

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SHARKNINJA, INC.,
SHARKNINJA OPERATING LLC,
SHARKNINJA MANAGEMENT LLC, AND
SHARKNINJA SALES COMPANY,
Petitioners,

v.

DYSON TECHNOLOGY LIMITED
Patent Owner.

Case No. IPR2023-01324

U.S. Patent No. 9,414,662

**PATENT OWNER'S PRELIMINARY RESPONSE
PURSUANT TO 37 C.F.R. § 42.017**

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I. INTRODUCTION

Patent Owner Dyson Technology Limited (“Patent Owner”) provides the following preliminary response to the Petition filed by SharkNinja, Inc., SharkNinja Operating LLC, SharkNinja Management LLC, and SharkNinja Sales Company (collectively, “Petitioners”) requesting *inter partes* review of claims 26-28 (“the Challenged Claims”) of U.S. Patent No. 9,414,662 (“the ’662 Patent”). For at least the reasons set forth below, Patent Owner requests that the Board deny *inter partes* review as to the Petition.

Institution of an *inter partes* review requires that “the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). “In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3)). This burden of persuasion never shifts to the patent owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing burden of proof in *inter partes* review).

Petitioners fail to meet that burden here. Petitioners ignore that one of ordinary skill in the art would have recognized that the claimed “inner wall” must

extend the entirety of the handle from the primary fluid inlet to the body of the hair care appliance. None of Petitioners' grounds disclose this limitation. Further, Petitioners fail to acknowledge that the preamble is limiting requiring disclosure of a "hair care appliance" and fail to explain why it would have been obvious to one of ordinary skill in the art to use a hand-held blower device using a high-pressure air source as the claimed "hair care appliance," instead improperly relying upon hindsight rationale from the '662 Patent itself to support this conclusion.

Therefore, Petitioners have not shown a reasonable likelihood that at least one of the Challenged Claims is unpatentable and the Petition should be denied.

II. CLAIM CONSTRUCTION

Petitioners state that construction of any claim term is unnecessary for the Board to resolve the controversy. Pet. at 8. However, there are two claim construction issues for the Board to resolve in order to determine whether to grant the Petition and institute trial. First, the Board should construe the term "inner wall" to mean "the wall located on the inside of the handle that extends the entirety of the handle from the primary fluid inlet to the body of the appliance." Second, the Board should find that the preamble is limiting. As discussed below, both of these issues are required in order to determine whether the claims are unpatentable.

A. “Inner Wall”

In applying the *Phillips v. AWH Corp.* standard for claim construction, claim terms are generally given their ordinary and customary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention¹ and in the context of the entire patent disclosure. 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). “[C]laims must be read in view of the specification, of which they are a part.” *Id.* at 1313 (quotation omitted). The specification is usually “dispositive” of claim construction, is the “single best guide to the meaning of a disputed term,” and “is, thus, the primary basis for construing the claims.” *Id.* at 1315 (quotations omitted). Additionally, “the context of the surrounding words of the claim must also be considered in determining the ordinary and customary meaning of terms in a claim.” *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1288 (Fed. Cir. 2017) (internal quotations omitted).

Here, both the claim language and the specification support Patent Owner’s construction of “inner wall” as “the wall located on the inside of the handle that

¹ For the purposes of this Preliminary Response only, Patent Owner does not contest Petitioners’ definition of a person of ordinary skill in the art. Pet. at 18-19. Patent Owner reserves the right to contest this definition at any other point in this proceeding or in any other proceeding involving the ’662 Patent or any patents regarding a related technology.

extends the entirety of the handle from the primary fluid inlet to the body of the appliance.” Claim 26 states that the “inner wall . . . defines a **primary** fluid flow path that extends from a primary fluid inlet into the appliance.” EX-1001 at 20:6-8 (emphasis added). The Petition asserts that this limitation is met as long as there is a fluid flow path from the outside of the housing into **any** portion of the appliance. *See, e.g.*, Pet. at 32-34 (arguing that the air flow into Jeong’s housing into the motor housing 18, which does not extend to the body, meets this limitation), 56-57 (arguing that air flow into Yoshida’s housing into the cylindrical wind tunnel, which does not extend the full length of the handle, meets this limitation), 79-81 (arguing that flow into Jeffs’ high pressure air inlet channel, which does not extend to the body, meets this limitation). However, this would mean that **any** fluid entering into **any** fluid inlet would create a flow path from outside the housing into the appliance. Similarly, if the portion of the appliance in which the air initially enters through the fluid inlet reads on the “the appliance,” then **any** fluid inlet through which fluid enters would create a fluid flow path from outside the housing into the appliance. Such a claim interpretation renders the phrase “inner wall . . . defines a primary fluid flow path that extends from a primary fluid inlet into the appliance” meaningless because the fluid inlet itself meets the Petitioner’s interpretation that the inner wall is met by any wall that provides a fluid flow path from the outside of the housing into **any** portion of the appliance. Thus, “inner

wall” in Claim 26 must define something more than just a fluid flow path from the outside of the housing into *any* portion of the appliance.

The phrase “wherein the primary fluid flow path from the primary fluid inlet to a primary fluid outlet from the body” in Claim 26 provides additional context to the term “inner wall,” which defines a primary fluid flow path within the handle. Because the primary fluid flow path extends from the primary fluid inlet to a primary fluid outlet from the body, the inner wall defining the primary fluid flow path in the handle must extend the length of the handle to complete the primary fluid flow path. Otherwise, the primary fluid flow path would not extend from the primary fluid inlet to the primary fluid outlet from the body. Accordingly, the claim requiring that the “inner wall . . . defines a *primary* fluid flow path that extends from a primary fluid inlet into the appliance” must require the primary fluid flow path to extend from the primary fluid inlet through the length of the handle.

The specification and drawings consistently require the “inner wall” to extend the entirety of the handle from the primary fluid inlet to the body of the appliance in order to define “a primary fluid flow path that extends from a primary fluid inlet into the appliance.” All of the figures illustrating the handle show that inner wall 220 extends the full length of the handle and the primary fluid flow path from the primary fluid inlet 40 to the body 30. *See* EX-1001 Figs. 3, 4b, 5, 6, 7.

For example, annotated Figures 3 and 4b below show that the inner wall 220 extends the full length of handle 200 from the primary fluid inlet 40 to body 30:

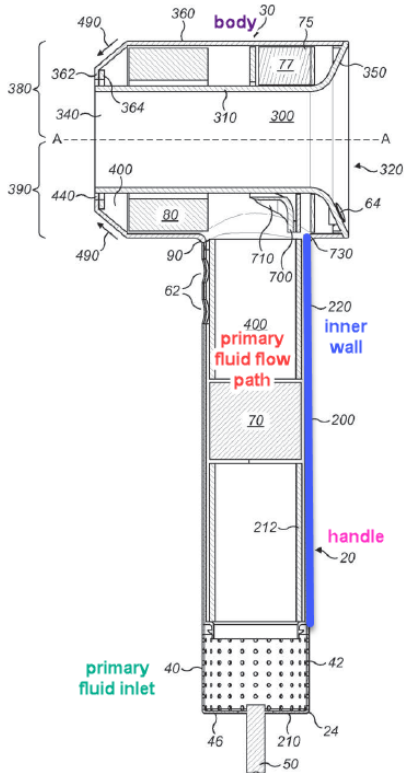


FIG. 3

EX-1001 Fig. 3 (annotated)

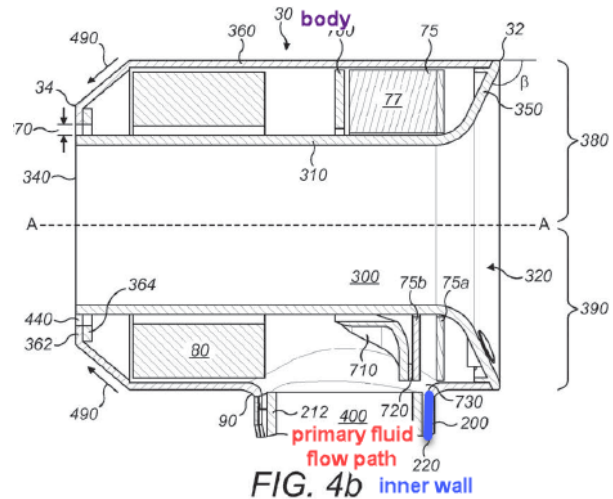
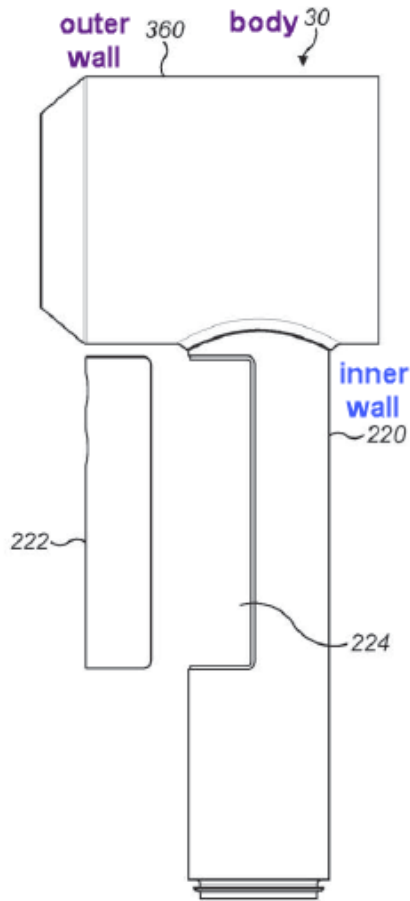


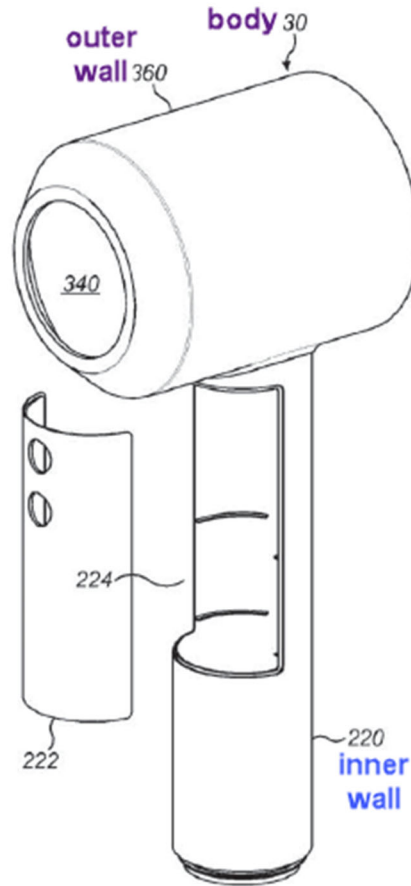
FIG. 4b inner wall

EX-1001 Fig. 4b (annotated)

Further, the specification discloses that the outer wall 360 of the body 30 and the inner wall 220 of the handle 20 is a single piece. EX-1001 at 11:49-51, 11:61-63. This is illustrated by Figures 5 and 6 as annotated below:



EX-1001 Fig. 5 (annotated)



EX-1001 Fig. 6 (annotated)

The specification further discloses that the outer wall 200 of the handle 20 does not have to extend over the entire length of the inner wall 220 implying that inner wall 220 must extend the full length of the handle from the primary fluid inlet 40 to body 30. EX-1001 at 12:54-65.

Thus, a person of ordinary skill in the art at the time of the invention reading the claim language and the specification would have interpreted “inner wall” to mean “the wall located on the inside of the handle that extends the full length of the handle from the primary fluid inlet to the body of the appliance.”

B. The preamble is limiting

The Board should construe the preamble of Claim 26—“[a] hair care appliance comprising”—as being limiting. The preamble provides the antecedent basis for “the appliance” in the body of Claim 26. Specifically, Claim 26 recites:

A hair care appliance comprising a body and a handle, the handle comprising an inner wall and an outer wall, wherein the inner wall is disposed radially inwardly from the outer wall and defines a primary fluid flow path that extends from a primary fluid inlet into *the appliance*, wherein the outer wall is an external surface of the handle, and wherein the primary fluid flow path from the primary fluid inlet to a primary fluid outlet from the body is not linear.

EX-1001 at 20:4-11 (emphasis added). This is classic antecedent basis; Claim 26 relies on the first instance of “appliance” that is introduced in the preamble for antecedent basis of “the appliance” in the body rather than reintroducing “an appliance” into the body of the claim. *Shoes by Firebug LLC v. Stride Rite Children’s Grp., LLC*, 962 F.3d 1362, 1368 (Fed. Cir. 2020); *see also Proveris Sci. Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1373 (Fed. Cir. 2014) (“The phrase ‘the image data’ [in the body of the claim] clearly derives antecedent basis from the ‘image data’ that is defined in greater detail in the preamble as being ‘representative of at least one sequential set of images of a spray plume.’”). “While antecedent basis alone is not determinative of whether a preamble is limiting, use of preamble terms to define positive limitations in the body of claims

can evince an inventor's intent that the preamble limit the scope of the claim."

Shoes by Firebug, 962 F.3d at 1368. That is precisely the case here.

The inventors' intent for the preamble to limit the claim is also evinced by the specification's highlighting that the invention was focused on a hair care appliance. *Proveris Sci. Corp.*, 739 F.3d at 1372-73. The specification is replete with references to use of the appliance for hair care. *See. e.g.*, EX-1001 Abstract, 1:11-13, 1:35-40, 1:63-2:23, 4:41-46, 5:38-44, 5:53-56, 6:42-48, 7:19-26, 7:45-54, 8:57-60, 9:52-56, 10:1-21, 10:40-45, 10:64-11:23, 11:31-60, 12:6-20, 12:29-41, 13:4-8, 13:26-33, 13:39-41, 14:4-27, 14:43-15:3, 15:55-61, 16:18-29, 16:43-17:37, 17:53-18:18, 18:29-33. Further, all the figures depict a hair care appliance. While Patent Owner acknowledges that the specification suggests the entire invention is not limited to a hair care appliance, *id.* 1:17-19, 18:19-22, the preamble of Claim 26 is the **only** reference in any independent claim to a hair care appliance.² "This fact alone is likely sufficient to support a conclusion that the preamble is limiting." *Proveris Sci. Corp.*, 739 F.3d at 1373.

Relying on broad recitations of case law, Petitioners argue the preamble is not limiting based almost entirely on the fact that the dependent claims do not

² It is also notable that Claim 39 states "[t]he appliance of claim 1, wherein the appliance is a hair care appliance" and there is no similar claim depending from Claim 26.

repeat “hair care.” Pet. at 66. Petitioners cite no case law supporting this argument, instead relying upon conclusory expert testimony. *Id.* (citing EX-1003 ¶¶ 120-22). That is likely because the Federal Circuit has held otherwise. In *Shoes by Firebug*, the preamble of the claim recited “textile footwear” and the body of the claim recited “the footwear.” 962 F.3d at 1365. Notwithstanding the fact that “textile” was missing from the reference in the body, the Court found that the preamble provided antecedent basis for the reference in the body of the claim and that the preamble limited the scope of the claims “to require the use of a textile upper.” *Id.* at 1368. Likewise, here, the preamble provides the antecedent basis. This is also supported by case law cited by Petitioners. *See, e.g., Bicon, Inc. v. The Straumann Co.*, 441 F.3d 945, 948-49, 953 (Fed. Cir. 2006) (finding that “the references to the abutment in the body of the claim derive their antecedent basis from the preamble” where the preamble recited structural limitations of an abutment).

In sum, the preamble providing antecedent basis for the body of the claim and the specification being directed to a hair are appliance both provide evidence that the inventors intended for the preamble to be limiting. Thus, the Board should find that the preamble is limiting.

III. SPECIFIC GROUNDS OF ALLEGED UNPATENTABILITY

Petitioners have not met their burden of showing that any of the Challenged Claims are unpatentable. None of the art to which Petitioners cite show the claimed “inner wall.” Petitioners also fail to show that the art meets the additional limitations of the dependent claims. As to Grounds 3-5, Petitioners admit that Jeffs does not disclose a “hair care appliance” as required by the preamble, and Petitioners do not show that one of ordinary skill in the art would have combined Jeffs with either Jeong or Yoshida to use the hand-held air blower device of Jeffs as a “hair care appliance.” Thus, Petitioners have not met their burden of showing a reasonable likelihood that at least one of the Challenged Claims is unpatentable, and their Petition should be denied.

A. GROUND 1: U.S. Patent Application Publication No. US 2013/0111777 (“Jeong”) does not anticipate the Challenged Claims

Ground 1 should fail because Petitioners have not shown that Jeong discloses the claimed “inner wall” that is recited in all of the Challenged Claims. Ground 1 also fails as to Claim 28 for the additional reason that Petitioners have not shown that Jeong discloses that “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle.”

1. Petitioners fail to show that Jeong discloses the claimed “inner wall” present in all Challenged Claims

Petitioners fail to meet their burden of showing that Jeong discloses the claimed “inner wall,” that is “the wall located on the inside of the handle that extends the full length of the handle from the primary fluid inlet to the body of the appliance.” Petitioners assert that Jeong’s discharge nozzle 30 is the claimed “body” and that Jeong’s housing 10 is the claimed “handle.” Pet. at 24-25.

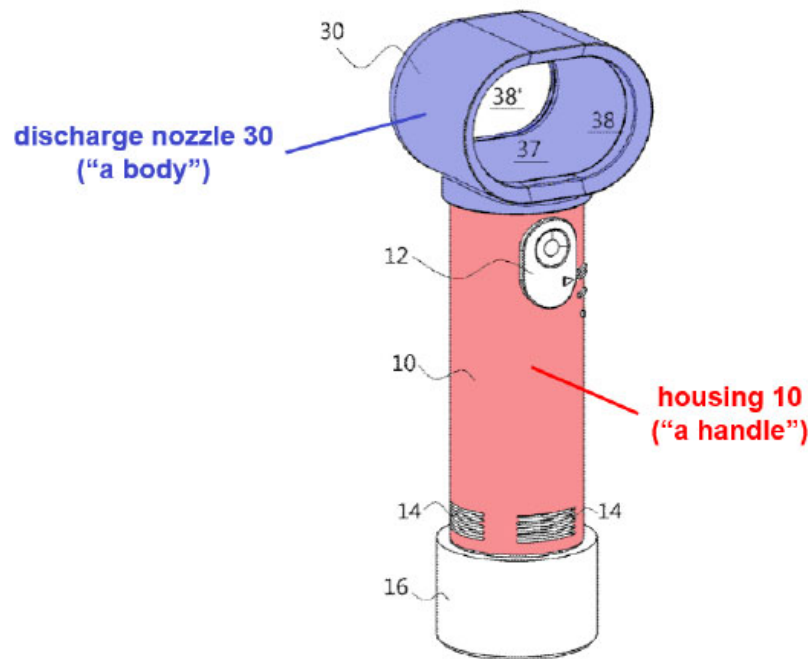


FIG. 1

Pet. at 25

Petitioners then assert that Jeong’s housing 10 is the claimed “outer wall,” Jeong’s motor housing 18 is the claimed “inner wall,” and Jeong’s plurality of inflow slots 14 are the claimed “primary fluid inlet.” *Id.* at 27-29, 31.

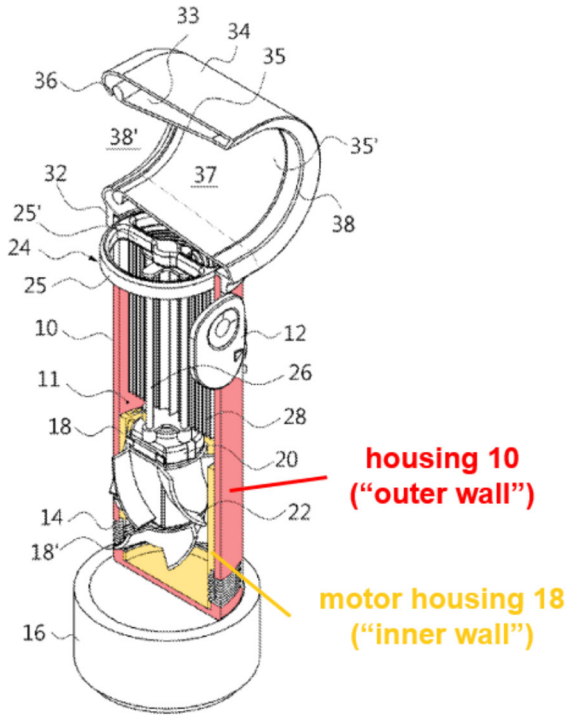


FIG. 2

Pet. at 28

**motor housing 18
("inner wall")**

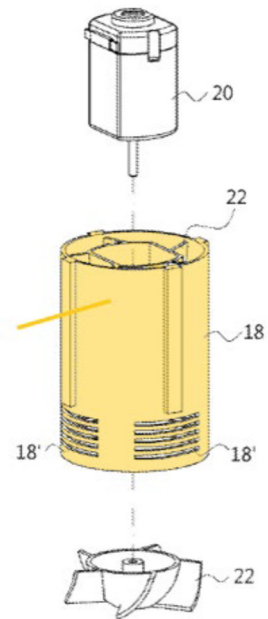


FIG. 3

Pet. at 29

However, Petitioners' own illustrations show that Jeong's motor housing 18 does not extend from the plurality of inflow slots 14 to the discharge nozzle 30. Instead, Jeong's motor housing 18 that Petitioners assert is the claimed "inner wall" only extends from the plurality of inflow slots 14 about half-way up housing 10, which Petitioners assert is the claimed "handle," and does not make any contact with the discharge nozzle 30 that Petitioners assert is the claimed "body." Thus, Petitioners have not shown that Jeong discloses the claimed "inner wall" and Ground 1 fails on that basis alone.

2. Petitioners fail to show that Jeong discloses the additional limitation of Claim 28

Petitioners also fail to meet their burden of showing Jeong discloses that “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle.” Petitioners assert that Jeong’s primary fluid flow path is the airflow path that flows through housing 10 and motor housing 18, to discharge slit 36, and then to discharge hole 38. Pet. at 46-48. Petitioners then state, without any basis, that the airflow changes by approximately 90 degrees. *Id.* at 46-47.

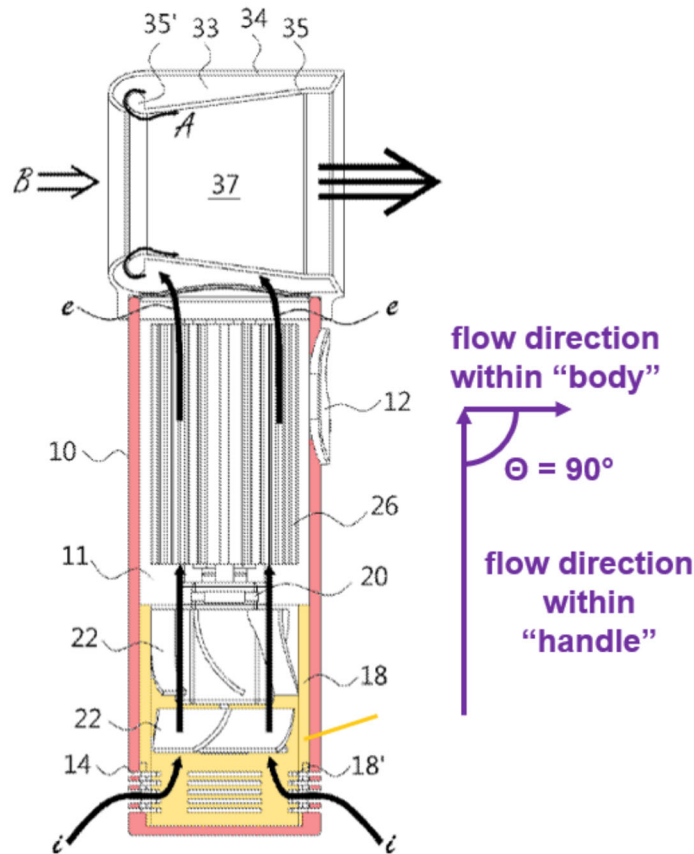
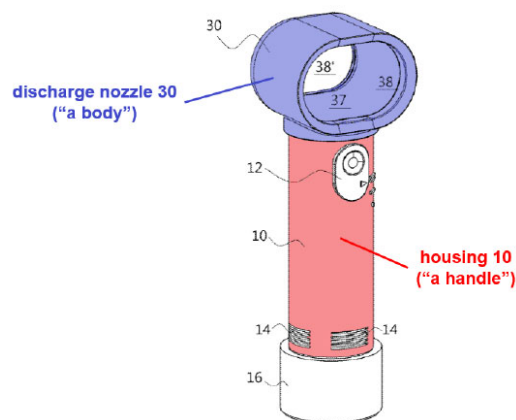


FIG. 5

Pet. at 47

Petitioners' analysis lacks any explanation as to the direction of the primary fluid flow path *in the body*, which is fatal given that Claim 28 requires that "the primary fluid flow *in the body* is substantially orthogonal to the primary fluid flow in the handle." EX-1001 at 20:16-18 (emphasis added). Petitioners allege that the primary fluid flow path goes through discharge slit 36 to discharge hole 38. Pet. at 46-48. As shown by Jeong's Figure 5 above, in order to flow from discharge slit 36 to discharge hole 38, the fluid must flow through central passage part 37 that "is disposed to pass through the inside of the discharge nozzle 30 in front and rear directions." EX-1004 ¶ [0045]; *see also* Figs. 1, 5. However, Petitioners have not explained why after exiting discharge slit 36 to central passage part 37, the primary fluid flow path is *in the body* as required by Claim 28. Notably, Petitioners have not identified central passage part 37 as the claimed "body":



Pet. at 25

At most, Petitioners have argued that the air *exiting* through discharge hole 38 is perpendicular to the airflow within housing 10 (asserted claimed “handle”). However, because Petitioners have only asserted that discharge nozzle 30 is the claimed “body” and have not explained why the flow outside of discharge nozzle 30 can be considered in determining whether “the primary fluid flow *in the body* is substantially orthogonal to the primary fluid flow in the handle,” Petitioners have not met their burden as to Claim 28.

B. GROUND 2: Japanese Patent Application Publication No. JP S 60-249907 (“Yoshida”) does not anticipate the Challenged Claims

Similar to Ground 1, Ground 2 fails because Petitioners have not met their burden of showing that Yoshida discloses the claimed “inner wall” that is required for all of the Challenged Claims. In addition, Ground 2 fails as to Claim 27 and Claim 28 because Petitioners have not met their burden of showing that Yoshida discloses either “the primary fluid flows within the handle in a first direction and within the body in a second direction” or “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle,” respectively.

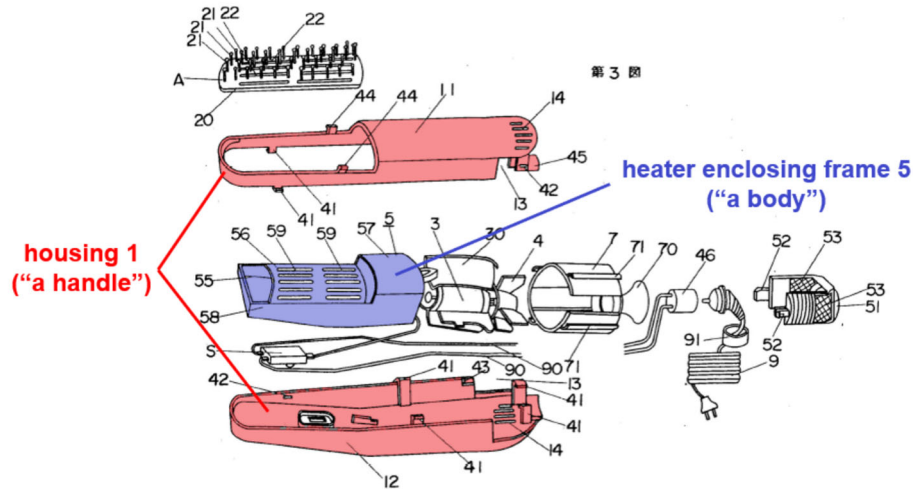
1. Petitioners fail to show that Yoshida discloses the claimed “inner wall” present in all Challenged Claims

Petitioners fail to meet their burden of showing that Yoshida discloses the claimed “inner wall,” that is “the wall located on the inside of the handle that extends the full length of the handle from the primary fluid inlet to the body of the

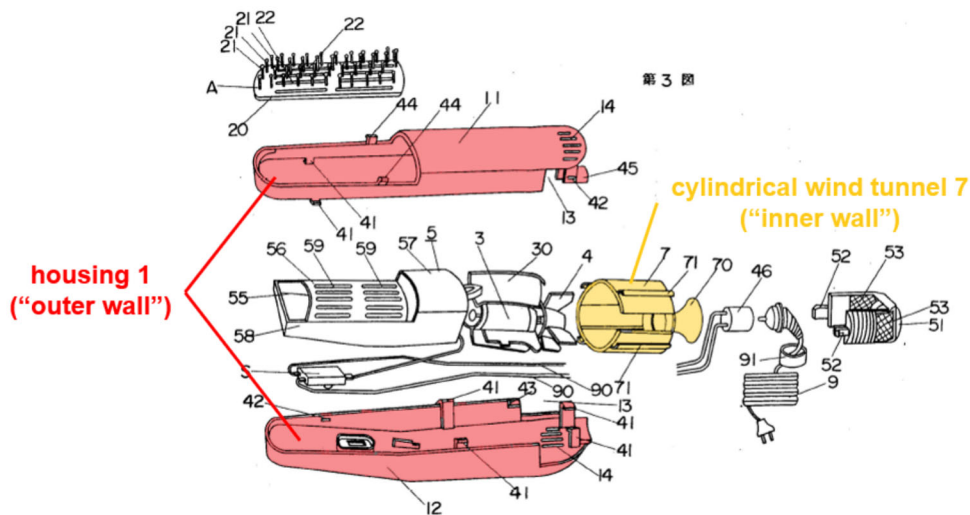
appliance.” Petitioners assert that Yoshida’s housing 1 is the claimed “handle,”

Yoshida’s heater enclosing frame 5 is the claimed “body,” and that Yoshida’s

cylindrical wind tunnel 7 is the claimed “inner wall.” Pet. at 50-51, 56-57.



Pet. at 51



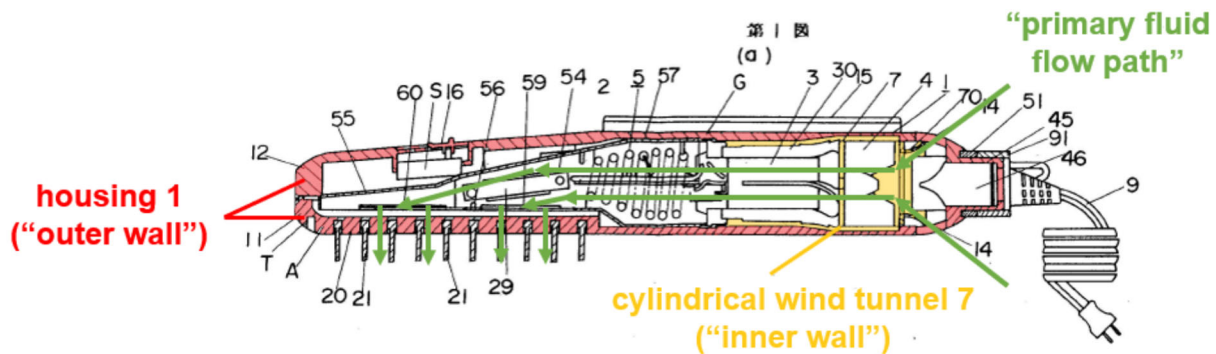
Pet. at 56

Petitioners then assert that the claimed “primary fluid flow path” originates at

Yoshida’s suction ports 13 and 14, which Petitioners assert are the claimed

“primary fluid inlet,” travels through Yoshida’s cylindrical wind tunnel 7 (asserted

claimed “inner wall”) through Yoshida’s heater enclosing frame 5 (asserted claimed “body”), and exits through outlet 59, which Petitioners assert is the claimed “primary fluid outlet from the body.” Pet. at 60-62.



Pet. at 62

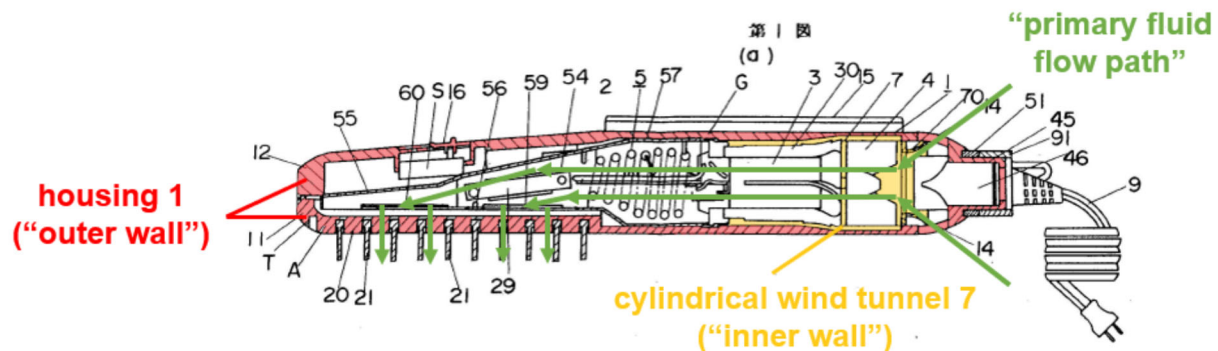
However, Petitioners’ own illustrations show that Yoshida’s cylindrical wind tunnel 7 does not extend from the suction ports 13 and 14 to outlet 59. Instead, Yoshida’s cylindrical wind tunnel 7 that Petitioners assert is the claimed “inner wall” extends from the suction ports 13 and 14 only about half-way up housing 1, which Petitioners assert is the claimed “handle.” Thus, Petitioners have not shown that Yoshida discloses the claimed “inner wall” and Ground 2 fails on that basis alone.

2. Petitioners fail to show that Yoshida discloses the additional limitations of Claims 27 and 28

Petitioners also fail to show that Yoshida discloses that “the primary fluid flows within the handle in a first direction and within the body in a second direction,” as required by Claim 27, or that “the primary fluid flow in the body is

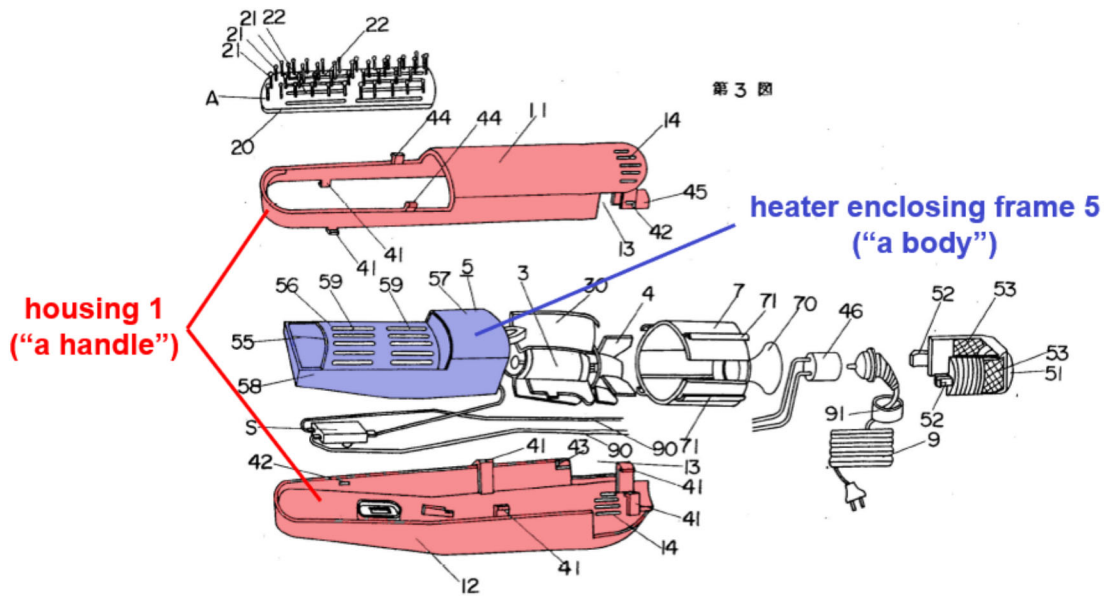
substantially orthogonal to the primary fluid flow in the handle,” as required by Claim 28.

Petitioners assert that the claimed “primary fluid flow path” originates at Yoshida’s suction ports 13 and 14, which Petitioners assert are the claimed “primary fluid inlet,” travels through Yoshida’s cylindrical wind tunnel 7 (asserted claimed “inner wall”) and through Yoshida’s heater enclosing frame 5 (asserted claimed “body”), and exits through outlet 59, which Petitioners assert is the claimed “primary fluid outlet from the body.” Pet. at 60-62.



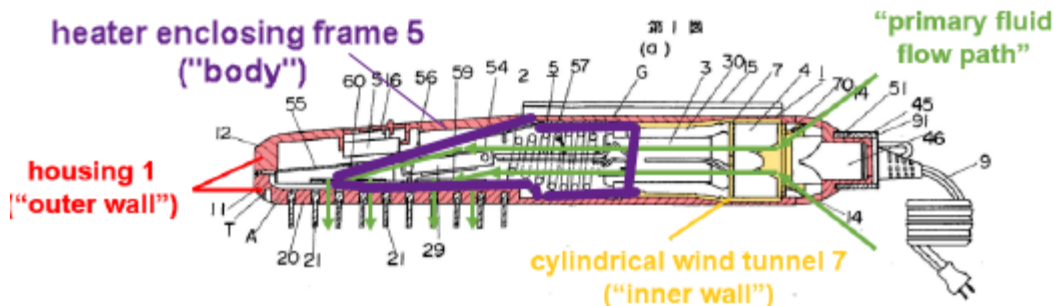
Pet. at 62

However, Petitioners also assert that Yoshida’s housing 1 is the claimed “handle” and that Yoshida’s heater enclosing frame 5 is the claimed “body.” Pet. at 50-51. As illustrated below, the alleged “handle” encompasses the alleged “body”:



Pet. at 51

As illustrated by the purple lines below outlining the heater enclosing frame 5 that Petitioners assert is the claimed “body,” because the asserted claimed “handle” encompasses the asserted claimed “body,” the asserted claimed “primary fluid flow” that occurs in the asserted claimed “body” also necessarily occurs in the asserted claimed “handle” (which Petitioners also assert is the claimed “outer wall”):

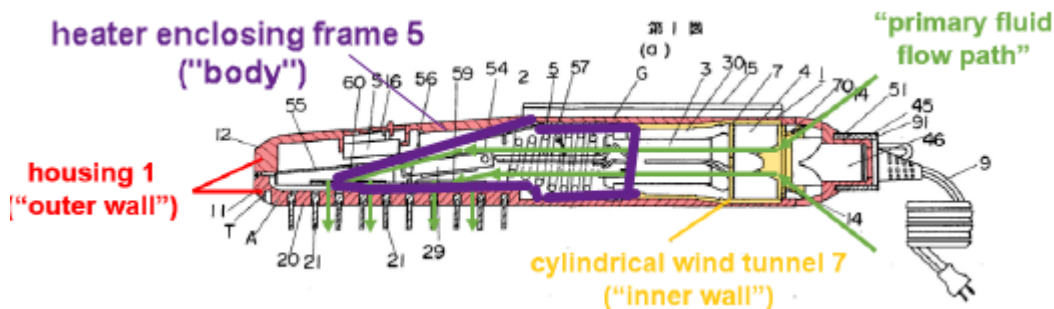


Pet. at 62 (further annotated)

Further, as illustrated above, Petitioners admit that the primary fluid flow that occurs in housing 1 (asserted claimed “handle” and “outer wall”) prior to entering the heater enclosing frame 5 (asserted claimed “body”) is in the same direction as the direction of the asserted claimed “primary fluid flow” entering the heater enclosing frame 5. *See also* Pet. at 62-63 (Petitioners asserting that the only change in direction in the primary fluid flow occurs in the asserted claimed “body”). Because the asserted claimed “primary fluid flow” in the asserted claimed “body” is coextensive with that in the asserted claimed “handle” and the fluid flow that occurs exclusively in the asserted claimed “handle” is in the same direction (*i.e.*, substantially parallel) as the asserted claimed “primary fluid flow” that occurs in the asserted claimed “body,” Petitioners have not met their burden of showing that Yoshida discloses “the primary fluid flows within the handle in a first direction and within the body in a second direction,” as required by Claim 27, or that “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle,” as required by Claim 28.

Further, as to Claim 28, Petitioners have also failed to meet their burden of showing Yoshida discloses that “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle” because they have not shown that the fluid flow *in the body* is substantially orthogonal to that in the handle. As discussed above, Petitioners assert that the claimed “primary fluid flow path”

originates at Yoshida's suction ports 13 and 14, which Petitioners assert are the claimed "primary fluid inlet," travels through Yoshida's cylindrical wind tunnel 7 (asserted claimed "inner wall") and through Yoshida's heater enclosing frame 5 (asserted claimed "body"), and exits through outlet 59, which Petitioners assert is the claimed "primary fluid outlet from the body." Pet. at 60-62. Notably, Petitioners only allege that the primary fluid flow path (annotated in green below by Petitioners) changes by 90 degrees once it *exits* Yoshida's outlet 59, which is when it exits heater enclosing frame 5 (asserted claimed "body"):



Pet. at 62 (further annotated)

Thus, at most, Petitioners have alleged that the fluid flow of the air *exiting* the asserted claimed body is substantially orthogonal to the fluid flow in housing 1 (asserted claimed "handle"). However, Petitioners have not shown that the fluid flow *in the body* is substantially orthogonal to the fluid flow in the claimed handle, as required by Claim 28. In fact, as shown by the green lines annotated by Petitioners in the illustration above, the primary fluid flow path in Yoshida's heater enclosing frame 5 (asserted claimed "body") is *never* substantially orthogonal to

the primary fluid flow path in housing 1 (asserted claimed “handle”). Thus, for this additional reason, Petitioners have not met their burden of showing that Yoshida discloses “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle,” as required by Claim 28.

C. GROUNDS 3-5: U.S. Patent No. 5,407,135 (“Jeffs”) does not anticipate the Challenged Claims and neither Jeffs in view of Jeong nor Yoshida rendered obvious the Challenged Claims

Petitioners fail to meet the burden of showing that Jeffs discloses all of the limitations of the Challenged Claims, therefore, all of the grounds relying on Jeffs must fail. Further, as to Grounds 4 and 5, Petitioners fail to show that it would have been obvious to combine Jeffs with either Jeong or Yoshida to meet the claimed “hair care appliance.”

1. Petitioners fail to show that Jeffs discloses all of the limitations of the Challenged Claims

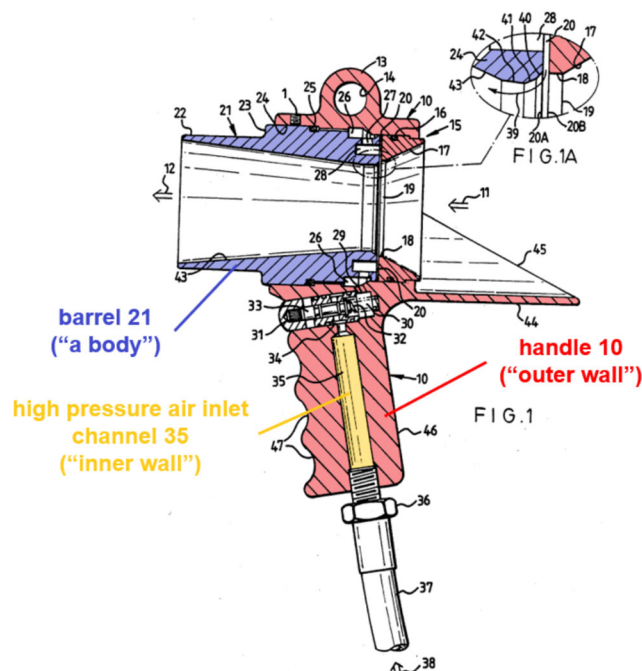
Petitioners fail to meet their burden of showing that Jeffs discloses all of the limitations of the Challenged Claims. Petitioners cannot show that Jeffs discloses the claimed “hair care appliance” or the claimed “inner wall,” as required by all the Challenged Claims. Petitioners further fail to show that Jeffs discloses “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle,” as required by Claim 28. Thus, the Challenged Claims are not unpatentable under Grounds 3-5.

a. Petitioners fail to show that Jeffs discloses the claimed “hair care appliance” present in all Challenged Claims

As discussed above, the preamble is limiting and requires disclosure of a “hair care appliance.” Petitioners concede that if the preamble is limiting, Jeffs does not disclose that limitation and cannot be the basis for an anticipation rejection. Pet. at 69. Thus, Ground 3 must fail for this reason alone.

b. Petitioners fail to show that Jeffs discloses the claimed “inner wall” present in all Challenged Claims

Petitioners fail to show that Jeffs discloses the claimed “inner wall” for two distinct reasons. First, Petitioners assert that Jeffs’ high pressure air inlet channel 35 within handle 10 is the claimed “inner wall.” Pet. at 77-78.

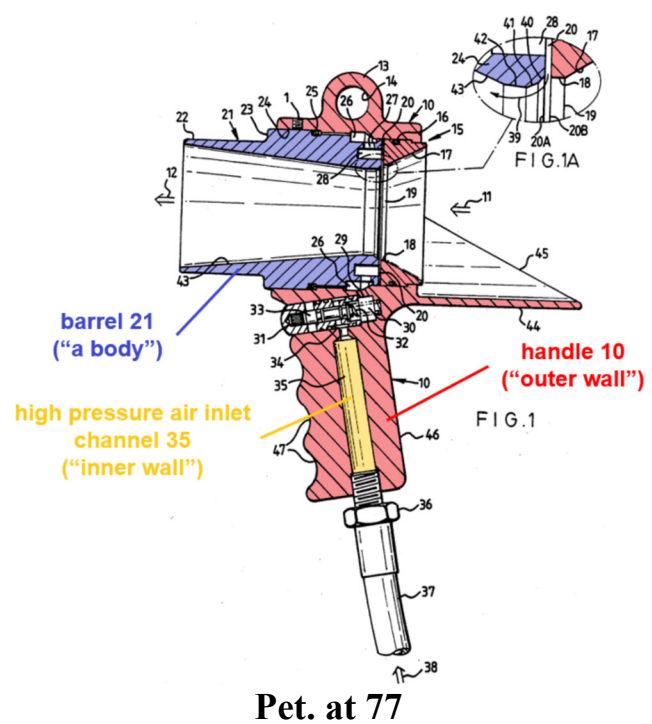
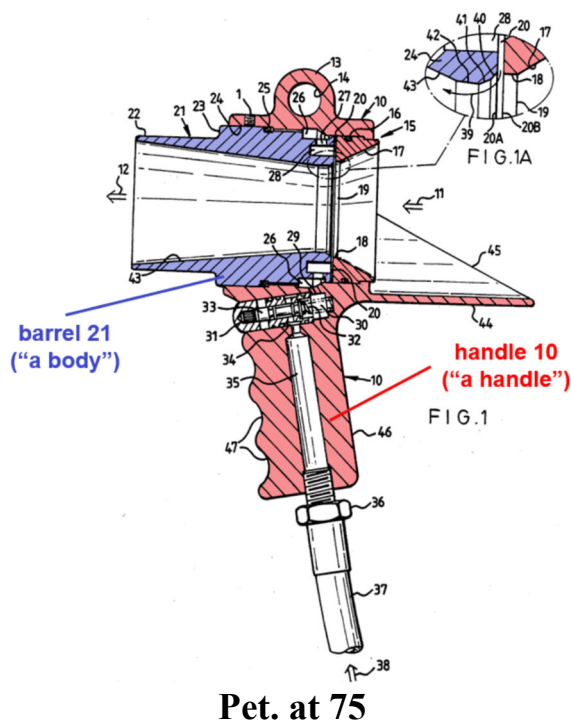


Pet. at 77

However, Petitioners have not shown that Jeffs' high pressure air inlet channel 35 forms a separate wall that is distinct from handle 10, which Petitioners assert is the claimed "outer wall." The specification is clear that the claimed "inner wall" includes a wall that is distinct from the claimed "outer wall." For example, the specification notes that the handle 20 has both an outer wall 200 and an inner wall 220, and that "inner wall 220 is *a duct* which surrounds and defines a primary fluid flow path 400 through the hairdryer." EX-1001 at 12:30-33 (emphasis added). This is confirmed by Claim 26 itself, which also requires a distinct inner wall and outer wall and that the inner wall "defines a primary fluid flow path." *Id.* at 20:5-8. Jeffs does not provide any description of high pressure air inlet channel 35 indicating that it is comprised of a wall separate and distinct from handle 10. Instead, high pressure air inlet channel 35 appears to be merely a hollow portion of handle 10 such that only a single wall is formed with an inner surface forming the high pressure air inlet channel 35 and the outer surface forming the portion of the handle gripped by the user. Further, Petitioners' only justification for their assertion that high pressure air inlet channel 35 is the claimed "inner wall" is merely because the channel is "disposed within the handle 10," Pet. at 77-78; EX-1003 ¶ 141, while ignoring whether high pressure air inlet channel 35 is merely a hollow portion of the handle 10. Thus, Petitioners have not met their burden of

showing that Jeffs discloses the claimed “inner wall” distinct from the claimed “outer wall,” And Ground 3-5 fail on that basis alone.³

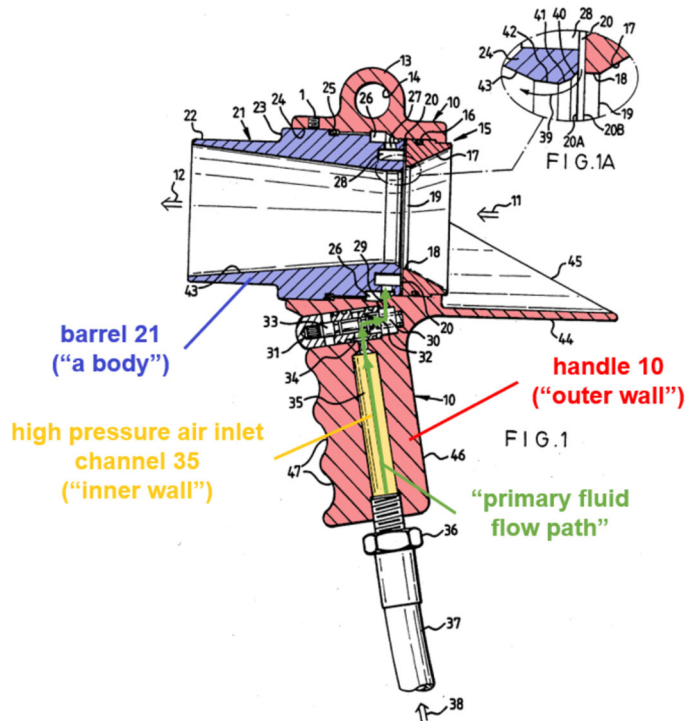
Second, similar to Grounds 1 and 2, Petitioners have not met their burden of showing that Jeffs discloses the claimed “inner wall,” that is “the wall located on the inside of the handle that extends the full length of the handle from the primary fluid inlet to the body of the appliance.” Petitioners assert that Jeffs’ handle 10 is the claimed “handle,” Jeffs’ barrel 21 is the claimed “body,” and Jeffs’ high pressure air inlet channel 35 is the claimed “inner wall.” Pet. at 74-78.



³ This argument is not dependent upon Patent Owner’s construction of “inner wall” and can prevail even if that construction is not adopted.

Petitioners further assert that Jeffs' union 36 is the claimed "primary fluid inlet."

Pet. at 79-81.

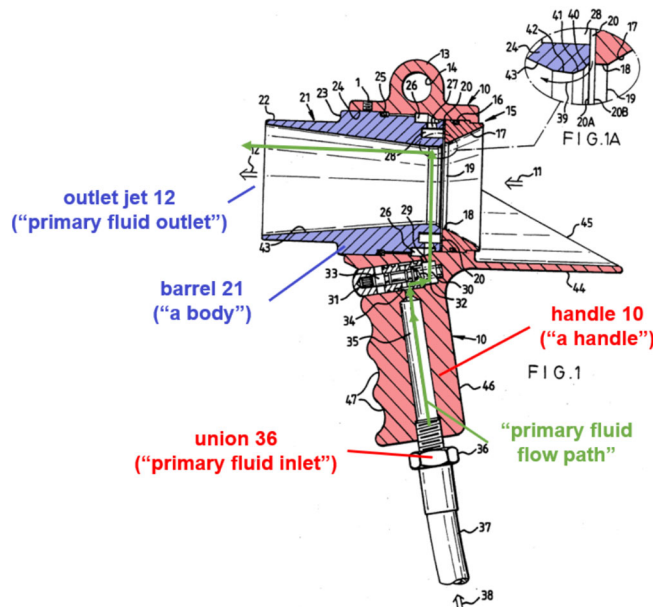


Pet. at 81

However, Petitioners' own illustrations show that Jeffs' high pressure air inlet channel 35 does not extend from union 36 to barrel 21. Instead, Jeffs' high pressure air inlet channel 35 that Petitioners assert is the claimed "inner wall" only extends from union 36 about half-way up handle 10, which Petitioners assert is the claimed "handle," and does not make any contact with barrel 21 that Petitioners assert is the claimed "body." Thus, Petitioners have not shown that Jeffs discloses the claimed "inner wall" and Grounds 3-5 also fail on that basis alone.

c. Petitioners fail to show that Jeffs discloses the additional limitation of Claim 28

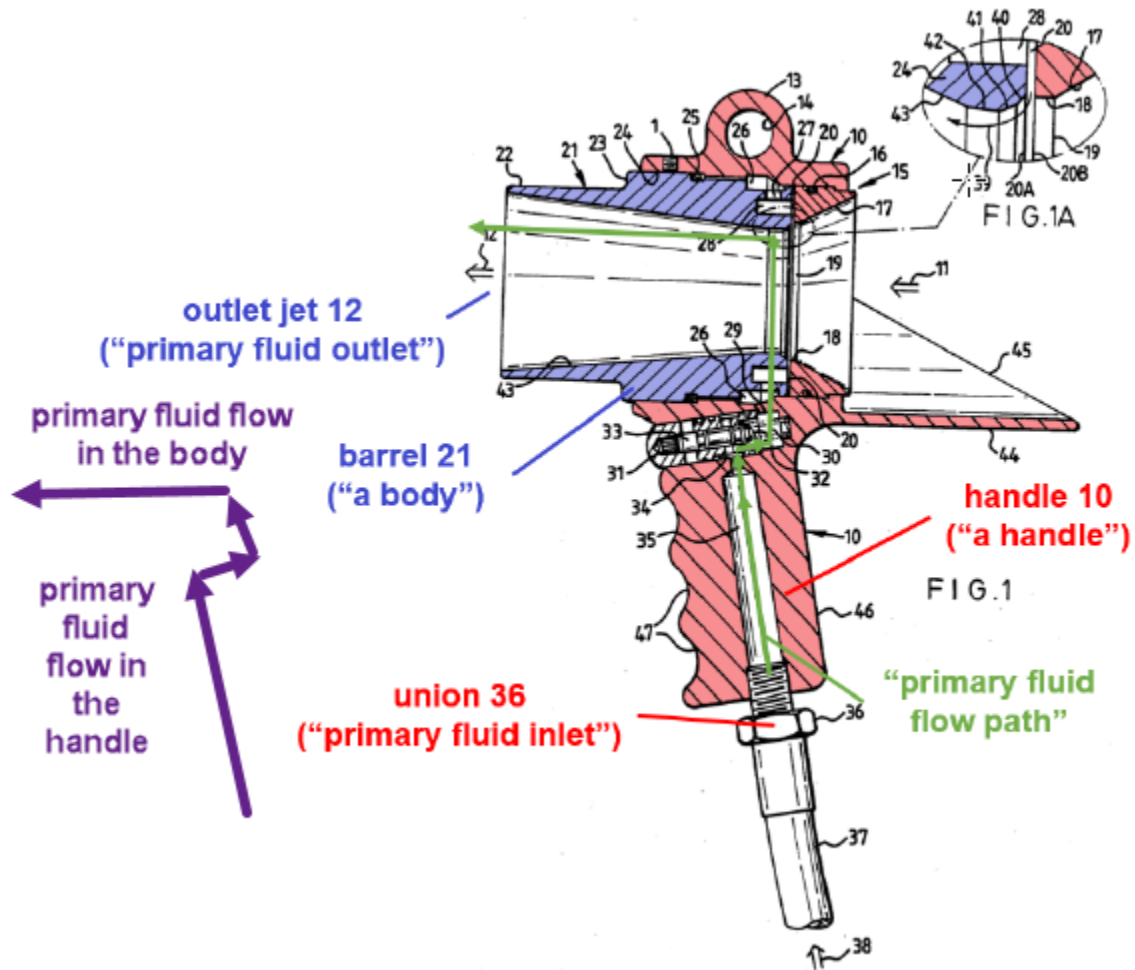
Petitioners have also not met their burden of showing that Jeffs discloses “the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle,” as required by Claim 28. Petitioners assert that the claimed “primary fluid flow path” begins at union 36 (asserted claimed “primary fluid inlet”), travels through high pressure air inlet channel 35 (asserted claimed “inner wall”) through valve assembly 30, 32, 33 to barrel 21 (asserted claimed “body”) and exits through inlet 20 to outlet jet 12 (asserted claimed “primary fluid outlet”). Pet. at 83-87. Petitioners assert that outlet jet 12 flows at a right angle from inlet 20 and that this causes the asserted claimed “primary fluid flow in the body” to be substantially orthogonal to the asserted claimed “primary fluid flow in the handle,” as required by Claim 28. Pet. at 89-90; EX-1003 ¶¶ 158-59.



Pet. at 90

Petitioners' argument fails for two reasons. First, Petitioners do not show that the air in outlet jet 12 that they allege is the claimed primary fluid flow that is orthogonal to the primary fluid flow in the handle is "*in* the body" as required by Claim 28. As illustrated above, Petitioners allege that barrel 21 (colored in purple) is the claimed "body" and that the green arrow is the claimed "primary fluid flow path." Pet. at 89-90. However, as illustrated, Petitioners' asserted "primary fluid flow path" turns at 90 degrees *after* it leaves barrel 21 (asserted claimed "body") and enters the throat of the barrel, which Petitioners do not contend is part of the claimed "body." Thus, Petitioners have not met their burden of showing that the "primary fluid flow *in the body* is substantially orthogonal to the primary fluid flow in the handle," as required by Claim 28.

Second, even if the "primary fluid flow path" that changes approximately 90 degrees is considered to be "*in* the body," Petitioners still have failed to show that "the primary fluid flow in the body is substantially orthogonal to the primary fluid flow in the handle," as required by Claim 28 because, as illustrated below by the dark purple annotations, the asserted claimed "primary fluid flow in the handle" is not perpendicular to the air flow in inlet 20:



Pet. at 90 (further annotations)

Thus, pursuant to the “primary fluid flow path” asserted by Petitioners, there is no point when the primary fluid flow in the handle is at a 90-degree angle, or substantially orthogonal, to the primary fluid flow in the body.

For these reasons, Petitioners have not met their burden of showing that Jeffs discloses Claim 28. Because Petitioners only rely upon the disclosure of Jeffs to meet this limitation, Pet. at 89-90, Grounds 3-5 fail.

2. As to Grounds 4 and 5, Petitioners fail to show that it would have been obvious to combine Jeffs with Jeong or Yoshida as a hair care appliance

For Grounds 4 and 5, Petitioners argue that a person of ordinary skill in the art at the time of the invention would have been motivated to combine Jeffs, “a hand-held air blower device . . . particularly useful in accelerating the drying of intermediate and final coats of water-borne coatings for example during the repainting of road vehicles,” EX-1006 1:6-9, with either Jeong or Yoshida, both hair dryers, resulting in use of Jeffs as a hair dryer. Pet. at 69-73. Importantly, Petitioner does not propose any modifications to Jeffs other than using it as a hair dryer instead of its stated use to dry paint on cars. *Id.* at 69 (“[I]t would have been obvious to a POSITA in light of either Jeong or Yoshida that the ‘hand-held air blower device’ disclosed in Jeffs would have been used as a ‘hair care appliance.’”), 71 (“A person of ordinary skill in the art would have been motivated to use the Jeffs air blower device as a hair care appliance”), 72 (“[A] person of ordinary skill in the art would have had a reasonable expectation of success in using the Jeffs air blower device as a hair care appliance, *i.e.*, to dry hair.”), 73 (“[I]t would have been obvious [to] a person of ordinary skill in the art reading Jeffs and either Jeong or Yoshida that the Jeffs air blower device would have been readily utilized as a ‘hair care appliance,’ *i.e.*, as a hair dryer.”); *see also id.* at 74-90 (relying exclusively on disclosures in Jeffs for all limitations of Challenged

Claims except preamble to Claim 26). However, Petitioners have not met their burden of supporting this argument and showing sufficient motivation to combine.

As an initial matter, Petitioners do not point to any statements in Jeffs, Jeong, or Yoshida supporting that a high-pressure air blower as disclosed in Jeffs would have been used as a hair dryer as disclosed in Jeong or Yoshida. Instead, Petitioners rely upon general statements *in the '662 Patent itself* that air blowers can be used for a variety of applications, such as drying paint or hair. Pet. at 70 (quoting EX-1001 at 1:17-19). Not only are these generalized statements insufficient to show that the specific air blower of Jeffs would have been used as a hair dryer, but it is also impermissible hindsight reasoning. As the Federal Circuit has repeatedly held, “[t]he inventor’s own path itself never leads to a conclusion of obviousness; that is hindsight. What matters is the path that the person of ordinary skill in the art would have followed, as evidenced by the pertinent prior art.” *Univ. of Strathclyde v. Clear-Vu Lighting LLC*, 17 F.4th 155, 165 (Fed. Cir. 2021) (quoting *Otsuka Pharm. Co. v. Sandoz, Inc.*, 678 F.3d 1280, 1296 (Fed. Cir. 2012)). As Petitioners concede, none of the prior art references disclose *any* motivation to use the air blower of Jeffs as a hair dryer as disclosed in Jeong or Yoshida.

Further, Petitioners and their expert, Dr. Nosenchuck, erroneously state that the Jeffs air blower and the hair dryers described in Jeong and Yoshida are

structurally and functionally similar and that there would be a reasonable expectation of success in using the Jeffs air blower as a hair care appliance. Pet. at 71-72; EX-1003 ¶¶ 124-127. They all but ignore the fact that Jeffs utilizes high-pressure air from an external air compressor via a flexible hose 37 and union 36. EX-1006 4:27-29. The Petition fails to acknowledge this fact at all, Pet. at 71-72, and Dr. Nosenchuck dismisses it because the source of the air is not a claimed element, EX-1003 ¶ 126. However, the Board must consider the entirety of the prior art in determining whether there is sufficient motivation to combine. *Artic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360 (Fed. Cir. 2017). Any person who uses a hair dryer, regardless of their skill in the art, would have understood that using Jeffs' air blower that relies upon a connection to an air compressor to supply the air flow would have been unwieldly and inoperable as a hair dryer, which is normally used in a home bathroom without any connection to an air compressor.

Finally, Petitioners' argument that Patent Owner's submission of prior art via Information Disclosure Statements ("IDS") relating to non-hair care blower devices supports the Jeffs combination is both legally and factually deficient. The Federal Circuit has held that "mere submission of an IDS to the USPTO does not constitute the patent applicant's admission that any reference in the IDS is material prior art." *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 866 (Fed. Cir. 2010)

(quoting *Abbott Labs. v. Baxter Pharm. Prods., Inc.*, 334 F.3d 1274, 1279

(Fed.Cir.2003)). Further, to the extent it has any legal relevance, Patent Owner does not dispute that air blowers outside of the hair care space *may* be relevant to the patentability of the claims of the '662 Patent. Rather, Patent Owner disputes that Petitioners have shown that it would have been obvious to one of skill in the art at the time of the invention to use Jeffs' air blower as a hair dryer, as is required to support Grounds 4 and 5 of this Petition.

Thus, Petitioners have not met their burden of showing that the Challenged Claims were obvious in view of Jeffs in combination with Jeong or Yoshida under Grounds 4 and 5, and the Petition should be denied.

IV. CONCLUSION

For the foregoing reasons, the Petition should be denied.

Respectfully submitted,

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Attorney for Patent Owner

Date: November 30, 2023

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), counsel for Patent Owner certifies that this document complies with the type-volume limitations of 37 C.F.R. § 42.24(b).

According to Microsoft Office Word's word count, this document contains approximately 6,343 words, including any statement of material facts to be admitted or denied in support, and excluding the table of contents, table of authorities, exhibit list, certificate of service or word count, or appendix of exhibits or claim listing.

Date: November 30, 2023

/Christopher P Bruenjes/
Christopher P. Bruenjes

Case No. IPR2023-01324

U.S. Patent No. 9,414,662

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE PURSUANT TO 37 C.F.R. § 42.017** was served upon Petitioners by email on November 30, 2023:

GDC-SharkNinjaIPRD@gibsondunn.com

Date: November 30, 2023

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