

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JUUL LABS, INC.,

Petitioner,

v.

NJOY, LLC,

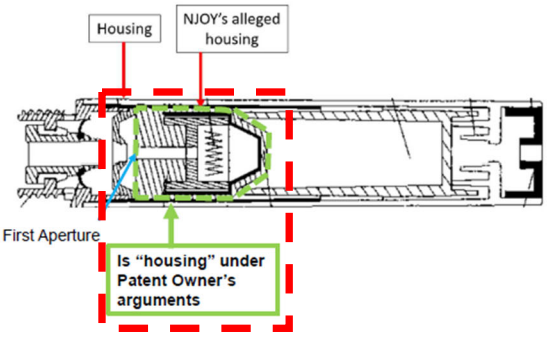
Patent Owner.

IPR2024-00160
U.S. Patent No. 11,497,864

**PATENT OWNER'S OBJECTIONS TO
PETITIONER'S DEMONSTRATIVE EXHIBITS
FOR ORAL ARGUMENT**

I. Objections to Patent Owner's Demonstratives

Pursuant to the Board's January 23, 2025 Order (IPR2024-00160 Paper 29), Patent Owner NJOY, LLC. ("Patent Owner" or "NJOY") submits the following objections to Petitioner's demonstratives for use at the oral argument scheduled for February 25, 2025. In the table below, Patent Owner has placed a red dashed box over the objectionable material in each slide.

Slide No.	Objection
30	Patent Owner objects to the annotated figure as suggesting that Xia's heater 9, secondary liquid storage 10, and liquid guiding mechanism 11 constitutes a "housing" under Patent Owner's arguments," which misrepresents Patent Owner's position, is highly prejudicial, and is a new argument not made in any paper of record. Alternatively, Per Patent Owner, Internal Structure Is Housing If It Houses Internals Patent Owner's Expert <u>Patent Owner Argues Generator's Internal Black Lines Are The Heating Element's Housing</u>  Reply at 11-12; Ex. 1004, Fig. 2 (annotated); Ex. 1035, 60:2-85:1 DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND PC 17 Q And you've used the term "outside structure," 18 so your definition is the housing is the outside 19 structure containing the device internals. That's what a 20 housing is, right? 21 A Yes. 21 A Whatever the external structure holding that 22 within its internals, that would be the housing of the 23 heating element. And you could put it deep inside of a 24 product, and it would still be recognized as the housing 25 of that internals. Again, we -- we often see nested 1 housings. 16 Q So the -- you can have a structure that's a 17 housing even if it's not the outermost structure then? 18 For example, in figure 2, generator? 19 MR. ANSLEY: Objection. Vague. 20 THE WITNESS: Yeah, certainly I'm aware of a 21 lot of products that have nested housings, like there's a 22 housing for one component, and then a housing is then 23 within some other housing. But I think a person of 30
31	Patent Owner objects to the citation to the ITC Final Initial Determination at 38-40 and EX1033 at 1-2 as improper new evidence and new argument because Petitioner did not address the cited material in any paper of record.

	Alternatively, Per Patent Owner, Internal Structure Is Housing If It Houses Internals Patent Owner's Infringement Arguments In ITC Alleged cartridge Alleged Second aperture ITC Initial Determination Certain Vaporizer Devices, Cartridges Used Therewith, And Components Thereof, Inv. No. 337-TA-1372, Final ID, 38-40 (Dec. 5, 2024); Ex. 1033 at 1-2 (alleging tank plus mouthpiece as claimed cartridge); PO Sur-Reply at 6 (citing Final ID without exhibit). DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property Patent Owner's Infringement Contentions Reply at 9-11; Ex. 1033 at 2 (alleging aperture internal to cartridge as second aperture)
36	Patent Owner objects to the citation to the ITC Final Initial Determination at 38-40 and EX1033 at 2 as improper new evidence and new argument because Petitioner did not address the cited material in any paper of record. In ITC, Patent Owner Argued “End” Has Substantial Width Patent Owner's Infringement Arguments In ITC Alleged cartridge Second aperture ITC Initial Determination Certain Vaporizer Devices, Cartridges Used Therewith, And Components Thereof, Inv. No. 337-TA-1372, Final ID, 38-40 (Dec. 5, 2024); Ex. 1033 at 1-2 (alleging tank plus mouthpiece as claimed cartridge); PO Sur-Reply at 6 (citing Final ID without exhibit). DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property Patent Owner's Infringement Contentions Ex. 1033 at 2 (alleging aperture internal to cartridge as second aperture); Reply at 6-9
48	Patent Owner objects to the citation of the prosecution history of the challenged patents and the Han reference as introducing improper new argument because Petitioner did not address the cited material when contending that Patent Owner's construction was not supported in any paper of record.

	Patent Owner's Construction Has No Basis In The Prosecution History '864 Patent Prosecution History Re Han Reference FIG. 1 first aperture and (b1) as the second aperture. However, the structure of Han cannot meet the limitations of dependent claims 49, 63, and 75 for two reasons. First, Han's shell (b) does not include a central airflow passageway and instead places the perforated component for liquid storage (9) in the middle of shell (b), thereby forcing the airflow around the peripheral surface of perforated component for liquid storage (9) as described in paragraph [0070] of Han and shown in FIG. 3. Second, the first aperture Conflicts with NJOY's later ITC infringement and domestic industry assertions Does not support "big" vs. "small" construction Reply at 15-17, 20-21; Pet. at 49-54; Ex. 1002 at 273-74 DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property
53	Patent Owner objects to the annotated figure as introducing improper new argument that was not disclosed in any paper of record. Xia As Modified With Wang Or Fang Extend Central Passageway Throughout Pet. at 38-39, 54-62; Reply at 22-25; Ex. 1007 at ¶90 DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property
62	Patent Owner objects the annotated portion of the figure as introducing improper new argument that was not addressed in any paper of record.

Lack Of Reabsorption Of Hypothetical Free Droplets Is Not A Significant Technological Drawback

'864 And '881 Patents Embodiments Without Wick Spray Liquid Onto Heating Element

Patent Owner Agrees No Direct Contact Between Liquid Storage And Heating Element In Figure 2

Contrary to JLI's assertion that the claims do not reduce burnt taste (Reply, 37), Fuma's device and invention eliminate burnt taste by separating the heating element and liquid storage. EX2022, ¶¶412-413. The uninsulated lead wires do not

Sur-Reply at 26

Reply at 24; Ex. 1001, Fig. 2 (annotated)

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63 Patent Owner objects to the citation to EX1035 at 167:6-168:5 as introducing new evidence that was not addressed in any paper of record.

Even If Patent Owner Is Correct, Cheaper Devices With Drawbacks Are Within The Scope Of Obviousness

Testimony Of Patent Owner's Expert

23 Do customers sometimes opt to purchase cheaper, worse
24 performing products?

1 THE WITNESS: Yes, I think they do.

2 Q BY MR. DOKHANCHY: And are you aware of the
3 proliferation of cheap, disposable e-cigarettes in the
4 marketplace today?

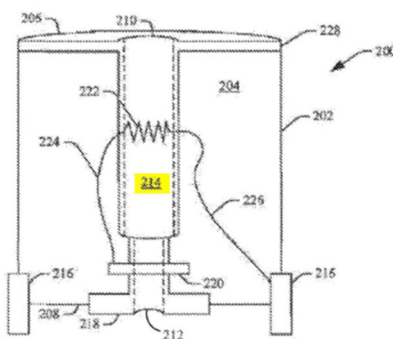
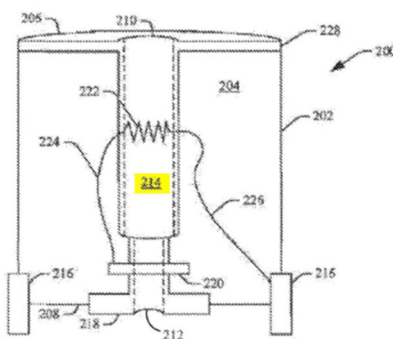
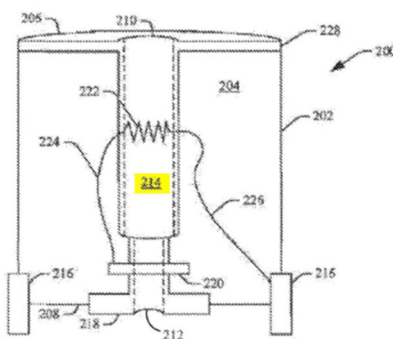
5 A I'm generally aware that there's that option.

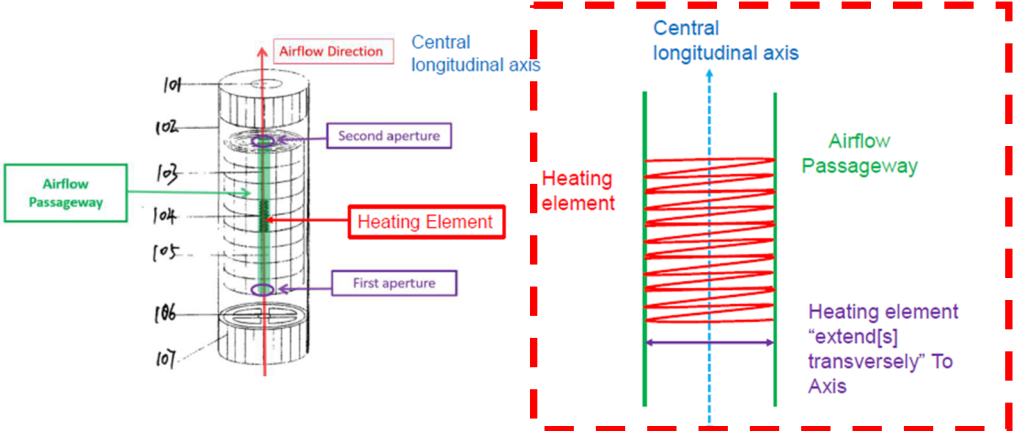
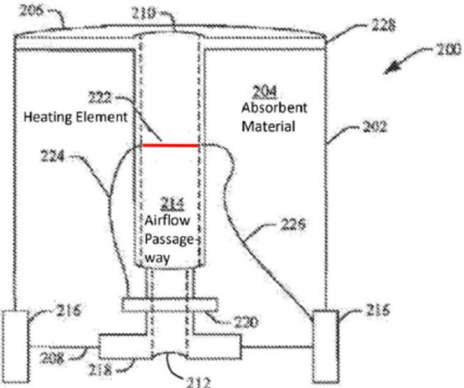
Reply at 21-22; Ex. 1035 at 167:6-168:5

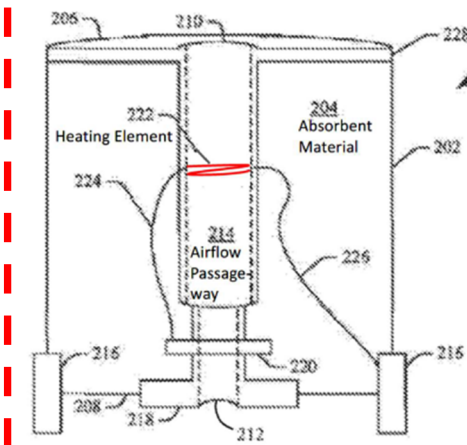
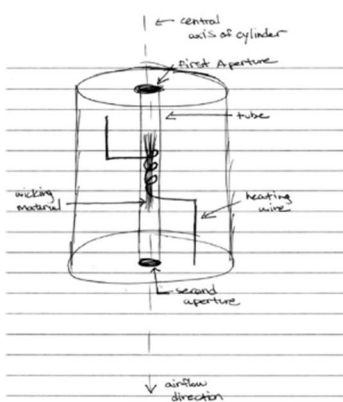
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63

82 Patent Owner objects to Slide 82 as introducing new evidence and improper new argument, because Petitioner did not argue that Patent Owner has treated passageway and chamber the same in any paper of record, nor did it cite to EX1033 at 42-43 to make any such argument.

	MINTZ “an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length” (Claims 19, 37, 44) Patent Owner's ITC Infringement Arguments Treat Passageway And Chamber The Same Claim 19 <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Claim 19 19. The cartridge of claim 9, wherein the housing further comprises an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length, the substantially uniform cross-sectional area being measured perpendicular to the central longitudinal axis of the housing, no portion of the chamber from immediately adjacent the heating element to the second aperture having a cross-sectional area smaller than a cross-sectional area of the second aperture. </td><td style="width: 50%; vertical-align: top;"> The JUUL system comprises the cartridge of claim 9, wherein the housing further comprises an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length, the substantially uniform cross-sectional area being measured perpendicular to the central longitudinal axis of the housing, no portion of the chamber from immediately adjacent the heating element to the second aperture having a cross-sectional area smaller than a cross-sectional area of the second aperture. <u>See supra Claim 4.</u> <u>The airflow chamber comprises the portion of the airflow passageway between the heating element and the second aperture.</u> </td></tr> </table> DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property Ex. 1033 at 42-43 82	Claim 19 19. The cartridge of claim 9, wherein the housing further comprises an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length, the substantially uniform cross-sectional area being measured perpendicular to the central longitudinal axis of the housing, no portion of the chamber from immediately adjacent the heating element to the second aperture having a cross-sectional area smaller than a cross-sectional area of the second aperture.	The JUUL system comprises the cartridge of claim 9, wherein the housing further comprises an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length, the substantially uniform cross-sectional area being measured perpendicular to the central longitudinal axis of the housing, no portion of the chamber from immediately adjacent the heating element to the second aperture having a cross-sectional area smaller than a cross-sectional area of the second aperture. <u>See supra Claim 4.</u> <u>The airflow chamber comprises the portion of the airflow passageway between the heating element and the second aperture.</u>
Claim 19 19. The cartridge of claim 9, wherein the housing further comprises an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length, the substantially uniform cross-sectional area being measured perpendicular to the central longitudinal axis of the housing, no portion of the chamber from immediately adjacent the heating element to the second aperture having a cross-sectional area smaller than a cross-sectional area of the second aperture.	The JUUL system comprises the cartridge of claim 9, wherein the housing further comprises an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length, the substantially uniform cross-sectional area being measured perpendicular to the central longitudinal axis of the housing, no portion of the chamber from immediately adjacent the heating element to the second aperture having a cross-sectional area smaller than a cross-sectional area of the second aperture. <u>See supra Claim 4.</u> <u>The airflow chamber comprises the portion of the airflow passageway between the heating element and the second aperture.</u>		
84	Patent Owner objects to Slide 84 as introducing new evidence and improper new argument, because Petitioner did not cite EX1001 at 6:53-56, 8:1-3, or Fig. 2 with respect to an airflow chamber. . MINTZ “an airflow chamber having a length extending intermediate of the heating element and the second aperture, the length of the chamber having a substantially uniform cross-sectional area along a continuous majority of the length” (Claims 19, 37, 44) <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> '864 Patent Specification coupled to a positive terminal of the power source. When a user draws a breath by way of the <u>airflow passageway 214</u>, a circuit is closed, thereby providing current to the heating element 222. The heating element 222 acts to vaporize the liquid solution in the absorbent material 204, and the result- * * * In another exemplary embodiment, a heating element 302 may be helical in nature and may wrap around the exterior of the <u>airflow chamber 214</u>. The heating element in this case </td><td style="width: 50%; vertical-align: top;"> '864 Patent, Figure 2  Ex. 1001 at 6:53-56, 8:1-3, Fig. 2 </td></tr> </table> DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property 84	'864 Patent Specification coupled to a positive terminal of the power source. When a user draws a breath by way of the <u>airflow passageway 214</u>, a circuit is closed, thereby providing current to the heating element 222. The heating element 222 acts to vaporize the liquid solution in the absorbent material 204, and the result- * * * In another exemplary embodiment, a heating element 302 may be helical in nature and may wrap around the exterior of the <u>airflow chamber 214</u>. The heating element in this case	'864 Patent, Figure 2  Ex. 1001 at 6:53-56, 8:1-3, Fig. 2
'864 Patent Specification coupled to a positive terminal of the power source. When a user draws a breath by way of the <u>airflow passageway 214</u>, a circuit is closed, thereby providing current to the heating element 222. The heating element 222 acts to vaporize the liquid solution in the absorbent material 204, and the result- * * * In another exemplary embodiment, a heating element 302 may be helical in nature and may wrap around the exterior of the <u>airflow chamber 214</u>. The heating element in this case	'864 Patent, Figure 2  Ex. 1001 at 6:53-56, 8:1-3, Fig. 2		
104	Patent Owner objects to the annotated figure as introducing new evidence and improper new argument that did not appear, or was not otherwise addressed, in any paper of record.		

	1[b1] a heating element located in the interior of the housing, <u>the heating element extending transversely to a central longitudinal axis of the housing and being at least partially exposed to the airflow</u>  Pet. at 96-97; Reply at 30-34; Ex. 1005, Fig. 3 (annotated). DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property
109	Patent Owner objects to Slide 109 as presenting improper evidence subject to Patent Owner's Motion to Exclude (Paper 31). 1[b1] a heating element located in the interior of the housing, <u>the heating element extending transversely to a central longitudinal axis of the housing and being at least partially exposed to the airflow</u> <u>Deposition Testimony of Inventor Daniel Hillenbrandt</u>  20 Q. And you agree it does go transversely 21 across the passageway, right? 22 MR. SIEGER: Same objections. 23 A. That your hypothetical does look 24 transverse. Reply at 33-36; Ex. 1040, 2; Ex. 1038, 88:16-89:24. DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property
110	Patent Owner objects to Slide 110 as presenting improper evidence subject to Patent Owner's Motion to Exclude (Paper 31).

	1[b1] a heating element located in the interior of the housing, the heating element extending transversely to a central longitudinal axis of the housing and being at least partially exposed to the airflow Deposition Testimony of Inventor Daniel Hillenbrandt  15 All this wire does is go across the 16 passageway three times. So my question is, if 17 the heating element, instead of going across 18 once, goes across three times, does it still 19 extend transversely to the airflow passageway? 20 A. As you're describing it, and the way you 21 drew it horizontally, would speculate that it 22 does -- 23 Q. Okay. 24 A. -- is what you're trying to achieve as 25 far as going across. Reply at 33-36; Ex. 1040, 2; Ex. 1038, 90:1-92:1 DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property
111	Patent Owner objects to Slide 111 as presenting improper evidence subject to Patent Owner's Motion to Exclude (Paper 31). 1[b1] a heating element located in the interior of the housing, the heating element extending transversely to a central longitudinal axis of the housing and being at least partially exposed to the airflow Deposition Testimony of Inventor Daniel Hillenbrandt  "[I]t does extend transversely across the passageway; correct? 13 MR. PEPE: Objection to form, calls 14 for opinion testimony. 15 A. I can see it can be interpreted like that. Reply at 33-36; Ex. 1041, 240:12-242:15, Ex. 1042. DEMONSTRATIVE EXHIBIT - NOT EVIDENCE - © 2024 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. // Confidential Property
115	Patent Owner objects to Slide 115 as presenting improper evidence subject to Patent Owner's Motion to Exclude (Paper 31).

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Patent Owner objects to Slide 116 as presenting improper evidence subject to Patent Owner's Motion to Exclude (Paper 31).

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Patent Owner objects to the annotated figure as misrepresenting Patent Owner's position, highly prejudicial, and introducing new argument that was not addressed in any paper of record.

Patent Owner's Theory



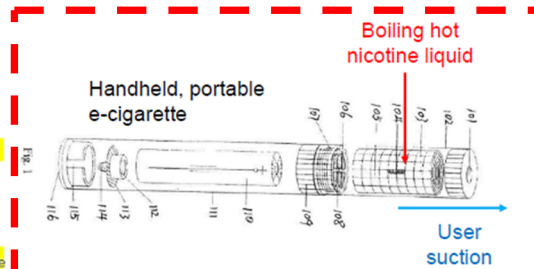
Deposition Of Patent Owner's Expert

2 Q Okay. So how does the vapor pass through a
3 fiber soaked in liquid?
4 A Well, it's kind of like drinking a Sprite or a
5 Coke, right? It's all liquid, but there's bubbles that
6 form and flow through the liquid to get to the outside.
7 So essentially it's a boiling operation, and gas can go
8 through liquid as it's boiling outwards.

24 Q Does Wang describe its operation as boiling the
25 liquid that's within the fiber?
1 A No, it does not use that terminology.

Ex. 1035 at 25:2-26:1

Patent Owner's Theory



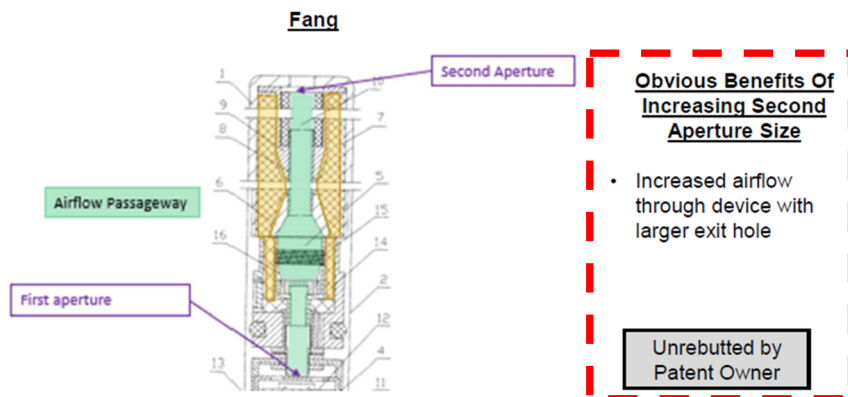
POR, 80-82

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118

137 Patent Owner objects to Slide 137 as introducing new argument that was not addressed in any paper of record.

"the first aperture proximate the first end is smaller than the second aperture proximate the second end"
(Claims 13, 32)



Reply at 36; Pet. at 113-114; Ex. 1006, Fig. 1 (partial, annotated); Ex. 1007, ¶360-361

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Date: February 25, 2025

By: /Anish R. Desai/

Anish R. Desai

Reg. No. 73,760

Lead Counsel for Patent Owner

Paul, Weiss, Rifkind, Wharton

& Garrison, LLP

1285 Avenue of the Americas

New York, NY 10019

adesai@paulweiss.com

T: 212-317-3000

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on February 25th, 2025, the foregoing
**PATENT OWNER'S OBJECTIONS TO PETITIONER'S
DEMONSTRATIVE EXHIBITS FOR ORAL ARGUMENT** was served via
electronic mail, upon the following:

LEAD COUNSEL	BACK-UP COUNSEL
William A. Meunier [Reg. No. 41,193] Mintz, Levin, Cohn, Ferris, Glovsky and Popeo P.C. One Financial Center Boston, MA 02111 WAMeunier@mintz.com	Michael T. Renaud [Reg. No. 44,299] Adam S. Rizk [Reg. No. 66,867] Mintz, Levin, Cohn, Ferris, Glovsky and Popeo P.C. One Financial Center Boston, MA 02111 ARizk@mintz.com MTRenaud@mintz.com Reza Dokhanchy [Reg. No. 62,795] Michael D Van Loy [Reg. No. 52,315] Mintz, Levin, Cohn, Ferris, Glovsky and Popeo P.C. 3580 Carmel Mountain Road, Suite 300 San Diego, CA 92130 MDVanLoy@mintz.com RDokhanchy@mintz.com

/Timothy J. Andersen/
Timothy J. Andersen
IP Case Manager
Paul, Weiss, Rifkind, Wharton
& Garrison, LLP
2001 K Street, N.W.
Washington, D.C. 20006
tandersen@paulweiss.com
202-223-7300