Filed: July 29, 2014

Filed on behalf of:
Patent Owner Gentherm GmbH
By: Stephen C. Jensen
Jared C. Bunker
KNOBBE, MARTENS, OLSON & BEAR, LLP
2040 Main Street, 14th Floor
Irvine, CA 92614
Tel.: (949) 760-0404
Fax: (949) 760-9502
Email: BoxGentherm@knobbe.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

IGB AUTOMOTIVE LTD. and
I.G. BAUERHIN GmbH

Petitioners,

v.

GENTHERM GmbH

Patent Owner.

Case IPR2014-00666
U.S. Patent 7,229,129

PATENT OWNER GENTHERM GMBH'S PRELIMINARY RESPONSE

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OTHER AUTHORITIES

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, Patent Owner Gentherm GmbH hereby submits its Preliminary Response to Petitioner IGB Automotive Ltd. and I.G. Bauerhin GmbH's Petition for *Inter Partes* Review of U.S. Patent No. 7,229,129 ("the '129 Patent").

I. INTRODUCTION

The Petition for *inter partes* review of the '129 patent should be denied. The Petition is fatally deficient for several important reasons that are outlined in detail below. Although the Petitioner asserts ten Grounds for instituting *inter partes* review based on various combinations of up to five asserted references, Petitioner fails to establish a reasonable likelihood of success with respect to any challenged claim.

As an initial matter, Petitioner fails to show that all material claim elements are present in the asserted references. For example, Petitioner fails to establish that the asserted references teach a top portion of a chamber including more than one group of holes, with the total cross-sectional area of each group of holes increasing the farther each group is from the chamber opening, as required by the challenged claims.

Petitioner also fails to show a reasoned motivation to combine the asserted references as alleged and a reasonable expectation of success in making Petitioner's proposed prior art combinations and modifications.

The Petition should also be denied for failing to provide a detailed explanation of the evidence and failing to identify with specificity where each claim element is found in the asserted references, as required by 37 C.F.R. §§ 42.22, 42.104(b)(4). Petitioner not only failed to provide standard claim charts, but also lumped together several claim elements in its analysis, relying on overbroad and ambiguous discussions of the asserted prior art. As just one example, Petitioner lumps together at least four discrete elements from challenged Claim 1 and treats them as the following single claim element:

> [E]ach of the plurality of holes has a cross-sectional area, the holes located substantially the same distance from the chamber opening defining a group having a total cross-sectional area, the top portion of the chamber including more than one group of holes, with the total cross-sectional area of each defined group of holes increasing the farther each defined group of holes is from the chamber opening.

Petitioner, moreover, improperly presents multiple redundant grounds for unpatentability, including various overlapping combinations of up to five references, apparently in an effort to unnecessarily increase Patent Owner's costs and obfuscate Petitioner's evidentiary deficiencies.

Accordingly, Patent Owner respectfully submits that the Board should deny in its entirety the Petition for *Inter Partes* Review of the '129 patent.

II. BACKGROUND

A. The Challenged Patent

The ’129 patent relates in general to ventilated seat assemblies for vehicles. Ex. 1001 at col. 1, ll. 13–19. The claimed seat assemblies may include a bag inserted below the seat’s trim. *Id*. at col. 2, ll. 16–29. The bag may include holes for directing air flow and may surround a spacer material that prevents air flow blockage. *Id*. The bag may be connected to a separate fan or connected to the vehicle’s air conditioning system to convey warm or cool air around the occupant. *Id*. at col. 1, ll. 31–36.

Figure 1 from the ’129 patent shows a perspective view of certain embodiments and is reproduced below:

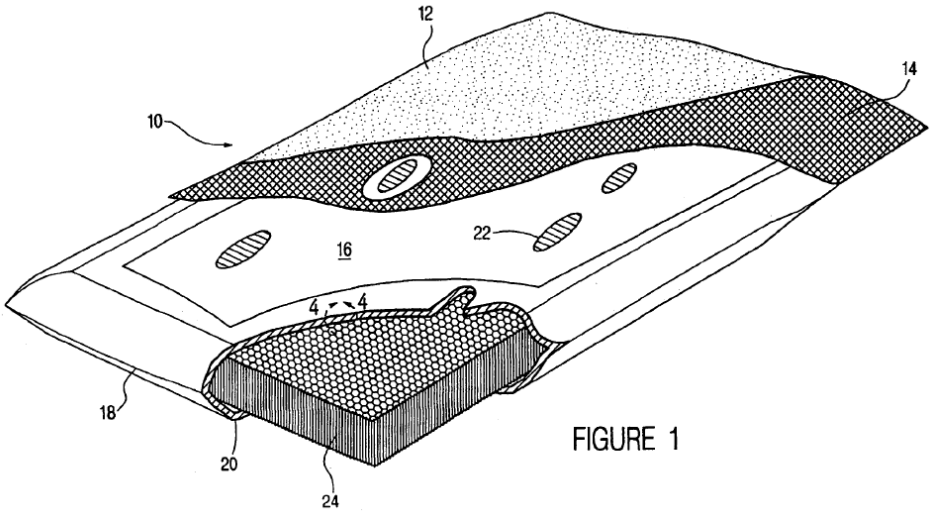


FIGURE 1

Bag 18 includes holes 22 and surrounds spacer 24. *Id*. at col. 4, ll. 5–24. The bag may be located beneath trim 12 and may include heater pad 14. *Id*.

Figure 2 from the ’129 patent shows embodiments that include bags installed in a seat base and seat back (*Id*. at col. 3, ll. 1–6) and is reproduced below:

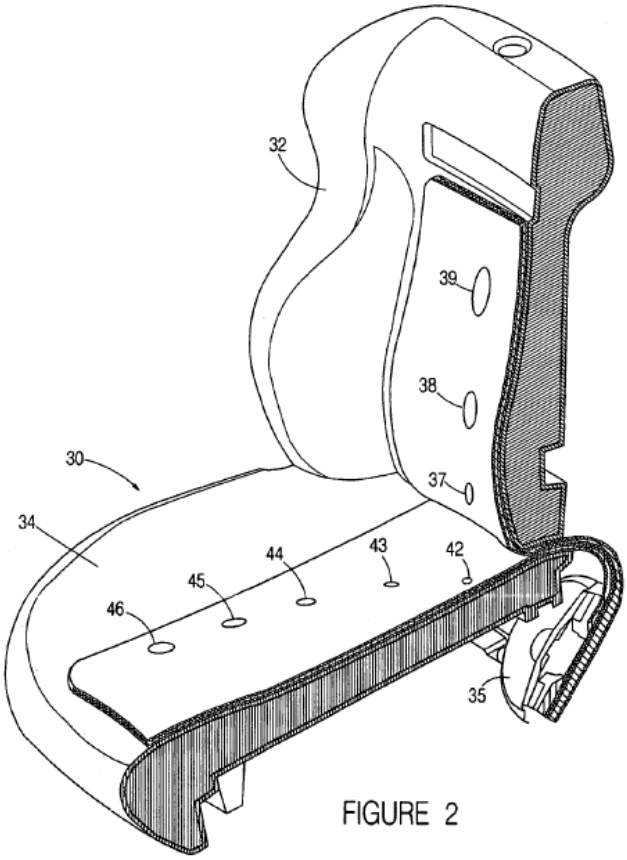


FIGURE 2

Bags are installed in seat base 34 and seat back 32 and are connected to fan 35. *Id*. at col. 4, ll. 40–59. The seat base bag includes holes 42–46, which extend in a spaced relationship toward the front of the bag and grow gradually larger. *Id*. at col. 4, ll. 51–57. This arrangement contributes to a more uniform air flow. *Id*.

Further embodiments are shown in Figure 3, which is reproduced below:

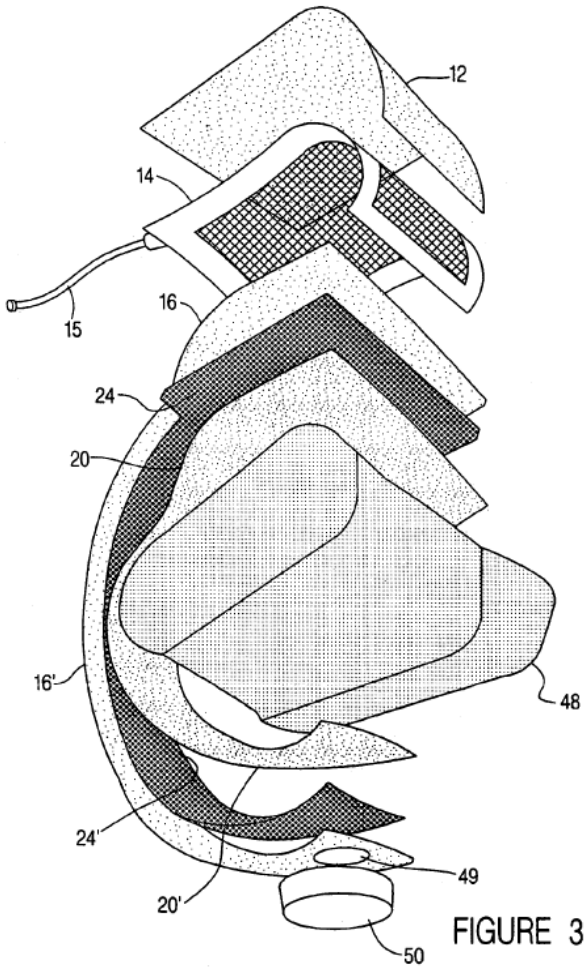


FIGURE 3

Bag top 16, spacer 24, and bag bottom 20 may include elongate tails for forming an enclosed tail that is, in turn, coupled to fan 50. *Id*. at col. 5, ll. 3–10. The tail may extend through the seat bite line, with the seat cushion 48 located between the fan and the bag. *Id*. at col. 4, l. 60–col. 5, l. 10.

The ’129 patent’s seat assemblies require minimal duct work and thus reduces costs by simplifying the seat retrofit needed for installation. *Id*. at col. 1, l.

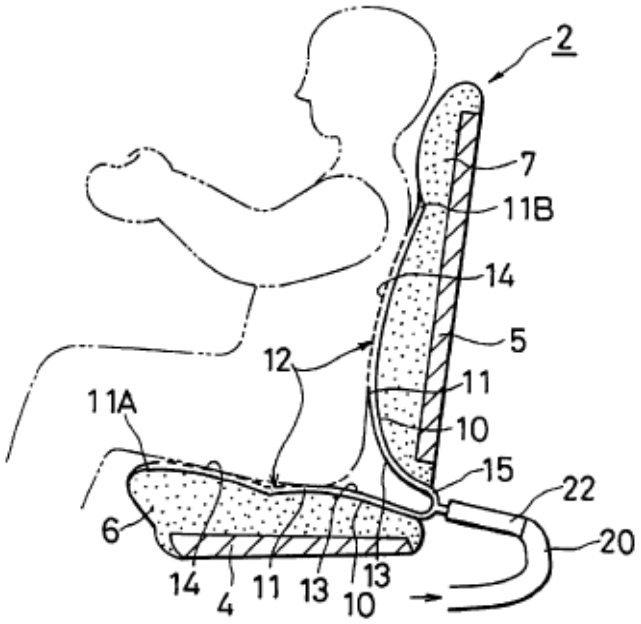
39–col. 2, l. 4. The patented designs also reduce costs by being adaptable to a wider range of vehicles. *Id.*

B. The Asserted Prior Art

1. U.S. Patent No. 5,918,930 to Kawai et al.

Kawai issued in July 1999 and claims priority to applications filed in October 1996 and August 1997. Ex. 1004 at 1. Kawai relates in general to a vehicle seat incorporating a ventilation structure. *Id*. at col. 3, l. 61–col. 4, l. 24. Figure 2 from Kawai is reproduced below:

FIG. 2



The ventilation structure includes lower layer 10, permeable layer 11, and upper layer 12. *Id*. Upper layer 12 includes a permeable section 14, formed from fabric or cloth, which contacts the occupant. *Id*. at col. 4, ll. 6–13. Air inlet port

15, connector 22, and hose 20 are used to convey air from the vehicle's air conditioner unit to the ventilation structure. *Id*. at col. 4, ll. 25–42.

2. U.S. Patent No. 4,946,220 to Wyon et al.

Wyon issued in August 1990 and claims priority to an application filed in August 1987. Ex. 1007 at 1. Wyon relates in general to a body supporting and ventilation device for use as a chair. *Id*. at col. 1, ll. 5–8. Figure 1 from Wyon is reproduced below:

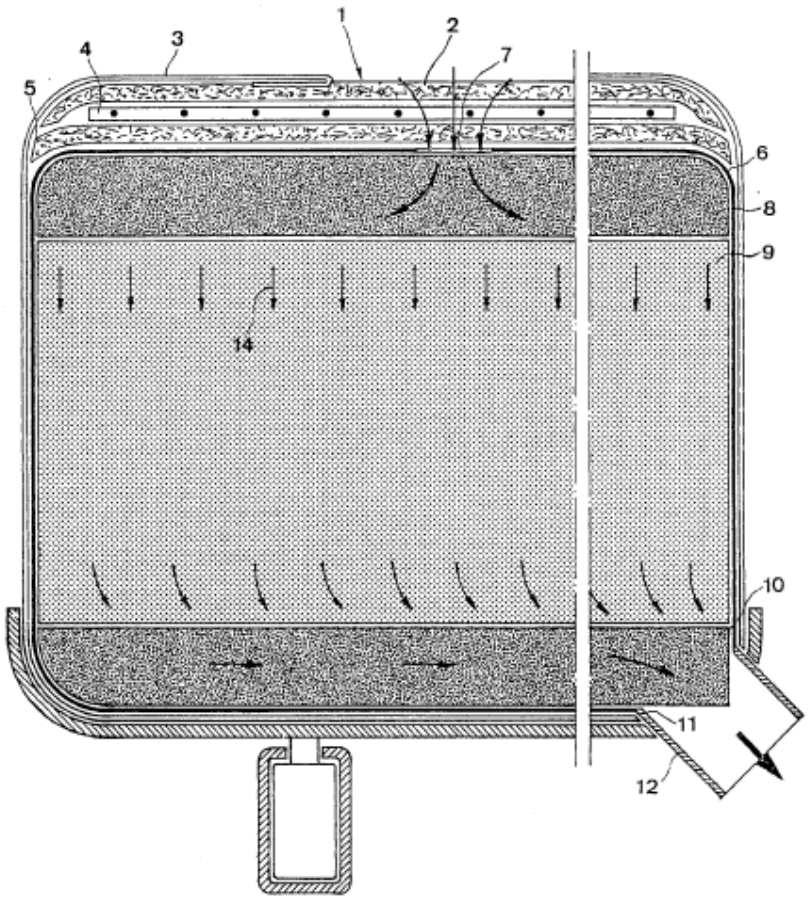
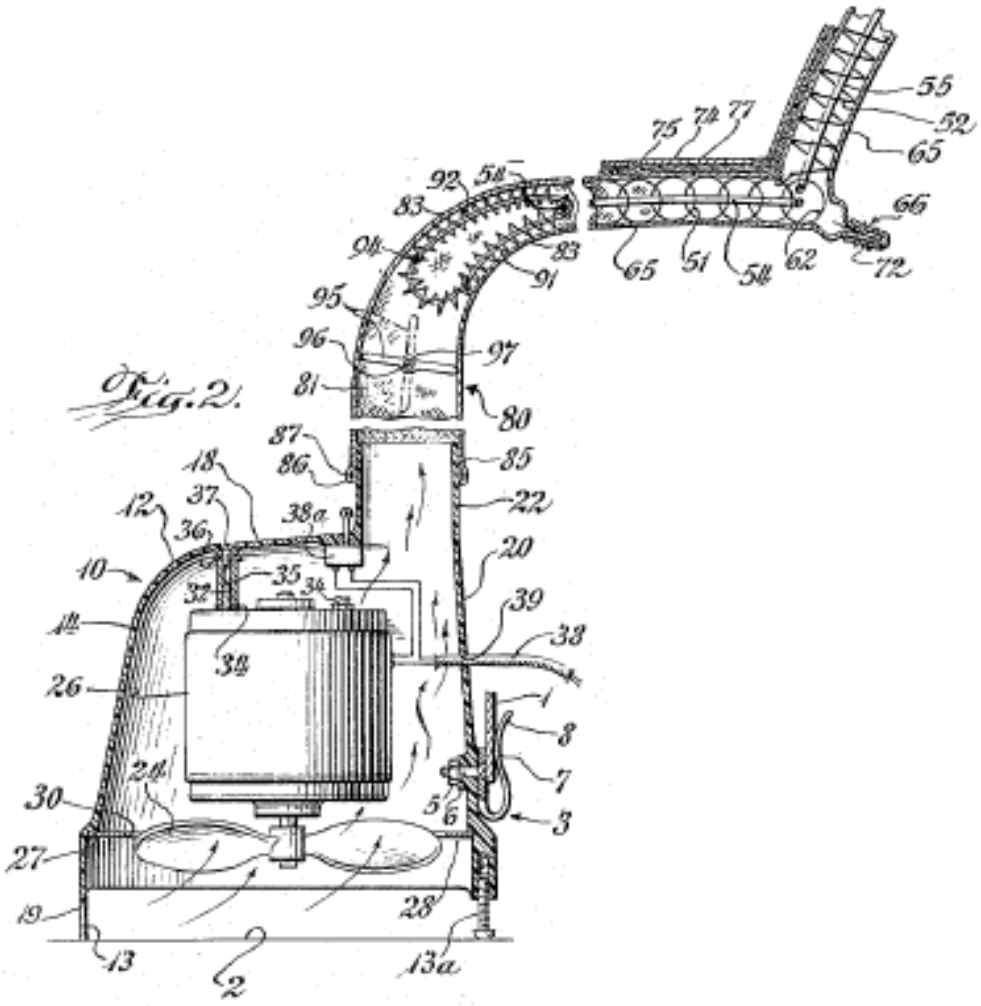


FIG 1

Seat 1 includes airtight layer 3 and woolen layers 2, 5 over bag 6. *Id.* at col. 2, l. 46–col. 3, l. 20. Bag 6 is made of an elastic sheet rubber material perforated by a number of holes 7 and is attached to tube 12 connected to the negative pressure side of a suction turbine. *Id.* Wyon's ventilation device is designed to suck air past the occupant, through the bag, and eventually out through the tube. *Id.* at col. 3, ll. 21–39. Wyon's hole pattern results in "evenly distributed negative air pressure provid[ing] substantially the same suction effect at each of the holes 7 in the perforated sheet rubber material 6." *Id.* at col. 3, ll. 37–39.

3. U.S. Patent No. 2,992,604 to Trotman et al.

Trotman was filed in June 1958 and issued in July 1961. Ex. 1008 at 5. Trotman relates in general to a ventilated pad for use with vehicle seats and other body-supporting devices. *Id*. at col. 1, ll. 13–24. Figure 2 from Trotman, which shows a cut-out depiction of the pad, is reproduced below:



The pad includes coil springs 51, 52, an air impervious backing 65, and an upper surface with porous cloth layer 74. *Id*. at col. 6, ll. 24–55. The pad may also include a layer of foam material 75, which is protected from the coil springs by cloth or fiber layer 77. *Id*. at col. 6, ll. 61–74. A motor-blower 10 is connected to the pad via duct 80, and the duct includes air impervious top and bottom cover 83. *Id*. at col. 3, ll. 19–20, col. 7, ll. 21–29. Motor-blower 10 rests on the floor of the vehicle. *Id*.

4. U.S. Patent No. 6,511,125 to Gendron

Gendron issued in January 2003 and claims priority to an application filed in September 2000. Ex. 1005 at 1.[1] Gendron relates in general to ventilated seat pads for vehicles. *Id.* at col. 1, ll. 16–29. Figures 1 and 3 from Gendron are reproduced below:

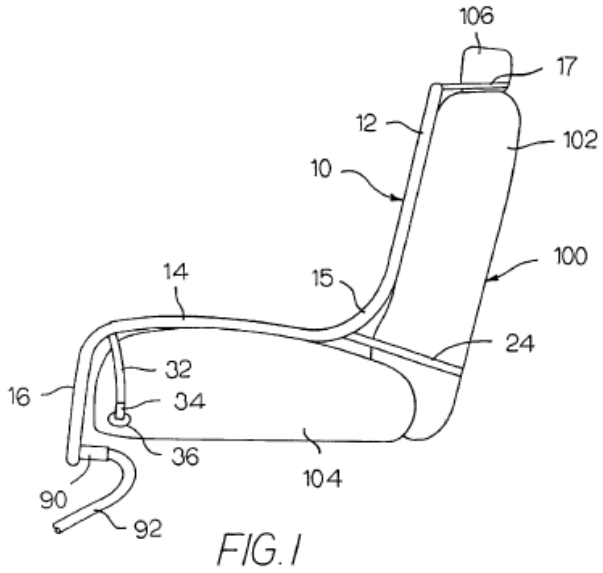


FIG. 1

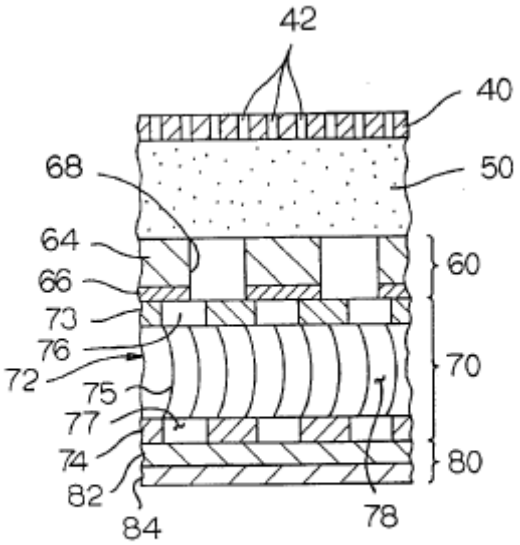


FIG. 3

Pad or topper 10 may comprise a plurality of layers. *Id*. at col. 2, l. 33. First layer 40 is the outer layer on which the occupant sits and is formed of an air permeable material. *Id*. at col. 2, ll. 33–39. Second layer 50 is formed from a

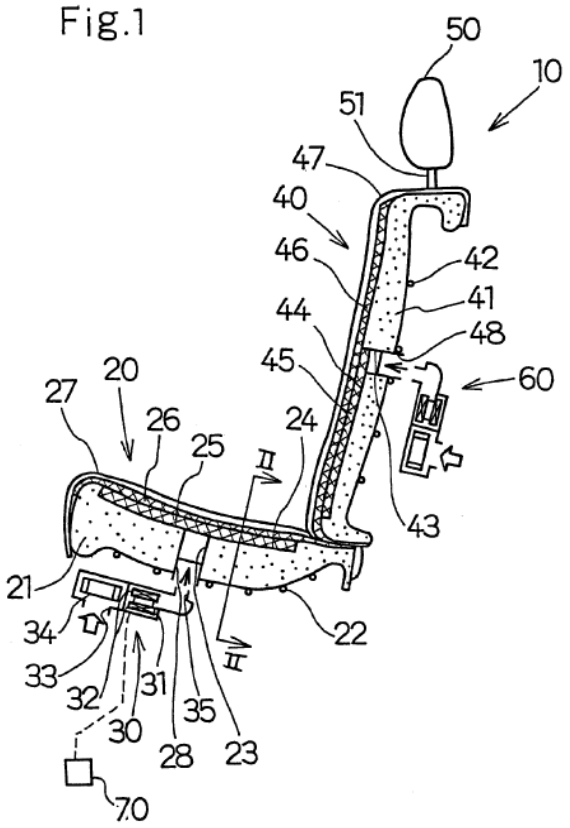
[1] Patent Owner expressly reserves its right to argue at the appropriate time that, under 35 U.S.C. § 103(c), Gendron does not qualify as prior art to the '129 patent.

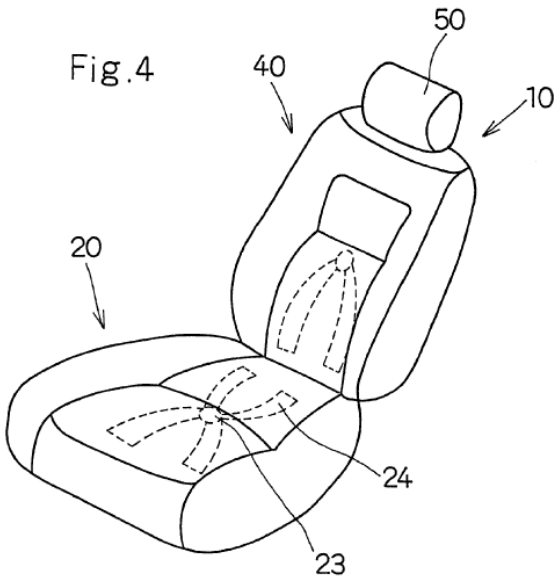
permeable cushioning material. *Id*. at col. 2, ll. 41–45. Third layer 60 includes foam layer 64 and impermeable backing 66. *Id*. at col. 2, ll. 45–53. Third layer 60 also includes aligned holes 68 forming hole pattern 62. *Id*. Fourth layer 70 includes spacer material 72, while fifth layer 80 includes an air impermeable material for preventing air escape. *Id*. at col. 2, l. 53–col. 3, l. 2.

Pad 10 also includes fitting 90 and hose 92 for connecting to the forced air unit of the vehicle. *Id*. at col. 3, ll. 4–15. During operation, air travels from the forced air unit, through the multiple layers of the pad, and out through the first layer to the occupant. *Id*. According to Gendron, the second layer is critical in that it prevents the top layer from closing off the third layer's holes 68 when the seat is occupied. *Id*. at col. 3, ll. 15–22. The second layer is also important as it acts as a manifold, distributing the air traveling up through holes 68 before it reaches the first layer. *Id*. at col. 3, ll. 23–31.

5. U.S. Patent No. 6,062,641 to Suzuki et al.

Suzuki issued in May 2000 and claims priority to an application filed in November 1997. Ex. 1006 at 1. Suzuki relates in general to a ventilated vehicle seat assembly. *Id*. at Abstract. Figures 1 and 4 from Suzuki are reproduced below:





Seat 10 includes urethane members 21, 41, which further include grooves 24, 44 and mesh layers 25, 26, 45, and 46. *Id*. at col. 2, ll. 29–44, col. 4, ll. 20–27. Fan 34 delivers air to the grooves via air vent 23. *Id*. at col. 2, ll. 56–63, col. 3, ll. 14–35. Air is distributed to the occupant via the grooves. *Id*.

6. U.S. Patent No. 4,997,230 to Spitalnick

Spitalnick was filed in January 1990 and issued in March 1991. Ex. 1014 at 1. Spitalnick relates in general to air conditioned covers for vehicle seats. *Id*. at. col. 1, ll. 39–45. Figures 1, 2, and 3 from Spitalnick are reproduced below:

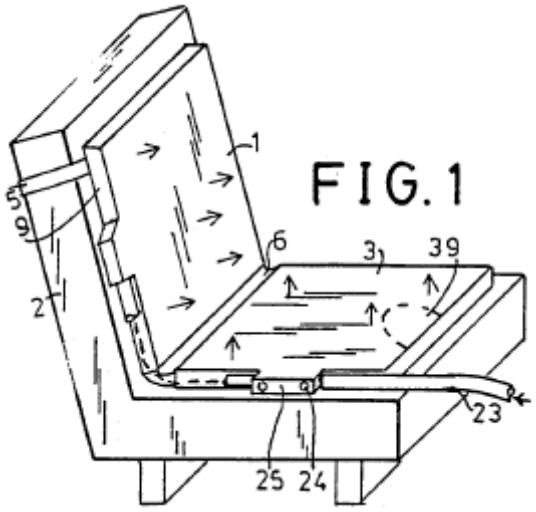


FIG. 1

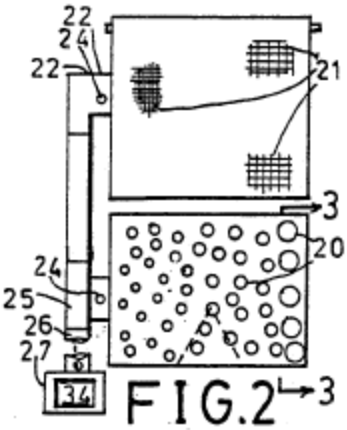


FIG. 2

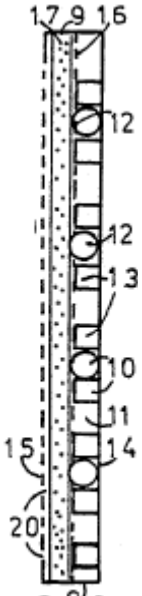


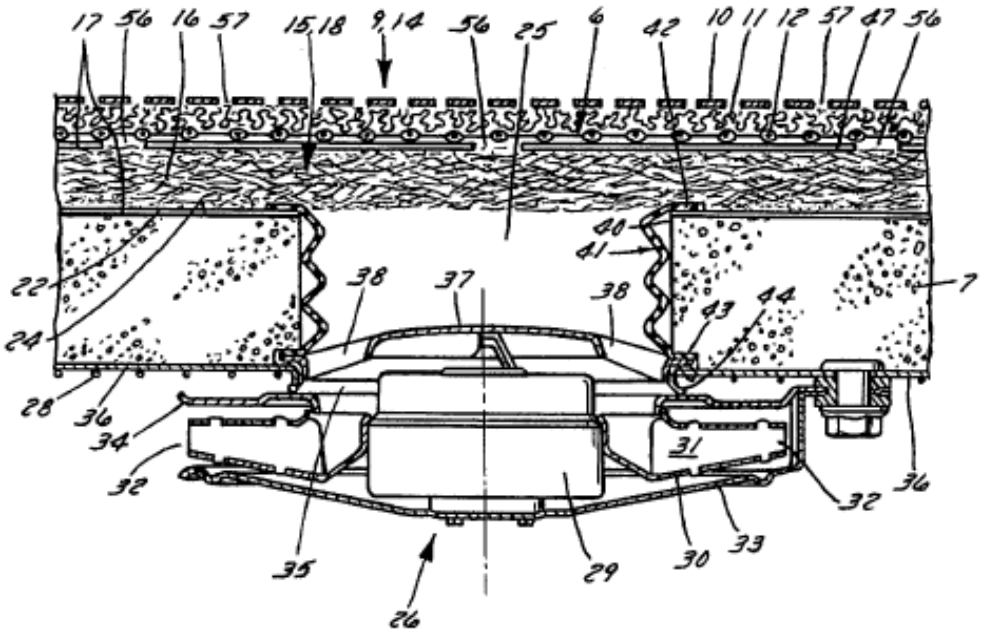
FIG. 3

First segment 1 covers back rest 2, while second segment 3 covers seat cushion 4. *Id*. at col. 2, ll. 33–35. Ducts 23 and 26 connect the conditioned cover to the air conditioning unit of the vehicle. *Id*. at col. 2, ll. 45–68. The conditioned mat includes spacer means 10 and front panel 15. *Id*. To ensure equal airflow at regions close and far from the air inlet, "the air permeability of the front panel may be made non-uniform . . . by the variable perforations 20." *Id*. at col. 2, ll. 54–58. Air travels from the vehicle's air conditioning unit through the ducts and up through perforations 20. *Id*.

7. U.S. Patent No. 6,003,950 to Larsson

Larsson issued in December 1999 and claims priority to an application filed in September 1995. Ex. 1009 at 1. Larsson relates in general to a multi-layered insert for ventilating a chair. *Id*. at col. 1, ll. 7–24. Figure 2 from Larsson is reproduced below:

Fig.2



Insert 15 includes layer 17 of airtight material, thickening part 18, and channel 25 extending from the lower insert layer to suction device 26. *Id*. at col. 4, ll. 9–39. During operation, suction device 26 draws in surrounding air, creating negative pressure at the surface of the insert, which in turns draw air past the occupant and down through the insert. *Id*. at col. 6, l. 58–col. 7, l. 9.

C. Summary Of Petitioner's Asserted Grounds of Unpatentability

For the Board's reference and convenience, a table listing Petitioner's proposed Grounds is presented here:

Ground No.	Reference(s)	Basis	Challenged Claims	Petition Cite
1	Kawai (Ex. 1004) Gendron (Ex. 1005) Suzuki (Ex. 1006) Spitalnick (Ex. 1014)	§ 103	1-3, 6, 7	14
2	Wyon (Ex. 1007) Gendron (Ex. 1005) Suzuki (Ex. 1006) Spitalnick (Ex. 1014)	§ 103	1-3, 6, 7	24
3	Trotman (Ex. 1008) Gendron (Ex. 1005) Suzuki (Ex. 1006) Spitalnick (Ex. 1014)	§ 103	1-3, 6, 7	33
4	Kawai (Ex. 1004) Gendron (Ex. 1005) Suzuki (Ex. 1006) Spitalnick (Ex. 1014) Larsson (Ex. 1009)	§ 103	4, 5	44
5	Wyon (Ex. 1007) Gendron (Ex. 1005) Suzuki (Ex. 1006) Spitalnick (Ex. 1014) Larsson (Ex. 1009)	§ 103	4, 5	45
6	Trotman Gendron (Ex. 1005) Suzuki (Ex. 1006) Spitalnick (Ex. 1014) Larsson (Ex. 1009)	§ 103	4, 5	46
7	Kawai (Ex. 1004)	§ 102	8-12	47

Ground No.	Reference(s)	Basis	Challenged Claims	Petition Cite
8	Wyon (Ex. 1007)	§ 102	8-12	50
9	Trotman (Ex. 1008)	§ 102	8-12	53
10	Kawai (Ex. 1004) Wyon (Ex. 1007) Trotman (Ex. 1008)	§ 103	8-12	57

III. PETITIONER FAILS TO ESTABLISH A REASONABLE LIKELIHOOD OF PROVING ANY CHALLENGED CLAIM UNPATENTABLE

A. Petitioner's Alleged Level Of Ordinary Skill Is Vague, Unsupported, And Undermines The Petition

Establishing the proper level of ordinary skill is critical for assessing patentability. Of course, one of the *Graham* factors for assessing obviousness is the level of ordinary skill in the art. *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986) (citing *Graham v. John Deere Co.*, 383 U.S. 1 (1966)*; see also Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 662 (Fed. Cir. 2000). Indeed, the "critical question" is whether the claimed invention would have been obvious at the time of invention to a person of ordinary skill in the art. *Custom*, 807 F.2d at 962. Assessing the level of ordinary skill in the art is critical to protect against hindsight bias, particularly where the invention is less technologically complex. *Ruiz*, 234 F.3d at 662.

The level of ordinary skill is also fundamental for properly construing claims. Claims are construed according to the manner in which those possessing

the ordinary level of skill in the art would understand them in the context of the challenged patent. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (citing *Phillips v. AWH Corp*., 415 F.3d 1303 (Fed. Cir. 2005) (en banc)).

The level of ordinary skill in the art is informed by several factors, including (a) the type of problems encountered in the relevant art, (b) prior art solutions to those problems, (c) the rapidity with which innovations are made, (d) the sophistication of the technology, and (e) the educational level of active workers in the field. *Custom*, 807 F.2d at 962.

Here, Petitioner contends that a person possessing the ordinary level of skill would have a "good working knowledge of vehicle seats, including those employing heating and/or ventilation systems," and "would have gained this knowledge either through education and training, several years of practical work experience, or through a combination of these." Pet. at 9–10. As an initial matter, this description is hopelessly vague. Petitioner does not explain what constitutes a "good working knowledge" and whether this includes designing vehicle seats or whether knowledge solely of repairing such systems were sufficient. Petitioner also fails to explain what type of education this ordinary artisan would have completed — is high school sufficient or would vocational or college training be required? Also absent is a description of how much education and training would suffice for the level of ordinary skill. Finally, what type of work experience would

qualify the ordinary artisan — again, is actual research and development required or would repair work suffice?

Petitioner compounds these deficiencies by neglecting any evidentiary support for its proposed level of skill. Petitioner cites to no documents or testimony to justify its proposal. There is no effort to even address the *Custom* factors for informing the level of ordinary skill. Rather, Petitioner relies solely on attorney argument. Attorney argument, however, is not evidence. *See, e.g.*, *Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009) (rejecting unsworn attorney argument regarding the accused manufacturing process as not evidence) (internal citations omitted); *see also* 77 Fed. Reg. 48680, 48702 (Aug. 14, 2012), Changes to Implement Inter Partes Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents ("[A]rguments of counsel cannot take the place of factually supported objective evidence.") (internal citations omitted).

The absence of a proper and defensible level of ordinary skill renders the Petition's obviousness arguments and proposed claim constructions baseless. Because obviousness and claim construction are assessed from the perspective of a person of ordinary skill, Petitioner's contentions thus lack a proper foundation. Indeed, Petitioner expressly argues that its proposed constructions are consistent with how an ordinary artisan would understand the claims (Pet. at 11) and that its

proposed prior-art combinations would have been obvious to a person of ordinary skill (*see, e.g.*, Pet. at 20 (Ground 1), 30 (Ground 2), 40 (Ground 3)). Without a reliable level of ordinary skill, however, Petitioner cannot satisfy its obligation to provide a detailed explanation of the significance of the evidence (37 C.F.R. § 42.22(a)(2)), cannot identify how the challenged claims are to be construed (37 C.F.R. § 42.104(b)((4)), nor can Petitioner explain how the construed claims are unpatentable (37 C.F.R. § 42.104(b)(4)). Petitioner's failure to establish the proper level of ordinary skill thus renders the Petition fatally deficient.

B. Petitioner's Proposed Claim Constructions Are Deficient

The Board construes claims consistent with the disclosure and according to the terms' broadest reasonable interpretation as understood by one of ordinary skill in the art. See Office Patent Trial Practice Guide, 77 Fed. Reg. 48756, 48766 (Aug. 14, 2012); 37 C.F.R. § 42.100(b). There is a heavy presumption that claim terms should carry their ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). However, special definitions presented in the specification with reasonable clarity, deliberateness, and precision must also be considered. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994); *see also In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The petition must identify how the challenged claims are to be construed. 37 C.F.R. § 42.104(b)(3).

For this Preliminary Response, and without prejudice to advance its own proposed claim constructions should an *inter partes* review be initiated, Patent Owner does not accede to Petitioner's proposed claim constructions. To the extent that Patent Owner does not expressly dispute a proposed construction or offer a competing construction, Patent Owner reserves the right to do so should a trial be initiated.

Nevertheless, in addition to failing to establish a defensible level of ordinary skill (*see supra* Part III.A), Petitioner's proposed constructions display several flaws. For example, Petitioner states that Patent Owner did not act as its own lexicographer and provide any special definitions for the '129 patent claims. Pet. at 11. Thus, according to Petitioner, all claim terms in the '129 patent should be given their plain and ordinary meaning as understood by an ordinary artisan. *Id*. But Petitioner then goes on to offer proposed constructions for twelve claim terms without any evidence, such as dictionaries or expert testimony, as to how a person of ordinary skill would understand the terms. Pet. at 11–13. For some terms, Petitioner offers a citation to the '129 patent specification without any evidence that a person of ordinary skill would agree with Petitioner's attorney conclusions. *Id*. For other terms, including "top portion," "bottom portion," and "extending between," Petitioner offers no citation or support whatsoever — simply a desired construction untethered to any evidence. *Id*.

Also, for most of its identified claim terms, Petitioner provides no meaningful construction. Rather, Petitioner simply offers an open-ended definition that the identified terms "include" certain features or characteristics. Pet. at 11–13 (*see* proposed constructions of "trim cover," "air mover," "spacer," "cross-sectional area," "heater," "elongate tail," and "extending between"). For these reasons, Petitioner fails to meet its statutory obligation to identify how the challenged claims are to be construed.

Patent Owner does make a further note regarding Petitioner's proposed construction of "spacer." Pet. at 12. Petitioner suggests an open-ended definition that would *include* "a material that is intermediate of a top and bottom portion." *Id*. Patent Owner submits that this construction is overbroad not only because it is open-ended, but because it does not account for the '129 patent's description of the spacer's unique characteristics and function. The spacer in the '129 patent is not simply a material, but is described as "three dimensional [and] expanded," and "sufficiently stiff to avoid blockage of air flow when the seat is occupied, even by heavy occupants." Ex. 1001 at col. 2, ll. 22-28. Petitioner's construction as simply a "material" is inconsistent with claim construction principles and the '129 patent disclosure.

C. Petitioner Fails To Specify And Explain In Detail Where Each Claim Element Is Found In The Asserted Prior Art

A petition for *inter partes* review must provide a detailed explanation of the evidence and identify with specificity where each claim element is found in the alleged prior art. 37 C.F.R. §§ 42.22, 42.104(b)(4). Indeed, merely summarizing and quoting from alleged prior art, without providing an explicit and precise correlation between the references and the limitations of the challenged claims, is insufficient to sustain a petition for *inter partes* review. Decision — Denying *Inter Partes* Review (Paper 9) at 24-25, *Google, Inc. et al. v. EVERYMD.COM LLC*, No. IPR2014-00347 (P.T.A.B. May 22, 2014) ("Petitioner's summaries, quotations, and citations from both references, with Belanger's figures, place the burden on us to sift through the information presented by Petitioners, determine where each element of claim 1 is found in Shah and Belanger, and identify any differences between the claimed subject matter and the teachings of Shah and Belanger.")

Here, Petitioner fails to satisfy these duties for each of its Grounds. Petitioner failed, for example, to provide standard claim charts outlining how each of its alleged prior-art references or combinations meet all of the limitations in the challenged claims. What's more, Petitioner in many instances lumped together several claim elements into one lengthy discussion, placing the burden on Patent Owner and the Board to untangle the summaries to assess Petitioner's contentions.

As just one example, for each of Grounds 1–3, Petitioner lumps together several elements from Claim 1 and treats them as the following single claim element:

> [E]ach of the plurality of holes has a cross-sectional area, the holes located substantially the same distance from the chamber opening defining a group having a total cross-sectional area, the top portion of the chamber including more than one group of holes, with the total cross-sectional area of each defined group of holes increasing the farther each defined group of holes is from the chamber opening.

Pet. at 21 (Ground 1), 31 (Ground 2), 40-41 (Ground 3). The above passage is more appropriately broke down into the following four discrete claim elements:

- "each of the plurality of holes has a cross-sectional area;"
- "the holes located substantially the same distance from the chamber opening defining a group having a total cross-sectional area;"
- "the top portion of the chamber including more than one group of holes;" and

- "with the total cross-sectional area of each defined group of holes increasing the farther each defined group of holes is from the chamber opening."

Not surprisingly, Petitioner's alleged description of where this claim element conglomerate is found in the alleged prior art stretches for several pages, with reference to more than two dozen components in four separate asserted prior-art references. Pet. at 17–21 (Ground 1), 26–31 (Ground 2), 36–40 (Ground 3).

Another particularly egregious example is Petitioner's Ground 10. There, Petitioner simply offers an omnibus combination of Kawai, Wyon, and Trotman, suggesting that to the extent these references fails to disclose certain *unidentified* features, "slight modifications of any one of Kawai, Wyon, or Trotman based on any of the other two disclosures made to obtain the subject matter claimed in the '129 patent would have been obvious to one of ordinary skill." Pet. at 58. Other than a suggestion to combine Trotman's air supply duct 80 to Kawai or Wyon, there is no identification of any missing element or the teachings from the other references that could be used to fill the gaps. *See* Pet. at 58–60. The Petition does not meet the requirement of providing a detailed explanation of the evidence and a specific identification of where each element is found in the alleged prior art. *See* 37 C.F.R. §§ 42.22, 42.104(b)(4).

Petitioner's claim element clustering and failure to provide traditional claim charts not only improperly shifted the burden of analysis to Patent Owner and the Board, but also improperly attempts to obscure the claim elements that are missing from the alleged prior art. As outlined below in Part III.D, Petitioner incorrectly argues that each limitation in the '129 patent claims is taught in the cited references. By grouping several claim elements together in its discussions, and relying on lengthy narrative characterizations of the alleged prior art, the gaps and shortcomings in Petitioner's alleged prior art and prior-art combinations are shrouded. But even granting Petitioner an innocent motive for this tactic, Petitioner nevertheless fails to satisfy the disclosure requirements outlined in 37 C.F.R. §§ 42.22, 42.104(b)(4), and each Ground should be rejected.

D. Petitioner Fails To Show That The Asserted Prior Art Teaches Or Suggests All Of The Elements In The Challenged Claims

Petitioner bears the burden of proving by a preponderance of the evidence that the challenged claims are unpatentable. 35 U.S.C. § 316(e). Assertions regarding elements that were known in the art or what was common sense to a person of ordinary skill must be supported by documentary or testimonial evidence. *K/S HIMPP v. Hear-Wear Techs., LLC,* 751 F.3d 1362, 1365–66 (Fed. Cir. 2014) ("We recognize that the Board has subject matter expertise, but the Board cannot accept general conclusions about what is 'basic knowledge' or

'common sense' as a replacement for documentary evidence for core factual findings in a determination of obviousness.").

To establish that a feature or limitation is inherently present in an alleged prior-art reference, evidence must be presented showing that the feature is "necessarily present." *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). In other words, inherency cannot be proven "by probabilities or possibilities," and "[t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id*. (quotation omitted).

Each Ground should be rejected because Petitioner fails to show that the asserted prior art teaches or suggests all of the elements in the challenged claims. For example, Petitioner fails to establish that any of the asserted references teach or suggest a top portion of a chamber including more than one group of holes, with the total cross-sectional area of each defined group of holes increasing the farther each defined group of holes is from the chamber opening, as required by Claims 1–7. Petitioner also fails to show that Wyon teaches or suggests a trim cover, as required by Claims 1–12. Petitioner also fails to show that Trotman teaches or suggests an enclosed chamber, as required by Claims 1–12. In addition, Petitioner fails to show that Kawai or Wyon teach or suggest an elongate tail being formed from an extension of the top portion of the bag and an extension of the bottom portion of the bag or a trim cover extending around at least a portion of the cushion

and the bag, as required by Claims 8–12. Moreover, Petitioner fails to establish that Wyon or Trotman teach or suggest an air mover located on the opposite side of a cushion as the bag, as required by Claim 11. Finally, Petitioner fails to show that Trotman teaches or suggests each of the seat base and the backrest comprising an elongate tail, as required by Claims 9 and 10.

1. Grounds 1–6: Petitioner Fails to Show That Any Of The Asserted Prior Art Teaches The Hole Pattern Required in Claims 1–7

Petitioner fails to show that any of its asserted prior art teaches "the top portion of the chamber including more than one group of holes, with the total cross-sectional area of each defined group of holes increasing the farther each defined group of holes is from the chamber opening," as required by Claims 1–7. Ex. 1001 at col. 5, l. 55–col. 6, l. 4. Petitioner acknowledges that its primary references fail to teach this limitation. For Ground 1, Petitioner admits that Kawai does not teach anything about cross-sectional area of holes in the top portion of a chamber. Pet. at 14–15. Petitioner admits the same for Wyon, the primary reference in Ground 2 (Pet. at 24), as well as Trotman, the primary reference for Ground 3 (Pet. at 34).

Petitioner relies on *three* other references to allegedly fill this missing piece: Gendron, Suzuki, and Spitalnick. Pet. at 14–15 (Ground 1), 24 (Ground 2), 34 (Ground 3). But Petitioner has failed to meet its burden to show that any of these

references teach this limitation, either. For Gendron, Petitioner points to "third layer 60 . . . having a selected hole pattern 62." Pet. at 17 (Ground 1), 27 (Ground 2), 36 (Ground 3). As an initial matter, there is no indication in the Petition that third layer 60 in Gendron is the top portion of a chamber. *See* Pet. at 17–18 (Ground 1), 27–28 (Ground 2), 36–37 (Ground 3). But regardless, Petitioner fails to establish that Gendron teaches or suggests any size difference among the holes in pattern 62 (Pet. at 17–18 (Ground 1), 27 (Ground 2), 37 (Ground 3)), let alone groups of holes with the total cross-sectional area of the groups increasing as they extend out from an opening, as required by the challenged claims.

Suzuki is even less helpful. For that reference, Petitioner points to "grooves 24 . . . formed on the upper side of the urethane member 21." Pet. at 18 (Ground 1), 29 (Ground 2), 38 (Ground 3). But grooves are not holes, and Petitioner does not point to any teaching in Suzuki of any holes. As a further point, there is no proof by Petitioner to support a suggestion that urethane member 21 forms, or is part of, a chamber. Thus, even if grooves were considered holes — which they are not — Petitioner provides no evidence that Suzuki suggests holes on the top portion of a chamber.[2]

[2] Petitioner also mischaracterizes Suzuki as teaching that "the size of the groove opening varies based on the amount of pressure applied by an occupant

Finally, with respect to Spitalnick, Petitioner points to perforations 20 in front panel 15. Pet. at 20 (Ground 1), 29–30 (Ground 2), 39–40 (Ground 3). Petitioner suggests that perforations 20 are actually "groups of perforations 20," but Petitioner points to nothing in Spitalnick to support a teaching of groups. *See id*. Indeed, Spitalnick simply says that the perforations are "variable." Ex. 1014 at col. 2, ll. 57–58. Petitioner fails to explain how "variable" translates into "groups." And while Figure 2 in Spitalnick includes a reference to perforations 20 and appears to show different sized circles, there is no indication that these various circles somehow form groups — there is no separation or categorization of the holes. Ex. 1014 at 2.

Even if the perforations shown in Figure 2 were broken down into groups, there is no support for the contention that the *total* cross-sectional area of any alleged group of holes increases as the distance from the opening increases. The *total* cross-sectional area of a group, of course, is dependent not only on the *size* of the holes, but also the *number* of holes. In other words, the total cross-sectional

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. . . .," citing Suzuki at col. 3, l. 59–col. 4, l.10. Pet. at 19. But Petitioner has not cited to evidence that Suzuki describes the *size* of the grooves — rather, the Petitioner's cite refers only to the *position* of the grooves. Ex. 1006 at col. 3, l. 59–col. 4, l. 10.

area of a group of large holes is not necessarily greater than a group of small holes. Thus, while the circles toward the right in Figure 2 appear larger than some of the other circles in Figure 2, there is no suggestion in Spitalnick that some of the large holes form a group with a total cross-sectional area that is greater than some other (unidentified) group of holes.

Petitioner also cites to Claim 8 of Spitalnick (Pet. at 20 (Ground 1), 30 (Ground 2), 40 (Ground 3)), which describes the front panel "with reduced air permeability in that area close to said duct connecting means and increased air permeability in those areas remote from said connecting means." Ex. 1014 at col. 4, ll. 48–53. But again, there is no suggestion in Spitalnick that this reference to reduced and increased air permeability equates to hole groups with increasing total cross-sectional area. There are many ways to reduce or increase air permeability, and Petitioner provides no evidence or explanation for the contention that this claim language supplies the missing piece from the challenged '129 claims. Petitioner's attorney argument is not evidence. *See supra* Part III.A.

To the extent Petitioner is suggesting that combining Gendron, Suzuki, and Spitalnick somehow results in the missing hole pattern limitation, this contention fails. As none of these references teaches this limitation, Petitioner is contending that three references can be combined to arrive at a limitation that none of the references teach. There is no support for such a hind-sight driven suggestion.

More fundamentally, as described in more detail below in Part III.E, Petitioner fails to provide evidence that that an ordinary artisan would have had a reason with rational underpinnings for making this alleged combination, let alone a reasonable expectation of success in making this combination to arrive at the missing claim limitation.

2. Grounds 2 And 5: Petitioner Fails To Show That Wyon Teaches The Trim Cover Required By Claims 1–7

As best Patent Owner can determine, with respect to Ground 2, Petitioner contends that airtight outer layer 3 in Wyon is "a trim cover," as required in the challenged Claims 1–7. Pet. at 25. Petitioner construes "trim cover," however, as "*perforated* leather, cloth, or the like which covers components of a seat assembly." *Id*. at 11. Thus, under Petitioner's own construction, the airtight outer layer 3 cannot be a "trim cover." Ground 2 thus fails because Petitioner has not provided a reasonable explanation for how this alleged prior-art combination meets the "trim cover" limitation.

3. Grounds 3 And 6: Petitioner Fails To Show That Trotman Teaches The Enclosed Chamber Required By Claims 1–7

With respect to Ground 3, Petitioner appears to suggest that Trotman's upper layer 77 combined with backing layer 65, seam 66, and tape 72, form an "enclosed chamber," as recited in challenged Claims 1–7. Pet. at 35-36. But this contention is flawed for several reasons. Trotman explains, for example, that the backing

extends over only *certain* edges and at *parts* of the front edge of the system. Ex. 1004 at col. 6, ll. 35–40. There is no evidence that the backing extends over and connects with the upper layer along the entire surface of the seating components to form a chamber. Petitioner asserts, moreover, that tape 72 *seals* the edge between the upper and lower layers (Pet. at 35), but Petitioner has failed to show how Trotman teaches that. Rather, Trotman simply says that tape 72 *reinforces* at the edge — there is no discussion of forming a seal, let alone a sealed chamber. Ex. 1008 at col. 6, ll. 35–38.

4. Ground 7: Petitioner Fails To Show That Kawai Teaches The Elongate Tail And Trim Cover Required By Claims 8–12

Petitioner appears to contend that Kawai's air inlet port 15 is an "elongate tail being formed from an extension of the top portion of the bag and an extension of the bottom portion of the bag," as required by Claims 8–12. Pet. at 48. In particular, according to Petitioner, air inlet port 15 is allegedly formed "by extending portions of structure 10, 11, 12," which correspond to lower layer 10, permeable layer 11, and upper layer 12. *Id.*; *see also* Ex. 1004 at col. 3, ll. 61–67. In Petitioner's view, this multi-layer structure comprises the top portion of the bag and an extension of the bottom portion of the bag. Pet. at 48. Petitioner fails to establish, however, that Kawai teaches that air inlet port 15 is formed by extending layers 10, 11, and 12. Rather, Kawai simply says that air inlet port is *formed in* the

structure 10, 11, 12. Ex. 1004 at col. 4, ll. 25–29. Petitioner provides no support for the suggestion that *forming in* a structure (which could refer to connecting or integrating an item of independent composition) necessarily means *form from* or *form by extending*. Petition thus fails to provide evidence that Kawai meets this claim limitation.

Patent Owner notes that while Petitioner asserts in Ground 7 that Kawai meets the "elongate tail" limitation, it later acknowledges in Ground 10 that Kawai does not. Pet. at 58 (arguing that Kawai could be modified in view of Trotman to meet the "elongate tail" limitation). Petitioner's seeming duplicity conflicts with its obligation to provide evidence and a detailed explanation for its unpatentability contentions and should be rejected.

Petitioner argues that Figures 1 and 2 in Kawai show a trim cover extending around at least a portion of seat pads 6, 7 (which Petitioner apparently calls a cushion) and that the alleged trim cover is "integral with the upper layer 12 of the ventilating structure." Pet. at 49. This, according to Petitioner, meets the limitation of "a trim cover extending around at least a portion of the cushion and the bag." *Id*. As an aside, Petitioner fails to explain how "integral with" (in reference to upper layer 12) means "extending around." More importantly, however, neither Figure 1 nor Figure 2 includes a reference to *any* trim cover, let alone a trim cover extending around these claimed components. Nor does Kawai's

specification mention a trim cover. Petitioner thus fails to provide evidence that Kawai meets this limitation of challenged Claims 8–12.

5. Ground 8: Petitioner Fails To Show That Wyon Teaches The Elongate Tail And Trim Cover Required By Claims 8–12 And The Air Mover Location Required By Dependent Claim 11.

Petitioner similarly fails to provide evidence that Wyon includes an "elongate tail being formed from an extension of the top portion of the bag and an extension of the bottom portion of the bag," as required by Claims 8–12. Petitioner suggests, citing to Wyon at col. 3, ll. 17–39 and Figures 1 and 2, that Wyon's opening 11 "is an extension of the sheet material forming the bag 6 and the second horsehair layer 10." Pet. at 52. But those portions of Wyon do not describe the composition of the opening 11. Those portions certainly do not say that the opening is an extension of bag 6 and second horsehair layer 10. On the contrary, Wyon teaches that opening 11 is "*close to* the second horsehair layer 10" (Ex. 1007 at col. 3, ll. 15–16), suggesting that opening 11 and horsehair layer 10 are separate.

Petitioner again exhibits seeming duplicity by arguing in Ground 8 that Wyon meets the "elongate tail" limitation, while later acknowledging in Ground 10 that Wyon does not. Pet. at 58 (arguing that Wyon could be modified in view of Trotman to meet the "elongate tail" limitation). Petitioner's shifting positions

cannot satisfy its obligation to provide evidence and explanations to justify an *inter partes* review.

Petitioner also fails to prove that Wyon teaches a "trim cover," as required by Claims 8–12. Petitioner suggests that Wyon's airtight layer 3 is a trim cover. Pet. at 52. According to Petitioner, however, the claim term "trim cover" should be construed as "*perforated* leather, cloth, or the like which covers components of a seat assembly." Pet. at 11. Thus, under Petitioner's own construction, the *airtight* outer layer 3 cannot be a "trim cover."

Finally, Petitioner also does not show that Wyon teaches "the air mover is located on the opposite side of the cushion as the bag," as required by Claim 11. According to Petitioner, the "air mover" is Wyon's section turbine 13, while the "cushion" includes woolen layers 2, 5, with bag 6 matching the claimed "bag." Pet. at 53. Petitioner fails to establish, however, that Wyon teaches that the woolen layers 2, 5 are between the bag 6 and the suction turbine 13. Rather, Wyon teaches that the bag 6 is in the middle — the bag is located between the woolen layers 2, 5, on the one hand, and the suction turbine 13 on the other. Ex. 1007 at Fig. 1, col. 3, ll. 1–20. Petitioner thus fails to provide evidence or an explanation for how Wyon meets this limitation in Claim 11.

6. Ground 9: Petitioner Fails To Show That Trotman Teaches The Enclosed Chamber Required By Claims 8–12 And Additional Elements Required By Dependent Claims 9–11

With respect to Ground 9, Petitioner appears to suggest that Trotman's upper layer 77 combined with backing layer 65, seam 66, and tape 72, form a "enclosed chamber," as required by Claims 8–12. Pet. at 54. But this contention is flawed for several reasons. As discussed above in Part III.D.3, Trotman explains, for example, that the backing extends over only *certain* edges and at *parts* of the front edge of the system. Ex. 1008 at col. 6, ll. 35–40. There is no showing that the backing extends over and connects with the upper layer along the entire surface of the seating components to form a chamber. Petitioner asserts, moreover, that tape 72 *seals* the edge between the upper and lower layers (Pet. at 35), but Petitioner fails to establish that Trotman actually says that. Rather, Trotman simply says that tape 72 *reinforces* at the edge — there is no discussion of forming a seal, let alone a sealed chamber. Ex. 1008 at col. 6, ll. 35–38. Petitioner thus fails to provide evidence that Trotman meets this claim limitation.

Looking at Claim 9, Petitioner does not show that Trotman teaches "each of the seat base and the backrest comprises . . . an elongate tail," as claimed. Petitioner apparently points to Trotman's air supply duct 80 as the "elongate tail." Pet. at 56; *see also* Ex. 1008 at col. 7, ll. 3–9. Trotman, however, teaches only *one* air supply duct 80 (Ex. 1008 at col. 7, ll. 3–9, Figs. 1 and 2), so there is no

evidence that *each* of the seat base and backrest in Trotman comprises an elongate tail.

Claim 10 similarly requires multiple elongate tails, one for the seat base and one for the backrest. Pet. at 56. Because Trotman teaches only one air supply duct 80, here again Petitioner fails to show that Trotman meets this limitation in Claim 10.

Finally, with respect to Claim 11, Petitioner does not show that Trotman teaches "the air mover is located on the opposite side of the cushion as the bag." *See* Pet. at 56–57. According to Petitioner, Trotman's blower unit 10 is the claimed "air mover," while foam layer 75 is the "cushion," and upper layer 77 combined with backing layer 65 form the "bag." *Id*. at 56; *see also* Ex. 1008 at col. 6, ll. 61–64 (identifying 75 as layer of foam material). But Trotman's foam layer 75 is not between the blower unit and layers 77 and 65. Rather, it is Trotman's alleged bag (layers 77 and 65) that is in the middle. Ex. 1008 at col. 6, ll. 24–75, Figs. 1 and 2. Petitioner therefore fails to prove that Trotman meets claimed location of the air mover.

E. Petitioner Fails To Show A Reasoned Motivation And Reasonable Expectation Of Success In Making Its Proposed Prior Art Combinations and Modifications

For an obviousness challenge, Petitioner must prove by a preponderance of the evidence that a "skilled artisan would have had reason to combine the teaching

of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success from doing so." *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068-69 (Fed. Cir. 2012). Indeed, the Supreme Court emphasized in *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418, (2007) that, in analyzing obviousness under 35 U.S.C. § 103, a combination of prior-art elements must be supported by an articulated reasoning for the combination with rational underpinnings to support the conclusion of obviousness. As the Board recently noted, this mandate, combined with the petitioner's obligation to provide a detailed explanation of the evidence (*see* 37 C.F.R. § 42.22(a)(2)), means that a unsupported recitation of a reason to combine, such as "the use of known techniques to improve similar devices in the same way" is insufficient. Decision — Denying Institution Of Inter Partes Review (Paper 15) at 13-14, *TRW Auto. US LLC v. Magna Elecs. Inc.*, No. IRP2014-00265 (P.T.A.B. June 26, 2014).

Petitioner here fails to meet its burden of proving obviousness of the challenged claims by a preponderance of the evidence. For example, Petitioner fails to provide any evidence or articulation of a reasoned basis in support of its proposed prior art combinations. Indeed, Petitioner offers only unsupported recitations of prior art combinations. Petitioner's failure to provide any evidence of a reason to combine or explanation of a reasonable expectation of success from

making the asserted combinations is insufficient to establish obviousness of any of the challenged claims.

1. Ground 1: Kawai In View Of Gendron, Suzuki, And Spitalnick

With respect to Ground 1, Petitioner acknowledges that Kawai does not teach any hole pattern in a chamber. Pet. at 17. Petitioner refers to Kawai's fibrous permeable section 14 as containing a random array of holes. *Id*. Petitioner nevertheless suggests that it would have been obvious to modify the random arrangement of holes in Kawai with a hole pattern as allegedly taught in Gendron, as Gendron's hole pattern is an "improvement." Pet. at 18. Gendron, however, expressly teaches that its hole pattern 62 is insufficient by itself to achieve effective ventilation. Ex. 1005 at col. 3, ll. 26–28. Indeed, according to Gendron, without the fibrous second layer 50 acting as a manifold, the hole pattern 62 would merely result in undistributed local cooling or heating. *Id*. As Gendron teaches the effectiveness of a fibrous layer in achieving proper air distribution, and as Kawai already includes and relies on a fibrous layer for this purpose, it is unclear why a person of ordinary of skill would be motivated to modify Kawai to include Gendron's hole pattern. Excising just the hole pattern in Gendron's third layer (without the other layers taught as critical for proper performance of the invention) to modify a separate reference suggests an inoperable result and discourages a person of ordinary skill or teaches away from the combination. *See McGinley v.*

Franklin Sports, Inc., 262 F.3d 1339, 1354 (Fed. Cir. 2001) ("If references taken in combination would produce a 'seemingly inoperative device,' we have held that such references teach away from the combination . . . ."). Similarly, there is no evidence that an ordinary artisan would have a reasonable expectation of success in making those modifications. Petitioner fails to provide any evidence to support its attorney argument. Attorney argument and other conclusory statements cannot sustain a finding of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *KSR*, 550 U.S. at 418.

Petitioner similarly asserts that a person of ordinary skill would modify Gendron's hole pattern in view of the grooves taught in Suzuki, as Suzuki also teaches an "improvement." Pet. at 19 (Ground 1), 29 (Ground 2), 39 (Ground 3). Petitioner again fails to provide any evidence that a person of ordinary skill would be motivated or have a reasonable expectation of success in making these alleged modifications. For example, Petitioner fails to account for the fact that Gendron teaches a multi-layer pad or topper with an air chamber (Ex. 1005 at Abstract), while Suzuki, on the other hand, instead of incorporating a separate pad and separate air chamber, teaches a modified seat cushion with grooves for delivering air (Ex. 1006 at Abstract). There is no showing that an ordinary artisan would see these two different approaches as interchangeable such that the teachings of Suzuki would be transferred to the hole pattern of Gendron.

Moreover, Gendron teaches that its multi-layered system already achieves uniform heating and cooling. Ex. 1005 at col. 3, ll. 27–31. There is no showing that a person of ordinary skill would recognize any problems with Gendron's hole patterns, nor that Gendron needs an "improvement." Certainly, neither reference suggests that Suzuki's groove pattern is an improvement that should be imported into Gendron's hole pattern. *See* Decision — Denying Institution of Inter Partes Review (Paper 18) at 21, *Bumble Bee Foods LLC, v. Kowalski*, IPR2014-00224 (P.T.A.B. June 5, 2014) (rejecting a suggested prior-art combination where the petitioner failed to provide evidence of a need or a problem that would provide an ordinary artisan with a reason to make the combination).

Finally, Gendron was filed *after* Suzuki issued in May 2000 (Ex. 1006 at 1). It is misplaced to suggest that the earlier Suzuki reference was an "improvement" on the later Gendron reference. Pet. at 19 (Ground 1), 29 (Ground 2), 39 (Ground 3). Moreover, if it was so obvious to a person of ordinary skill to modify Gendron in view of the pre-existing Suzuki reference, as Petitioner contends, why did Gendron not already incorporate the teachings from Suzuki?

Spitalnick predates Gendron by nearly a decade. *Compare* Ex. 1014 at 1 (Spitalnick's issue date of March 1991) *with* Ex. 1005 at 1 (Gendron's filing date of September 2000). Yet Petitioner contends it would have been obvious for a person of ordinary skill to modify Gendron in view this "improvement." Pet. at 21

(Ground 1), 30 (Ground 2), 40 (Ground 4). Again, if it were so obvious, why did Gendron not already incorporate Spitalnick's "improvement"? The substantial time lapse between Spitalnick and Gendron undermines the suggestion that an ordinary artisan would have been motived and had a reasonable expectation of success in making this alleged combination. And again, that the later-filed Gendron teaches that its hole pattern in connection with the fibrous second layer already achieves uniform heating and cooling (Ex. 1005 at col. 3, ll. 27–31) undercuts the suggested need for an "improvement."

2. Ground 2: Wyon In View Of Gendron, Suzuki, And Spitalnick

Petitioner similarly alleges that it would have been obvious to modify Wyon in view of Gendron, Suzuki, and Spitalnick. Pet. at 24. According to Petitioner, this "combination amounts to use of a known technique to improve a similar device in a similar way." *Id*. Again, Petitioner provides no evidence for this contention — there is no evidence to support the assertion that these four references teach similar devices or that they disclose a known technique to make similar improvements. Petitioner's unsupported recitation should be rejected. *See* Decision — Denying Institution Of Inter Partes Review (Paper 15) at 13-14, *TRW Auto. US LLC v. Magna Elecs. Inc.*, No. IRP2014-00265 (P.T.A.B. June 26, 2014).

Petitioner also fails to account for the fact that Wyon teaches a *suction*-based air-transfer device that relies on a *turbine* (Ex. 1007 at col. 1, ll. 61–2:10, col. 3, ll.

21–24), while Gendron teaches leveraging a car's pre-existing *ventilation system* to *blow* air past the occupant (Ex. 1005 at col. 1, ll. 16–20, col. 3, ll. 15–22). Indeed, the layers in Gendron's seat pad are specifically designed for receiving blown air as opposed to suction, as the second layer (toward the top of the pad) is designed to "act[ ] as a manifold to distribute the air coming through hole 68 to the top layer holes of 42." Ex. 1005 at col. 3, ll. 15–22. Suzuki, meanwhile, relies on a separate *fan* rather than the car's ventilation system to blow air past the occupant. Ex. 1006 at col. 1, ll. 45–54, col. 3, ll. 15–30. While both suction-based systems and blower-based systems may have been known, the direction in which the air travels through the system may affect the composition and arrangement of the other system components. Petitioner provides no showing that a person of ordinary skill would be motivated and have a reasonable expectation of success in combining these various alleged prior-art references despite their technical differences.

The assertion that an ordinary artisan would modify Wyon's holes 7 in view of Gendron's hole pattern 62 (Pet. at 26–27) is also flawed because there is no evidence that an ordinary artisan would recognize any deficiencies in Wyon. In fact, Wyon teaches that its system shows "evenly distributed negative air pressure provid[ing] substantially the same suction effect at each of the holes 7 . . . ." Ex. 1007 at col. 3, ll. 37–39; *see also* Ex. 1007 at col. 3, ll. 50–54. And the suggestion that this person of ordinary skill would look to Gendron's hole pattern 62 to

modify Wyon is problematic because Gendron itself teaches that its hole pattern 62 is insufficient by itself to achieve effective ventilation. Ex. 1005 at col. 3, ll. 26–28. Again, according to Gendron, without the fibrous second layer 50 acting as a manifold, the hole pattern 62 would merely result in undistributed local cooling or heating. *Id*. Petitioner provides no evidence or explanation for the ordinary artisan making modifications in view of a hole pattern that was expressly described as inadequate on its own.

Addressing the flaws in Petitioner's Wyon-Suzuki combination further, Wyon teaches that avoiding air channels or tubes is a "great advantage," as channels can be easily closed off. Ex. 1007 at col. 4, ll. 40–47. Suzuki, on the other hand, expressly relies on grooves for delivering air by its system. Ex. 1006 at col. 1, ll. 32–44. Petitioner fails to explain away the tension underlying its assertion that a person of ordinary skill would look to Suzuki and its distribution grooves to modify the holes in Wyon's system. *See* Pet. at 29.

Finally, Petitioner's Ground 2, like Ground 1, also relies on the combination of Gendron with Suzuki and Spitalnick to arrive at the hole pattern claimed in the challenged claims. Pet. at 27–31. As discussed above in Part III.E.1 with respect to Ground 1, Petitioner fails to provide evidence that a person of ordinary skill would have had a reasoned motivation and reasonable expectation of success in

making this alleged combination, let alone to arrive at the claimed hole pattern that is missing from all three asserted prior art references.

3. Ground 3: Trotman In View Of Gendron, Suzuki, And Spitalnick

Petitioner also argues that a person of ordinary skill would modify Trotman's outer cover 74 and weave layer 77 with Gendron's internal hole pattern 62. Pet. at 36–37. This contention similarly lacks evidentiary support and fails to explain the apparent conflicts in these references. For example, there is no suggestion in Trotman of any deficiencies in its porous cloth layer 74. In fact, Trotman teaches that its cloth layer is critical to achieving proper air flow:

> This outer cover 74 is preferably of a wear resistant material, coarsely woven of a heavy or coarse yarn (or a low cost twisted, paper-like material), to supply an attractive and comfortable upper surface which will be sufficiently porous to permit the even and non-jetlike flow therethrough of the forced air but which will have a small restrictive effect or back pressure adequate to force a sufficiently equal distribution of the forced air flow through the different unit areas of the whole of the upper body ventilating surfaces of the air distributing pad 40.

Ex. 1008 at col. 6, ll. 43–54. Petitioner fails to account for the fact that modifying the outer cover 74 to include holes or groups of holes could threaten the air flow critical to Trotman's system, cutting against a motivation to modify.

Trotman also teaches that weave layer 77 should be thick to protect the other system layers from the steel wire coil springs located inside the pad. Ex. 1008 at col. 5, ll. 19–29 (describing the steel wire coil springs 51 and 52), col. 6, ll. 1–75 (describing the thick coarse weave layer 77). Introducing holes or groups of holes into weave layer 77 could threaten exposing the other, more sensitive, layers to the coil springs through the hole openings. Petitioner similarly fails to account for this potential teaching against modifying Trotman in the manner Petitioner proposes. Petitioner thus fails to show that a person of ordinary skill would have had a reasoned motivation to modify Trotman in view of Gendron's hole pattern, and Petitioner further fails to show that this ordinary artisan would have had a reasonable expectation of success in achieving the proposed combination.

Regardless, again, as discussed above in Parts III.E.1, and 2, there is no support for the contention that a person of ordinary skill would excise just the hole pattern from Gendron pattern 62 in third layer 60, particularly where Gendron teaches the importance of the other layers in achieving air flow. And, finally, the combination of Gendron, Suzuki, and Spitalnick also fails for the same reasons articulated above in Parts III.E.1 and 2.

4. Grounds 4–6: Each Of Kawai, Wyon, And Trotman In View Of Gendron, Suzuki, Spitalnick, And Larsson

For Grounds 4–6, which challenge Claims 4 and 5, Petitioner adds yet another reference to its proposed combinations. To its initial four-reference combinations — each of Kawai, Wyon, and Trotman combined with Gendron, Suzuki, and Spitalnick — Petitioner adds a fifth: Larsson. Pet. at 44–47. Petitioner once again provides no evidence that a person of ordinary skill would have had a reason or reasonable expectation of success in making these five-reference combinations. Petitioner instead provides yet another conclusory assertion that the combinations would have been obvious because all of these references "related to ventilation, cooling, and/or heating of an automobile seat" and the combinations "amount[ ] to use of a known technique to improve a similar device in a similar way." Pet. at 44 (Ground 4), 45 (Ground 5), 46 (Ground 6). Once again, this unsupported mantra cannot justify an *inter partes* review.

In addition to the issues already discussed with respect to Petitioner's combinations involving Kawai, Wyon, Trotman, Gendron, Suzuki, and Spitalnick (*see supra* Parts III.E.1–3), Petitioner fails to explain how and why a person of ordinary skill would join Larsson despite the apparent technical differences described in that reference. For example, Larsson teaches a ventilating device incorporating a separate suction device for generating negative pressure within the

insert covering (Ex. 1009 at col. 1, l. 43–col. 2, l. 16), while Gendron, as discussed above in Part II.B.4, teaches leveraging a car's pre-existing *ventilation system* to *blow* air past the occupant (Ex. 1005 at col. 1, ll. 16–20, col. 3, ll. 15–22). Suzuki, meanwhile, relies on a separate *fan* rather than the car's ventilation system to blow air past the occupant. Ex. 1006 at col. 1, ll. 45–54, col. 3, ll. 15–30. Petitioner fails to show that a person of ordinary skill would be motivated and have a reasonable expectation of success in combining these various alleged prior-art references despite their technical differences.

5. Ground 10: Claims 8–12 And Kawai In View Of Wyon And Trotman

For ground 10, Petition proposes a combination of Kawai, Wyon, and Trotman. Pet. at 57. Petitioner's support for this combination is the conclusory attorney argument that it would have been obvious to combine and modify unidentified "similar corresponding features" in these references, and that the combination "amounts to the use of a known technique to improve a similar device in a similar way." *Id.* Here again, an unsupported recitation of a reason to combine is insufficient. *See supra* Part III.E.

Petitioner fails to provide evidence that a person of ordinary skill would have been motivated to make this alleged combination. Nor has Petitioner explained why a person of ordinary skill would have had a reasonable expectation

of success in making the combination. Again, Petitioner fails to account for technical differences between the references, such as the following: (1) Wyon teaches a suction-based device (Ex. 1007 at col. 1, l. 61–col. 2, l. 10, col. 3, ll. 21–24), while Kawai and Trotman rely on blowing (Ex. 1004 at col. 4, l. 64–col. 5, l. 3; Ex. 1008 at col. 1, l. 55–col. 2, l. 3); and (2) Kawai teaches a system that relies on a vehicle's pre-existing air conditioner unit (Ex. 1004 at col. 4, l. 64–col. 5, l. 16), while Wyon relies on an independent suction turbine (Ex. 1007 at col. 3, ll. 21–33) and Trotman relies on an independent blowing unit (Ex. 1008 at col. 1, l. 55–col. 2, l. 3).

F. Petitioner's Asserted Grounds Of Unpatentability Are Redundant

As discussed above, each of Petitioner's Grounds is deficient and fails to meet the required standards. On top of this, many of Petitioner's deficient Grounds are redundant. Petitioner's attempt to unnecessarily increase costs or further obfuscate the deficiencies in its Petition by presenting cumulative grounds should be rejected. *See* 37 C.F.R. § 42.108(a).

Grounds 1–3, for example, rely on different primary references (Kawai, Wyon, and Trotman) without pointing to any difference in the references' teachings that would justify multiple bases for an *inter partes* review. To the contrary, Petitioner suggests that each of Kawai, Wyon, and Trotman similarly show all features of challenged Claims 1–3, 6, and 7 except for the cross-sectional

area of the holes in the top portion of the chamber. Pet. at 14–15 (Ground 1), 24 (Ground 2), and 34 (Ground 3). Petitioner then relies on the same three secondary references (Gendron, Suzuki, and Spitalnick) to attempt to address this common shortcoming. *Id*. Petitioner offers no justification in the primary references themselves, or in the alleged combinations, for its redundant Grounds 1–3.

Grounds 4–6, which challenge Claims 4 and 5, merely tack on to the overlapping combinations of Ground 1–3 the same additional secondary Larsson reference. Pet. at 44 (Ground 4), 45 (Ground 5), and 46 (Ground 6). As Grounds 1–3 are redundant, merely adding the same secondary reference to each ground does not escape the redundancy of Grounds 4–6. Here again, Petitioner fails to offer any explanation based on the references or their alleged combination why Grounds 4-6 should not be stricken as redundant.

Finally, in Grounds 7–9, Petitioner similarly presents Kawai, Wyon, and Trotman without any material differences to justify multiple grounds to challenge Claims 8–12. Pet. at 47–50 (Ground 7), 50–53 (Ground 8), and 53–57 (Ground 9). There is no explanation from Petitioner for this bald redundancy, and Petitioner's piling-on should be rejected.

IV. CONCLUSION

For the above reasons, Patent Owner respectfully requests that the Board deny in its entirety the Petition for *Inter Partes* Review of the '129 patent.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: July 29, 2014

By: /Jared C. Bunker/

Stephen C. Jensen, Reg. No. 35,556
Jared C. Bunker, Reg. No. 58,474

Eric M. Dobrusin, Reg. No. 33,867
Daniel Aleksynas, Reg. No. 62,551

Email: BoxGentherm@knobbe.com
Attorneys for Patent Owner
Gentherm GmbH

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of **PATENT OWNER GENTHERM GMBH'S PRELIMINARY RESPONSE** is being served on July 29, 2014, via email pursuant to 37 C.F.R. § 42.6(e) per agreement of the parties, to counsel for IGB Automotive Ltd. and I.G. BAUERHIN GmbH, at the addresses below:

Christopher Fildes
Jeremy Gajewski
fildespat@teleweb.net
Fildes & Outland, P.C.
20916 Mack Avenue, Suite 2
Gross Pointe Woods, Mich. 48236
(313) 885-1500

Dated: July 29, 2014

/Jared C. Bunker/
Stephen C. Jensen, Reg. No. 35,556
Jared C. Bunker, Reg. No. 58,474

Eric M. Dobrusin, Reg. No. 33,867
Daniel Aleksynas, Reg. No. 62,551

Attorney for Patent Owner
Gentherm GmbH

18276717