

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NJOY, LLC and NJOY HOLDINGS, INC.,
Petitioners

v.

JUUL LABS, INC.,
Patent Owner.

IPR2024-00231
Patent 10,130,123 B2

Record of Oral Hearing
Held: March 19, 2025

Before CHRISTOPHER M. KAISER, KIMBERLY MCGRAW, and
AVELYN M. ROSS, Administrative Patent Judges.

APPEARANCES:

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The above-entitled matter came on for hearing Wednesday,
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P-R-O-C-E-E-D-I-N-G-S

(1:00 p.m.)

JUDGE ROSS: Good afternoon, everyone. We're on the record. We're here for the final hearing in IPR 2024-00231 concerning U.S. Patent No. 10,130,123. I am Judge Ross, and with me today are Judges Kaiser and McGraw. As you can see, we're conducting this hearing remotely. There are a lot of people online appearing remotely, so please make every effort to speak clearly and avoid speaking over each other. That helps both us and the court reporter. Also, hearing no objection, we authorized a public line for today's hearing, so be aware that members of the public may be listening in today.

As we mentioned in our February 27th order granting oral argument, each side will have 60 minutes to present their case. Because Petitioner bears the burden, Petitioner will go first, followed by Patent Owner, and each of you may reserve rebuttal time. We do have electronic versions of the slides, as well as all of the papers filed in the case, so if you reference one of those, please reference it by page number, so that we know what you're looking at and so that the record is clear.

We see that the parties filed objections to each other's demonstratives. We ask that the parties withhold any objections they may have until it's their time to speak. It's likely that the Board will reserve ruling on all objections. If you do want to maintain your objections, please let us know at the beginning of your speaking time.

There's no official clock, so I will be keeping time, please bear with me. I will try to keep a close eye on the clock and let you know when your time is near exhaustion, but I also ask that you all try to keep your own time.

1 Lastly, it looks like we received a party's email late last night
2 regarding the additional portions of the ITC decision that the Patent Owner
3 would like admitted. Since everybody's here today, it seems most efficient
4 for us to discuss that today, and we thought, absent any strong objections,
5 we would talk about that at the end of the hearing.

6 And so I guess that's about it. Counsel for Petitioner, when you're
7 ready, you may begin. Please introduce yourself, those in your party, and let
8 us know how much time you'd like to reserve for rebuttal. So, please
9 proceed when you're ready.

10 MR. DESAI: Thank you, Your Honor. This is Anish Desai for
11 Petitioner. I'll be presenting. Let me share my screen. Okay, are you able
12 to see the screen?

13 JUDGE ROSS: We can, thank you.

14 MR. DESAI: Thank you. Sorry, one moment. I'm having a little
15 issue here. Okay.

16 Well, good afternoon, Your Honors. The Institution Decision agreed
17 that there was a reasonable likelihood that the claimed invention in the '123
18 patent is obvious based on Worm in view of Levitz. After consideration --

19 JUDGE ROSS: Mr. Desai, do you want to reserve time for rebuttal?

20 MR. DESAI: Oh, sorry, yes. I'll reserve 15 minutes for rebuttal.
21 Thank you.

22 JUDGE ROSS: Fifteen, you said? One-five?

23 MR. DESAI: Fifteen minutes, yes. After consideration with their
24 record, I think Your Honors will see that that remains the case with respect
25 to Worm in view of Levitz. Your Honors did disagree, however, regarding
26 anticipation by Worm after JLI's, or Patent Owner's, preliminary response.

1 But without the benefit of a reply from Petitioner, we submit that, with our
2 response and the full record, Your Honors will see that Worm does, in fact,
3 anticipate.

4 I'm going to move to Slide 6, and these are the grounds that I'll be
5 addressing. These are the base grounds, one through four, covering Claims
6 14, 27, and 32. Fourteen and 27 are independent, and Claim 27 includes all
7 of the limitations of Claim 14. The difference is that claim 27 also claims
8 the cartridge, whereas Claim 14 is only claiming the device body. Claim 32
9 does not add anything novel or non-obvious; it just says that the vaporizable
10 material includes a nicotine solution or nicotine formulation.

11 I'm on Slide 7 now, and these are the Grounds 5 through 8 that
12 correspond to each of one through four, and these are addressing the other
13 dependent claims: 15, 16, 18, 28, 29, and 31, and adding the reference
14 Lamb. These dependent claims likewise add nothing novel or non-obvious,
15 and there is no dispute that Lamb discloses the limitations of these
16 dependent claims.

17 So I'm going to jump right into the first ground, anticipation by
18 Worm. And I am on Slide 8 now. And there are really two arguments in
19 play here by Patent Owner in response, and the first is that we are combining
20 different disparate embodiments. And disparate means made up of
21 fundamentally different or often incongruous elements, like markedly
22 distinct in character or quality. And the case law they rely on is the *Net*
23 *Money* case, where the court was combining two mutually exclusive
24 embodiments to arrive at the claimed invention. And we are not combining
25 disparate or mutually exclusive embodiments.

1 And I'll start with Figure 2. Figure 2 is not disparate from Figure 7,
2 and Figure 2 is also not disparate from Figure 5. And to be clear, we are not
3 combining Figures 5 and 7 to arrive at the claimed invention.

4 And what you can see in Figure 2 is that it depicts the control body
5 and the cartridge. It also depicts a cavity and a projection that allows the
6 control body to receive the cartridge. This is not unique to Figure 2. And in
7 paragraph 67 of Worm, which is actually discussing Figure 5, the
8 specification refers back to Figure 2's depiction of the cavity that receives
9 the projection. In paragraph 73, the specification refers back to Figure 2 to
10 reference how the airflow path can extend into the cartridge, as shown in
11 Figure 2. And then in paragraph 74, which is discussing Figure 7, the next
12 paragraph, paragraph 73 is also discussing Figure 7. It says the spatial
13 relationship of the air in the channel and the first end of the pressure channel
14 is further illustrated in Figure 7.

15 And what we see if we look at Figures 5 and 7 is these are detailed
16 views -- and they don't illustrate the entire device. Figure 5, for example,
17 only illustrates the control body, but we know in the context of this patent,
18 there's a cartridge. And it provides a detailed view of the pressure sensor
19 configuration as well as the cavity. Figure 7 also provides a detailed view of
20 the pressure sensor configuration, but this includes a portion of the cartridge
21 to show the matched configuration of the cavity and the projection.

22 Now, Figures 5 and 7 omit certain details that are shown in Figure 2.
23 For example, there's a reservoir 244 in the cartridge, and the heater 234.
24 Those are clearly aspects of the overall vaporizer device, but they're just not
25 shown in Figures 5 and 7. So Figures 5 and 7 do illustrate slightly different
26 configurations, but they are not disparate from Figure 2. And the question is

1 not whether there are differences between the figures -- there are, Figures 5
2 and 7 -- but it's whether Figure 2 is mutually exclusive or disparate from
3 Figure 5, or whether Figure 2 is mutually exclusive or disparate from Figure
4 7. And they are not.

5 JUDGE ROSS: Where is that language in *Net MoneyIN*, the disparate
6 and mutually exclusive?

7 MR. DESAI: In *Net Money*, it's in a footnote where it talks about
8 how, for the purposes of their decision, the Federal Circuit was -- because it
9 was on summary judgment, that they were deciding this based on the
10 assumption, looking at the facts most favorable, that the two embodiments
11 that were being combined were mutually exclusive, it's in a footnote. And I
12 don't remember the footnote number, but I can check that.

13 Sorry, it's Footnote 1.

14 JUDGE ROSS: Do you understand that to be the holding in *Net*
15 *MoneyIN*, that it requires mutually exclusive embodiments?

16 MR. DESAI: Well, that was certainly the premise of their holding. In
17 other words, they assumed that for purposes of finding that what the District
18 Court did was wrong. And so the question is not -- certainly, the question is
19 not whether there are differences between the figures. It's whether these --
20 if you're looking at *Net Money*, it's whether Figure 2 and Figure 5, or Figure
21 2 and Figure 7, are mutually exclusive or disparate. In other words, they're
22 not related; they're distinct, separate, distinctly separate. And they are not,
23 is our view.

24 Now, moving along to Slide 10, there's actually additional text in
25 Worm that confirms this. And this is paragraph 54, and this is in reference
26 to Figure 2. And explains that there's a flow sensor 208 and a control

1 component 206, and it specifically notes that the control component and the
2 sensor may be combined as an electronic circuit board. And the board may
3 be positioned horizontally relative to the illustration of Figure 2, in that the
4 board can be lengthwise parallel to the central axis of a control body. And
5 that is exactly what we have in Figures 5 and 7. You can see the pressure
6 sensor 708 in Figure 7 is oriented horizontally relative to what you see in
7 Figure 2. So this is a paragraph in Worm that definitely draws a relationship
8 between these figures.

9 Now, you'll hear argument -- I'm on Slide 11 -- that Figure 2 is
10 disparate or mutually exclusive from Figures 5 and 7 because the flow
11 sensor 208 is disparate or mutually exclusive from pressure sensor 308 and
12 708. And that is based solely on conclusory testimony from Dr. Collins,
13 Patent Owner's expert. And this testimony by Dr. Collins is flatly
14 contradicted by the prior art. A pressure sensor is an implementation of a
15 flow sensor. And this is shown in the Lamb reference, for example, which is
16 prior art, and includes the same exact drawing as Worm Figure 2, and says
17 that the flow sensor can be implemented by a MEMS pressure sensor. So
18 flow sensor 208 and pressure sensor 308, 708, are not disparate or mutually
19 exclusive. And as noted above in the previous slide, paragraph 54 expressly
20 describes that the Figure 2 sensor can be arranged horizontally, as shown in
21 Figures 5 and 7 of Worm.

22 Now, that addresses the first argument by Patent Owner about the
23 mutually exclusive disparate combination. The second argument from
24 Patent Owner regarding Ground 1 is that Worm does not disclose an airflow
25 path between the receptacle and the cartridge body. And this comes down to
26 the express disclosure in Worm at paragraph 76, which we have on Slide 12.

1 And this paragraph unambiguously states that the matched configuration of
2 the cavity 725 and the projection 741 preferably does not substantially form
3 an airtight connection there between. Not airtight means air is able to flow
4 between those surfaces, and Figure 7 itself illustrates the configuration in the
5 gap between cavity 725 and the projection 741.

6 I think it's notable that Patent Owner has 88 demonstratives and there
7 is not a single demonstrative with this paragraph on it. And that's the only
8 way Patent Owner can make its argument here, is by pretending this passage
9 does not exist in Worm.

10 Now, if I move to Slide 13, Patent Owner's expert agreed in his
11 deposition. He said the patent very clearly says there needs to be a non-
12 airtight connection between the inlet 789 and 785a. And you can see that
13 he's drawn this yellow -- sorry, it's orange. There's this orange line in the
14 figure where he's saying, no, there's definitely -- it's definitely not airtight
15 there, okay? He agrees. And, well, we know that's right, because there has
16 to be communication, fluid communication, along that orange path for the
17 pressure sensor to work. But what Dr. Collins is saying is, well, yeah, I
18 agree, this part here is not airtight, but the rest of the matched configuration,
19 well, that's airtight.

20 But let's go back to what Worm says. It doesn't say that part of the
21 matched configuration is not airtight. It says the matched configuration is
22 not airtight, and it illustrates a gap in the matched configuration all the way
23 through. So there's really no basis for Dr. Collins' position that, well, part
24 of it is not airtight, but the rest of it is. And in the POR at page 63, Patent
25 Owner relied on the *Hockerson* case. And that case is not applicable. It
26 says, quote, patent drawings do not define the precise proportions of the

1 elements and may not be relied on to show particular sizes if the
2 specification is completely silent on the issue.

3 But we are not relying on the figure to show precise proportions or
4 particular sizes, and the specification here is not completely silent. It says
5 very clearly that the matched configuration is not airtight, so that case
6 doesn't apply.

7 Now, there's more arguments here by Patent Owner, of course, not
8 addressing paragraph 76, but addressing other points. And the first is that
9 this matched configuration is a winding path, and that would be ineffective
10 for controlled airflow. Well, this argument fails for several reasons. First,
11 the claims do not require controlled airflow or any particular amount of
12 airflow in the path. It is a basic and broad claim that says there is an airflow
13 path between the receptacle and the cartridge. There are no limitations in
14 terms of how much airflow.

15 Now, the second is this issue about a winding path being ineffective.
16 Their own patent illustrates a winding airflow path with multiple 90-degree
17 turns and through various holes and inlets.

18 Now, I'm going to turn to Patent Owner Slide 14. Sorry, perhaps it's
19 Slide 7. And I think -- I believe they're going to argue -- that's the wrong
20 slide. I apologize. It's Slide 23. I apologize.

21 The argument here is that, oh, there's actually not twists and turns in
22 the patent, and it's just -- the air's flowing into an open chamber. And they
23 cite Dr. Collins here, saying, no, it's an open chamber. That's not what the
24 patent says. And I think Your Honors should refer to the '123 patent at
25 column 31, lines 50 to 56, and that's a description of this airflow path, and it
26 doesn't align with Dr. Collins' view here. It says the air pulls through

1 channel air inlet opening 50, through the air inlet passage 51, and into the
2 heater chamber 37 through the second air passage, tank air inlet hole 41, at
3 the tank air inlet 52, and then into the heater inlet 53. So there's two 90-
4 degree turns, through a hole 41, and then through another inlet 53. And so
5 we don't agree that this description here does not have a winding path. It
6 does, in fact, and that's how the patent describes it.

7 So, turning now to Slide 15, back to our slides, Patent Owner argues
8 again about a labyrinth seal. And what they wrote here is that there's no air
9 flowing because labyrinth seals could be used to seal connections from
10 fluids. That's not what Worm says in paragraph 76. It says the opposite. It
11 says the connection is not sealed, it is not airtight. So, even if a labyrinth
12 seal can be airtight, the configuration in Worm is not airtight, by the express
13 words of Worm.

14 I'm going to turn to Slide 16. This is the next argument by Patent
15 Owner. And they argue here that when a user inhales the control body and
16 the cartridge have been pulled together to form a seal. And I think Your
17 Honors did reference this argument in the Institution Decision, and we
18 submit that this argument is actually directly contradicted, again, by
19 paragraph 76, that Patent Owner doesn't reference.

20 And if you look at paragraph 76, the opening sentence is: when you
21 draw on a device causing air to enter. So the context of this entire paragraph
22 is when a user is drawing on the device. And then, in the very next sentence,
23 in that context, it says the matched configuration is not airtight. And it can't
24 be, because airflow needs to be communicated to that pressure sensor. So if
25 I go back to this figure on Slide 13, if the two were to be pulled together and
26 sealed by a draw, that space shown with the orange would seal, too, and that

1 would prevent communication with the pressure channel. So this argument
2 fails for multiple reasons, and most specifically because it's contradicted by
3 paragraph 76.

4 And then on Slide 17, the last argument here, Patent Owner argues
5 that the electrical contacts that are in that space make the connections
6 airtight and prevent airflow. Again, this is contradicted by paragraph 76,
7 which says the matched configuration is not airtight. Also contradicted by
8 Dr. Collins' deposition testimony where he agreed that the band on the
9 control body, that's the electrical band, when it engages the band on the
10 projection, it does not create a seal that prevents airflow, correct? That's
11 correct, it need not be an airtight seal. It shouldn't be an airtight seal. So he
12 agrees that these electrodes that you see in these figures are not going to
13 form an airtight seal. And he certainly agrees that electrode 1 is not going to
14 form an airtight seal, because if it did, you wouldn't have the required
15 communication with the pressure channel.

16 That really covers the two arguments that were raised by Patent
17 Owner with respect to Ground 1, and so unless Your Honors have any
18 questions, I'll move onto Ground 2 quickly.

19 So, for Ground 2, I'm going to cover this rather quickly, and the basis
20 for this ground is that a POSA would have been motivated to have air inlets
21 at the periphery. And as I've already pointed out, Worm discloses that the
22 matched configuration is not airtight. And as Mr. McAlexander, Petitioner's
23 expert, explained, if air does not enter by the device air inlet 789, and there
24 are no other air inlets, the device would be non-functional, because you need
25 external air sources for this device to function. And as Dr. Collins admitted
26 in his deposition, a person of ordinary skill in the art would've recognized

1 that it would be desirable to have multiple air inlets to help minimize the risk
2 that there was clogging or blocking of the air inlets. And this rebuts Patent
3 Owner's argument with respect to Ground 2, that an additional airflow
4 pathway or additional air inlets would be unnecessary for Ground 2.

5 And if we turn to Slide 27, Patent Owner's other argument for Ground
6 2 is that the airflow through the matched configuration would be difficult to
7 control. This is at the POR at page 56. And, again, I've already covered
8 this, but this is contradicted by the turns in the airflow shown in the '123
9 patent, and also by the fact that the '123 patent does not disclose anything
10 about how to size the pathways or the inlets to achieve any desired airflow.

11 And what Dr. Collins admitted in his deposition is that a POSA would
12 have the knowledge of how to size these pathways. They would come to the
13 patent with this knowledge of how to size the pathway and the passages to
14 achieve desired resistance. And he said it's -- his quote was, it's a pretty
15 straightforward analysis when you've got fixed geometries. And you have
16 fixed geometries in the '123 patent, and you have fixed geometries in Worm
17 with respect to the matched configuration. So, according to Dr. Collins, a
18 POSA would know how to size a channel to get your desired airflow.

19 And I'm going to turn to Ground 3, Your Honors. This is Worm plus
20 Levitz. And here again, I'm on Slide 28, we start with Worm, and that it
21 teaches the matched configuration of the receptacle and the cartridge,
22 forming a non-airtight gap. And then the Board did make this finding in the
23 Institution Decision at page 32, and I don't think anything has changed with
24 respect to that. On slide 29, Levitz teaches airflow from the periphery of the
25 device and through the interface of the device body and the cartridge. The

1 Board also made this finding in the Institution Decision at page 32, and
2 again I don't think there's been any change here on these two points.

3 So, slide 30, this is the proposed modification, and it's to the extent
4 Worm does not disclose air entering at the periphery, it would have been
5 obvious to modify Worm so that air enters at the interface and flows through
6 the non-airtight gap. Again, the non-airtight gap is what's already disclosed
7 by Worm.

8 JUDGE ROSS: Can I ask a quick question, please?

9 MR. DESAI: Yes.

10 JUDGE ROSS: So, I just want a little bit of clarification on your
11 modification of Worm in view of Levitz.

12 MR. DESAI: Yes.

13 JUDGE ROSS: You say the only thing that Levitz provides this
14 combination is the fact that there could be airflow or an air inlet at the side
15 of the device? Or are you actually substituting Levitz's connection feature
16 into Worm?

17 MR. DESAI: The connection feature, I don't think we're substituting
18 the connection features, because Worm already discloses a matched
19 connection. The issue for this combination is, is there air flowing at that
20 matched configuration, and if there's an inlet and it's a non-airtight
21 connection, there will be air flowing. And so I think that's the proposal.
22 Levitz does teach that there is an inlet and air flowing through a connection,
23 and if you have the inlet in Worm, and you already have a non-airtight
24 connection, you're going to have air flowing. So that's the combination, if
25 that makes sense, Your Honor.

1 JUDGE ROSS: I think so. So you're pretty much saying Levitz
2 shows a person of ordinary skill in the art would understand that air can flow
3 at the interface between the cartridge and the body, and that's what you're
4 saying Levitz brings to the table?

5 MR. DESAI: Correct.

6 JUDGE ROSS: Okay, thank you. I understand.

7 MR. DESAI: And now, on slide 31, we have the motivations for this
8 combination, and these are in the petition and our expert declaration. This
9 additional pathway at the interface provides a path for vapor backflow to
10 exit rather than into the pressure reduction space. This additional air channel
11 can be easily cleaned when the cartridge and the control body are separated,
12 because if they're formed by the interface, when you take them apart you
13 can clean that interface. And I've already covered this, but having multiple
14 air inlets allows the device to function if an air inlet is clogged or blocked.

15 So let me turn to Patent Owner's rebuttal. And Patent Owner has not
16 rebutted these motivations, and you'll see that their arguments are actually
17 not really directed to the combination of Worm and Levitz.

18 First, Patent Owner argues that there was no motivation because
19 Levitz has a vapor backflow problem. And Patent Owner points to Figure
20 16 of Levitz, and what you'll see here in Figure 16, and you can see at this
21 red arrow, is that there's a direct alignment between the pressure reduction
22 channel on the left and the cartridge airflow path on the right, and we've got
23 a circle around that, like right where that direct alignment is. And because
24 of this direct alignment, this is why there's a vapor backflow problem in
25 Figure 16. But this is not the proposed combination of Worm and Levitz.

1 And if we go to slide 53, Patent Owner actually concedes that Figure
2 18 of Levitz does not have the same vapor backflow problem and is
3 designed to minimize this problem. And what you see here is, this is,
4 because there is not direct alignment between the cartridge airflow path and
5 the pressure reduction space, there's this turn that happens, right? So you
6 don't have the direct alignment between the two.

7 And if we go to slide 34, you'll see that the Worm-Levitz combination
8 does not have that direct alignment between the pressure reduction space and
9 the cartridge airflow path. It looks like Figure 18, because, you can see here,
10 the airflow path is on the right, but then there's a couple of turns before you
11 get to the pressure reduction space. So if we look at the actual proposed
12 combination, we can see that Patent Owner's argument has no merit with
13 respect to Levitz causing -- exacerbating vapor backflow problems.

14 I'm on slide 35, and here Patent Owner argues that this modification
15 is redundant and you would have no reason to make the modification
16 because of Worm's express disclosure of air inlet path, and it's referring
17 there to the 789 air inlet. This ignores that there is motivation to have
18 multiple air inlets. And Dr. Collins in his deposition admitted all sorts of
19 things can block air inlets: dirt, fingers, labels. And he admitted that a
20 person of ordinary skill in the art would have recognized that it would be
21 desirable to have multiple air inlets to help minimize the risk that there was
22 clogging or blocking of one of the air inlets. So we've addressed this
23 argument by Patent Owner.

24 If we go to slide 36, here Patent Owner argues that Worm already
25 solves the vapor backflow problem, so Petitioner's argument is based on a
26 false premise. And that is not a correct characterization of Worm. Worm

1 does talk about reducing or preventing contamination by the passage of
2 liquid. The proposed combination does reduce -- it does further reduce the
3 potential for vapor backflow by providing the additional pathway for the
4 vapor backflow to exit.

5 And here I'd like to go to Patent Owner's demonstratives. And the
6 real crux of their argument here, that Worm already solves the vapor
7 backflow problem, is testimony from Mr. McAlexander. And they put a
8 little snippet here on slide 50, and he says, certainly I have represented that
9 Worm has already solved that. Actually, they put a Q here, but that should
10 be an answer. I believe that was his answer.

11 But if we look at the full context of his testimony, we'll see that this
12 isn't exactly what he was saying. And they did provide the full context of
13 the testimony on page 51, or slide 51, and what we see is Mr. McAlexander
14 was explaining here his opinion that Worm anticipates, okay? Meaning,
15 Worm discloses the non-airtight gap and air entering through the periphery,
16 and if that anticipation opinion is accepted, then, yes, Worm does itself
17 disclose this additional pathway for the vapor backflow to exit. But if it's
18 found that Worm does not anticipate because it doesn't disclose that
19 additional pathway -- we obviously disagree with that, we believe in our
20 anticipation case, and so does Mr. McAlexander -- it's obvious based on the
21 combination of Worm and Levitz that that additional pathway would exist,
22 or would be there, and that provides the benefit of an additional pathway for
23 vapor backflow to exit. So that is really the gist of this testimony, was, if it
24 anticipates, well, yes, it does provide that benefit already, but if it doesn't,
25 you get it from the combination.

1 And I'm going to turn to Patent Owner's slide 52, and this is where
2 they're arguing that adding the side inlets, the inlets at the periphery,
3 exacerbates backflow problems. And this is clearly wrong. The figure on
4 the left has a purple arrow showing how backflow could potentially enter the
5 pressure channel, okay? This zig-zagging purple arrow. And we know that
6 pathway does exist, because that's a non-airtight matched configuration, and
7 there has to be fluid communication between this space and the pressure
8 channel. But it's not clear how the combination would exacerbate that. The
9 combination confirms that there's this additional pathway through the air
10 inlet on the periphery. And if there's an additional pathway, there's a place
11 for vapor backflow to go other than into the pressure reduction space. So it
12 doesn't make sense and it's not clear how having the additional pathway that
13 goes all the way to the periphery would exacerbate the vapor backflow
14 problem.

15 So, Your Honors, that covers Ground 3, and I'm happy to answer any
16 more questions if you have any about Ground 3, or I'll move onto Ground 4.

17 JUDGE ROSS: I don't have any questions.

18 MR. DESAI: Thank you. So Ground 4, this is Thorens in view of
19 Weigensberg.

20 JUDGE ROSS: I'm sorry, Judge Kaiser, did you have a question?

21 JUDGE KAISER: No, thank you.

22 MR. DESAI: So, here, Patent Owner rebuttal here is that this
23 combination involves significant modifications and there's no motivation to
24 combine. I think both are wrong, and I'll explain why. This is Thorens, and
25 there's no dispute that Thorens by itself meets all of these limitations on the

1 left on slide 37 that are in bold. It has a sensor, but a sensor does not meet
2 the limitations of the claim, so that's why those are not in bold.

3 If we go to Weigensberg, Weigensberg is another e-cigarette device,
4 and it does have a pressure sensor. And it has the two sides. It has one side
5 that's exposed to ambient, the other side exposed to the sealed airflow path,
6 and the gasket around it that seals one side from the other. And this pressure
7 sensor in Weigensberg is incorporated into the end with the LED indicator,
8 all right? And the proposed modification, or combination, does not involve
9 significant modifications. In Thorens, the cartridge, the airflow path, they
10 remain the same. And as you can see, unmodified Thorens, on the top,
11 already has an LED indicator at the end. The end cap is an LED indicator.
12 And all they're doing with this combination is incorporating the pressure
13 sensor into the end with the LED indicator, as is expressly taught by
14 Weigensberg, okay? And there is express motivation for this modification.

15 I'm on slide 40. And Weigensberg explains that incorporating the
16 pressure sensor into the end with the LED saves space. Taking the separate
17 sensor and combining it into a single housing with the LED saves space, it's
18 exactly what Weigensberg says. And as Mr. McAlexander explained, this
19 additional space inside the device body can be used for a larger battery.
20 Now, again going back to Patent Owner's slide, I'm on 64, somehow they
21 argue that this combination takes up more space, and I don't see how that's
22 possibly correct.

23 If we look at Figure 1 of Thorens, I'll just pull that up really quick,
24 here's Figure 1 of Thorens. 109 is the LED end, and 107 is a separate
25 sensor, and 105 is circuitry, okay? Now, if we incorporate the sensor and
26 the circuitry and the LED into one unit at the end, it clearly saves space in

1 the device body. We don't have to keep this pressure set for 107 and we
2 don't need to keep this circuitry 105 here. It's going to create space inside
3 the device body.

4 And if we go back to slide 45, I think part of the argument here from
5 Patent Owner is misunderstanding something, because they argued that the
6 proposed modification removes Thorens' programmable circuitry 105,
7 which is needed. But that's not the proposed modification. We're not
8 removing the circuitry. And as Mr. McAlexander explained, this contention
9 is incorrect and ignores that Weigensberg pressure sensor assembly includes
10 integrated circuitry that controls the device. And it says this here in
11 Weigensberg, in paragraph 107, that electrical circuitry associated with or
12 incorporated in the sensor unit can be incorporated into the LED cap at the
13 end. So we're not eliminating the integrated circuitry, and I think that's part
14 of the misunderstanding here by Patent Owner.

15 If we go to slide 41, there is also motivation to use a differential
16 pressure sensor, which is the type of sensor used in Weigensberg, because it
17 does provide certain benefits. It's not disputed that the differential pressure
18 sensor was effectively ubiquitous in e-cigarette devices. This was a very
19 common type of pressure sensor used to control the activation of a heater.
20 And the '123 patent itself says that any differential pressure sensor can be
21 used. That's at column 4, lines 49 to 56, and column 41, 56 to 58.

22 Now, Patent Owner tries to argue that there are all kinds of problems
23 with differential pressure sensors, and they're very difficult to use or very
24 difficult to control. But there's not a single piece of prior art that Patent
25 Owner cites to support that proposition, and, really, if differential pressure
26 sensors were known to be problematic and difficult to use, how do you

1 explain how the '123 patent says that you can use any type of differential
2 pressure sensor? The reality is that there are benefits to differential pressure
3 sensor, they were ubiquitous, and there would be motivation to use one.

4 I'm on slide 42, and these are the remaining arguments --

5 JUDGE ROSS: Mr. Desai, you have about 10 minutes left.

6 MR. DESAI: Thank you, Your Honor. The first here is that they
7 contend that there is no gasket in Weigensberg because the LED cap is
8 plastic. There's no basis for this argument that a plastic cannot be used as a
9 gasket to seal. We provided evidence that's here on slide 42 confirming that
10 plastics are, in fact, used as gaskets to seal. And I think the Institution
11 Decision already discussed this issue and found that Petitioner had
12 sufficiently shown that Weigensberg teaches a gasket.

13 Slide 43, Patent Owner argues that the differential pressure sensor
14 could activate the heater if the air inlet is clogged or blocked and the device
15 may overheat. Well, again, differential pressure sensors were widely used,
16 and Thorens itself, here on slide 43, discloses temperature controls for a
17 heater that would prevent overheating. So we don't believe that this
18 argument really addresses the motivations to combine here.

19 And then on slide 44, the last argument is that this combination results
20 in exposed wiring. This is absolutely not correct. The figure that Patent
21 Owner is drawing this argument from is shown on this slide, it's on the
22 bottom, and that is taking Figure 14 from Weigensberg and annotating it in
23 the combination. But Figure 14 is a schematic drawing, and it specifically
24 says that it's a schematic diagram, it's there to illustrate electrical
25 connections, and schematics are not used to illustrate an actual physical
26 layout. This is not an illustration that there are going to be wires hanging all

1 around the device; this is a schematic to show what electrical connections
2 exist in the device.

3 Okay, Your Honors, that covers it for Ground 4. I can address
4 Grounds 5 through 8 very quickly. This is the addition of Lamb. There's no
5 dispute that Lamb discloses the limitations of Claims 15, 16, 18, 28, 29, and
6 31. And on slides 47 and 48, these are the disclosures in Lamb regarding the
7 MEMS pressure sensor and how it meets those limitations of those claims.

8 Now, the motivation to combine Lamb with respect to this MEMS
9 pressure sensor is set forth on pages 90 to 94 of the petition, and they are not
10 disputed. The only argument that Patent Owner makes with respect to Lamb
11 is that there's no reason to modify Worm or Weigensberg to include a
12 gasket, and that's at the POR 85 to 86, but we do not need Lamb for the
13 gasket in Ground 1 through 4. Worm discloses a pressure sensor with a
14 gasket for Grounds 1 through 3, and so does Weigensberg for Ground 4.
15 The motivation here is respect to using a specific type of MEMS pressure
16 sensor, and that's covered in the petition and disclosed by Lamb. And if
17 Your Honors find that Claims 14, 27, and 32 are unpatentable in view of any
18 of Grounds 1 through 4, then these dependent claims are unpatentable based
19 on the corresponding Grounds 5 through 8.

20 Your Honors, secondary considerations, I'll save I think some or most
21 of this for rebuttal, but I do have a couple points to make upfront. And the
22 primary point is, I'm on slide 50, is that the Juul system, which is the system
23 that Patent Owner is relying on for secondary considerations, does not
24 practice this claim. Under clear Federal Circuit precedent, this claim
25 requires that there is at least one pressure sensor that has a first side and a
26 second side that are exposed, and a gasket around that pressures sensor.

1 This is addressed in our brief, it's the *Salazer* case. You'll also see this issue
2 covered in the commission's opinion on claim construction, where they
3 agreed that this claim requires at least one pressure sensor that has the two
4 exposed sides. There is no pressure sensor that exists in the Juul system
5 meeting these requirements.

6 And if we're on slide -- I'm on slide 51. The Juul system has two
7 absolute pressure sensors, and they're referred to as PS1 and PS2, and that's
8 shown here on the circuit board. There is absolute pressure sensor PS1, and
9 it has only one exposed side, and it has a gasket around it. But that doesn't
10 meet the claim language. You need to have a pressure sensor that has two
11 exposed sides and the gasket around it. There is absolute pressure sensor
12 PS2 that has one side, but it has no gasket around it. That doesn't meet the
13 claim language either.

14 Now, in their sur-reply, Patent Owner argues that we're interpreting
15 around as requiring surround, with respect to the gasket, and that's too
16 narrow. But that's exactly what around means in this context, and it doesn't
17 even matter anyway, because neither of these pressure sensors has the two
18 exposed sides. So, they lack the two exposed sides, and they lack two
19 exposed sides and a gasket around them.

20 But also, Patent Owner's expert agreed -- and this is paragraph 98 of
21 Exhibit 2001, it's Dr. Collins' declaration -- and he agreed --

22 JUDGE ROSS: You have about five minutes left.

23 MR. DESAI: Thank you. A POSITA would understand a gasket to
24 be some flexible material surrounding the sensor. So it's really Patent
25 Owner's own expert was equating around and surrounding in his own
26 opinions. Now, if JLI wants to now argue in this case that this configuration

1 with two separate pressure sensors with one side each somehow practices
2 under the doctrine of equivalents, they did not present that case in this IPR
3 proceeding. There is no equivalents analysis anywhere in their expert
4 declaration or POR, and there is just a conclusory sentence in the PO sur-
5 reply. And we know they didn't present a case on this, because if we look at
6 slide 53, their expert Dr. Collins, when he was deposed, didn't even know
7 that the Juul system had two pressure sensors.

8 JUDGE ROSS: But doesn't Patent Owner argue that the single
9 pressure -- or a single sensor that has two pressure detecting components in
10 it?

11 MR. DESAI: Well, again -- well, I think what their argument would
12 be, and this is one that was rejected by the commission under this claim
13 construction, is that you collectively say that PS1, PS2, and this
14 microcontroller are a pressure sensor, they say, well, then that meets the
15 requirements. But it wouldn't, because there's no gasket around that
16 combination, all right? There's only --

17 JUDGE ROSS: Isn't the gasket, according to the claim, the gasket is
18 simply to seal the device air path from the sealed airflow path?

19 MR. DESAI: Correct, but there's two requirements for the gasket
20 function, which is the part Your Honor just read, but before that it says the
21 gasket is around the pressure sensor, the gasket configured. And there's
22 case law that says you can't interpret the functional and eviscerate the
23 structural requirement of it being around. So it has to be both around the
24 pressure sensor, and it has to do the function of sealing the two airflow
25 paths. And if you were to say the combination of these elements is the

1 pressure sensor, you need a gasket around them, according to the literal
2 language of the claim, and they don't have that.

3 Also, I will say Your Honor, the idea that the collective is a pressure
4 sensor is contradicted by their own documents, meaning their own document
5 describes it as two pressure sensors, not one. So, that's another issue that
6 was discussed by the ITC and resolved in terms of the Juul system not
7 literally practicing this claim.

8 JUDGE ROSS: You've got two minutes left.

9 MR. DESAI: I think, Your Honor, I've covered everything I wanted
10 to cover, so I'll reserve the time for rebuttal.

11 JUDGE ROSS: Okay, thank you. I guess we'll hear from Patent
12 Owner next.

13 MR. GLASS: Thank you, Your Honors, give me one minute to share
14 my screen. Can you see my screens, Your Honor?

15 JUDGE ROSS: We can. Thank you.

16 MR. GLASS: All right, I don't think there's any surprise, I'm going
17 to go mostly in the order that Petitioner went. I will start off with Ground 1,
18 the anticipation ground.

19 JUDGE ROSS: Mr. Glass, do you want to reserve any time for
20 rebuttal?

21 MR. GLASS: I will optimistically reserve 20 minutes, though I may
22 eat into that a little bit.

23 JUDGE ROSS: Okay.

24 MR. GLASS: Now, on the anticipation ground, Petitioner is correct,
25 we did raise two arguments, the first argument that Your Honors credited in
26 the Institution Decision is that the ground relied on multiple disparate

1 embodiments. I do disagree with Petitioner's characterization of these
2 embodiments. They argue that that flow sensor in Figure 2 could be made
3 somehow horizontally. That doesn't change the fact, and I'll get to this in a
4 moment, that the flow sensor in Figure 2 is a flow sensor, it is not a pressure
5 sensor.

6 You can see by Figures 5 and Figure 7, there's more to a sensor, the
7 flow sensor and the pressure sensor, than just flipping that on its horizontal,
8 there's chambers. One chamber has to be sealed from the other, one has to
9 be exposed to ambient, the other has to be exposed to -- I'll focus on it here,
10 I'll highlight, that's the gasket that now seals it from the pressure drop side.
11 None of that is shown in Figure 2. Figure 2 is a simple flow sensor.

12 I'll back up a little bit -- and this is something Your Honors relied on
13 in the Institution Decision. I won't put the patent on the screen; I'll just
14 walk through the disclosure. And I am going to apologize in advance. I'm
15 recovering from whatever everyone else has been getting, so I will be
16 clearing my throat, and if at some point I go on mute it's because I'm
17 coughing, so I'll just apologize in advance for that.

18 If you look at paragraphs 12 through 17 of Worm, Worm expressly
19 describes them as different embodiments. Figure 2 is described as an
20 example embodiment, and when the applicant wanted to draw a connection
21 between the figures, it did. Figure 5 is further described as a detailed view
22 of Figure 3, which is also described as an example embodiment. Figure 7 is
23 also referred to as a further example of an embodiment. So the takeaway,
24 again, from this is that as Your Honors pointed out in the Institution
25 Decision, these are different embodiments, they're not intended to be the
26 same. So while there may be some similarities in the orientation, Petitioner

1 focused on, counsel focused on the coupling. These are very different
2 embodiments.

3 I'll point out, too, that the fact that Figure 2 is very different than
4 Figures 5 and 7 because it has a flow sensor, that is the entire point of their
5 Ground 4. Remember, they took the flow sensor from Thorens and replaced
6 it with a differential pressure sensor. Figure 2 of Worm has a flow sensor.
7 On the one hand, in the first ground they're saying, well, it's the same thing.
8 In connection with Ground 4 they're saying, well, it's different enough that
9 we have to propose an obviousness ground. They are very different. Again,
10 as I mentioned, you need these chambers, you have to have this seal. The
11 flow sensor operates very differently. It senses flow, not pressure.

12 I'll also point out Petitioner itself has taken the position that Worm
13 discloses different embodiments. We dispute this point substantively, their
14 point, not the fact that they're different embodiments. If you look at the
15 reply at 16, in responding to the airflow path, which I'll get to in a moment,
16 they argue that Worm discloses air inlets, and this is a quote, Worm
17 discloses air inlets that are only in some embodiments.

18 So in connection with their obviousness arguments, they take the
19 position that, yes, of course, Worm discloses different embodiments. In
20 connection now with the anticipation ground, they argue, no, it's all the
21 same embodiment. Again, they're very different. A flow sensor is very
22 different than a differential pressure sensor. They have an entire ground
23 devoted to swapping those two out. So Your Honors were correct in the
24 Institution Decision, these are different embodiments.

25 I will move on to the second point --

1 JUDGE MCGRAW: Can I interrupt for a moment? How do you
2 address the statement in paragraph 14, then, which states that, although 206
3 and 208 are illustrated separately, it's understood that the control component
4 and the flow sensor may be combined with the air inlet?

5 MR. GLASS: The control sensor and the flow sensor can be
6 combined, that's not saying that you can then take the flow sensor, replace it
7 with a differential pressure sensor, put in a gasket, have one side exposed to
8 ambient and the other side exposed to the pressure drop, because that's what
9 Figure 5 and 7 is. And that's the -- the level of changes and interrelatedness,
10 they're trying to draw it through that statement. So while you could
11 combine the control circuitry and the flow sensor, that does not lead to the
12 conclusion that these are the same embodiments. This is a flow sensor, not a
13 differential pressures sensor. Does that answer your question, Your Honor?

14 JUDGE MCGRAW: Yes, thank you.

15 MR. GLASS: So I'll move off of this. I think Your Honors were
16 correct in the Institution Decision, these are very different embodiments.

17 I'll move on to slide 18. The second issue on anticipation, this is the
18 airflow path issue. This is an issue that dovetails with the remaining
19 grounds, this is something you'll hear me repeating a lot, what I'm about to
20 go through, you'll hear me repeating this for Grounds 2 and 3, because it is
21 very much the same issue.

22 Just to set the table for this ground, and let me get a highlighter up,
23 there is no dispute on one point. And I'll be very careful how I frame this,
24 because I don't want to overstep. There is only one airflow path that Worm
25 labels as such. It starts in connection with Figure 7, it starts at this airflow
26 inlet, then goes straight through as the user draws on the device. That is the

1 only airflow path in Worm that Worm expressly describes as an airflow
2 path. So I'll start with that.

3 I'll move on to slides 19, to walk through what does Petitioner refer to
4 as the airflow path. Now, Petitioner criticized us for not going through
5 paragraph, I think it's 74. That's only because I'm going to put the exhibit
6 on the screen and go through it. They're correct that is a very important
7 paragraph, and they ignore key language in that paragraph.

8 To set the table, though, Worm is very, very specific on a few things.
9 I'm just going to mouse my cursor over it, this, what they call a gap, it's
10 never referred to as a gap. It is a cavity. Just to illustrate this, I think they
11 have a picture in their petition of a Sharpie with a cap that snaps into the top
12 of it, that has some inaccuracies, but it generally conveys the point, this is
13 misleading because it's a two-dimensional slice. This is a three-dimensional
14 cavity, the purpose of which is to connect the two ends, the cartridge and the
15 control body.

16 Worm is very specific also on another point. I'm going to highlight
17 on here. This is what I'll refer to as the low pressure side of the differential
18 pressure switch. Worm is clear that that low pressure side opens to this
19 cavity, where I put that circle. Worm is also very clear, and Petitioner's
20 ignore this language, that to avoid the backflow issue that we spent
21 significant time briefing, that you want to keep that portion, that entry, away
22 from the airflow. So what is Worm telling you? That these two portions,
23 this entry to the low pressure side must be kept separate from the airflow.
24 That's the setup. Let me walk through the exact language.

25 I'm going to bring up Worm in one minute. So I'm on Exhibit 1004,
26 I'm on page 20. Now, to put this in context, Worm specifically says, the

1 entire point of Figure 7, and I think this is instructive, the entire point of
2 Figure 7 is to illustrate the spatial relationship of the air inlet channel and the
3 first end of the pressure channel. So that's where I put that -- let me move
4 this out of the way. That's where I put that circle. That's the entire point of
5 this Figure 7.

6 Worm expressly states that that first end, 785, that's where I put that
7 circle, opens within the cavity. And that the first end of the pressure channel
8 is spatially arranged relative to the air inlet channel, that's this air inlet
9 channel I illustrated here, to be separated along the longitudinal axis. It
10 gives us very specific measurements: it should be at least one millimeter, at
11 least two millimeters, or at least three millimeters.

12 This is not a just a one-off statement. Worm goes on to explain that
13 again in paragraph 75, that this spatial relationship is important. In fact, it
14 says that that air inlet, where I put that circle, should be downstream from
15 the inlet channel.

16 Now, why does Worm explain this? And this is what Petitioner
17 ignores. The entire point of this spatial relationship, because of the spatial --
18 I'm in paragraph 76 of Worm, because of the spatial arrangement of the air
19 inlet channel in the first end, so because they're separated, because they're
20 separated by at least one or two or three millimeters, that prevents or reduces
21 incident passage of liquid from the cartridge, through the base, into the
22 controlled body. So that is the entire point of this system, to keep that
23 pressure channel separate from the air channel. Petitioner's combination in
24 Ground 3 and Ground 2 and their anticipation analysis in Ground 1 would
25 create an airflow channel in exactly the place where Worm tells you not to.

1 I was accused of ignoring what they rely on. I had every intention of
2 walking through this, because they ignore something very critical. Worm
3 explains in paragraph 76 this matched configuration, this mating
4 configuration between the cartridge and the battery preferably does not
5 substantially form -- doesn't say it's not airtight, it's not completely airtight
6 there between. What they ignore, though, is it says very clearly 'thus,' the
7 reason for this is not to create an air channel, the reason for this is to convey
8 a pressure drop in the cavity that's communicated to the pressure channel
9 form the first end of 785a.

10 So this is -- and they misunderstand our argument. They say, well, if
11 that was airtight, you could never convey the air pressure drop to that
12 pressure channel. That's not true. What Worm says very clearly is it's just
13 not sufficiently airtight so that that pressure drop will be conveyed. It's like
14 sucking on a straw where you put your finger on the end of it. You're not
15 going to get airflow, but you're going to convey that pressure drop to your
16 finger. That's not a great analogy, but it conveys the point. This channel,
17 this cavity, excuse me, is not intended and not described by Worm to be an
18 airflow path. It is expressly described to be separate from the airflow path,
19 otherwise you will have backflow directly into that pressure channel. They
20 say that we made that up, that we got that from our expert. It's right in
21 Worm. It's in paragraph 75 in Worm.

22 So I've walked through their reliance on the not substantially airtight.
23 The entire rationale and the entire reason for this configuration in Worm is
24 to prevent backflow. With that context, the rest of what we've argued in our
25 briefs makes perfect sense. And as Your Honors pointed out, that this is not
26 an airflow channel on slide 20 is supported by everything else that's

1 described about that cavity. It has, as we've already pointed out, it has
2 protrusions. These protrusions, the point of these protrusions, are not
3 disputed. The point of the cavity is to lock together; the point of the
4 protrusions is to be unlocking mechanisms to accomplish that. That, by
5 necessity, has to be a very tight coupling.

6 One of ordinary skill in the art would understand that that is an
7 impediment to airflow. One of ordinary skill in the art would never look at
8 that and say, hey, that's a great airflow path that is intended to lock against
9 external pressures.

10 Again, looking at the totality of how Worm describes this, looking at
11 slide 21. I'll get to what they pointed to in the '123 patent, but this is what --
12 and Your Honors credited this in the Institution Decision as well, this cavity
13 is what one of ordinary skill in the art would consider to be a labyrinth seal.
14 It has one, two, three, four, five, six, seven, eight, nine, ten 90-degree angles
15 on one side alone; one of them is a 180-degree angle. That's great for
16 locking two pieces together; it's terrible for airflow. And there's no dispute
17 on this point. Their expert agreed with us in principle. This was in the ITC
18 deposition. Their expert agreed with us in principle that each step of that
19 angle would reduce airflow, of course it would, that's not a straight line,
20 that's an impediment to airflow. He agreed with us on two questions.

21 Patent Owner cited to Figure 10 -- well, first off, I'll go through their
22 first point, because I'm not entirely sure they're even pursuing this anymore.
23 They argued in reply that they cited to an engineering handbook that said in
24 turbine engines labyrinth seals are not fluid tight. On this point, turbine
25 engines are -- I don't know how else to say it, they're turbine engines.
26 They're extremely high speed, extremely high pressure, exotic materials,

1 and high temperature, they couldn't be further from an e-cigarette if you
2 tried. So the fact that they found a statement in an engineering handbook on
3 turbine engines is simply irrelevant.

4 Now, the other point they relied on was Figure 10a, and other figures
5 in the '123 patent saying, well, the '123 patent shows multiple right angle
6 paths. This -- I can get a cite in a moment, but this -- oh, this is in Figure
7 10a, where this air is flowing is shown to be -- is described to be in a tank.
8 It's this portion right here that I'm highlighting, this portion right here, this
9 is at -- in description of 10a, it's at column 31, lines 50 to 56, it's called a
10 tank air inlet 47. So air is not going, as they argue, air is not going to take a
11 90-degree right turn in an open cavity. So the '123 patent doesn't support
12 them. And, again, I really don't think there's any dispute that multiple right
13 angle turns in a channel is going to minimize airflow, despite how they
14 interpret Figure 10a.

15 As Your Honors cited in the Institution Decision, it's just common
16 sense. To the extent they're saying that this cavity is a gap, and it has
17 enough gap for an airflow, well, as you draw on the device, of course it's
18 going to seal, it's going to compress. I don't, you know -- our point is that
19 there is no gap and there's locking mechanisms locking together, but to the
20 extent there is a gap, as they're arguing, it would seal anyway after
21 conveying that pressure drop. Again, like sucking on a straw that you've put
22 your finger on, that pressure drop will be conveyed, but there won't be any
23 airflow.

24 Now, another point on slide 25, the electrical contacts, and again,
25 Your Honors credited us in the Institution Decision, these are electrical
26 contacts. By necessity, they contact. They stand the control body side and

1 the battery side. This is going to be yet another impediment to the airflow.
2 There's six of these throughout where they call an airflow path. This is yet
3 another reason why one of ordinary skill in the art would not have
4 considered this to be an airflow path.

5 I'll pause here for a moment, because I think that's the crux of the
6 arguments. I'll get through a few other points that they raised. The crux of
7 the argument's on why this is not an airflow path, and again this is just as
8 applicable to Grounds 2 and Ground 3. Worm expressly tells us it's not.
9 Worm expressly tells us you have to keep that pressure sensor separate from
10 the airflow path, otherwise you get what we've illustrated as the backflow
11 issue. That's expressly from Worm. And in connection with that, again, all
12 of the remaining disclosure makes sense. There's nothing about that cavity
13 that says to one of ordinary skill in the art, airflow path. It is the furthest
14 thing away from an airflow path that you could design.

15 Petitioner also argued that -- well, I don't know if Petitioner counsel
16 raised this in their presentation, that this 789, I'll highlight this, 789 air inlet
17 is option. Well, they rely on Figure 7. It is never once referred to in
18 connection with Figure 7 as being optional. It's stated as an element. It
19 points to a description of air channel 388 to say that, well, that's a disclosure
20 that could be optional. That's not what that statement says. It says, in some
21 environments, the coupler 324 can include an air inlet channel. In the
22 embodiments that they rely on, that air inlet channel is expressly disclosed.
23 It's not optional.

24 With that, I'm going to move on. Unless Your Honors have any
25 questions, I'll move on to Ground 2, and that's slide 29. As Petitioner's
26 counsel discussed, Ground 2 is essentially the same as Ground 1, and it

1 really doesn't modify Worm in any way. It simply argues that if Worm's
2 cavity 725 isn't expressly an air channel, a person of ordinary skill in the art
3 would understand that it could be obvious that air would flow in the cavity.
4 I'm not going to go through all of this again, because it's the same exact
5 issues. Again, Worm expressly tells us, keep that pressure channel separate
6 from the airflow, otherwise you will get backflow issues. Keeping them
7 separate solves the backflow issue. Their proposed modification would turn
8 that into an airflow channel doing exactly what Worm tells us not to do. We
9 also -- as counsel raised, we also argued that this has to be -- these airflow
10 channels are tightly controlled to provide a user experience. They have strict
11 engineering.

12 Our expert, this is on slide 32, one more point on this, our expert was
13 also asked during his deposition, I think this was actually during redirect,
14 about the backflow issue, and he confirmed there was a backflow issue. He
15 also confirmed that if you open that cavity up to ambient, you would get an
16 error between the pressure sensor and the vapor channel. He suggested it
17 would be a very unreliable way of actually monitoring the pressure in the
18 channel 789. So not only does opening up that cavity directly contradict the
19 express instructions in Worm, it would cause errors, it would be unreliable,
20 as our expert testified to.

21 I'll move on to, on slide 33, Petitioner counsel raised this during his
22 presentation, that a POSITA would know how to properly size that passage.
23 Again, it's not a passage. And I think that's one of the fundamental issues
24 with their combinations. It's a cavity. Whether one of ordinary skill in the
25 art would understand how to properly size an air channel -- to rely greatly on
26 our expert's testimony on this point, that really is of no moment here,

1 because there are inherent restrictions in Worm, because it's not an air
2 channel. It is something designed to lock the two halves together. It is
3 designed to convey electrical contacts, and to not be substantially airtight, so
4 it conveys that air pressure drop.

5 So there are inherent design constrictions on Worm. You can't make
6 it arbitrarily large. If you did, the device wouldn't lock, one end would fall
7 off from the other. So the question is not whether, generally, one of ordinary
8 skill in the art would understand how to properly size a airflow path in
9 general. The question is, how would you do that in Worm? And you can't,
10 because Worm is -- that cavity is used as a functional aspect of the device to
11 lock the two together, to provide the electrical contacts, et cetera.

12 With that, Your Honors, that's Ground 1 and Ground 2. I'm going to
13 move onto Ground 3. Now, I thought I was going to have to spend a lot of
14 time proving this, but I wrote down what counsel said, that -- and I think
15 Your Honors solidified this with your question. We argued in our
16 preliminary response that there was no difference between the airflow path
17 in Ground 3 and the airflow path in Ground 1. We argued in the preliminary
18 response that the only thing they were using from Levitz in their
19 combination was this air inlet. Now, they do discuss the airflow path in
20 Levitz, but that's not -- that's simply for their motivation to combine. And
21 as counsel said during his presentation, they are not modifying the airflow
22 path in Worm at all.

23 Your Honors pointed out and said that we had not addressed the
24 combination airflow path, we only addressed the Worm airflow path. I think
25 it's pretty clear now, especially with counsel's presentation, that the airflow
26 paths are exactly the same, they're not modified at all. This is from their

1 petition, this is what I'll refer to, in the middle here. This is modified Worm,
2 I don't have a label for this, I'll call this reverse Worm. If you look at this,
3 the only thing they've changed is the size of that inlet. The path is exactly
4 the same, the position of the low pressure side on the pressure channel is
5 exactly the same. In reverse Worm, the only reason they use reverse Worm
6 is they were anticipating -- I think it's in their petition at 61, they argue to
7 the extent that the protrusions in Worm lack an exterior surface, then they
8 said, well, you could just reverse them. So instead of having the female
9 coupling on the control body side, they have the male coupling on the
10 control body side, and the female coupling on the cartridge side. Again, the
11 path is exactly the same, it's simply reversed.

12 So all the infirmities that I just walked through in connection with
13 Grounds 1 and Grounds 2, the express mandate in Worm that you keep that
14 pressure channel separate from airflow, that applies equally to Ground 3,
15 because the airflow path is exactly the same.

16 I had statements from the petition lined up. I'll just point out that at
17 page 56 of their petition, and in their reply, they said very specifically a
18 POSITA would have modified Worm so that the outside air enters at the
19 interface. So again, I'm not going to belabor it, I think that's settled at this
20 point.

21 Slide 42, I'm not going to go through these again. The same air path,
22 it has the same issues with the protrusions, it has the same issue with being a
23 labyrinth seal. In both modified and reverse Worm, you would have the
24 same issue with sealing on inhalation, if that was actually a gap that had play
25 in it.

1 Slide 45, I'd modify their figure slightly, I grayed it out, just to show
2 that there are actually electrical contacts in there. They didn't illustrate it in
3 the figures. I don't think they're arguing that they're removing the electrical
4 contacts. They didn't say so in their briefs. So this modified Worm would
5 have exactly the same issues, and the reverse Worm, the exact same issues
6 with the electrical contacts.

7 I'll focus for a moment on their motivation to combine. We walked
8 through their cleaning -- primarily, they have two motivations to combine.
9 It would be easier to clean, because you could take the device apart. Well,
10 we address this in the briefs, in that if you have a straight air inlet that, like if
11 they just use a simple pipe cleaner to clean, versus a labyrinth seal that goes
12 around the entire device, cleaning the nooks and crannies of that, I would
13 suggest, is a lot more difficult than cleaning the straight through path.
14 That's in the briefs. I think that's adequately addressed. Their major
15 primary argument to combine Levitz with Worm is that Levitz solves the
16 backflow issue, and again they task us because, well, Worm never says that
17 their configuration solves the backflow issue.

18 Again, I'll point out in paragraph 76, that is exactly what Worm says.
19 Worm says because of the spatial arrangement of the air inlet channel,
20 because they're sufficiently spaced apart from each other, you don't have the
21 passage of liquid cartridge through the base 740 in the control body. They
22 argue that we made this figure up, that there's no way that this would not
23 exasperate the problem. Of course it would. Because Worm says you solve
24 the backflow problem by not having that pressure channel communicating
25 with an airflow path. By turning this into an airflow path, you do exactly
26 what Worm says don't do. So, yes, of course, it would not only exasperate

1 the problem, it would take a problem that doesn't exist, because Worm says
2 it solves the backflow problem, and then create a backflow problem. It does
3 exactly what Worm says you should not do.

4 Now, on that, Your Honors, on Grounds 1, 2, and 3, unless you have
5 any questions, I've hit the point I'd like to hit, to the extent that I missed
6 anything there, I think adequately explained the briefs. Unless you have any
7 questions, I'll move on now to the Thorens and Weigensberg combination.
8 Now, that's --

9 JUDGE ROSS: Mr. Glass, you're at 29 minutes right now.

10 MR. GLASS: Thank you, Your Honor. And I'm not coughing the
11 entire time, so I'm ahead of myself. In Thorens, as counsel described in his
12 presentation, the Thorens and Weigensberg combination, Thorens uses a
13 pressure -- excuse me, Thorens uses an airflow sensor. I don't think there's
14 any real dispute on that. They argue that, well, it could be a pressure sensor.
15 I'm going to bring up Worm for a second, just let me make sure I'm on the
16 right -- I'm sorry, I'm going to bring up Thorens for a second, excuse me.

17 Now, they focused on other patents. They focused on a patent by
18 different inventors, I think there's one -- Lamb has one common inventor
19 that says that the airflow sensor could be a pressure sensor. Well, first off,
20 that doesn't say it's a differential pressure sensor, but looking at what
21 Thorens does disclose, it's really irrelevant what Lamb discloses, because it
22 says that it has a sensor to detect airflow. It could not be clearer: it doesn't
23 detect pressure, it detects airflow, and it senses when airflows.

24 So what are they doing? They're taking this puff detection system
25 that uses an airflow sensor and replacing it with a differential pressure
26 sensor, really for no good reason. As Your Honors pointed out in the

1 Institution Decision, and this is all over the case law, I think it's also in the
2 Polaris decision that we cited for a different point, just because you can do
3 something doesn't mean you would be motivated to do it. The puff
4 detection system in Thorens already detects inhalation. There is no benefit
5 to replacing it with a differential pressure sensor, a much more complicated
6 pressure sensor I'll add, when it works adequately. There's no dispute that it
7 works to detect the airflow and detect when a user is puffing on the device.

8 I'll walk through some of their motivations to combine. They argue
9 that a POSITA would include Weigensberg's differential pressure sensor
10 because it better accommodates external pressure changes. Well, that might
11 be an advantage from a differential pressure sensor over other pressure
12 sensors, but it's not an advantage over a flow sensor. The flow sensor is not
13 susceptible to external pressure changes, because it's not sensing pressure.
14 So that motivation simply doesn't apply.

15 Petitioners argue that Weigensberg differential pressure sensor would
16 allow to heater parameters based on airflow rates. Again, Thorens already
17 does that. It has an airflow sensor. It senses airflow. So again, that's not
18 really a motivation to combine. It already does that.

19 Petitioner's primary -- I'm on slide 64. Petitioner's primary
20 motivation to combine is that it saves space. I'm not entirely sure how they
21 get to this, because if you look -- and I went to great pains here to scale these
22 correctly -- they basically argue, well, you can put a bigger battery in the
23 combined setup. Well, first off, that just begs the question, what would one
24 of ordinary skill in the art really do? If you want a bigger battery, would you
25 hack off your flow sensor and put in a differential pressure sensor just to get

1 a bigger battery, or would you just make the body just a little bit bigger and
2 put in a bigger battery?

3 That would be the more rational choice. But even if you look at their
4 combination, being charitable, that battery at best is the same size as the
5 battery in modified Thorens as the battery in unmodified Thorens. I think if
6 you really look at it, because their combination requires more complicated
7 differential pressures set up, they have included these pads on the periphery,
8 that battery, if you really look at it, I think is actually smaller than in the
9 unmodified Thorens. So again, I don't think this is, this is certainly not --
10 one of ordinary skill in the art would not say, wow, I need a bigger battery,
11 let me get rid of my sensor. One of ordinary skill in the art would say, well,
12 I'll just make the body a little bit bigger. They certainly would not go
13 through this complicated morass of replacing the flow sensor with a
14 differential pressure sensor.

15 Now, we pointed out some deficiencies in the using a differential
16 pressure sensor. Petitioner's main point is, well, the '123 patent says, well,
17 you could use any other kind of pressure sensor. Yes, in the '123 patent, that
18 may make sense. Why would that make sense in Thorens when you have a
19 flow sensor? Just because you can use different types of pressure sensors in
20 the '123 patent doesn't necessarily convey that in Thorens' specific
21 invention that you would do that as well. And they do have disadvantages
22 that you have to take into account. And our point was, not that these are
23 hideously difficult to use, but that they have pros and cons, and Thorens has
24 a system that already works, and unless those disadvantage outweigh the
25 advantages, there's simply no motivation to replace them.

1 And we pointed out that in the differential pressure sensor, they can
2 overheat if the inlet's blocked. And they said, well, you could add a
3 temperature sensor. Well, now we're making it even more complicated by
4 adding a temperature sensor to do something that Thorens is not even
5 susceptible to with its airflow sensor. I'll also point out --

6 JUDGE ROSS: Mr. Glass, you have five minutes remaining.

7 MR. GLASS: I'm going to eat a little bit into my rebuttal time, not
8 too much, but I will. Petitioner also argued that the airflow sensor in
9 Thorens may be a pressure sensor. Again, it's not just that you can take that
10 flow sensor and replace it with a differential pressure sensor, there's a lot
11 more you have to do with that. So just because Lamb or another reference
12 says, well, you could use a differential pressure sensor, you have to -- again,
13 you would have to take that flow sensor out, include the chambers, include
14 the seal, make sure one side is sealed towards ambient, the other side is
15 sealed toward the pressure drop side. So, just because it may be a pressure
16 sensor, another reference says that it might be a pressure sensor, doesn't
17 necessarily convey to Thorens, and they haven't explained that adequately.

18 With that, Your Honors, I'm going to spend a few minutes on the
19 secondary indicia, unless there are any questions. I'll jump to slide 77.

20 Now, we laid out a number of secondary indicia. I'm only going to
21 hit the high points here, not every issue. We've argued that the Juul system
22 satisfied a long felt need, it was commercially successful, significant
23 industry praise and copying. That those facts exist are really not disputed.
24 Petitioner really just focuses on two aspects. The alleged unclaimed
25 elements, which we've addressed in the briefs, they are all expressly

1 claimed, but primarily the fact that the Juul system allegedly uses two
2 completely different sensors as opposed to the Claim 1 sensor.

3 Now, as Your Honors pointed out during Petitioner's presentation, in
4 the Juul system and in our own documentation, we describe this as being
5 basically two components. There are two pressure sensors, one measures
6 ambient, the other which measures air path pressure. Now, this is the
7 subject of one of Petitioner's motions to strike. They cited this page. They
8 originally had this entire quote in their slides, they removed it, because the
9 second sentence conveys exactly the point that we're making: when the
10 microcontroller interprets readings from the two sensors as a differential
11 pressure profile resembling a puff. What is that saying? That these two
12 sensors work together, that in the Juul system you have, instead of one
13 sensor doing -- essentially a differential pressure sensor in any event, is two
14 sensors, one sensing ambient, the other sensing the pressure drop, this using
15 two sensors acting as one.

16 In the same document, at page 14, this is in Exhibit 2003 -- I'm going
17 to be careful with this. I'm going to cover up the other portions of this
18 which still remain CBI. It's saying the exact same thing on page 14. Two
19 pressures sensors that working together sense differential pressure sensors
20 when the user inhales on the mouthpiece. So, again, the fact that these are
21 two pressure sensors really is of no moment, because that's essentially what
22 a differential pressure sensor is. It's two pressure sensors that are acting as
23 one, and that's exactly how the Juul system works. It's two sensors, one
24 measures ambient, the other measures the pressure drop.

25 And we did say in our briefs, we have statements that this would be
26 equivalent. The analysis is that this is the epitome of equivalency: they're

1 doing the same thing in the same way to get the same exactly result.
2 They're sensing pressure, using pressure sensors, one is measuring ambient,
3 the other is measuring the pressure drop. So even to the extent it's not
4 literally encompassed by the claims, as we argued in the briefs, it's
5 equivalency.

6 JUDGE ROSS: Can you point to your briefs where you argued that it
7 was equivalent?

8 MR. GLASS: Yes, I can. In the briefs it was -- I just had this just a
9 moment ago. It was in the sur-reply on the section. We did have a
10 statement saying that both in POR and in the reply, in the sur-reply, that to
11 the extent they're not literally encompassed by the claims, they are
12 equivalent. I'm getting a cite for you right now.

13 It's in the POR at 22 to 23. It's also in the sur-reply. It's essentially
14 the same statement.

15 JUDGE ROSS: Okay, thank you.

16 MR. GLASS: And with that, Your Honors, unless there are any
17 further questions, I'll bank the rest of my time for sur-rebuttal.

18 JUDGE ROSS: That sounds good. It looks like you did not eat into
19 your sur-rebuttal time. I have you right at 40 minutes.

20 MR. GLASS: Fantastic. Thank you.

21 JUDGE ROSS: Mr. Desai, your rebuttal?

22 MR. DESAI: Yes, Your Honor, let me just share my screen again.

23 JUDGE ROSS: Sure.

24 MR. DESAI: Okay, let's start with Ground 1 and the -- I heard
25 counsel for Patent Owner repeatedly talk about different embodiments for
26 that first issue, just kept using the word different. I mean, there's no

1 question that there are differences between Figure 5 and Figure 7, for
2 example. The difference is not the issue, and it's -- to quote from the *Net*
3 *Money* case, in that footnote, was, as we must do at this stage in the
4 proceedings, the reference is properly construed to show mutually exclusive
5 payment models, okay? So just pointing out that, oh, well, there's a
6 difference here and there's a difference there, is not going to get you into the
7 same place that was at issue in *Net Money*.

8 And I didn't hear a response on the flow sensor in Figure 2, that the
9 prior art clearly discloses that a pressure sensor is an implementation of a
10 flow sensor. They are not mutually exclusive. That was addressed on slide
11 11 of our slides, and I don't think there's any real debate here, a pressure
12 sensor is an implementation of a flow sensor. So they are definitely not
13 disparate and they are definitely not mutually exclusive.

14 And then I think what it comes down to for anticipation is, what I
15 heard being argued was that there needs to be some certain amount of
16 airflow, a particular amount. But, here, the issue is, if there is airflow, it
17 doesn't matter how much for anticipation. They chose to broadly claim an
18 airflow path with no limitation on the amount of airflow, and we seem to
19 agree that this portion of this configuration that I'm putting in red is not
20 airtight. I think Patent Owner has conceded that point, because there has to
21 be fluid communication here.

22 But what we seem to be disagreeing about is this portion here. And I
23 think it was danced around a little bit, the issue is that I think they want to
24 argue that that portion is actually fully airtight. And it is not, because that's
25 what Worm says. Worm says that this connection, the matched
26 configuration, is not airtight. And I think the arguments about the twists and

1 the turns, and, oh, there's going to be reduced airflow or small amount, it's
2 not airtight, and air will flow, it doesn't matter how much for anticipation,
3 for sure, because they didn't claim any specific amount of airflow. So
4 reduced -- or the fact that the airflow would be reduced because of the turns,
5 it doesn't matter, because there's nothing in the claims on that point.

6 So, for anticipation, it really comes down to, Your Honors, if it can be
7 found that, well, part of this configuration has some airflow, but the other
8 part is airtight, and that's their position, it's not supported anywhere in
9 Worm at all. And, again, if the electrical contacts are all one, two, three,
10 none of them make it airtight. When you draw on a device, it doesn't make
11 it airtight, because we agree this cannot be airtight, right? So there's no
12 difference between that part of the matched configuration and this part, with
13 respect to drawing on the device. The bottom line is, it's not airtight, air will
14 flow, and that's enough to meet the claim language.

15 Let me turn to the combination of Worm and Levitz. And here, again,
16 I think the argument is that, well, we're not saying you need to modify the
17 path -- let me get to this slide right here. We didn't say, well, you need to
18 modify this air path, right? It's not airtight, there's air inlet, air will flow.
19 And the reason why we don't need to make any arguments about modifying
20 this air path is because there's nothing in the claims that requires a specific
21 amount of airflow. What Patent Owner seems to be arguing is that we need
22 to show that a finely tuned airflow path requiring some amount of airflow is
23 obvious, but that's not what they claimed. And there was motivation in the
24 combination to have an air inlet at the periphery and to provide this
25 additional pathway. It's not necessary for us to make additional
26 modifications to get any particular amount of airflow through this pathway.

1 But even if some specific -- even if you were to assume that some
2 specific amount of airflow is needed, if we go to slide 27, Patent Owner's
3 expert admitted that sizing the fixed geometry to get the type of resistance
4 that you want to get a pleasant e-cigarette. He admitted that it's a
5 straightforward analysis for POSA. Again, we don't need to show a finely-
6 tuned or specific amount of airflow because they didn't claim it, and it's not
7 anywhere in the patent. But even if that were something we needed to show,
8 they've admitted that that's within the scale of a POSA and it's a
9 straightforward analysis on how you size to get the appropriate resistance.

10 The other argument that we heard was that cleaning, somehow, that
11 it's actually more difficult, or it's more optimal to be able to clean using
12 some sort of pipe cleaner to clean that air inlet hole, and that it's more
13 difficult to clean the passage formed by the matched configuration. But
14 what they're ignoring is that when you separate the cartridge from the device
15 body, that configuration is open, that space that forms the channel is open
16 and can be cleaned, right? We're not talking about cleaning this cavity
17 when they're combined. We're talking about how you can clean it when
18 they're separated. And this other passage, that's not exposed when you
19 would open the device. So it is a clear point that when you separate these
20 two, that matched configuration is now open on both sides and you can look
21 at it, you can see it, and you can clean it.

22 Now let me turn to the Weigensberg reference and Thorens. And --
23 now, Weigensberg had a separate pressure sensor from the LED cap, okay?
24 And it had that, but what it said is, let's make an improvement here, and let's
25 combine these into one package at the end of the housing. And the
26 improvement there is to save space inside the device body cavity, okay?

1 And that's expressly stated in Weigensberg as a benefit that can be achieved
2 by taking a pressure sensor that's in a separate place and combining it with
3 the LED cap in one, okay?

4 Now, I think that these figures right here, and they were on Patent
5 Owner's slide in their argument as well, these -- I don't really say how you
6 save space -- let's be clear, these were not intended to be scale drawings to
7 show how someone would save space. The fact that space is saved by
8 combining a separate pressure sensor into an LED cap is expressly stated in
9 Weigensberg as a benefit. We didn't need to actually make the actual layout
10 diagram to show how that would happen. This is intended to show what the
11 combination would look like, not the specific dimensions of the device.

12 Now, Patent Owner's counsel, I wrote this down, said why would a
13 POSA say let me get rid of my sensor and do this with Weigensberg? Well,
14 we're not getting rid of the sensor, right? We're taking the sensor and
15 packaging it together into a housing with the LED cap for the benefit that is
16 expressly stated in Weigensberg. And I think, and really important point
17 here, is that Patent Owner overlooks that Thorens says, and I'm on
18 paragraph 15 of Thorens, that any sensor can be used, okay? It says,
19 alternatively, a sensor may be any of a mechanical device, an optical device,
20 an opto-mechanical device, and a micro-electromechanical system based
21 sensor, okay? The idea that Thorens is somehow critically wedded to a
22 particular type of sensor is false. Thorens is telling a POSA, you can use
23 whatever sensor you want. And Weigensberg says, well, let's do something
24 beneficial here and combine the pressure sensor and the LED into one place
25 to save some space in the body, in the device body cavity, and both Thorens

1 and Weigensberg have LED end caps. It's a natural combination, and the
2 benefit is expressly stated in Weigensberg.

3 Now, I think two points to raise on -- a few points to raise on
4 secondary considerations, and we'll start with this issue of doctrine of
5 equivalents. I think it's very clear that this Juul system does not literally
6 practice this claim, it's just -- it's a mismatch. This is claim that says you
7 have a pressure sensor, it has two sides and a gasket around it, and they have
8 a product that has two separate pressure sensors, each with one exposed side.
9 There's a mismatch between the claim and the product, and that's why the
10 Commission agreed and it just doesn't fit this literal claim language when
11 you interpret it correctly under Federal Circuit law.

12 As far as doctrine of equivalents is concerned, they did not put this
13 case into the record here. In the POR at 22 and 23 and the sur-reply, there is
14 a single sentence without a citation to any expert testimony or evidence.
15 And Federal Circuit law is clear that doctrine of equivalents requires
16 particularized expert testimony that they don't have. And they didn't do it in
17 this case, and they can't backdoor it in by citing to evidence from another
18 proceeding that they didn't include here. And we know they didn't put it in
19 the expert testimony, as I said, because their expert didn't even know that
20 there were two pressure sensors in the Juul system. So, really, Your Honors,
21 we only need to consider the literal issue, and they don't practice -- and there
22 just isn't the evidence here for you to even address doctrine of equivalents.

23 But even if you get past that point, they have a clear nexus problem,
24 okay? And the nexus problem here is -- I'm on slide, sorry, let me -- I'm on
25 slide 55. There are multiple unclaimed features of the Juul system that are
26 claimed by other patents. And, for example, as we explained in our brief, in

1 our reply brief at pages 34 and 35, there are the nicotine salts, there's the
2 rectilinear shape, and then there's lock and gaps and electrical contacts. And
3 these are all items that have been deemed critical to the success of the Juul
4 system, and they are patented by other patents.

5 Under Federal Circuit case law, JLI cannot show co-extensiveness
6 because of these numerous critical unclaimed features that are claimed by
7 other patents. And it's not an issue that there are other features claimed by
8 patents; it's that they're critical features, that the success of the product has
9 been attributed to them.

10 JUDGE ROSS: What about Patent Owner's argument that they are in
11 fact claimed here?

12 MR. DESAI: It is very clear that nicotine salts are not claimed in this
13 patent. Nicotine salt formulation, this is on slide 56, this exhibit -- if you
14 read this exhibit, Patent Owner's founder, I mean, basically said, I think we
15 would be lucky to have five percent share without the nicotine formulation
16 that they had, the salt formulation. It's not any nicotine formulation. It's a
17 nicotine salt formulation. And that is separately patented by Patent Owner.

18 The rectilinear shape is also the subject of different design patents.
19 Patent Owner's own expert admitted here that this claim is not limited to any
20 kind of shape. He said that the claims would encompass the device body
21 and the cartridge that are cylindrical. It's clearly not the case that the
22 rectilinear shape is claimed in this patent, so I wouldn't agree with that
23 statement by Patent Owner.

24 And there are also numerous other factors that led to the success of
25 the Juul device, and we're talking -- I'm on slide 59, and this is one of their
26 own exhibits for secondary consideration. And here they talk about the

1 growing popularity of Juul system seems to be driven by flavored offerings,
2 in particular Cool Cucumber and Mango, and these are not claimed features
3 in the '123 patent. So even if you're able to overcome the hurdle about the
4 Juul system practicing, they have a serious nexus problem that they can't
5 overcome, and Your Honors really don't even need to address the nexus
6 problem, because the Juul system does not practice this claim. Thank you.

7 JUDGE ROSS: Thank you, Mr. Desai. Mr. Glass?

8 MR. GLASS: Thank you, Your Honors. I'll start with Ground 4 and
9 just cue in on a few points that counsel said. Counsel said Thorens tells you
10 that you can use any sensor. That's exactly not what Thorens says. Thorens
11 says -- I'm looking at the exact same paragraph counsel cited to -- preferably
12 the electrical circuitry comprises a sensor to detect airflow. That airflow
13 sensor, the sensor, may be electromechanical, could be any mechanical
14 device, optical device, opto-mechanical device, or optical-mechanical based
15 system. So again, it's referring to different types of flow sensors, not saying
16 you can take the flow sensor from Thorens and replace it.

17 Again, we're not just replacing it with a pressure sensor, they're
18 suggested replacing it with a differential pressure sensor. Replacing a flow
19 sensor, something that works perfectly well in Thorens, with a differential
20 pressure sensor that requires chambers, the seals, everything we've gone
21 through, based on this one sentence which doesn't even say what they say it
22 says. So, Thorens does not say you can use any sensor whatsoever.
23 Actually, I realize that I was not sharing my screen. Let me put that back up.
24 This is -- it's exactly what I said, preferably the electro-circuitry comprises a
25 sensor to detect airflow. Those subsequent examples are examples of
26 airflow sensors.

1 I'll work backwards. I'm going to hit really Grounds --

2 JUDGE ROSS: Mr. Glass, we lost your screen.

3 MR. GLASS: No, I dragged the exhibit off.

4 JUDGE ROSS: Okay.

5 MR. GLASS: I'm bringing up my presentation again. I'll go back to
6 slide 15, starting with Ground 2. Petitioner argued that, well, I didn't
7 address the fact that you can take that flow sensor in Figure 2 and put it
8 horizontally. I did. Actually, counsel must have missed it, we had objected
9 to one slide, because that's an argument they didn't raise in their petition,
10 but it's really of no moment. The fact that you can take that sensor 208 -- let
11 me highlight it -- that sensor 208 and make it horizontal, doesn't turn it into
12 a differential pressure sensor.

13 So they say, well -- their argument goes like this: well, if you put it
14 horizontal, it kind of looks like the differential pressure sensor we see in
15 Figures 5 and 7, so therefore they're the same embodiments. No, that flow
16 sensor, that's again -- that's what Thorens discloses, that's a flow sensor.
17 They had to go through an entire obviousness analysis in Ground 4 to add
18 that in. They can't just say, well, you can flip it on its side and that makes it
19 a differential pressure sensor.

20 In connection -- and I'm going to hit the highlights on secondary
21 indicia. I think it's well laid out in the briefs. Counsel disagreed with me on
22 the point that nicotine salt practices the claims. We have that adequately in
23 our briefs, we mapped that to the vaporizable material in the claims, every
24 one of these so-called critical limitations are mapped in the claims. I will
25 point out, in the case that they cite, the *Fox* case, the fact that the limitations
26 were critical wasn't just a statement made by counsel. There were

1 admissions in the record in that case that the elements were critical, which
2 don't exist here. So there's simply statements by counsel that they're
3 critical, and we have mapped them in the briefs.

4 I'm sorry, going back to -- I will go back to Ground 2. Counsel relies
5 extensively on, exclusively, in the *Net Money* case, on the footnote. I'll point
6 out to Your Honors, I think he said that there's no, as we must do, we find
7 there's no mutually exclusive embodiments. That's not, first off, what that
8 footnote says. They say, I'm reading from the decision, it is not clear
9 whether the payment modules disclosed in the records are mutually
10 exclusive. Viewing the facts in light most favorable to NMI, however, as we
11 must do.

12 So they're just saying that there was an argument raised in that case
13 that the two embodiments were mutually exclusive, and they're just saying
14 in that footnote -- that's why it's in a footnote, not in the holding of the case.
15 The footnote simply says, as we must do on summary judgment, to look at
16 the facts most favorable to the non-movement. So that's certainly not part of
17 their holding. That's not the law. The law is that the claim, the elements
18 must be arranged to anticipate as they are in the claims, and that's what the
19 *Net MoneyIN* case focused on.

20 These are different embodiments, they used different sensors, and
21 again, I'll point out that -- and counsel did not address this, they have an
22 entire ground to address why it would be obvious to replace a flow sensor
23 with a differential pressure sensor.

24 I'll point out -- I know I'm jumping around a little bit, but I'll point
25 out one more point in Ground 4 since I mentioned it. They argued that, well,
26 the benefit is stated in Weigensberg that you can save space. Again I'll say,

1 why on earth would someone take a flow sensor out that works, that has
2 none of the disadvantages that they've pointed to, and swap in a differential
3 pressures system that you have to now make radical changes to the device
4 simply to save space, when you could just make the plastic body longer?
5 That seems a far more rational modification, and counsel didn't address that
6 either.

7 I'll end on one point, and I am going to go back to Worm. One thing
8 that was very surprisingly missing from counsel's argument, I spent at least
9 a third of my time explaining why this language that they rely on, the airtight
10 language, why Worm expressly explains the purpose of it. Worm expressly
11 states that that airtight, that not substantially airtight language, is simply to
12 convey that the pressure drop is communicated to the pressure sensor.

13 Even more surprisingly, counsel completely ignored the backflow
14 issues I raised. That the entire point of Figure 7, this is the figure they rely
15 on exclusively for the airflow patent. Worm says that the entire point of that
16 figure is to illustrate the spatial relationship of the air inlet channel and the
17 pressure channel. Worm goes to great pains to explain that those two things
18 must be separate. The air pressure channel must be separate from the
19 airflow.

20 So again, this is not us making this up, pulling out reasons why you
21 wouldn't combine from whole cloth. It is express disclosure in Worm, keep
22 the pressure channel separate from the airflow path by at least one or two or
23 three millimeters. Keep it downstream, so when you blow into it, the first
24 thing you hit is that air inlet 789, not the pressure channel. And it says very
25 specifically, and counsel completely ignored this, that because of the spatial
26 arrangement, Worm expressly attributes the spatial arrangements, the fact

1 that the pressure channel is separate from the airflow because of that spatial
2 arrangement, you have prevented the airflow issue.

3 Again, by opening up, by changing that into an airflow channel, they
4 not only exacerbate -- I said this before, I'll say it again, Worm solved the
5 problem. So by creating an airflow channel, and airflow path that is in
6 communication with that pressure channel, they've taken a problem that has
7 been solved and now they're creating exactly what Worm says was solved.
8 There's simply no reason to do it. Worm tells you not to do it, and they
9 completely ignore that disclosure, and they ignored at least one third of what
10 I said in my presentation.

11 Your Honors, a few more minor points, but I think -- give me one
12 second to look through my notes. I'm not sure there's anything.

13 I'll actually, Your Honors, I'll end on that point, unless there's any
14 questions.

15 JUDGE ROSS: I do have a question about -- oh, sorry, go ahead.

16 JUDGE MCGRAW: Could you address Petitioner's argument that
17 the claims do not cover either nicotine salts or flavorings, merely because
18 the claims recite a vaporizable material? That is not enough to show that
19 nicotine salts or flavorings are --

20 MR. GLASS: It's -- well, okay, to be fair, I don't think they said
21 they're not covered. I don't think there's any dispute that they are covered.
22 What they're arguing is that they're not a critical component, and again, they
23 haven't explained what makes or doesn't make a critical component. The
24 only case they've cited to, the *Fox* case, there were admissions, and I
25 thought I had mentioned this earlier, there were admission from the Patent
26 Owner that the elements were critical. So the fact that there are nicotine

1 salts in the Juul system, it's completely covered by the claims. Whether it's
2 critical, I mean, we disagree with it, the facts, the analysis of their own case
3 doesn't support the notion that they're critical. Have I responded to your
4 question, Your Honor?

5 JUDGE MCGRAW: But their arguments that the claims cover things
6 that can be vaporized that do not use nicotine salts, and so I think that might
7 tie into why it's not critical, why should we consider nicotine salts, which is
8 just one small subset of a vaporizable material to -- go ahead.

9 MR. GLASS: I'm sorry. I didn't mean to cut you off, Your Honor.

10 JUDGE MCGRAW: Why shouldn't we consider that argument, then?
11 Because nicotine salts, there are other items that are vaporizable that are not
12 nicotine salts that we should not consider nicotine salts to constitute
13 secondary considerations?

14 MR. GLASS: I would point to their own case. Their own case says
15 they're not -- I'm going from memory, their own case, the *Fox* case, says
16 that the Federal Circuit is not saying that every unclaimed item would render
17 a nexus not coextensive. It has to be critical. And the fact that it's covered,
18 in some cases, can be sufficient. And again, the only case they've cited to,
19 to establish criticality, is a case where there were admissions. There's no
20 such admissions here. And I would submit that the fact that they are covered
21 by the claims, and there's no dispute on that, and there's no case saying that
22 absent an admission there's some criticality, I would say that they have
23 failed to establish that they are critical.

24 JUDGE MCGRAW: Thank you.

25 JUDGE ROSS: I was going to ask a question about the doctrine of
26 equivalents argument, to show, I'm assuming, coextensivity? Could you

1 explain a little bit about that for us, and whether you have any case law to
2 support that, that you know, we can rely on the doctrine of equivalents under
3 secondary analysis of secondary considerations?

4 MR. GLASS: So we did not cite to any cases in our briefs. I will say
5 that there are district court cases on this point, there's at least one district
6 court case. I'll give you a cite to it, Your Honor, but I will say it's
7 something that we found after the briefing, it's not in the briefs. So I don't
8 want to cross the line. I'm happy to get you the cite to it, but in terms of
9 whether you can rely on doctrine of equivalents from a Federal Circuit
10 perspective, as far as we can tell, it's simply an unaddressed issue. There's
11 no cases. Petitioner has not cited to any cases on that point. To the contrary,
12 we have not come up with any cases on that point that -- from either
13 perspective.

14 JUDGE ROSS: What about Petitioner's argument that the record is
15 lacking in terms of expert support for the doctrine of equivalents?

16 MR. GLASS: Well, Your Honor, again, our point on doctrine of
17 equivalents -- and it's not inaccurate to say we have a few sentences in both
18 the sur-reply and in the POR -- the point is that these are exactly the same.
19 That's really our point, that there's no differences. The law requires that
20 there can't be more than substantial differences. One way to find that is the
21 function-way-results analysis, but our point is that there really are no
22 differences. Because the way the undisputed evidence, the Juul
23 documentation, show that these two sensors are components of the same
24 device, there's simply no differences between the two. And that's really our
25 point.

26 JUDGE ROSS: Okay, thank you for addressing my question.

1 MR. GLASS: And Your Honor, I'll just, for the record, the case I was
2 referring to was the *Dome Patent* case, and it's 2014 Westlaw 2948927, at
3 jump cite 26. And again, to the extent Your Honors wish to review it, that is
4 a case I will admit was not cited in our briefs, it's something that we located
5 after the briefing.

6 JUDGE ROSS: Okay. If you all could just hang tight for a second,
7 I'm going to see if there's anything else we need to talk about.

8 Okay, so as I mentioned at the beginning of the hearing, you emailed
9 the Board late last night about the issue of the ITC, or additional portions of
10 the ITC decision being entered into evidence. Because this is Patent
11 Owner's request, I'm going to let Patent Owner go ahead and address that
12 issue, and then we'll hear from Petitioner.

13 MR. GLASS: Your Honors, it's a really straightforward. I think we
14 can dispense with this very quickly. There are multiple sections of the ITC
15 decision, one is the claim construction section, the other is a section that
16 holds that a very similar Juul product that uses the same sensor arrangement
17 practices under the doctrine of equivalents. So, and how that is mapped I
18 think is relevant to how the claims are construed. Also I'll point out, Your
19 Honors, that several times in Petitioner's presentation they reference the fact
20 that well, the ITC found a literal infringement, and it would just simply be
21 unfair to let that statement go without the full context.

22 We're not going to try and raise -- at this point, how could we? We're
23 not going to raise any arguments or bring in any new evidence, as counsel
24 suggested. I think from the Board's perspective, having that fulsome
25 analysis and opinion would be helpful to the claim construction analysis. So
26 that's really our point. It's really an incomplete decision, it's an issue

1 they've raised, counsel raised it repeatedly during his presentation, how the
2 ITC only found -- the doctrine of equivalents didn't find literal. I think, at
3 this point, it's only fair to allow that in so that Your Honors could review the
4 entirety of those two sections.

5 JUDGE ROSS: Thank you, Mr. Glass. Mr. Desai?

6 Mr. DESAI: Sure. Again, we've submitted the claim construction
7 portion of the decision, but I think what Mr. Glass did not clearly state is that
8 the section that they would like to submit, first of all, includes portions about
9 the NJOY Ace device, which are not relevant at all here. And then, it
10 doesn't have to -- the analysis in that section is about Juul 2 system, which is
11 a different device, it is not the Juul system that they are relying on for
12 secondary considerations in this case.

13 And there are some similarities, but there are a lot of differences
14 between those two devices. The circuit board is different, the gaskets are
15 different, and so it's simply a different device. And we could certainly
16 submit the whole opinion, and I think it's clear at this point that Patent
17 Owner did not put in the evidence on doctrine of equivalents in this case,
18 and so it would be problematic if portions of that opinion were used for
19 doctrine of equivalents, because the Commission was considering entirely
20 different evidence and expert testimony.

21 And as to the point about how I referenced that the Commission found
22 that Juul system did not literally practice, that is the same argument that's
23 presented here, right? The argument about Juul literally practicing is the
24 same argument. The argument about doctrine of equivalents is different
25 because the Commission had different evidence and was addressing a
26 different device, in that part of the opinion, Juul 2. So, I think there's

1 limited use for that portion of the opinion, and the portion of the opinion
2 that's really relevant to us right now is the claim construction portion. So
3 that's the reason why our position is that is what should be submitted.

4 JUDGE ROSS: And if -- I'm sorry, I don't have your email in front
5 of me anymore. If we were to admit that portion of the decision, I
6 understand you request authorization to move to exclude, is that correct, Mr.
7 Desai?

8 MR. DESAI: Well, if those portions of the opinion regarding doctrine
9 of equivalents for Juul 2 are somehow used in this case, I think we would --
10 it's not clear that Patent Owner is saying if they are, but if they are going to
11 rely on those portions, then we need to move to exclude it, because they
12 were not put in evidence in this case. The underlying evidence, the expert
13 testimony, underlying doctrine of equivalents, was not put into this case.

14 MR. GLASS: If I could just raise a few points, Your Honor?

15 JUDGE ROSS: Mr. Desai, are you finished?

16 MR. GLASS: Oh, sorry.

17 MR. DESAI: I think so. I believe, yeah, I'm finished.

18 JUDGE ROSS: Okay, thank you. Go ahead, Mr. Glass.

19 MR. GLASS: Just one quick point. It sounds like the fear from
20 counsel is that we're going to somehow bring in new evidence and make
21 new arguments. Once we get off this Zoom, that's it, the case is closed. So,
22 you know, I trust the Panel and its discretion to look at the decision and not
23 be swayed by evidence that is not in this case. But it is relevant, I think, to
24 the issue of claim construction, because -- and I didn't gloss over it, I think I
25 said it very expressly, the DOE section discusses a different product. But
26 there is no dispute, and counsel may disagree with me, that that product has

1 the same sensor arrangement, uses the two sensors, which is really the issue,
2 the sole issue that we're focusing on here, or one of the issues.

3 So to the extent there's any harm, as we often do on evidentiary
4 issues, the Panel is their own gatekeeper. Your Honors can certainly work
5 through which are the relevant portions and which are not. It's not a very
6 long section, and it does have some bearing on the DOE analysis, on the
7 claim construction analysis. And we have, just to assure counsel, I have no
8 intention of asking to submit new evidence, new exhibits, or new briefing.

9 JUDGE ROSS: Okay, thank you very much. Mr. Desai, anything
10 else before we conclude?

11 MR. DESAI: Nothing further, Your Honor, thank you.

12 JUDGE ROSS: Any questions from the panel, Judge McGraw, Judge
13 Kaiser?

14 MR. GLASS: I do have one final point, Your Honors, on the motions,
15 on the objections. I don't know if you'd like to address those now, or -- I'm
16 just going to say, we're withdrawing our objections, we have no intention of
17 following up on those objections at this point.

18 JUDGE ROSS: Fair, thank you very much for doing that. Okay, so,
19 before we adjourn, I'd just like to say that you both did a very nice job
20 presenting your case and fielding our questions. I really appreciate your
21 preparedness. And, we'll issue a decision in due course. Thank you very
22 much.

23 (Whereupon, the above-entitled matter went off the record at 3:09
24 p.m.)

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