

Filed: January 9, 2015

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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'S RESPONSE TO
PETITION FOR *INTER PARTES* REVIEW**

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I. INTRODUCTION

Petitioner cannot satisfy its burden of proving the challenged '129 patent claims unpatentable. Petitioner acknowledges that Wyon, its primary reference, fails to teach a vehicle seat assembly with the claimed hole pattern. And Wyon's device relies on suction pressure to deliver air rather than the positive pressure required by the challenged claims.

One of ordinary skill would have had no reasoned motivation to modify Wyon to arrive at the claimed inventions. Nor would this artisan have had a reasonable expectation of successfully doing so. Wyon teaches that suction pressure and its uniformly sized holes are critical for achieving equally distributed air pressure — one of Wyon's primary goals. Wyon thus discourages and leads away one of ordinary skill from incorporating the variable hole pattern and positive pressure taught in Spitalnick, Petitioner's secondary reference.

Testimony from James G. Rice, Ph.D. Mechanical Engineering, establishes the proper level of ordinary skill in the relevant art and confirms that Wyon teaches one of ordinary skill away from Spitalnick and the claimed inventions. Petitioner, in contrast, provides no evidence to support its contention that Wyon and Spitalnick can be combined to arrive at the claimed inventions. Petitioner's attorney argument is not evidence and cannot satisfy Petitioner's burden of proving

by a preponderance of the evidence that the challenged '129 patent claims are unpatentable.

II. BACKGROUND

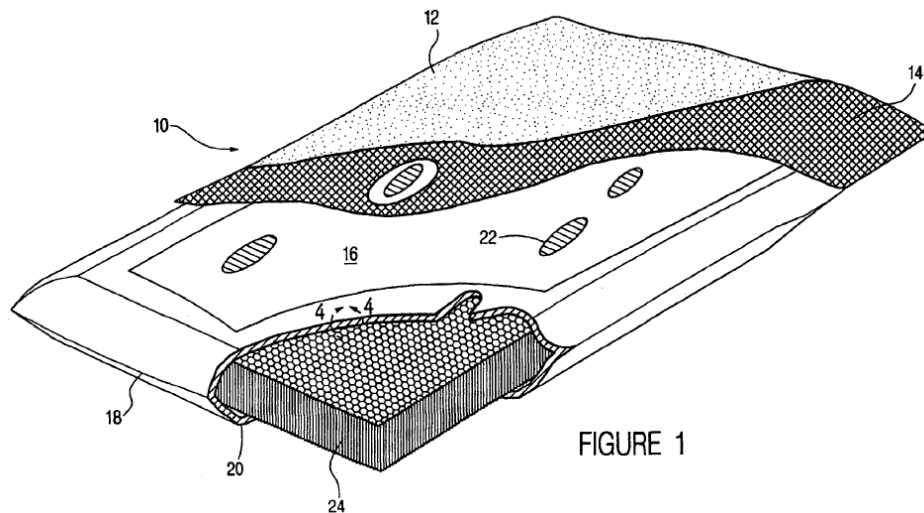
A. The Challenged Patent

U.S. Patent No. 7,229,129 (“the '129 patent”) issued on June 12, 2007, from an application filed October 26, 2005, and claims priority to a January 5, 2001 application. Ex. 1001 at Cover. The '129 patent describes a ventilated vehicle seat assembly for delivering conditioned air to a seat occupant. *Id.* at Abstract. The seat assemblies may include a bag inserted below the seat’s trim. *Id.* at col. 2, ll. 16–30. The bag may include groups of 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 deliver warm or cool air to the occupant. *Id.* at col. 1, ll. 30–37.

Claims 1–7 of the '129 patent are challenged in this proceeding. These challenged claims recite a device that uses positive pressure to blow air to a chamber. *Id.* at col. 5, ll. 45–50. The chamber includes an internal spacer. The chamber’s surface includes a specific hole pattern, which is used to uniformly distribute air to the occupant. *Id.* at col. 4, ll. 54–57, col. 5, l. 47–col. 6, l. 4. The claimed hole pattern requires multiple groups of holes defined by distance from a

chamber opening, with the total surface area of each group increasing the farther each group is from the opening. *Id.* at col. 5, l. 52–col. 6, l. 4.

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



Bag 18 includes groups of holes 22 and surrounds spacer 24. *Id.* at col. 4, ll. 5–26.

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:

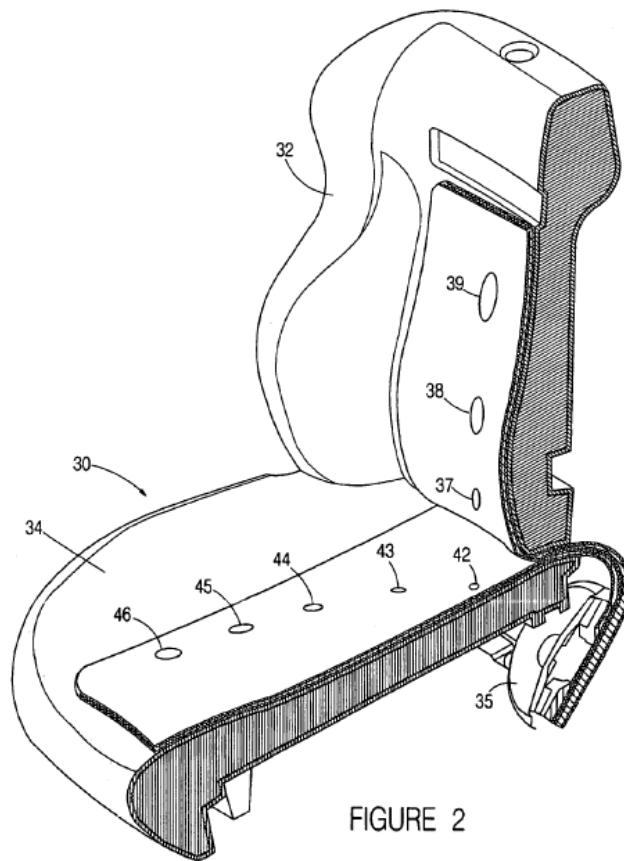


FIGURE 2

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 are formed into groups. *Id.* at col. 4, ll. 51–57; col. 5, l. 52–col. 6, l. 4. These groups of holes extend in a spaced relationship toward the front of the bag and grow gradually larger. *Id.* at col. 4, ll. 51–57. The total surface area of the groups of holes increases as the distance from the chamber opening increases. *Id.* at col. 5, l. 52–col. 6, l. 4. This hole pattern and air delivery arrangement contributes to a uniform air flow distribution and delivery to an occupant. *Id.* at col. 4, ll. 54–57.

In addition to providing a uniform distribution of air flow, the '129 patent's seat assemblies require minimal duct work and thus reduce costs by simplifying 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. 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 describes a ventilated seat. *Id.* at Abstract, col. 1, ll. 5–8.

Wyon's purpose is to avoid occupant discomfort caused by thermal insulation of the chair. *Id.* at col. 1, ll. 5–8. To that end, it teaches a device that uses suction to draw air past an occupant and into the seat. *Id.* at col. 1, ll. 61–67. To provide uniform air flow, Wyon teaches coupling the suction pressure with a device surface that contains uniform hole sizes. *Id.* at col. 3, ll. 2–5, 50–54. Figure 1 from Wyon is reproduced below:

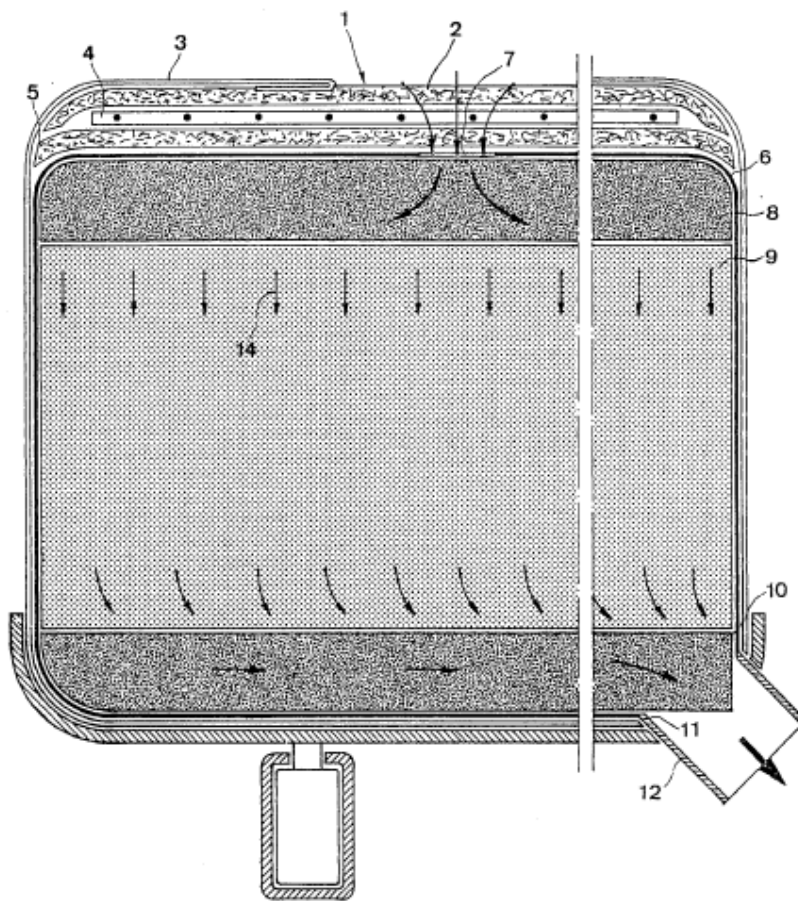


Fig. 1

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 that is tightly bearing under tension, enclosing layers 8 and 10 of fibrous material (*e.g.*, horsehair) and porous body 9 of foamed plastic. *Id.* at col. 3, ll. 8–15, 22–29. Bag 6 is perforated by a number of equally-sized holes 7. *Id.* at col. 3, ll. 2–5. Bag 6 and its contents form a “suction-equalizing device.” *Id.* at col. 3, ll. 50–54. Bag 6

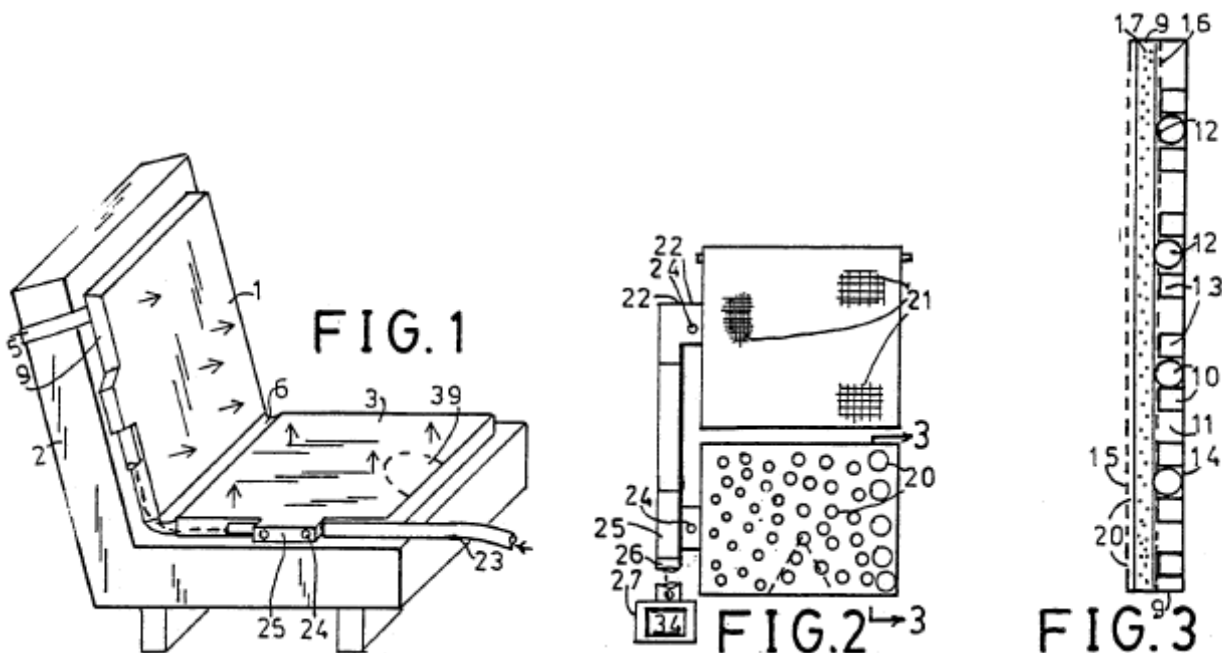
is attached to tube 12, which is connected to the negative pressure side of a suction turbine. *Id.* at col. 2, l. 46–col. 3, l. 20.

Wyon’s ventilation device is designed to suck air past the occupant, through the bag, and eventually out through the tube 12. *Id.* at col. 3, ll. 21–39. It incorporates support surfaces that can absorb the sweat and moisture pulled into the device. *Id.* at col. 2, ll. 4–9. 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.

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

Spitalnick issued in March 1991 from an application filed in January 1990. Ex. 1014 at 1. Spitalnick describes an air conditioned seat cover. *Id.* at col. 1, ll. 4–8.

Spitalnick’s device relies on a car’s air conditioning unit to force air up through the cover and toward the occupant. *Id.* at col. 1, l. 65–col. 2, l. 3. To attempt uniform air flow, Spitalnick combines a positive pressure delivery system with a panel of “variable perforations” and “non-uniform” permeability. *Id.* at col. 2, ll. 54–58. Figures 1, 2, and 3 from Spitalnick are reproduced below:



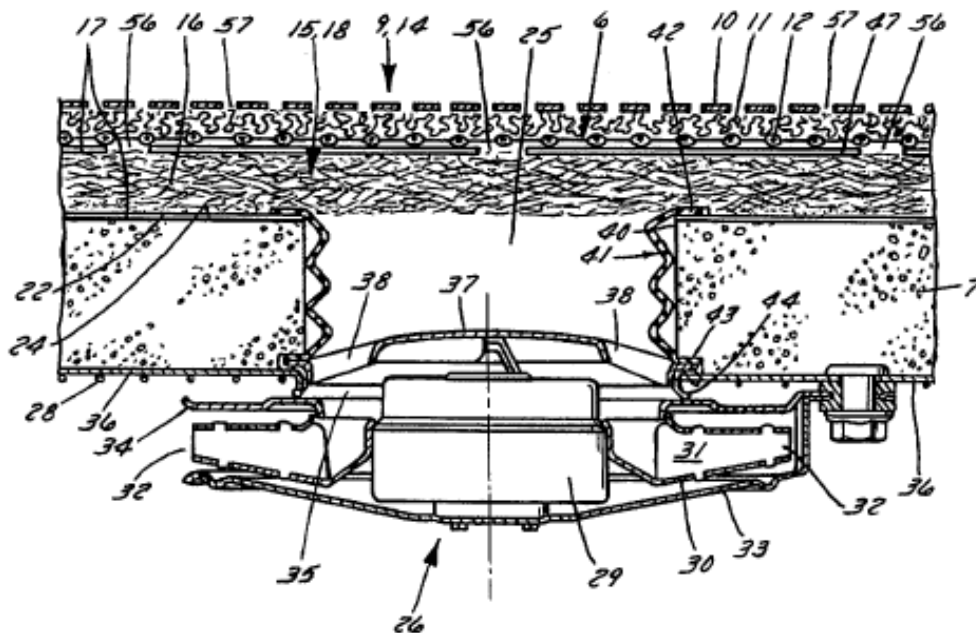
First segment 1 covers back rest 2, while second segment 3 covers seat cushion 4. *Id.* at col. 2, ll. 33–37. Ducts 23 and 26 connect the conditioned cover to the air conditioning unit of the vehicle. *Id.* at col. 2, ll. 45–68. The conditioned mat includes spacer means 10 and front panel 15. *Id.* Spitalnick teaches that to achieve equal air flow 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.*

3. 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 describes a device for ventilating a chair. *Id.* at col. 1, ll. 7–24.

Larsson teaches a device that uses suction to draw air past an occupant and into the seat. *Id.* at col. 1, ll. 15–21. To provide uniform air flow, it incorporates uniformly-sized and spaced internal suction openings and uniformly-sized outer surface holes. *Id.* at col. 1, l. 65–col. 2, l. 4; col. 2, ll. 63–65; col. 6, l. 58–col. 7, l. 9. 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. 8–39. During operation, suction device 26 draws in surrounding air, creating negative pressure at the surface of the insert, which in turn draws air past the occupant and down through the insert. *Id.* at col. 6, l. 58–col. 7, l. 9.

C. James G. Rice, Ph.D.

In support of its Patent Owner Response, Gentherm submits the expert testimony of James G. Rice, Ph.D. Dr. Rice holds Bachelors, Masters, and Ph.D. degrees in mechanical engineering. Ex. 2001 ¶¶ 4. He has over 30 years of professional experience in mechanical engineering design and analysis in both academic and industrial environments. *Id.* Dr. Rice has worked as a consultant or advisor for over 30 companies, including Ford Motor Company, Boeing Aircraft, General Motors, and Siemens. *Id.* In addition, he has authored or co-authored over 30 publications and numerous consulting reports. *Id.*

Dr. Rice has extensive educational and professional experience in fluid dynamics, thermodynamics, and materials, which are relevant to the design and engineering of mechanical equipment, such as climate-control systems. *Id.* ¶ 5. A major portion of Dr. Rice's professional experience has involved engineering projects to design and develop a wide variety of consumer and commercial mechanical systems and components, such as consumer heating systems, automobile parts, and accessories. *Id.* ¶¶ 5, 34.

III. ARGUMENT**A. Level of Ordinary Skill in the Art**

Establishing the proper level of ordinary skill is a fundamental step in assessing patentability. 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 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. In a given case, not all factors may be present and one or more may predominate. *Id.* “The important consideration lies in the need to adhere to the statute, *i.e.*, to hold that an invention would or would not have been obvious, as a whole, when it was made, to a person of ‘ordinary skill in the art’—not to the judge, or to a layman, or to those skilled in remote arts, or to geniuses in the art at hand.” *Envtl. Designs, Ltd. v. Union Oil Co. of Cal.*, 713 F.2d 693, 697 (Fed. Cir. 1983).

Here, the relevant art relates to heating and cooling systems for vehicle seats. Ex. 2001 ¶ 34. As explained by Dr. Rice, the level of ordinary skill in the art includes the following educational and professional experience:

- Vocational training in mechanical or electrical engineering or related field plus 3-4 years of experience designing consumer heating, cooling, or ventilation systems; or
- A B.S. in mechanical or electrical engineering or related field, plus 1-2 years of experience designing consumer heating, cooling, or ventilation systems.

Id. ¶ 33.

In arriving at the above level of ordinary skill, Dr. Rice considered the type of problems encountered in developing climate-control systems for vehicle seats, including efficiently and safely delivering conditioned air to an automobile occupant. *Id.* ¶ 34. He also considered that the technology of heating, cooling, and ventilating automobile seats is somewhat sophisticated but not excessively sophisticated compared to other industrial arts. *Id.* Finally, Dr. Rice considered the educational and professional experience level of engineers and technicians in the field. *Id.*

B. Construction Of The Claim Term “Spacer”

The Board construes claim terms 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).

The Board noted in its Decision – Institution of *Inter Partes* Review (Paper 7) at page 8 that none of its initial determinations required an express claim construction. Patent Owner respectfully submits that Patent Owner’s formal response to Petitioner’s challenge similarly requires no express claim constructions by the Board. Nevertheless, out of an abundance of caution, Patent Owner responds to Petitioner’s proposed construction of one claim term: “spacer.”

Petitioner asserts that the claim term “spacer” should be open-ended and “include ‘a material that is intermediate of a top and bottom portion.’” Petition at 12. Petitioner proposes no limit on the material’s composition or function. This construction, however, is overly broad and does not reflect how an ordinary artisan would understand “spacer” in view of the ’129 patent specification and file history.

The ’129 patent teaches that the “spacer” is not just any material, but a material or layer that maintains air space and air flow between two layers or

objects. The '129 patent specification teaches that, “the spacer material is sufficiently stiff to avoid blockage of air flow when the seat is occupied, even by heavy occupants.” Ex. 1001 at col. 2, ll. 21–28. The specification later describes the spacer as creating “air space” (*id.* at col. 2, ll. 37–38) and as including various materials “so long as air flow is permitted to occur in any direction . . . within the spacer material itself” (*id.* at col. 3, ll. 52–56).

Dr. Rice confirms that a person of ordinary skill would thus understand the claim term “spacer” in the context of the '129 patent as meaning “a material or layer that maintains space and allows air flow between two layers or objects.” Ex. 2001 ¶¶ 36–39. Patent Owner respectfully submits that this is the proper construction of the term and that it is consistent with the specification and the file history. *See id.*; Ex. 2003.

C. The Challenged Claims Are Patentable Over Wyon, Spitalnick, and Larsson

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); 35 U.S.C. § 316(e). 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.

Further, “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR*, 550 U.S. at 416 (citing *United States v. Adams*, 383 U.S. 39, 51–52 (1966)). That is, an invention is likely nonobvious where one of ordinary skill would be discouraged or led away from the claimed invention. *In re Omeprazole Patent Litig.*, 536 F.3d 1361, 1380 (Fed. Cir. 2008); *Ortho-McNeil Pharm. Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1365 (Fed. Cir. 2008); *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009).

1. Wyon Fails To Teach The Claimed Positive Air Pressure And Hole Pattern

Petitioner fails to show that Wyon teaches two key limitations required by Claims 1–7. First, Wyon does not teach positive air pressure or blowing forced air. Challenged claim 1 recites “a generally enclosed chamber . . . including an opening *for receiving air from the air mover . . .*” Ex. 1001 at col. 5, ll. 45–50 (emphasis added). This limitation indicates a *positive* pressure system that *blows* air from the

opening, through the chamber, and out the plurality of holes at the top of the chamber. *Id.* In contrast, Wyon teaches “a *suction* device capable of producing a *negative* air pressure connected to the opening.” Ex. 1007 at Abstract (emphasis added).

Second, Wyon does not teach the hole pattern required by the disputed claims: “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” Ex. 1001 at col. 5, l. 55–col. 6, l. 4. Instead, Wyon teaches a device surface that contains uniform hole sizes. Ex. 1007 at col. 3, ll. 2–5, 50–54. Petitioner acknowledges that Wyon fails to teach the claimed hole pattern. Petition at 24.

2. One Of Ordinary Skill Would Have Had No Reasoned Motivation Nor Reasonable Expectation of Successfully Combining Wyon and Spitalnick To Arrive At The Challenged Claims

Petitioner fails to meet its burden of proving by a preponderance of the evidence that it would have been obvious to modify Wyon in view of Spitalnick to arrive at the challenged claims. One of ordinary skill would have had no reasoned motivation to combine Wyon with Spitalnick, nor any reasonable expectation of successfully doing so. In fact, Wyon discourages and leads away an ordinary artisan from Spitalnick’s disclosure.

Wyon teaches that a critical part of its cooling device is negative air pressure or suction. The cooling effect, according to Wyon, is “dependent on the . . . suction effect utilized [by] the suction device in use.” Ex. 1007 at col. 2, ll. 2–4. The suction pressure makes it possible to pull air past the occupant, “cooling them in a comfortable way and keeping them dry.” *Id.* at col. 1, ll. 61–67. Negative pressure is so important, in fact, that Wyon relies on it despite the resulting need to incorporate materials that can absorb the sweat and moisture pulled into the device during operation. *Id.* at col. 2, ll. 4–9. Positive air pressure would not require these features. And even when eschewing limitations and highlighting the potential for alternative designs for its device, Wyon restricts the potential replacements to other *suction* devices. *Id.* at col. 4, ll. 50–56. Thus, Wyon leads one of ordinary skill to maintain negative pressure or suction and discourages a change to positive pressure or blowing. Ex. 2001 ¶¶ 52–58; *see In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) (finding no motivation to flip the orientation of a reference to arrive at the claimed invention where the reference relied on gravity).

Wyon also teaches away from incorporating Spitalnick’s positive pressure because doing so would render Wyon inoperable. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1354 (Fed. Cir. 2001) (“If references taken in combination would produce a ‘seemingly inoperative device,’ . . . such references teach away from the combination and thus cannot serve as predicates for a prima facie case of

obviousness.”); *see also In re Gordon*, 733 F.2d at 902 (holding that a prior art gasoline filter taught away from being flipped to arrive at the claimed invention where doing so would cause gasoline to be trapped instead of filtered, water to flow out of the device, and clogs to develop). Wyon’s layers, for example, are selected and arranged to rely on negative pressure. Ex. 2001 ¶¶ 56–57. Wyon’s negative pressure chamber is sealed by a “sheet rubber material [that] is tightly bearing under tension” Ex. 1007 at col. 3, ll. 24–29. While negative pressure works to reinforce that seal under tension, positive pressure would work against the seal and render it susceptible to leaking. Ex. 2001 ¶ 57. Thus, incorporating positive pressure, as taught in Spitalnick, would render the Wyon device inoperable for its intended purpose of providing effective air flow. *See id.*

A similar situation was addressed in Final Written Decision (Paper 44), *Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*, Nos. IPR2013-00132, IPR2013-00584 (P.T.A.B. July 24, 2014). There, the claimed device transferred stranded material from one package to another on the same side of a frame. *Id.* at 16. To satisfy the claimed same-side transfer limitation, the petitioner proposed replacing the *single* bobbin taught in a prior-art reference with a *pair* of bobbins, as shown in a secondary reference. *Id.* at 18. The Board found, however, that replacing the primary reference’s single bobbin with a pair of bobbins would result in tangling, and the process would have to stop. *Id.* at 19. The Board thus held

that the proposed combination was inoperable and upheld the patentability of the claimed invention. *Id.* at 19–21.

Another reason one of ordinary skill would not be motivated to modify Wyon to incorporate Spitalnick’s positive pressure is because this artisan would understand that Spitalnick’s blowing was incorporated not as an improvement but as a means of making the Spitalnick’s device portable. Ex. 2001 ¶ 55. Spitalnick discloses “a means for cooling and heating the seat of a vehicle that is *portable . . .*” Ex. 1014 at col. 1, ll. 39–45 (emphasis added). Spitalnick’s use of an existing air conditioning system to circulate forced air, instead of adding a separate device to provide suction, furthers its portability objective. Ex. 2001 ¶ 55. In light of Wyon’s emphasis on suction, one of ordinary skill would not view Spitalnick’s use of forced air as an improvement. Instead, it would be viewed as a trade-off in exchange for portability. *Id.*

Similarly, a skilled artisan would have no motivation to modify Wyon’s hole pattern in view of Spitalnick. Petitioner alleges only one source of motivation to combine these references — that Spitalnick teaches an “improvement” that ensures equal air flow by incorporating perforations that are non-uniform or variable. Petition at 30. But Wyon’s device already provides equal air flow. *See, e.g.*, Ex. 1007 at col. 3, ll. 33–39. Thus, Petitioner’s alleged “improvement” is illusory.

In fact, Wyon discourages and leads an ordinary artisan away from modifying Wyon's hole pattern in view of Spitalnick. Wyon emphasizes multiple times that combining negative air pressure with regularly placed holes of the *same size* (about 20 mm) (*id.* at col. 3, ll. 2–5), evenly distributes the pressure and generates an equal suction effect at each hole:

- Wyon's device "create[s] a negative air pressure substantially evenly distributed over the upper side of the [device]." *Id.* at col. 3, ll. 33–36;
- "This evenly distributed negative air pressure provides substantially the same suction effect at each of the holes" *Id.* at col. 3, ll. 33–39;
- "The suction-equalizing arrangement . . . produces air stream evenly distributed over the relevant surfaces" *Id.* at col. 3, ll. 65–67.

Wyon's repeated announcement of achieving uniform pressure distribution with same-sized holes deters one of skill from incorporating Spitalnick's variable perforations. Ex. 2001 ¶ 50.

Further, an ordinary artisan would understand from Wyon's disclosure that incorporating variable perforations jeopardizes the uniform air pressure distribution that is a critical part of Wyon's device. *Id.* at ¶¶ 59–61. As noted above, Wyon's "evenly distributed negative air pressure provides substantially the

same suction effect at each of the holes” Ex. 1007 at col. 3, ll. 33–39. While same-sized holes distribute an equal amount of this uniform air flow, varying the size of the holes or hole pattern would vary that distribution. Ex. 2001 ¶ 60. Again, as in *Shaw*, incorporating variable perforations into Wyon’s ventilated chair would render the device inoperable for its intended purpose of providing uniform air flow. *See Shaw Indus.*, Nos. IPR2013-00132, IPR2013-00584, Paper 44 at 19–21 (Final Written Decision). Being led away from Spitalnick and the claimed inventions, an ordinary artisan would see neither a reasoned motivation to combine nor a likelihood of success in combining Wyon and Spitalnick, as Petitioner contends. *See* Ex. 2001 ¶ 61.

Larsson also supports the conclusion that an ordinary artisan would understand that suction combined with homogenous hole size leads to uniform pressure distribution. Like Wyon, Larsson discloses a device that relies on suction to draw air past an occupant and into a seat cushion. Ex. 1009 at col. 1, ll. 15–21. Larsson also teaches incorporating internal suction openings of the same size (diameter about 10 mm), arranged in a regular pattern, and outer surface holes of about the same size (diameter 1–2 mm), achieving an even distribution of negative pressure and air flow through the surface. *Id.* at col. 1, l. 65–col. 2, l. 4; col. 2, ll. 63–65; col. 6, l. 58–col. 7, l. 9. Larsson is further evidence that an ordinary artisan would be dissuaded from arriving at the claimed invention by modifying the

suction pressure and uniform hole pattern that are critical to Wyon. *See* Ex. 2001 ¶¶ 62–63.

Also telling is Larsson’s failure to incorporate a non-uniform or variable hole pattern despite Spitalnick being available to the public several years before Larsson was filed. Spitalnick issued and was available to the public in March 1991. Ex. 1014 at Cover. Larsson was apparently originally filed over four years later in September 1995. Ex. 1009 at Cover. If, as Petitioner contends, it would have been obvious to one of ordinary skill to modify a uniformly sized hole pattern, like Wyon, to incorporate variable hole sizes or patterns, like Spitalnick, Larsson would reasonably be expected to incorporate the same approach. But it did not. The time lapse between Spitalnick and Larsson thus further supports the nonobviousness of the challenged claims. *Leo Pharm. Prods. Ltd. v. Rea*, 726 F.3d 1346, 107 U.S.P.Q. 2d 1943, 1951–52 (Fed. Cir. 2013).

Petitioner has failed to present evidence sufficient to satisfy its burden of proving that challenged Claims 1–7 are unpatentable based on Wyon, Spitalnick, and Larsson. In contrast, the evidence shows that Wyon teaches away from Spitalnick and the claimed inventions. A person of ordinary skill would thus have no reasoned motivation nor reasonable expectation of successfully modifying Wyon in view of the asserted prior art.

IV. CONCLUSION

For the foregoing reasons, Gentherm respectfully requests that the Board find that Petitioner has failed to meet its burden of proving that (1) Claims 1–3, 6, and 7 are unpatentable as obvious over Wyon and Spitalnick and (2) Claims 4 and 5 are unpatentable as obvious over Wyon, Spitalnick, and Larsson.

Respectfully submitted,

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Dated: January 9, 2015

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of **PATENT OWNER'S RESPONSE TO PETITION FOR INTER PARTES REVIEW** is being served on January 9, 2015, 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:

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