explained above, that corresponding structure is (i) a weighing spring 33'; (ii) a leaf spring 19' with an effective/working length that shortens as weight is applied to the weighing spring 33'; (iii) gears 94, 96 and associated racks 98, 100 that cooperate and move relative to one another to cause shortening of the effective/working length of the leaf spring 19'; and (iv) a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19'; and equivalents thereof.

Deficiencies as to each of the three grounds are discussed in turn below.

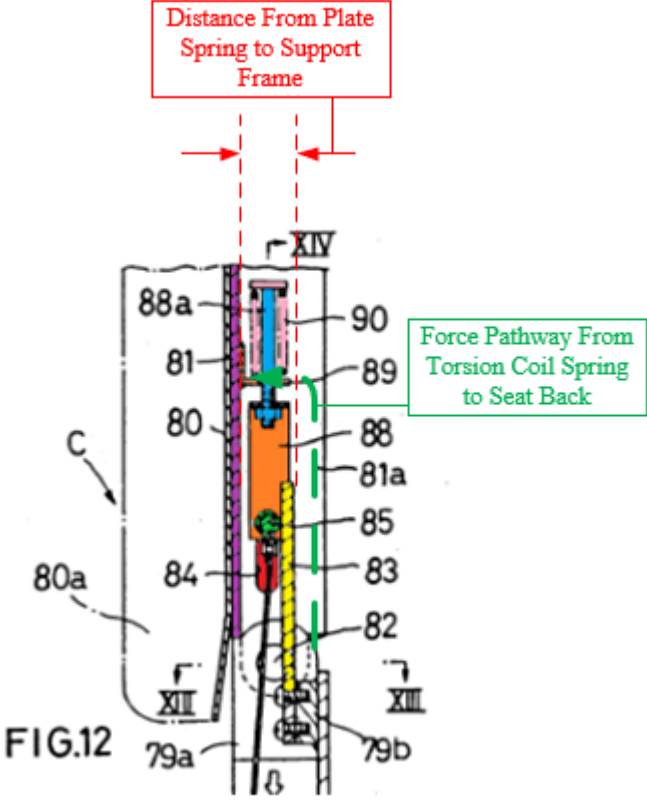
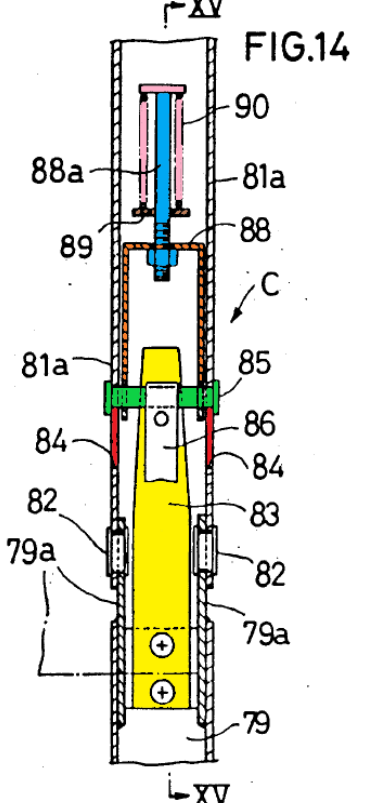
1. Ground I Fails as Petitioner's Arguments as to Takamatsu '318 Fail to Show that it Includes the Complete Corresponding Structure for "Adjusting Assembly"

In Ground I, Petitioner relies upon the embodiment associated with Figures 8, 11, 12, and 15 for allegedly anticipating the "adjusting assembly." But that embodiment in Takamatsu '318 is not alleged by Petitioner to disclose gears and racks, let alone the required gears 94, 96 and associated racks 98, 100 that cooperate and move relative to one another to cause shortening of the effective/working length

of the leaf spring 19' included in the corresponding structure for the “adjusting assembly.” For this reason alone, Ground I fails.

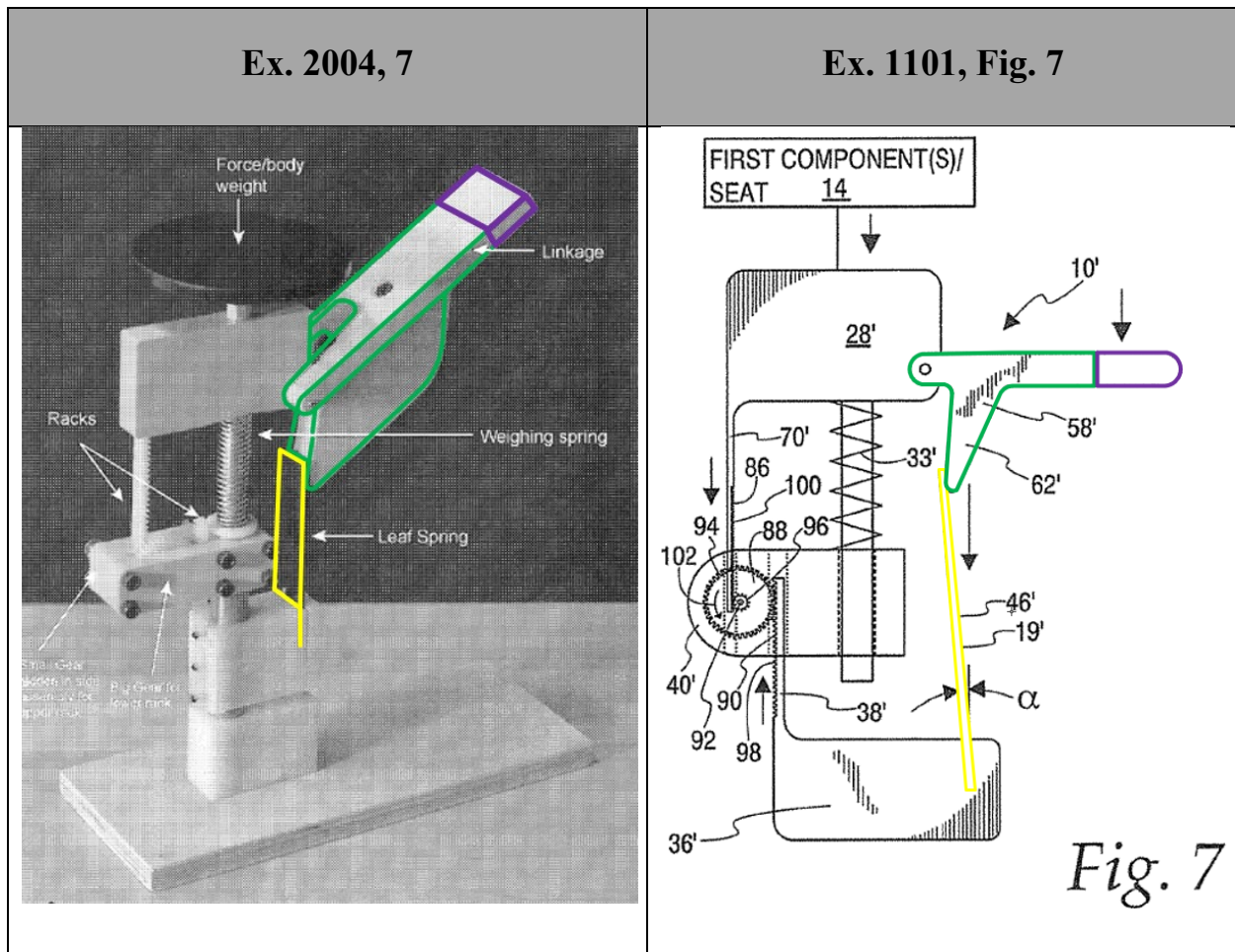
Takamatsu '318 also lacks another portion of the corresponding structure: a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19'. Petitioner alleges that “[t]he second tilting control plate springs 83 (below-left in yellow) are the same as leaf spring 19 in the '498 Patent.” Petition at 38. Petitioner also states that “as an incident of the force being applied in the first manner changing in magnitude, the force required to move chair back C relative to seat B changes in magnitude.” Petition at 33.

This mapping, however, is insufficient as is evident by the number of components separating the tilting control plate springs 83 from the chair back C in Takamatsu '318, and failure to disclose the key innovation of a linkage that directly contacts the leaf spring and the backrest. To illustrate this, Petitioner's marked-up versions of Takamatsu '318's Figures 12 and 13 are shown below along with Petitioner's color-coded description of those figures:

Petition, 31 (red and green annotations added; remaining annotations are Petitioner's)	Petition, 31
 FIG. 12	 FIG. 14

Petitioner states that, “[i]n particular, each contact pin 85 (green below) bears against a plate spring 83 (yellow) and is connected to a “**vertical carrier 88**” (orange) that, in turn, is connected to a “**carrier bolt 88a**” (blue), which is urged upwards by a “**compression spring 90**” (pink) against an “**L-shaped bracket 89**” (brown) mounted to **back support frame 81** (purple).” Petition at 31.

In stark contrast to this arrangement of numerous parts that separate the alleged leaf spring in Takamatsu '318 from the alleged back rest C in Takamatsu '318, the corresponding structure for the claimed adjusting assembly requires a linkage 58 that is direct contact with **both** the leaf spring 19' and the back rest 16 with no intervening parts. This is shown in the figures of both the provisional application and the '498 patent (reproduced below).

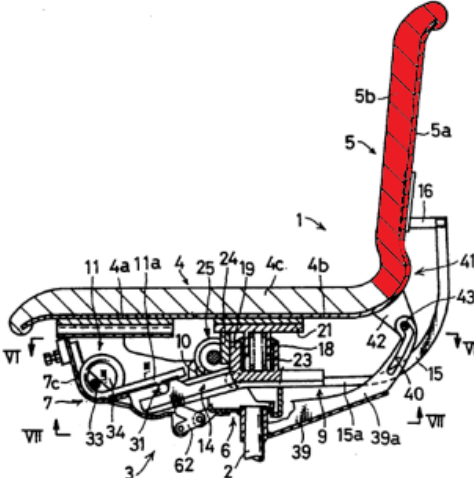
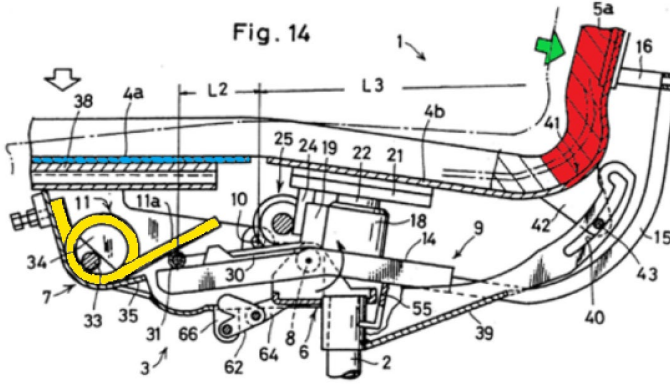


For the additional reason that Petitioner failed to allege that Takamatsu '318 includes a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19' (or an equivalent), and also because

Takamatsu '318 simply does not include such a structure (instead it uses a different structural arrangement of parts that separates the alleged leaf spring from the alleged back rest 16 in Takamatsu '318 using numerous different components) nor does it include the gears and racks required by the corresponding structure (as explained above), Ground I fails.

2. Ground II Fails as Petitioner's Arguments as to Takamatsu '372 Fail to Show that it Includes the Complete Corresponding Structure for "Adjusting Assembly"

In Ground II, Petitioner relies upon the embodiment associated with Figures 3-6 and 8 for allegedly anticipating the "adjusting assembly." But this relied-upon embodiment of Takamatsu '372 lacks one of the same portions of the corresponding structure that was also lacking in Takamatsu '318. Specifically, Takamatsu '372 lacks a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19'. Petitioner alleges that "[a]s for the tilting spring of the 'adjusting assembly,' Takamatsu '372 discloses torsion coil springs 11, which elastically control 'rearward tilting of the seat back 5.' Ex. 1104, 7:35-39; Ex. 1108, ¶209." Petition at 70-71. Petitioner also indicates that "Takamatsu '372 discloses a "seat back 5" (red below)—a second component—that is supported by the frame." Petition at 58.

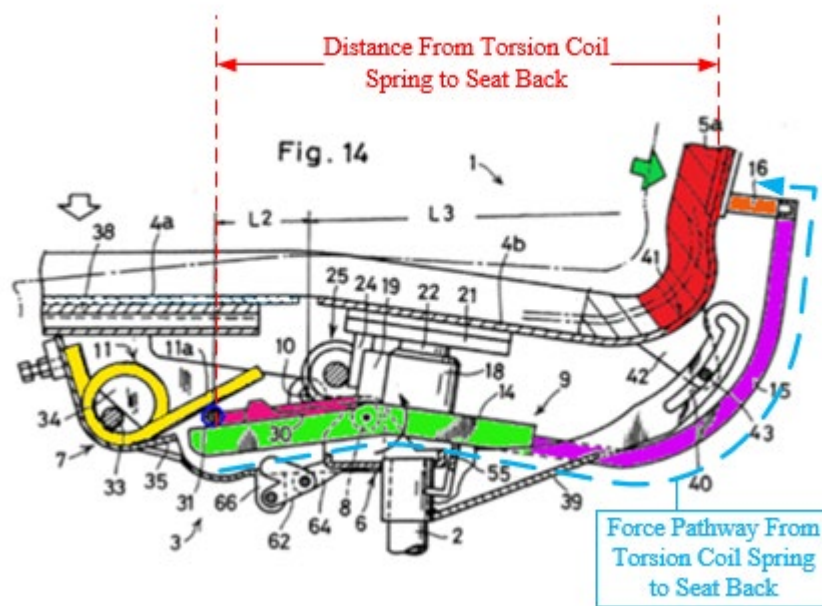
Petition, 58 (Petitioner's annotated Figure 2 of Takamatsu '372)	Petition, 64 (Petitioner's annotated Figure 14 with yellow added by Patent Owner to indicate torsion coil spring 11)
 A technical drawing of a seat assembly. A red curved line, labeled 5, represents the seat back. Various mechanical components are labeled with numbers: 11, 4a, 11a, 4, 25, 19, 4c, 4b, 41, 43, 15, 40, 39a, 39, 14, 6, 2, 3, 31, 33, 34, 7c, 7, 23, 18, 21, 42, 43, 16, 5b, 5a. Section lines VI-VI and VII-VII are indicated.	 A technical drawing of a seat assembly, labeled 'Fig. 14'. A red curved line, labeled 5a, represents the seat back. A yellow curved line, labeled 11, represents the torsion coil spring. Various mechanical components are labeled with numbers: 38, 4a, L2, L3, 4b, 25, 24, 19, 22, 21, 41, 42, 15, 43, 40, 39, 14, 6, 2, 3, 31, 33, 35, 66, 62, 64, 8, 55, 30, 10, 7, 34, 11a, 11, 16, 41, 42, 15, 43, 40, 39, 14, 6, 2, 3, 31, 33, 35, 66, 62, 64, 8, 55, 30, 10, 7, 34, 11a, 11. A green arrow points to the seat back 5a.

This mapping, however, is insufficient as can be seen by the number of components that separate the torsion control springs 11 from the backrest component identified by Petitioner (*i.e.*, seat back 5 in Takamatsu '372, which petitioner colored in red above). Further, Takamatsu '372 fails to disclose the key innovation of a linkage that directly contacts the leaf spring and the backrest. To illustrate this, Petitioner's marked-up versions of Figure 2 (shown above on left) and Figure 14 (shown above on right) along with Petitioner's color-coded descriptions shows the numerous components separating the seat back 5 from the torsion coil springs 11.

As shown above the torsion control spring 11 (yellow) is separated from the seat back 5 (red) by at least: (i) roller 31 (blue), (ii) second racks 30 (pink),

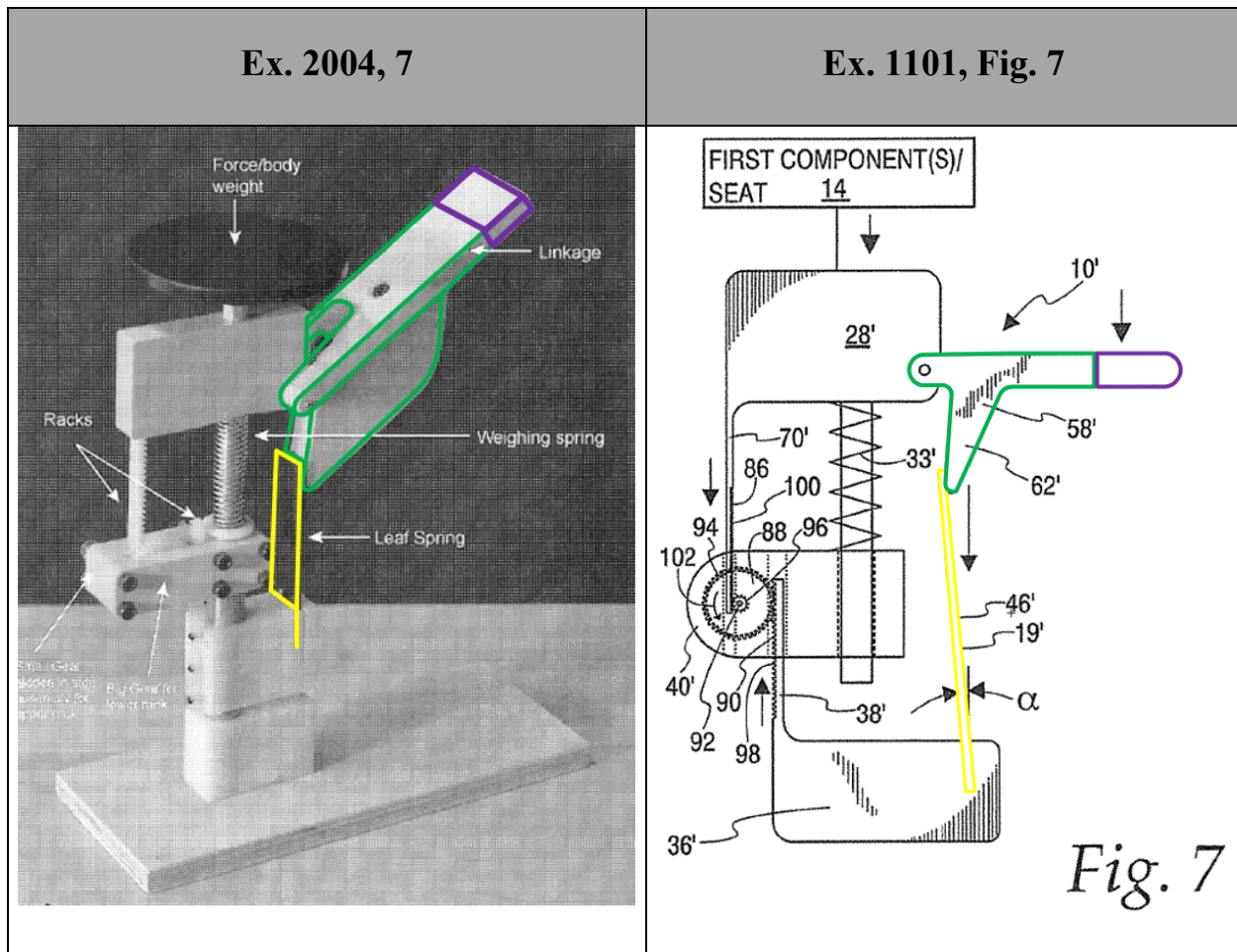
(iii) mechanism carrier 14 (green), (iv) L shaped frame bars 15 (purple), and (v) horizontal connecting bar 16 (orange). This distinction is critical because the torsion control springs 11 directly impacts the rotation of these components based on the tilt of the *seat* (at point 8), and the torsion control springs 11 does not directly impact the tilt of the backrest, which is the opposite of Mr. DeJule's claims.

Ex. 1104, Fig. 14 Marked-up



In stark contrast to this arrangement of numerous parts that separate the torsion coil spring in Takamatsu '372 from the seat back 5 in Takamatsu '372, the corresponding structure for the claimed adjusting assembly requires a linkage that is direct contact with both the leaf spring 19' and the back rest 16 (or is a part of the back rest) with no intervening parts. This is illustrated in the figures of both the

provisional application and '498 patent (reproduced below).



For the reason that Petitioner failed to allege that Takamatsu '372 includes a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19' (or an equivalent), and also because Takamatsu '372 simply does not include such a structure (instead it uses a different structural arrangement of parts that separates the alleged leaf spring from the alleged back rest 16 in Takamatsu '372 using numerous different components), Ground II fails for this reason alone.

Furthermore, Patent Owner does not agree with Petitioner's contention that

the torsion control spring in Takamatsu '372 can be considered an equivalent of the leaf spring 19' (Petition at 71), and at least because the complete corresponding structure requires more than just a spring (or two springs) standing alone. Petitioner has not alleged that the torsion control spring in Takamatsu '372 makes contact with any alleged linkage that is also in contact with a back rest (which it cannot do, as explained earlier), equivalency in the context of the full corresponding structure has not been established (at a minimum, the way and the result are different in the context of the complete corresponding structure that is required).

3. Ground III Fails as Petitioner's Arguments as to Combining the Takamatsu '318 and Takamatsu '372 References Fail to Account for the Failings of the Individual References

Petitioner's Ground III fails to account for at least one of the deficiencies that dooms both of its earlier grounds (Grounds I and II)—specifically that both Takamatsu '318 and Takamatsu '372 lack a linkage 58' that is in direct contact with, or is a part of, a back rest 16 and is also in direct contact with the leaf spring 19'. Because no argument has been attempted as to why it would have been obvious to modify the references to add such a structural aspect (it would not have been),¹⁰

¹⁰ Fact-intensive issues related to secondary considerations as they pertain to

Petitioner's COSM chair, as well as fact-intensive issues related to the contractual

Ground III fails to remedy the deficiencies of the other grounds.

As is also explained below, secondary indicia of non-obviousness also exist that further confirm patentability of claim 18. *Infra* Section VI.

V. PETITIONER’S CHALLENGE TO CLAIM 15 IS ADDITIONALLY DEFICIENT

As noted above, Claim 15 includes the limitations of claim 1 (including the correct corresponding structure for the “adjusting assembly”) and is also challenged by Petitioner in Ground I, so Petitioner’s challenge to claim 15 fails for the same reasons provided as to claim 1 above.

The Board should also find the Petition’s challenge to claim 15 deficient because it improperly mixes embodiments in the context of a Section 102 argument. Petitioner does not hide from this fact—indeed it argues that a concept from a different fourth embodiment “can be applied to plate springs 83” of the third embodiment in Takamatsu ’318 that Petitioner relies on for its anticipation arguments. Petition at 50. In short, Petitioner is knowingly proposing a modification to the third embodiment of Takamatsu ’318 based on a different embodiment’s

disputes, are at issue in the District Court case. As explained more fully below, the presence of these additional issues in the disputes between the parties countenances in favor of a discretionary denial of institution.

teachings in Takamatsu '318. That is an obviousness argument. But the Petition did not make an obviousness argument against claim 15 and did not include the required showing of a motivation to combine and a reasonable expectation of success. Thus, Petitioner's anticipation challenge to claim 15 fails for this additional reason.

Additionally, Petitioner fails to adequately support its position that “[w]ith such a design, ‘the pin 85 may support a contact roller’—an actuating component—‘which comes into rolling contact with the second tilting control spring.’” Petition at 50. While Petitioner does cite to its expert declaration for support, the declaration (1108 at ¶150) recites nothing beyond the position that appears in the Petition, so that is entitled to little weight. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 12 at 5 (noting that “the Board was correct in giving little weight to Petitioner’s expert because the expert declaration merely offered conclusory assertions without underlying factual support and repeated, verbatim, Petitioner’s conclusory arguments”) (italics in original). Without more, Petitioner has failed to adequately explain its positions (such as why a “contact roller” should teach an “actuating component”) and its Ground I challenge to claim 15 fails for this additional reason.

VI. THE BOARD SHOULD EXERCISE ITS DISCRETION AND DENY INSTITUTION UNDER 35 U.S.C. § 314(A)

Under 35 U.S.C. § 314(a), the Board has the discretion to deny institution for judicial efficiency. In exercising its discretion, the Board considers the merits of a

petition, not in isolation, but in view of surrounding circumstances relevant to the “potential impacts on both the efficiency of the *inter partes* review process and the fundamental fairness of the process for all parties.” *General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19, at 18 (Sept. 6, 2017) (Precedential).

A. Petitioner Agreed to Litigate Disputes Arising Out of Patent Owner’s Disclosure of Patented Information in Michigan and the District Court is Expected to Resolve this Issue Soon

Petitioner and Mr. DeJule have a long history spanning business meetings, contracts, and efforts to work together collaboratively for many years; until Petitioner decided to use Mr. DeJule’s inventions, without his knowledge or agreement, when Petitioner launched the Cosm[®] chair. Mr. DeJule’s 2015 disclosures to Petitioner were contractually protected by a “Mutual Confidentiality Agreement,” (“MCA”) and the Michigan Litigation includes a claim for Petitioner’s breach of that contract. *See, e.g.*, Ex. 2007, ¶¶ 37-38, ¶¶ 83-91 (alleging breach for Petitioner’s use of Mr. DeJule’s confidential information to design the infringing Cosm[®] products). The MCA was drafted by Petitioner, and Mr. DeJule only agreed to it so long as it explicitly included his patent rights (which are now being challenged by Petitioner). The MCA states:

12. Governing Law. This Agreement shall be governed in all respects by the laws of the United States

of America and by the laws of the State of Michigan, as such laws are applied to agreements entered into and to be performed entirely within Michigan between Michigan residents. *Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in Michigan, as applicable, for any matter arising out of or relating to this Agreement*, except that in actions seeking to enforce any order or any judgment of such federal or state courts located in Michigan, such personal jurisdiction shall be nonexclusive.

Ex. 2005, 3. Put simply, Petitioner wanted all disputes to be resolved in Michigan. However, Petitioner has now changed its mind. In fact, Petitioner has filed a motion to stay the *entire* Michigan Litigation (including the breach of the MCA and multiple non-challenged patent infringement allegations) in the hopes that it can subvert its own MCA and avoid addressing all of the issues in an efficient manner in the Michigan Litigation. Mr. DeJule will soon file his opposition to Petitioner's motion to stay the entire Michigan Litigation, and Mr. DeJule will update the Board once the District Court determines if the Michigan Litigation will be stayed (and thus this will be the only forum addressing the challenged patent), or if *all* of the disputes between the parties will proceed and be resolved in Petitioner's home and chosen forum, as stated by the MCA (and thus the Board should deny the Petition as an

inefficient use of the Board’s limited resources).

This is a critical issue with respect to this Petition because it will be inefficient to proceed here, while the Michigan Litigation is proceeding on the exact same issue and addressing the interrelated MCA issues that can *only* be resolved in the Michigan Litigation. The MCA was not merely tangentially related to the patent issues, including the challenged patent in this Petition. In fact, the entire purpose of the MCA was to entice Mr. DeJule to explain his inventions to Petitioner, and thus the agreement explicitly references Mr. DeJule’s provisional patent application, which ultimately matured into the challenged patent. The MCA protects, among other things, information regarding the claimed self-adjusting tilt inventions. Even Petitioner acknowledges that Mr. DeJule’s “Confidential Information” under the MCA included at least some subject matter disclosed in Mr. DeJule’s ’706 Provisional Application. *See* Ex. 2007 at ¶23 (arguing that the ’706 Application “includes pictures of [Mr. DeJule’s] prototype he allegedly presented to MillerKnoll in his 2015 Submission”).

Notably, the MCA—which originated as a form contract proposed *by Petitioner*. Ex. 2007 at ¶ 38—requires Petitioner to resolve its dispute with Mr. DeJule in district court. It provides that “[e]ach of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in Michigan, as applicable, for any matter arising out of or relating to this Agreement.”

2005, ¶ 12. In other words, **Petitioner** demanded to litigate disputes over Mr. DeJule’s confidential information in Michigan, where **Petitioner** is headquartered. It cannot now argue that efficient resolution of all of Mr. DeJule’s claims in its chosen home forum is unreasonable.

B. Resolving the Petition Will Necessitate Objective Indicia Discovery

Furthermore, Ground III asserts obviousness against claim 18. The Federal Circuit has “consistently held that objective indicia ‘may often be the most probative and cogent evidence of nonobviousness,’” as they “are essential safeguards that protect against hindsight bias.” *Liqwd, Inc. v. L’Oreal USA, Inc.*, 941 F.3d 1133, 1136 (Fed. Cir. 2019) (quoting *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1285 (Fed. Cir. 2000)). That is especially true here. Petitioner launched its infringing Cosm[®] chairs (which is an embodiment of the claims of the ’498 patent—*see generally* Ex. 2007) in 2018 and began touting their “AutoHarmonic Tilt” feature as a groundbreaking “holy grail” that took years to achieve, and which resulted in various industry awards. Ex. 2009. The Board should give credence to Petitioner’s representations about the long-felt need for Mr. DeJule’s Self-Adjusting Tilt mechanism, their struggles to develop this feature (until they talked to Mr. DeJule), and the resulting praise and commercial success after they commercialized Mr. DeJule’s invention. For this reason, the Board should deny institution so these complex factual issues can be fully explored in District Court and obviousness issues

can be assessed on the complete record.

Skepticism by Others

Mr. DeJule traveled to MillerKnoll's offices in Michigan for meetings on January 16, 2015 and February 11, 2015, where he presented multiple ideas and designs to MillerKnoll's designers, engineers, and businesspeople, including explaining the features of his Self-Adjusting Tilt invention. Ex. 2007 at ¶ 3. Even MillerKnoll has argued that Mr. DeJule's Provisional U.S. Patent Application No. 62/114,706 ("the '706 Application") "includes pictures of [Mr. DeJule's] prototype he allegedly presented to MillerKnoll in his 2015 Submission." Ex. 2007 at 23.

During the February 11, 2015 meeting, Mr. John Aldrich—then Petitioner's Vice President of Advanced Development—spent nearly one-hour describing the forces between a chair and body, expressing his opinion that Mr. DeJule's Self-Adjusting Tilt invention would not work. Ex. 2007, ¶¶ 34, 36. In the following weeks, MillerKnoll informed Mr. DeJule that it was not interested in pursuing a chair with him. *Id.* ¶ 40. In the Michigan Litigation, Mr. DeJule expects to obtain further evidence of skepticism regarding the claimed self-adjusting tilt inventions, including skepticism by Petitioner's technical personnel.

Copying By Others

Mr. DeJule also expects that the Michigan Litigation may produce evidence of copying by Petitioner and its design studio, Studio 7.5. After their meeting,

Petitioner told Mr. DeJule that it “d[id]n’t have the capacity” to develop a chair with the patented tilt mechanism and that doing so did not “align with [its] strategic seating path for the next few years.” Ex. 2007 at ¶ 40. But, Petitioner and its design studio quickly began filing patent applications relating to the infringing Cosm[®] products. *Id.* ¶¶ 40-43 (explaining how Petitioner now marks the infringing Cosm[®] products with patents claiming priority to these applications). Put simply, Mr. DeJule’s allegations set forth a case of Petitioner’s corporate “theft” (as stated by the District Court judge at a recent hearing, Ex. 2011 at 9-10) of the claimed self-adjusting tilt inventions.

Long-Felt, Unmet Need

Petitioner describes the infringing Cosm[®] products—and particularly their “Auto-Harmonic Tilt” mechanism—as satisfying a long-felt, unmet need for an “automatic” self-adjusting tilt function in seating. Notably, Petitioner describes this design as a “holy grail”:

[The Cosm chair] represents something of *a holy grail*: a design that creates a new reference point for instant, personalized comfort. *Cosm’s new Auto-Harmonic Tilt, in particular, has been a goal they’ve worked toward for years.*

* * *

A tilt is to a chair what a transmission is to a car, and like transmissions, some are manual, and others, such as Cosm's, are automatic. With other self-adjusting models, the chair decides how you should sit by forcing the body to conform to the tilt's movement. Cosm's Auto-Harmonic Tilt puts the person first and responds to them—no matter their posture—providing a balanced recline and personalized comfort. Studio 7.5 and Herman Miller perfected the self-adjusting tilt by inventing a complex, finely tuned mechanism. Accounting for the sitter's vertical force—which is always in flux—the gears within the tilt move the fulcrum along a leaf spring to automatically adjust the chair's tension.

Ex. 2009.

This need has been “long felt.” Petitioner describes the Auto-Harmonic Tilt” feature as “a goal they’ve worked toward for years.” *Id.* Likewise, Petitioner’s design studio—Studio 7.5—described the Cosm chair as taking as long as eight years to develop, and almost 18 years for certain components. *See The Henry Ford, How Studio 7.5 Designed Herman Miller’s Cosm Chair*, YOUTUBE.COM, <https://www.youtube.com/watch?v=zZhHUTg1tS0> (Jun 28, 2018). In the Michigan Litigation, Mr. DeJule expects to obtain further evidence of this long-felt, unmet need for the claimed self-adjusting tilt inventions.

Industry Praise

Petitioner’s advertising for the infringing Cosm[®] products highlight various

awards won for their design since 2018:

- Cosm received an iF Gold Award in the Office and Industry category at the iF World Design Awards (2020);
- Cosm receives a Gold Product Award from the Deutscher Designer Club (DDC) (2019);
- Cosm receives a German Design Award for Excellent Product Design in the ‘Office Chairs’ category (2019);
- Cosm is listed by TIME as one of the 100 Best Inventions of 2019—a curation of products selected for making the world better, smarter, and more fun (2019);
- Cosm receives a Red Dot Best of the Best Product Design Award in the “Office Chairs” category (2019);
- Cosm receives Gold at the New York DRIVENxDESIGN Award in the Product Design – Office category (2018);
- Cosm receives the Orgatec Innovation Award (2018);
- Cosm is shortlisted for a Dezeen Workplace Design Award (2018); and

- Cosm receives the Fast Company Innovation by Design Award (2018).

Ex. 2009. In the Michigan Litigation, Mr. DeJule expects to obtain further evidence of industry recognition and praise for the claimed self-adjusting tilt inventions.

Commercial Success

Mr. DeJule expects that the Michigan Litigation will provide ample evidence of commercial success of the claimed inventions. Petitioner’s public financial filings indicate that it achieves hundreds of millions of dollars in sales in the relevant seating categories. *See, e.g.*, Ex. 2010 at 63. Even if the infringing Cosm[®] products represent a small fraction of these sales, they will still amount to many millions of dollars in sales, and thus evidence commercial success in this market.

* * *

Publicly available information already provides strong evidence of objective indicia tied to the claimed self-adjusting tilt inventions. This evidence largely is *from Petitioner* and belies its obviousness allegations. Further discovery—whether taken in an IPR proceeding or the Michigan Litigation—will only bolster objective evidence of non-obviousness.

C. The Michigan Forum Is the Ideal, and Most Efficient, Forum for Resolving This Dispute

In this case, “efficiency, fairness, and the merits support the exercise of authority to deny institution.” *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper

11 at 6 (Mar. 20, 2020) (precedential).¹¹ Denial is proper because Petitioner’s decision to file this Petition is inefficient. The Michigan Litigation involves four asserted patents and the breach of contract claim. Petitioner has chosen not to file petitions for post grant review for two patents asserted in the Michigan Litigation—U.S. Patent Nos. 11,744,373 and 11,744,374. And, notwithstanding any overlap in subject matter, the Board cannot grant judgment on the parallel MCA dispute. It must be resolved in the Michigan Litigation. Instituting an IPR would therefore needlessly duplicate proceedings and waste the Board’s resources.

By contrast, the Michigan Litigation provides the ideal forum for efficiently resolving these disputes. First, the Michigan Litigation is the only forum that can grant judgment on the MCA issues.

Second, Petitioner’s claim that Schmitz ’637 (a contention raised in the related IPR2023-01427)—a reference naming members of Petitioner’s design studio (Studio 7.5) as inventors—*anticipates* Mr. DeJule’s claimed self-adjusting tilt inventions is belied by representations it has made regarding its own product.

¹¹ The individual *Fintiv* factors are relevant “[w]hen the patent owner raises an argument for discretionary denial under NHK due to an earlier trial date.” *Id.* at 5. Because an earlier trial date is not the primary basis for Mr. DeJule’s challenge here, the individual factors are not addressed.

Petitioner describes its “AutoHarmonic Tilt” feature as a “holy grail” that it has “worked toward for years.” Ex. 2009. Studio 7.5 also describes the Cosm chair as taking as long as eight years to develop, and almost 18 years for certain components. *See* The Henry Ford, *How Studio 7.5 Designed Herman Miller’s Cosm Chair*, YOUTUBE.COM, <https://www.youtube.com/watch?v=zZhHUTg1tS0> (Jun 28, 2018). Neither of these statements align with Petitioners anticipation contention. As asserted by Petitioner in the Michigan Litigation, resolution of these issues may involve discovery from third-party Studio 7.5, which is located entirely in Germany.

Third, if an IPR were instituted, discovery will be required on at least the objective indicia of non-obviousness noted above: (1) Petitioner’s skepticism regarding the claimed self-adjusting tilt inventions; (2) to what extent Petitioner copied the claimed self-adjusting tilt inventions; (3) the long-felt, unmet need for the claimed self-adjusting tilt inventions; (4) industry praise for the claimed self-adjusting tilt inventions; and (5) commercial success of the claimed self-adjusting tilt inventions. This will require both documentary discovery and depositions of Petitioner’s personnel involved with Mr. DeJule’s disclosure of patented information and/or the development of the infringing Cosm[®] products.

It is inefficient for the Board to engage in complex third party and international discovery dispute when Petitioner’s chosen forum and the Michigan Litigation are ideally positioned to address and resolve those issues. In fact, the

Michigan Litigation has already issued a Scheduling Order accommodating some of these issues. *See generally* Ex. 2007. Both Mr. DeJule and Petitioner have already served discovery relating to these issues, and will begin serving substantive responses and document productions as soon as December 29, 2023.

Put simply, the Michigan Litigation will have fulsome claim construction briefing and a *Markman* hearing (which would be unnecessarily duplicated here), have fulsome third party and international discovery (which is unlikely to be duplicated, resulting in an incomplete record here), and will resolve all of the disputes with Petitioner's MCA (which cannot be resolved here). For all of these reasons, if the District Court denies Petitioner motion to stay, and the Michigan Litigation proceeds, then the Board should also deny this Petition because it will be inefficient to proceed in two forums.

It is also respectfully noted that the Patent Office is considering rules changes that would countenance in favor of a discretionary denial here. In particular, the Patent Office recently explained that "providing support for startups, small businesses, and independent inventors is one of the major priorities for the USPTO, the Office proposes to limit the impact of AIA post-grant proceedings on these patent owners by discretionarily denying petitions for an IPR or PGR when certain other conditions are met." 88 Fed. Reg. 77 at 24509. Mr. DeJule is an independent inventor and owner of a small business, and he would satisfy most of the other

conditions that the Office has indicated would lead to an automatic discretionary denial if the rule changes were adopted. The Office can and should consider this in the context of the 314(a) analysis, despite this being a rule proposal that has not yet been adopted, at least because these proposals reflect the same fairness and efficiency considerations that are part and parcel of the Office's discretionary-denial authority under 314(a). This is an appropriate case for discretionarily denying institution (which might have automatically occurred if the rule proposals were in force). Petitioner wanted to resolve any and all disputes in Michigan and there is no prejudice in holding them to that.

VII. CONCLUSION – THE PETITION SHOULD BE DENIED

For all the reasons provided above, the Petition's Grounds 1-3 should all be denied due to the substantive flaws related to Petitioner's incomplete means-plus-function analysis (and the failure of its prior art to disclose the complete corresponding structure for the claimed "adjusting assembly), or, alternatively, due to the efficiency and fairness considerations of 314(a).

Dated: January 12, 2024

Respectfully Submitted,

/ Alexander B. Stein /

Alexander B. Stein, Reg. No. 71,397

CERTIFICATION OF COMPLIANCE WITH TYPE-VOLUME LIMITS

This Patent Owner's Preliminary Response to Petition includes 10,292 words, as counted by Microsoft Word, and is therefore in compliance with the 14,000-word limit established by 37 C.F.R. § 42.24(b)(1). Accordingly, pursuant to 37 C.F.R. § 42.24(d), lead counsel for Patent Owner hereby certifies that this paper complies with the type-volume limits established for a patent owner response to petition.

Dated: January 12, 2024

Respectfully Submitted,

/ Alexander B. Stein /

Alexander B. Stein, Reg. No. 71,397

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), it is hereby certified that this **PATENT OWNER'S PRELIMINARY RESPONSE** (as well as the exhibits filed therewith) is being served via email to Petitioner's counsel of record:

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