Inter Partes Review of U.S. Patent No. 7,229,129 IPR2014-00666

1

IGB Automotive Ltd. and I.G. Bauerhin GmbH, Petitioner

v.

Gentherm GmbH, Patent Owner

PETITIONER'S DEMONSTRATIVES

June 9, 2015 Oral Argument

Issues to be Argued

- Obviousness of claims 1 – 3, 6, and 7
  - Claims 1-3, 6, and 7 are unpatentable over Wyon in view of Spitalnick
- Obviousness of claims 4 and 5
  - Claims 4 and 5 are unpatentable over Wyon and Spitalnick in further view of Larsson

The ‘129 Patent – Independent Claim 1

1. A ventilated seat assembly for use with an air mover comprising:
a seat having a seat base and a backrest, at least one of the seat base and the backrest comprising:
a cushion;
a trim cover;
a generally enclosed chamber formed by a top portion and an air-impermeable bottom portion and including an opening for receiving air from the air mover, the top portion of the chamber including a plurality of holes configured to provide air movement through the chamber; and
a spacer located within the chamber;
wherein 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, 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.

a generally enclosed chamber formed by a top portion and an air-impermeable bottom portion and including <u>an opening for receiving air from the air mover</u>

Ex. 1001: col. 5, l. 39-col. 6, l. 4

Wyon

'129 Patent – Claim 1	Wyon(Ex. 1007)
"a generally enclosed chamber formed by a top portion and an air-impermeable bottom portion and including an opening for receiving air from the air mover" Ex. 1001: col. 5, ll. 45-47.	"A preferably flexible tube 12 is connected to an opening 11 in the bag 6 and is also connected to the negative pressure side of a suction turbine 13." Petition (Paper 1) at 26, citing Ex. 1007: col. 3, ll. 1-11, 14-20, 29-30; FIGS. 1, 2.

Wyon

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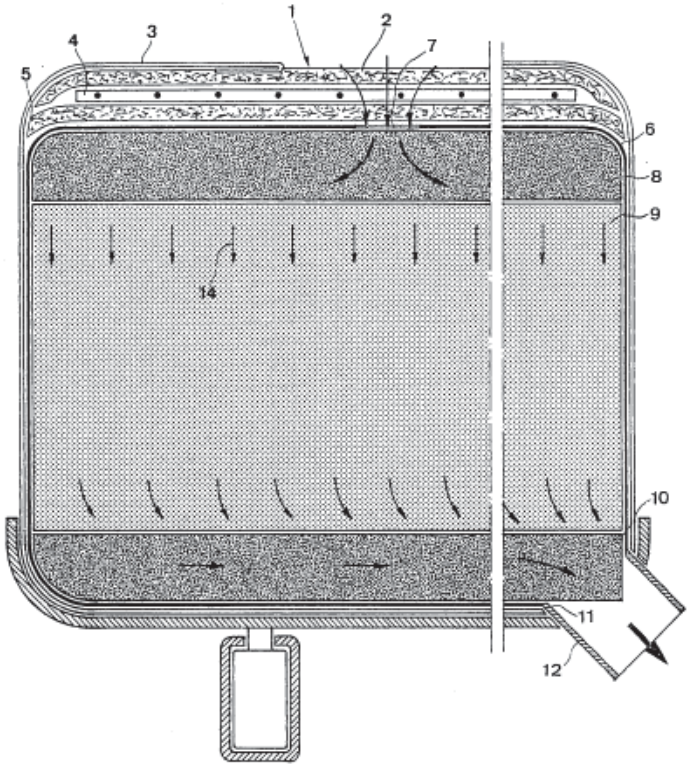

FIG 1

Ex. 1007 (Wyon): FIG. 1

"an opening for receiving air from the air mover"

- "[T]he recitation "a generally enclosed chamber . . . including an opening for receiving air from the air mover" in claim 1 only positively requires that the generally enclosed chamber have an opening. The opening 11 in the bag 6 of Wyon is such an opening. The recitation 'for receiving air from the air mover' focused on by Patent Owner is merely an intended use." Petitioner's Reply (Paper 17) at 1.

"an opening for receiving air from the air mover"

- "Dr. Rice admitted at his deposition that he had not construed the term 'an opening for receiving air from the air mover' in his expert report and had only provided a claim construction of the term 'spacer.'" Petitioner's Reply (Paper 17) at 2, citing Ex. 1015 at 121:23-122:2.

Q Earlier you testified that the only claim construction that you provided an opinion on was with respect to the term "spacer." Is that still to be the case?
A Yes.

Ex. 1015 (Deposition of Dr. Rice) at 121:23-122:2.

"an opening for receiving air from the air mover"

- "Patent Owner's expert, Dr. Rice, admitted at his deposition that the phrase 'for receiving air from the air mover' describes the function of the opening." Petitioner's Reply (Paper 17) at 1, citing Ex. 1015 at 127:8-14.

Q This language, "an opening for receiving air from the air mover," would you agree that for receiving air from the air mover, that that's functional language?
A Yes, that describes the function of the opening, yes, but it also -- you know, the claim also defines the structure.
Q And what is it you believe is the structure?
A The opening.
Q And the opening is illustrated as element 49 in Figure 3, right?
A That's correct.

Ex. 1015 (Deposition of Dr. Rice) at 127:8-11, 13-23.

“an opening for receiving air from the air mover”

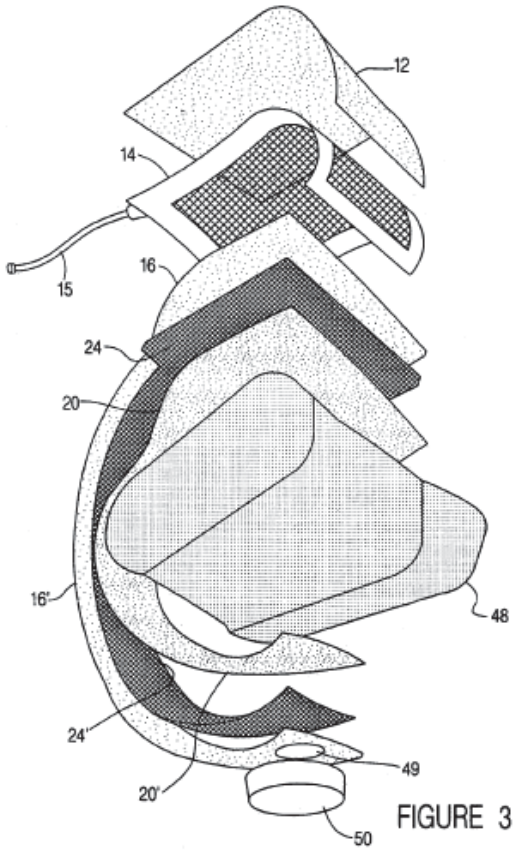

FIGURE 3

Ex. 1001 (The ‘129 patent): FIG. 3

"an opening for receiving air from the air mover"

- "Dr. Rice has also admitted that the opening described in the '129 patent would receive air in either a pressure mode or a suction mode." Petitioner's Reply (Paper 17) at 3, citing Ex. 1015 at 143:22-144:9.

Q -- in Figure 3. Is it fair to say that, you know, with this opening 49, that the opening 49 will receive air when the fan 50 is a pressurized fan, a positive flow fan?
A Correct.
Q And would you also agree that it's fair to say that 49, hole 49, if 50 is a suction mode fan, 49 also would receive air?
A But not from the air mover.
Q We'll get to that. You will agree that the opening will receive air?
A The opening itself will receive air, yes, either way, from suction or pressure mode.

Ex. 1015 (Deposition of Dr. Rice) at 143:22-144:9.

"an opening for receiving air from the air mover"

- "Dr. Rice admitted that the specification of the '129 patent discloses that the direction of the air movement provided by the fan may be reversed, and that the specification is not limited to a pressurized mode." Petitioner's Reply (Paper 17) at 3, citing Ex. 1015 at 129:14-19; 131:8-23.

"an opening for receiving air from the air mover"

"In addition, known ventilated seating can include flow control to increase or decrease total air flow, as well as direction . . ."

* * *

"If the air movement system is in a suction mode, air is drawn through the holes, into the spacer material and out of the bag. In a pressurization mode, air is forced into the bag and outwardly through the holes."

* * *

"It can also be mentioned again here that the speed and direction of air movement can be controlled by a separate controller coupled to the air mover 50 or by using the fan speed and temperature controls of the vehicle. If a fan 50 is used which is not directly coupled to the vehicle's air conditioning system, it is preferred that the fan be reversible to operate in a pressurizing or suction mode and that the fan be multi-speed, i.e., having at least low, medium and high settings."

Ex. 1001 (The '129 Patent) at col. 1, ll. 35-37; col. 2, ll. 39-43; col. 5, ll. 25-33 (emphasis added).

“an opening for receiving air from the air mover”

Q Okay. In this column 5, lines 29 through 34, it says, "If a fan 50 is used which is not directly coupled to the vehicle's air conditioning system, it is preferred that the fan be reversible to operate in a pressurizing or suction mode and that the fan be multispeed, having at least low, medium and high settings."
A What's the question?
Q The question is: Why would it be preferred to permit the fan to operate in a reversible mode?
A I would assume whoever -- I would assume whoever drafted the patent was looking to just simply broaden the coverage to some extent, but the specification really focuses on the use of the patent in a pressurized mode, and as I said earlier, it does mention that the fan could be reversible, but claims 1 through 7 only deal with the pressurized mode.
Q But you don't dispute that the language that we just read into the record says that it's actually preferred that the fan be reversible?
A I don't disagree with what it says, no.

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Q And you're not aware of anything in the prosecution history that affirmatively would limit claim 1 to what we are calling the pressure mode?
A Well, no, there's no doubt that my opinion is claim 1 limits the operation to the pressure mode, and, of course, that version of claim 1 is scattered throughout the prosecution history.
Q I just want to confirm that you don't have any additional information outside of your report that you're relying upon for your position that claim 1 is limited to what we call the pressure mode.
A That's correct.

Ex. 1015 (Deposition of Dr. Rice) at 128:16-129:19; 131:8-23.

"an opening for receiving air from the air mover"

- "Dr. Rice admitted that Wyon itself mentions that the flow direction may be reversed, thereby reversing the direction of flow through the openings of the Wyon." Petitioner's Reply (Paper 17) at 2, citing Ex. 1015 at 114:6-10; 115:11-20; 116:10-16.

Q And so what does that mean when you say the flow may be reversed?
A That the Wyon device would operate in a pressure mode where the flow is exiting rather than entering the holes 7 shown in Figure 2.

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Q So you don't agree with, you don't agree that the '129 you could have bidirectional flow, and you don't agree that the '220 you could have bidirectional flow?
A What I think in particular is that with the Wyon patent, you would not -- if you follow all of the teachings of the Wyon patent, you would not want to have to reverse that to a pressurized flow.
Q But you could do it?
A You could do it, but you wouldn't want to. The Wyon patent teaches that the suction flow is of extreme benefit.

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Q But it does teach that you could reverse it?
A It states that you could reverse it. It certainly does not teach that the reverse direction would be as beneficial as the suction direction.

Ex. 1015 (Deposition of Dr. Rice) at 114:6-10; 115:6-21; 116:10-16.

The ‘129 Patent – Independent Claim 1

1. A ventilated seat assembly for use with an air mover comprising:

a seat having a seat base and a backrest, at least one of the seat base and the backrest comprising:

a cushion;

a trim cover;

a generally enclosed chamber formed by a top portion and an air-impermeable bottom portion and including an opening for receiving air from the air mover, the top portion of the chamber including a plurality of holes configured to provide air movement through the chamber; and

a spacer located within the chamber;

wherein 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, 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.

wherein 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, 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: col. 5, l. 39-col. 6, l. 4

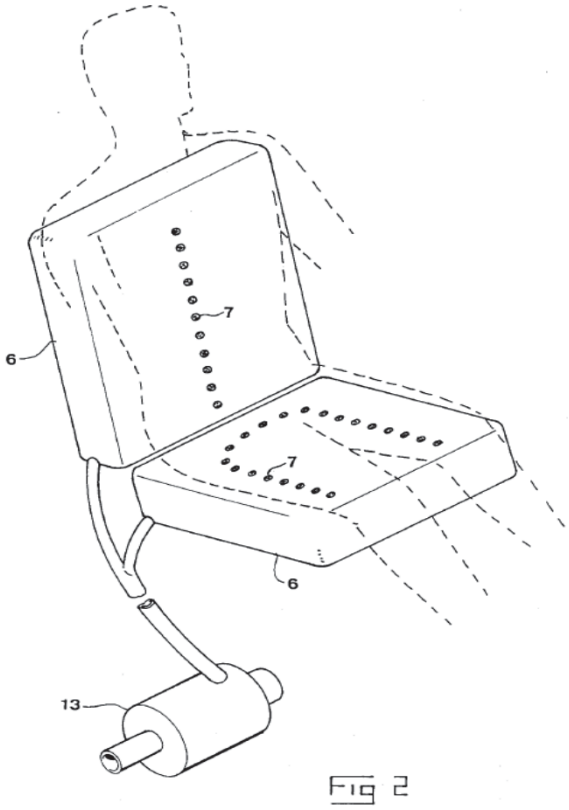
Wyon in view of Spitalnick

'129 Patent – Claim 1	Wyon(Ex. 1007)
"wherein 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, 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: col. 5, l. 52-col. 6, l. 4.	"The holes 7 in the upper surface of the bag 6 of Wyon are arranged in a pattern which substantially corresponds to the shape of the projection on the seat and the backrest of those parts of the body that would normally bear thereupon." Petition (Paper 1) at 26, citing Ex. 1007: col. 3, l. 40 through col. 4, l. 5; FIG. 2.

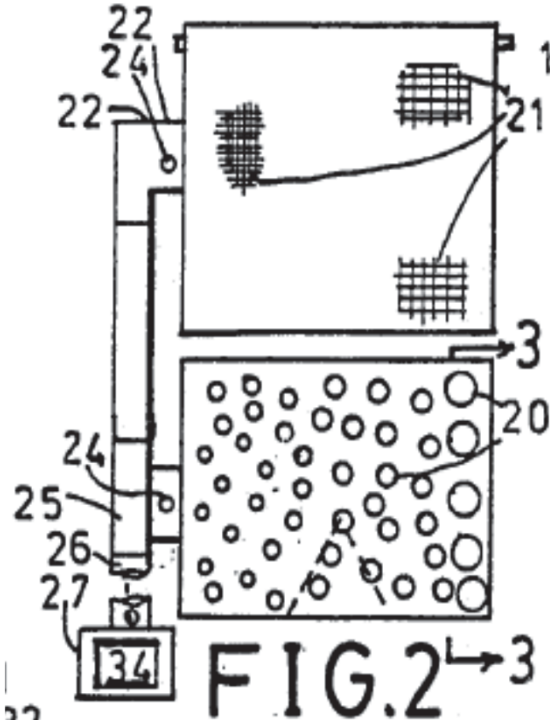
Wyon in view of Spitalnick

'129 Patent – Claim 1	Spitalnick(Ex. 1014)
"wherein 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, 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: col. 5, l. 52-col. 6, l. 4.	"The air permeability of the front panel 15 may be made non-uniform to ensure equal air flow at regions close and far from the air inlet; specifically, the front panel 15 is constructed with reduced air permeability in that area close to the duct connecting means (connections 22, 25 to air duct 23) and increased air permeability in those areas remove from said connecting means to equalize flow of air through the front panel. The non-uniformity may be achieved by variable perforations 20 or a variably woven fabric 21. In the case of variable perforations 20, the groups of perforations 20 closer to the air connection 25 have a smaller total cross-sectional area than groups of perforations 20 farther from the air connection 25, and the total cross-sectional area of the groups increases as the distance from the air connection 25 increases." Petition (Paper 1) at 29-30, citing Ex. 1014: Abstract; col. 2, ll. 33-37, 39-43, 54-58; col. 4, ll. 48-53; FIGS. 1, 2.

Wyon in view of Spitalnick



Ex. 1007 (Wyon): FIG. 2



Ex. 1014 (Spitalnick): FIG. 2

Spitalnick is Combinable with Wyon

- "It would have been obvious to one of ordinary skill in the art at the time of the invention that resulted in the '129 patent to modify the disclosures of Wyon and/or Gendron as taught by Spitalnick, because these references all disclose providing a flow of air to occupant contact areas of a vehicle seat, and Spitalnick teaches an improvement in which the cross-sectional area of the perforations increases as the distance from the air source increases in order to ensure equal air flow at regions close and far from the air source. (Ex. 1014: col. 2, ll. 54-56). (Similarly, the '129 patent itself states that "[t]his size and arrangement of the air holes, with the smaller holes being near the air mover, contributes to a more uniform flow of air from the air mover.") (Ex. 1001: col. 4, ll. 54-57). Wyon, Gendron, Suzuki, and Spitalnick all disclose similar ventilated vehicle seats that provide a flow of air from a supply of air to an upper contact surface of the seat in order to provide sufficient and effective comfort for the seat occupant." Petition (Paper 1) at 30-31.
- "We are also persuaded, on the present record, that IGB is reasonably likely to show that a person of ordinary skill in the art would have had a reason to combine Wyon with Spitalnick, e.g., because doing so amounts to applying a known technique to a known device to yield predictable results." Institution Decision (Paper 7) at 12.
- "The holes 7 in the upper surface of the bag 6 of Wyon are of uniform size (cross-sectional area), and Spitalnick is combined with Wyon to modify the holes 7 so that they have the cross-sectional area arrangement as disclosed in Spitalnick." Petitioner's Reply (Paper 17) at 5, citing Petition (Paper 1) at 24.

Spitalnick is Combinable with Wyon

- "Patent Owner takes the position that one would be discouraged and lead away from combining Spitalnick's hole pattern with Wyon because Wyon teaches that a critical part of its cooling device is negative air pressure or suction, while the device of Spitalnick uses positive pressure." Petitioner's Reply (Paper 17) at 4.
- "Spitalnick is not combined with Wyon to change the direction of air flow from suction to blowing; Wyon may still operate with suction when modified to have the variable hole size as taught by Spitalnick." Petitioner's Reply (Paper 17) at 5.

Spitalnick is Combinable with Wyon

- "Patent Owner also contends that there is a critical difference between seat ventilation devices that utilize suction of air versus seat ventilation devices that utilize blowing of air. However, . . . the '129 patent itself discloses that suction and blowing are interchangeable options." Petitioner's Reply (Paper 17) at 6.

> "If the air movement system is in a suction mode, air is drawn through the holes, into the spacer material and out of the bag. In a pressurization mode, air is forced into the bag and outwardly through the holes. The features of the present invention are also accomplished by altering the hole sizes so that holes nearer the air flow entrance or exit are smaller, thereby equalizing the amount of air which passes through the holes."
>
> Ex. 1001 (The '129 Patent) at col. 2, ll. 39-46.

Spitalnick is Combinable with Wyon

- "In any event, Dr. Rice has admitted that both Wyon and Spitalnick could function with the flow reversed." Petitioner's Reply (Paper 17) at 6, citing Ex. 1015 at 113:21-114:10; 140:9-142:2.

Q All right, and then when we look at Wyon, it's basically the reverse. It's primarily focused on, I think you said emphasized --
A Suction mode.
Q Suction, but that it also has this concept of the reverse?
A It mentions that the flow may be reversed.
Q And so what does that mean when you say the flow may be reversed?
A That the Wyon device would operate in a pressure mode where the flow is exiting rather than entering the holes 7 shown in Figure 2.

Ex. 1015 (Deposition of Dr. Rice) at 113:21-114:10.

Spitalnick is Combinable with Wyon

23

Q Today we talked a lot about what we call the pressure mode and the suction mode. I think it's fair to say in your report that you characterize this as a pressure mode system?
A That's correct, yes.
Q Is it possible that one could use a suction mode on the Spitalnik disclosure?
A Not without rather significant modification.
Q But it's possible?
A Yes.

* * *

Q In order to add a suction mode system, you wouldn't then use the air conditioning system of the vehicle?
A No, not very easily.

* * *

Q So let's set aside the, the air conditioning aspect of this design. What if you were to remove that and put a fan in there that permitted for suction? You could possibly do that?
A Oh, you mean use a separate fan?
Q A separate, yes.
A Yeah.
Q So that probably would be easier to do than modify the air conditioning unit to reverse the flow; is that fair to say?
A Oh, yes, that's true.

Ex. 1015 (Deposition of Dr. Rice) at 140:9-21; 141:5-8; 141:16-142:2.

Spitalnick is Combinable with Wyon

- "Dr. Rice has admitted that . . . the uniform hole size pattern of Wyon may not provide equal flow of air through the holes." Petitioner's Reply (Paper 17) at 6, citing Ex. 1015 at 81:2-82:7.

Q So a larger diameter hole in comparison with the others could do either more or less?
A It's going to have an effect, but you can't simply say one way or the other, but what I would say in general, you're going to skew the flow higher with the larger holes, but if you look at -- let me just give you an example. Say you had all equal size holes here.
Q 46 through had 42 are all the same size?
A Yes.
Q Okay.
A Do you expect to get all equal flow rates? No, because some have a shorter distance to go through, so you generally have, general -- in other words, it's very difficult to try to predict in advance how it's going to go, because I can say that, okay, in general, if a fluid is following a much shorter path through this device, as it approaches the first hole it encounters, it's going to get a higher flow rate at that hole, but that's not always going to be true.
Q Under what conditions would it not be true?
A For some reason it encountered a higher resistance to that flow along that path to that first hole. This is not complicated.

Ex. 1015 (Deposition of Dr. Rice) at 81:2-82:7.

Spitalnick is Combinable with Wyon

- "Dr. Rice has admitted that . . . a non-uniform hole pattern is a good idea for both suction and blowing applications." Petitioner's Reply (Paper 17) at 6, citing Ex. 1015 at 108:7-111:7.

Spitalnick is Combinable with Wyon

Q As we discussed this '129 patent, you said that, you know, it sounds like a good idea to use a variable hole design.
A Yes.
Q And so I'm just, I just want to make sure I understand that, you know, your view, which is "sounds like a good idea," applies, the same principle would apply to the pressure mode and the suction mode. -- Just the general statement that, you know, "sounds like a good idea." That's what I'm looking to make sure I understand. -- Does that make sense?
A Yes.
Q Okay, thanks. I'm not sure if you were saying yes, it doesn't make sense or yes, this, this principle of sounding like a good idea would apply to both the pressurized mode and the suction mode. Can you clarify?
A Yes, that's correct.
Q To make sure it's clear for the record, what are you saying yes to?
A That I think it sounds like a good idea for both the pressure mode and the suction mode.
Q All right. Just one further question on this. Why, why would it be a good idea in your view for both suction and pressure mode? Again, I'm asking a general question.
A Well, in general you're talking about really the same effects. In other words, as I mentioned earlier, when you're looking at fluid flow, it's a path-dependent process. In other words, you have a certain path that you're traveling along from, in one case, from the fan to the hole, and in the other case from the hole to the fan. Is that going to be the same path? Pretty much. So if you're talking about the path effects where it's -- and that shorter path has the smaller hole versus the longer path which has the larger hole, it's going to be the same. It's going to be essentially the same flow, pressure and suction side.

Ex. 1015 (Deposition of Dr. Rice) at 108:7-110:9.

Spitalnick is Combinable with Wyon

- "Dr. Rice has admitted that . . . providing a non-uniform pattern of holes in Wyon may improve flow." Petitioner's Reply (Paper 17) at 6, citing Ex. 1015 at 134:10-137:6.

Spitalnick is Combinable with Wyon

Q What if one were to modify the size of the holes as shown on Figure 2? How will that change the functioning of the overall system? -- And I know we talked a lot about this earlier today, but I just want to hear it as it would apply to this particular embodiment here.
A Let me answer that by referring to what Wyon says about that, and he -- the Wyon patent teaches that with the suction system, it obtains a fairly uniform distribution of flow over the holes without any variation in size.
Q Do you agree with that?
A I think a variation in size would probably help, but, you know, what I mentioned earlier was one of the things that serves to make the flow more uniform is the spacer material. In spite of that, I think the hole distribution could potentially help, but that's not what Wyon teaches. Wyon teaches that you get -- because of the use of the suction system, you get a uniform distribution with the uniform size holes.

* * *

Q What would happen -- I'll do it in layperson's terms. What would happen if you increase the size of the holes as you get further away from the inlet?
A I think it has the potential to further equalize the flow rates in the holes.
Q And why do you believe that?
A Well, we discussed this earlier, and I discussed how the flow must travel along a path from the, from the air moving device to the, to the holes, or in this case from the holes to the air moving device. And as you move further to the holes, more distant from the moving device, the distance it has to travel increases, and I think there would be a tendency to decrease the flow rate as that increase, so the increase in the hole would compensate for that effect.
Q And I might not be quoting you exactly, but earlier you said it could be a good thing.
A Correct.

Ex. 1015 (Deposition of Dr. Rice) at 134:10-135:11; 136:8-137:6.

Spitalnick is Combinable with Wyon

- "Patent Owner contends that one of ordinary skill would have had no motivation to modify Wyon's hole pattern as taught by Spitalnick, because Spitalnick is not an improvement over Wyon." Petitioner's Reply (Paper 17) at 7, citing PO Resp. (Paper 14) at 19.
- "However, despite Wyon's purported belief that its hole pattern arrangement provides the same suction effect at each of the holes (i.e. equal air flow), the disclosures of Spitalnick and the '129 patent itself contradict this belief." Petitioner's Reply (Paper 17) at 7.

> "The air permeability of the front panel may be made non-uniform to ensure equal air flow at regions close and far from the air inlet. The non-uniformity may be achieved by the variable perforations 20 or a variably woven fabric 21."
>
> Ex. 1014 (Spitalnick) at col. 2, ll. 54-58.

> "FIG. 2 also illustrates in greater detail the aspect of the preferred embodiment of the present invention which varies the size of the holes 22 as the distance from the air mover increases. In this Figure, three openings are provided in the bag extending up the backrest 32 with holes 37, 38 and 39 becoming gradually larger as the distance from fan 35 increases. A linear pattern is provided for these holes, as that pattern has been found to be acceptable for the heating or cooling of an occupant. The bag located on the cushion 34 also includes a pattern of openings 22, this time the openings being provided in a U-shape to rest under the legs and seat of the occupant. The opening 42 at the bottom of the "U" is the smallest and sets of openings 43, 44, 45, and 46 extend in a spaced relationship toward the front of the bag and grow gradually larger. <u>This size and arrangement of the air holes, with the smaller holes being near the air mover, contributes to a more uniform flow of air from the air mover, in this case fan 35</u>."
>
> Ex. 1001 (The '129 Patent) at col. 4, ll. 40-57 (emphasis added).

Spitalnick is Combinable with Wyon

- "[T]he linear pattern of holes in the backrest as well as the U-shaped pattern of holes in the seat cushion disclosed in the '129 patent (and shown in FIG. 2 of the '129 patent) are identical to the hole patterns shown in FIG. 2 of Wyon, with the only difference being the hole size. Thus, both Spitalnick and the '129 patent itself disclose that the hole pattern and hole size arrangement disclosed in Wyon does not provide uniform flow, and both Spitalnick and the '129 patent itself indicate that providing a pattern of hole sizes in which the hole size grows larger as the distance from the air mover increases results in a uniform flow of air, or at least that a variable size hole pattern provides more equal flow than a uniform size hole pattern." Petitioner's Reply (Paper 17) at 8-9.

Spitalnick is Combinable with Wyon

- "Dr. Rice has admitted that varying the hole size in Wyon would improve the flow distribution." Petitioner's Reply (Paper 17) at 9, citing Ex. 1015 at 134:10-137:6 (See slide 28).
- "Dr. Rice has admitted that he has not performed testing on any seat inserts to support his position that Wyon and Spitalnick are not combinable." Petitioner's Reply (Paper 17) at 9, citing Ex. 1015 at 18:18-21.

Q So it's, it's fair to say that you haven't conducted any testing on any seat inserts?
A I have not.

Ex. 1015 (Deposition of Dr. Rice) at 18:18-21.

Dependent Claims 4 & 5

'129 Patent – Claim 4	Larsson(Ex. 1009)
"a heater for raising the temperature of the air exiting the ventilated seat, the heater positioned beneath the trim cover." Ex. 1001: col. 6, ll. 11-14.	The ventilated vehicle chair 1 of Larsson includes an electric heater 12 underneath the covering 9 and integral with a plate-formed insert 15 having a fibrous air-permeable material 16, and an upper layer 17 of airtight material including openings 56. Petition (Paper 1) at 44, citing Ex. 1009: col. 3, ll. 42-46; col. 3, l. 63 through col. 4, l. 7; col. 4, ll. 13-22; col. 6, ll. 11-14, 58-63; FIGS. 1, 2.

Dependent Claims 4 & 5

'129 Patent – Claim 5	Larsson(Ex. 1009)
"the top portion of the chamber and the heater are separate elements." Ex. 1001: col. 6, ll. 15-17.	The electric heater 12 and upper layer 17 of the plate-formed insert 15 of Larsson are separate elements. Petition (Paper 1) at 45, citing Ex. 1009: FIGS. 1, 2.

Dependent Claims 4 & 5

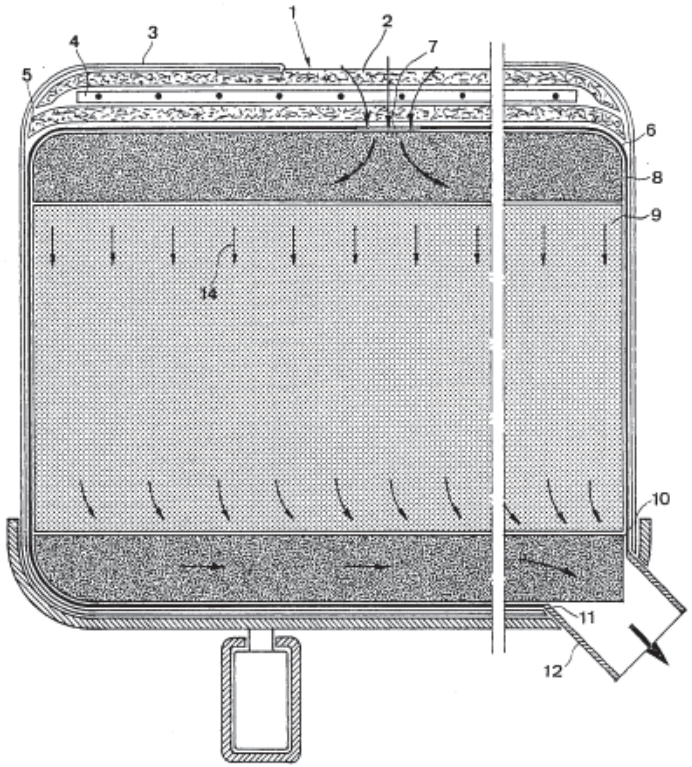
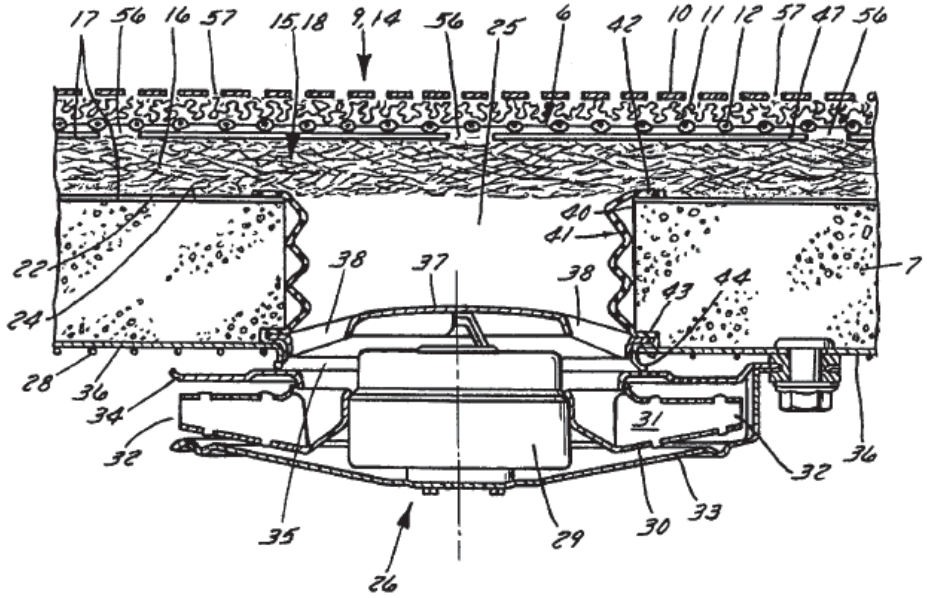


Fig 1

Ex. 1007 (Wyon): FIG. 1

Fig.2



Ex. 1009 (Larsson): FIG. 2

Dependent Claims 4 & 5

- "It would have been obvious to one of ordinary skill in the art to include the electric heater 12 of Larsson with vehicle seat of Wyon in order to provide additional heating capabilities." Petition (Paper 1) at 45-46.
- "On the current record, we are persuaded that IGB is reasonably likely to prevail in showing that claims 4 and 5 would have been obvious over the combination of Wyon, Spitalnick and Larsson, and that combining Larsson with Wyon and Spitalnick amounts to the use of a known technique to improve a similar device in a similar way." Institution Decision (Paper 7) at 15.
- "Patent Owner has not disputed this finding in its response." Petitioner's Reply (Paper 17) at 13 (emphasis added).

Dependent Claims 4 & 5

- "Further, although not relied upon by Patent Owner in its response, Patent Owner's expert, Dr. Rice, appears to suggest that one of ordinary skill would not have combined the heater of Larsson with Wyon, because any air heated within the seat of Wyon would be directed away from the occupant." Petitioner's Reply (Paper 17) at 13, citing Ex. 2001 at 21: ¶¶ 64, 65.
- "Apparently Dr. Rice basis this opinion on the ventilation device of Wyon including a suction device. However, it is noted that the ventilated vehicle chair 1 of Larsson (including electric heater 12) similarly includes a suction device 26. (Ex. 1001 at 1, 7: Abstract, col. 4, ll. 6-7). If the heater of Larsson functions sufficiently in the ventilation device of Larsson utilizing suction, then the heater of Larsson would function at least as sufficiently in the ventilation device of Wyon which also utilizes suction." Petitioner's Reply (Paper 17) at 13-14.