

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AROMA360, LLC,

Petitioner,

v.

AIR ESSSENTIALS, INC.,

Patent Owner.

Case IPR 2025-00707
U.S. Patent No. 10,092,918

PATENT OWNER'S
RESPONSE

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

I. INTRODUCTION

Pursuant to 37 C.F.R. § 42.120 Air Essentials, Inc. (“Patent Owner”), submits its Response (“POR”) in response to the Institution Decision for *inter partes* review of claims 1 and 3-8 of U.S. Patent No. 10,092,918 (the “’918 Patent). For the reasons set forth herein, the Board should conclude that the challenged claims of the ‘918 Patent remain patentable over the prior art of record.

As will be demonstrated, Petitioner, Aroma360, LLC (“Petitioner”), has failed to carry its burden under 35 U.S.C. § 316(e) to prove, by a preponderance of the evidence, that any of the challenged claims are unpatentable. In particular, Petitioner’s asserted grounds rely on inappropriate characterizations of the prior art in an effort to map disparate disclosures onto distinct claim limitations, and expert testimony that is not grounded in measurements, calculations, or reliable technical analysis. Petitioner further advances combinations of prior art that neither disclose nor suggest the full scope of the claimed limitations. As will also be demonstrated, Patent Owner’s evidence and analysis further forecloses Petitioner’s ability to satisfy its burden under 35 U.S.C. § 316(e) to prove unpatentability by a preponderance of the evidence. For these reasons, the Board should conclude that Petitioner has not, and cannot, establish that claims 1 and 3-8 ‘918 Patent are unpatentable.

II. STANDARD OF REVIEW

“In an [inter partes review], the petitioner has the burden from the onset to show with particularity why the patent [claims] it challenges [are] unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016); *see also* 35 U.S.C. § 312(a)(3) (requiring inter partes review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)); and *Twitter, Inc. v. VidStream LLC*, 825 F. App’x 844, 851 (Fed. Cir. 2020) (explaining that it is the petitioner’s burden “to establish the scope and content of a prior art reference by a preponderance of the evidence”). 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).

The petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). Accordingly, expert testimony that merely repeats the conclusory argument and does not *explain why* the expert’s position is correct is given little weight. *See Xerox Corp. v. Bytemark, Inc.*, No. IPR2022-00624, 2022 WL 3648989, at *5- 6 (PTAB Aug. 24, 2022); *Xerox Corp. v. Bytemark, Inc.*, No. IPR2022-00624, Paper 12 at 3-6 (PTAB Feb. 10, 2023) (Director Vidal designating the Board’s decision as precedential and affirming the decision because little weight

should be given to declarations that “do[] not provide any technical detail, explanation, or statements supporting why the” expert’s position is correct).

Additionally, the petitioner’s case-in-chief must be made in the petition, and “[the] [p]etitioner may not submit new evidence or argument in reply that it could have presented earlier,” such as to bolster an insufficient petition that fails to establish a prima facie case of unpatentability. *VidStream LLC v. Twitter, Inc.*, 981 F.3d 1060, 1064 (Fed. Cir. 2020) (quoting U.S. Patent Trial and Appeal Board, Consolidated Trial Practice Guide 73 (Nov. 2019)); 35 U.S.C. § 312(a)(3) (“the petition” must identify supporting evidence “with particularity”); 37 C.F.R. § 42.104(b)(4) (“The petition must specify where each element of the claim is found in the prior art . . .”).

III. OVERVIEW OF PROSECUTION HISTORY

The ‘918 Patent issued from U.S. Application Serial No. 15/353,951 (Ex. 1004)(“the ‘951 Application”), which is a continuation in part of U.S. Application Serial No. 14/844,650, which was a continuation of U.S. Application Serial No. 13/838,634 (Ex. 1005), which in turn claimed the benefit of U.S. Provisional Application Serial No. 61/694,500 (Ex. 1006).

The ‘951 Application was filed on November 17, 2016. A non-final refusal was issued on January 22, 2018. The Office Action indicated that original claims 2, 7, and 12 would be allowable if re-written in independent form. The remaining

claims were subject to a substantive refusal in light of U.S. Pat. Pub. No. 2014/0202457 by Addington. A non-statutory double patenting refusal was also raised over Patent Owner's own U.S. Patent Nos. 9,527,094; and 9,126,215. On April 20, 2018 Patent Owner submitted an appropriate terminal disclaimer and amended original claim 1 to include the recitation of allowable claim 2, as well as amended original claim 6 to include the recitation of allowable claim 7. The '918 Patent issued on October 9, 2018.

IV. PRIORITY DATE

In light of the PTAB's findings in the Institution Decision (Paper 10), Patent Owner does not dispute that Gao-2 (Ex. 1041) published before Patent Owner's first disclosure of a diffusion chamber comprising "an upper and a lower chamber." Petitioner has only challenged the priority date of this claim element. Patent Owner reserves all rights as to the remaining claim elements. Regardless, as demonstrated below, the disclosure of Gao-2 fails to anticipate or obviate, alone or in combination, the challenged claims.

V. CLAIM CONSTRUCTION

Petitioner has indicated that it does not believe any term needs to be construed by the PTAB to decide the petition. Paper 1, page 12. Patent Owner agrees in light of the general proposition that "we need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy.'" *Nidec Motor Corp. v.*

Zhongshan Broad Ocean Motor Co., 868 F.3d 1013, 1017 (Fed. Cir. 2017). Patent Owner is not currently aware of any claim term that requires construction to resolve the petition.

VI. LEVEL OF ORDINARY SKILL IN THE ART

Patent Owner does not dispute the level of ordinary skill in the art proposed by Petitioner because Patent Owner does not believe it is required at this stage to resolve the petition. Patent Owner reserves the right to address it should new issues materialize. Regardless, Patent Owner's Response is supported by the Declaration of Dr. Gerald J. Micklow, PhD, PE, who meets and exceeds Petitioner's proposed level of skill. *See* Ex. 2002.

VII. GROUND 1 (Claims 1 and 3-8 – Goubet)

Petitioner's Ground 1 fails to demonstrate that Claims 1 and 3-8 are unpatentable under 35 U.S.C. § 103 in view of Goubet because Goubet does not disclose an atomizer assembly disposed between an upper and lower chamber.

Independent Claims 1 and 5 recite "said diffusion assembly is disposed between said upper chamber and said lower chamber." Ex. 1001, Claims 1 and 5. As the Board recognized at institution, Petitioner's showing as to this limitation hinges entirely on annotated versions of Figure 1 of Goubet, in which Petitioner labels portions of the figure as an "upper chamber," a "lower chamber", and an "atomizer

assembly.” Paper 10, Pages 17-18. It is clear from Figures 1 and 3 of Goubet that the “atomizer assembly” identified by Petitioner is at no point disposed between the identified “upper chamber” and the identified “lower chamber”. In fact, the “diffusion assembly” identified by Petitioner rises vertically above the identified “upper chamber.” See Paper 2, Page 63. This structure directly contrasts the meaning of the word “between” taught by the ‘918 Patent, where the upper chamber is shown to be above, and the lower chamber below, the diffusion assembly. Ex. 1001, Figures 1-3 and 5-6, 9:52-56.

Petitioner’s Ground 3 also fails to demonstrate that Claims 1 and 3-8 are unpatentable under 35 U.S.C. § 103 because Goubet does not disclose or suggest an apparatus capable of creating a “fluid dispersion” as defined in the specification of the ‘449 Patent and required by all claims therein. Specifically, a POSITA would appreciate that the circular shape of the baffle formed by enclosures 12 and 13 and passage 14 necessitates that the droplets undergo multiple twists and turns, which would cause the droplets to remain in close contact and eventually coalesce into larger droplets. Ex. 2002, ¶ 19. Additionally, fine atomization of a liquid to create the uniform microdroplets required for a “fluid dispersion” is time-dependent; the relatively short time spent traversing the baffle of Goubet would result in a non-uniform spray. Ex. 2002, ¶ 19. Petitioner’s assertions to the contrary are based on the testimony of their expert who has not conducted any testing or analysis of any

embodiment of Goubet and should not be permitted to carry Petitioner's burden. Ex. 2001, 39:2-23.

With respect to dependent Claims 3-4 and 6-8 of the '918 Patent, the claims rely on and incorporate the limitations of Claim 1 and 5 which are not taught by Goubet as explained above. Accordingly, because Petitioner has failed to show that Goubet teaches or suggests Claims 1 and 5, its arguments as to the dependent claims should also fail. *See Ortho McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1365 (Fed. Cir. 2008).

Ground 1 should be rejected in the Final Written Decision. Petitioner has not met its burden to show that Claims 1 and 3-8 are unpatentable under 35 U.S.C. § 103. Goubet does not disclose a diffusion assembly disposed between an upper chamber and a lower chamber. Petitioner's attempt to supply missing structural limitations through annotated figures and functional inference is legally insufficient, especially where those annotations admit that Petitioner's construction contradicts the apparent structure of the prior art. Additionally, Goubet does not disclose or suggest a diffusion assembly capable of creating a "fluid dispersion" as required by each Claim of the '449 Patent. The deficiency in Petitioner's argument compels a finding in Patent Owner's favor.

VIII. GROUND 2
(Claims 1 and 3-8 – Goubet in View of Kaiser)

Petitioner's Ground 2 fails to demonstrate Claims 1 and 3-8 are unpatentable under 35 U.S.C. § 103 for at least two independent reasons. First, as established above, Petitioner does not establish that Goubet discloses or suggests a dispersion assembly disposed between an upper chamber and a lower chamber, or a fluid dispersion as defined and required by the '918 Patent. Second, Petitioner has not met its burden to show that Kaiser is analogous art, nor that a POSITA would have been motivated to combine Kaiser with Goubet. Along these lines, the Board itself recognized at institution that the record is insufficient on Kaiser being analogous art and if there was a motivation-to-combine Goubet and Kaiser. Paper 9, Page 23.

a. Kaiser Is Not Analogous Art.

The Board expressly noted at institution that “the record on the analogous art issue is incomplete” and that there is no conclusion as to “whether Petitioner has made a sufficient showing that one of ordinary skill in the art would have combined Goubet and Kaiser as proposed.” Paper 9, Page 23. Ultimately, Petitioner bears the burden to prove unpatentability by a preponderance of the evidence, supported by substantial evidence. 35 U.S.C. § 316(e).

Along these lines, Petitioner is unable to effectively address the issue that Kaiser is analogous art because Kaiser is so patently distinct from the '918 Patent. Indeed, in the case cited by the Board, *Sanofi-Aventis*, the Federal Circuit reasons that the petitioner must establish, with substantial evidence, that ***each relied-upon***

reference is analogous to the challenged patent. See Sanofi-Aventis Deutschland GmbH v. Mylan Pharms. Inc., 66 F.4th 1373, 1379-80 (emphasis added). It is insufficient to argue that a reference is analogous only to another prior art reference in the asserted combination, because obviousness must be assessed from the perspective of the claimed invention, not from a daisy-chain of prior art analogies. *See id.*

As such, here, Petitioner offers no evidence that Kaiser is analogous to the ‘918 Patent. Rather, Petitioner provides testimony of Dr. White, who only attempts to describe *how* a POSITA would consider modifying Goubet, and mentions that Kaiser demonstrates “that it was well known in the field at the time of the invention that droplets of greater uniformity result in uniform droplet evaporation.” Paper 1002, ¶¶ 166-168. Accordingly, neither Dr. White nor Petitioner describes why or how Kaiser is analogous to the challenged patent.

Along these lines, Petitioner cannot show that Kaiser is analogous to the challenged patent. Rather, Kaiser is directed to electrospray injection and combustion in mesoscale power-generation systems, using high-voltage electric fields to generate charged fuel droplets for controlled combustion in catalytic micro-combustors. Paper 1014 at 42–44. Its objective is efficient fuel burning, emissions reduction, and thermal efficiency in power systems, not scent dispersion, consumer appliances, or acoustic attenuation.

More specifically, as Dr. Micklow explains, Kaiser operates in a fundamentally different atomization regime from the fluid-flow-driven mechanisms of the '918 Patent, one based on electrosprays, in which charged droplets are formed from capillaries and dispersed through Coulombic repulsion. Ex. 2002, ¶ 20. As such, the droplets in Kaiser are generated from a semi-conducting liquid, not from an operative fluid as described and claimed in the '918 Patent. Ex. 2002, ¶ 21. In Kaiser, droplets are formed and electrically charged via a capillary tube under a high potential relative to a nearby ground electrode, rather than introduced as an uncharged fluid into a mixing chamber as taught in the '918 Patent. Ex. 2002, ¶ 22.

Further, dispersion in Kaiser occurs through Coulombic repulsion (an electrostatic force) of charged droplets, not through a gas-flow and liquid-particle interaction as found in the '918 Patent. Ex. 2002, ¶ 23. Accordingly, the atomization in Kaiser is electrostatic and entirely decoupled from gas-flow processes, making the underlying physical mechanisms markedly different from the fluid-flow-based atomization of the '918 Patent. Ex. 2002, ¶ 24. For these reasons, a POSITA would not look to an electrostatic atomizer such as Kaiser when considering the teachings of the '918 Patent, as such a POSITA would generally lack coursework or practical experience with this type of electrostatic system in the context of the claimed technology. Ex. 2002, ¶ 25.

Therefore, the above demonstrates that Kaiser is of a different field of endeavor than that of the '918 patent as claimed as not reasonably pertinent to the problem faced by the inventor. *See generally Virtek Vision Int'l ULC v. Assembly Guidance Sys. Inc.*, 97 F.4th 882, 886-87 (Fed. Cir. 2024) (describing that a reference is analogous art only if it is (1) from the same field of endeavor, or (2) reasonably pertinent to the problem faced by the inventor). As a result, Kaiser should not be considered prior art, nor should it be combinable with any reference to qualify as prior art.

b. Petitioner Fails to Articulate a Legally Sufficient Motivation to Combine.

Even if Kaiser were analogous art (which it is not), Petitioner still fails to provide a substantial reasoned explanation for why a POSITA would combine the references in the manner proposed. Ultimately, it is not enough that two systems were merely “known” to combine them for purposes of evaluating obviousness; there must be a reason a skilled artisan would have made the specific substitution or combination. *Id.*

The Board noted at institution that it reached “no conclusion as to whether Petitioner has made a sufficient showing that one of ordinary skill in the art would have combined Goubet and Kaiser as proposed.” Paper 9, Page 23. Indeed, Petitioner’s asserted motivation boils down to the conclusory statement that given

Goubet and Kaiser, “it was well known in the field... to produce uniform droplets.” Paper 1, Page 47. That is precisely the kind of generic, outcome-driven rationale rejected by the Federal Circuit. *See Palo Alto Networks, Inc. v. Centripetal Networks, LLC*, 122 F.4th 1378, 1384–86 (Fed. Cir. 2024) (legal error to rely on isolated disclosures without articulating a concrete rationale for integration). The testimony of Dr. White is equally void of a sufficient showing that a POSITA would have combined Goubet and Kaiser. Paper 1002, ¶¶ 166-168.

The fact of the matter is that a POSITA would not look to an electrostatic atomizer such as Kaiser when considering the ‘918 Patent, as such a POSITA would generally lack coursework or practical experience with this type of electrostatic system in the context of the claimed technology. Ex. 2002, ¶ 25.

c. Claims 3, 4, and 6-8

As claims 3 and 4 depend from claim 1 and claims 6-8 depend from claim 5 and because Petitioner fails to establish unpatentability of claims 1 and 5 under Ground 2, the dependent claims cannot be shown to be unpatentable under the theory that Goubet and Kaiser renders them obvious. IPR2015-00592, Paper 72, 2016 Pat. App. LEXIS 13343, at *38 (finding that where a petitioner has not shown, by a preponderance of the evidence, that an independent claim is unpatentable, the claims that depend on it likewise cannot be shown to be unpatentable).

d. Conclusion

Ground 2 should be rejected in the Final Written Decision. Petitioner has not met its burden to show that claims 1 and 3-8 are unpatentable under § 103. Goubet does not disclose or suggest a diffusion assembly disposed between an upper chamber and a lower chamber or a fluid dispersion as defined in and required by the ‘918 Patent; Kaiser is non-analogous art; and Petitioner has failed to articulate a legally sufficient motivation to combine. The deficiencies identified by the Board at institution persist and compel a finding in Patent Owner’s favor that Claims 1 and 3-8 are not obvious in light of the references presented.

IX. GROUND 3
(Claims 1 and 3-8 – Gao-2)

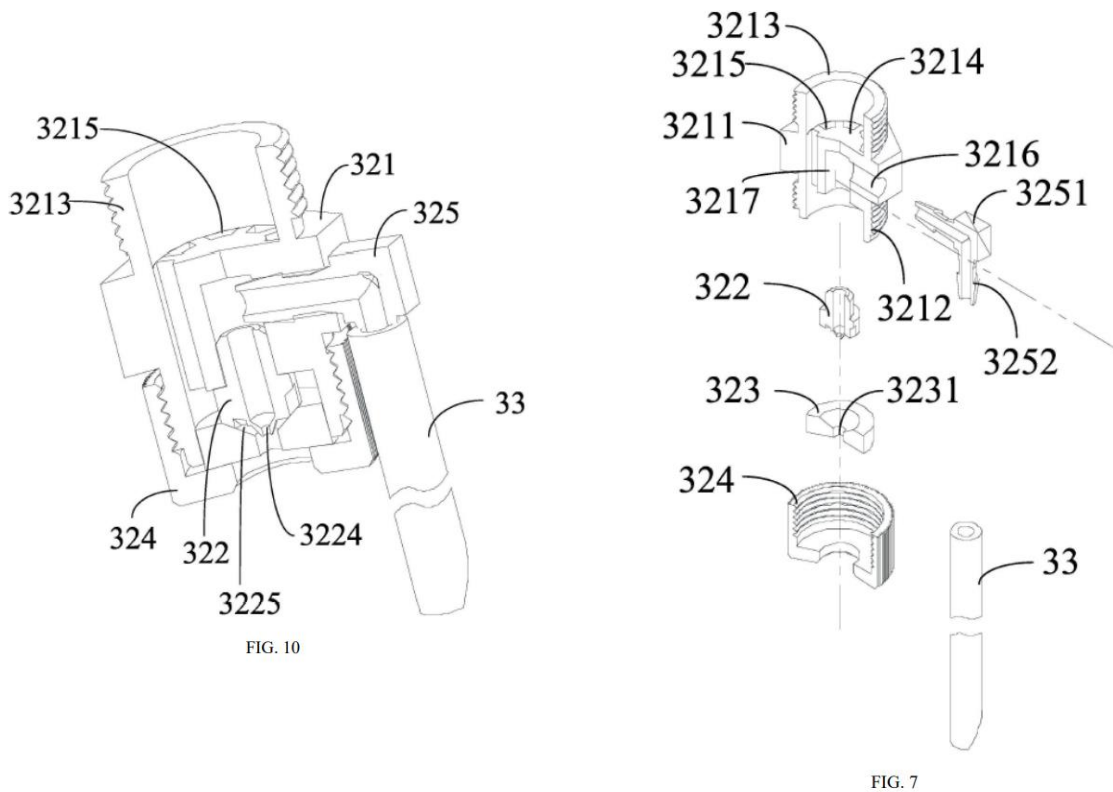
Gao-2 cannot render the ‘918 Patent’s independent claims obvious because Gao-2 does not teach nor suggest a mixing chamber as required by the independent claims. Petitioner mischaracterizes the outlet hole of Gao-2 to be analogous to the “mixing chamber” of the ‘918 Patent, and further, in so doing, includes a contradiction between its assertions and Petitioner’s own expert witness.

As an initial point, a careful reading of Gao-2 teaches that:

Specifically, the airflow is guided between the atomization rotating core 322 and the atomization core cap 323 and is ejected from the spray outlet 3231. Due to the highspeed ejection of the airflow, a negative pressure is formed near the outlet of the liquid suction hole 3224 opposing the spray outlet 3231, causing the essential oil to be drawn into

the liquid suction hole 3224 under this negative pressure. *The essential oil then mixes with the airflow and is atomized at the outlet of the liquid suction hole 3224, before being sprayed out from the spray outlet 3231.*"

Ex. 1042, ¶ 0036 (emphasis added).



Ex. 1042, Figures 10 and 7.

As such, it is clear that the mixing of the liquid and air occurs at 3224 of Gao-2. To this end, Petitioner, in its Petition, alleges that 3224 is the mixing chamber, as is a negative space between reference numerals 322 and 321:

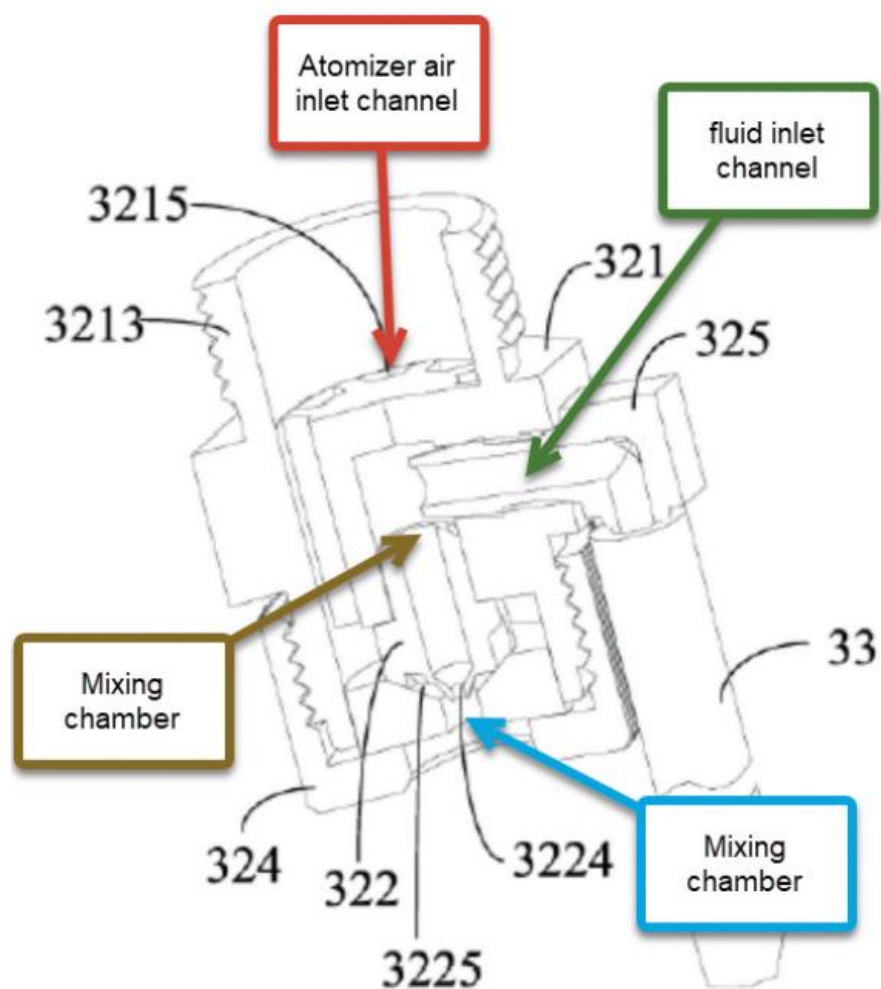


FIG. 10

At the same time, Petitioner's expert witness describes 3224 as the atomizer exhaust aperture:

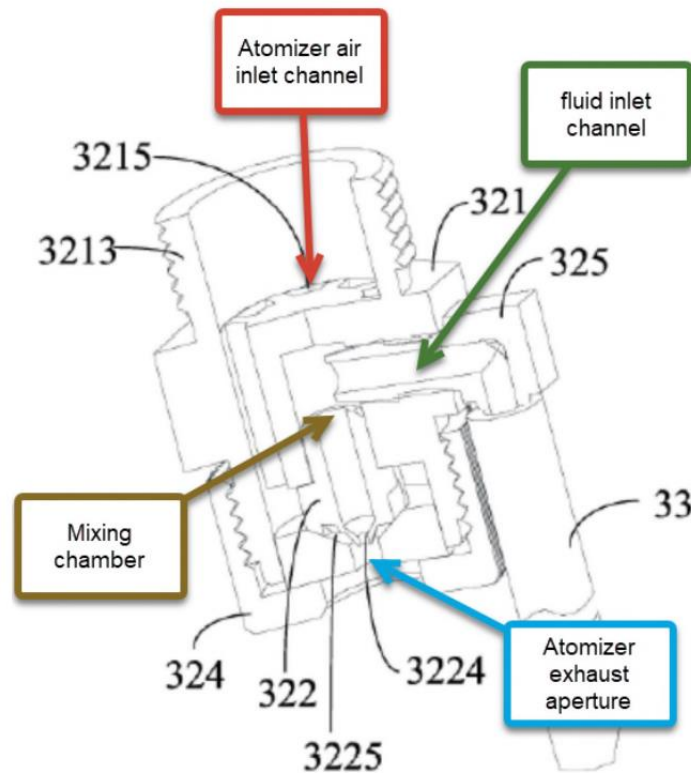


FIG. 10

Paper 2, Page 86.

In either instance, both Petitioner and its expert misconstrue the plainly stated function of Gao-2's atomization core: atomization of the essential oil "at the outlet of the liquid suction hole 3224," which is disposed after the guide grooves through which airflow passes. *Compare* Ex. 1042. ¶ 0036, with Paper 1, Pages 59-60

(describing the chamber within core base 322 as the mixing chamber), *and* Paper 2, Page 87 (describing the chamber within rotating core 322 as the mixing chamber).

As such, even if the atomization taught by Gao-2 is sufficient to constitute a “fluid dispersion” for the purposes of the ‘918 Patent, such atomization is plainly stated to occur following the mixing of air and fluid at the “outlet” of a “hole” and not in a chamber as in the ‘918 Patent. *Id.* The specification of the ‘918 Patent further teaches such a requirement to be within Claim 1 and Claim 7 and their dependent claims:

“when compressed air is supplied to the diffusion assembly 200, a corresponding amount of operative fluid is drawn into the mixing chamber 226 through the fluid delivery tube 300 as a result of the venturi effect of the compressed air flowing past the opening of the fluid inlet 227 into the mixing chamber 226.”

Ex. 1001, 5:50-55 (emphasis added).

Indeed, Petitioner’s expert fundamentally misapprehends and misstates the function of the apparatus disclosed in Gao-2. Where, as established above, Gao-2 teaches expressly that the fluid atomizes at the “outlet of the liquid suction hole,” Petitioner’s expert counterfactually states that airflow passes “into rotating core 322” and suggests that “where” the atomization occurs is ***within*** “atomization core 322”. Ex. 1002, ¶¶ 185 and 186. Petitioner’s expert’s careful weaving of quoted language into his own construction—namely “into atomization core 322 where”—contradicts

and cannot substitute the plainly stated specification of Gao-2, which teaches that air mixes with fluid **at the hole** of the atomization chamber, where the airflow guide grooves are disposed **downstream** from the hole. Ex. 1042, ¶ 0036. Between this and Petitioner’s disagreement with its own expert as to the location of the purported “mixing chamber” in Gao-2, the testimony of Dr. White should be afforded little weight on this Ground.

Even if Petitioner could somehow stretch Gao-2’s “outlet of the liquid suction hole” 118 into a “mixing chamber”—which it cannot—Gao-2 still does not disclose forming a fluid dispersion in that location. Indeed, Gao-2 explains in the specification that

[s]ince the atomization core 32 is located within the bottle mouth 22 and the spray outlet 3231 faces downward, the **coarse** fragrant mist (i.e., droplets) sprayed from the spray outlet 3231 falls directly back into the essential oil bottle 2 under gravity, **while only the fine fragrant mist disperses outward**, thereby preventing oil stains from forming around the aroma diffuser.

Ex. 1042, [0030] (emphasis added). The presence of both coarse **and** fine fragrant mist after **final** ejection of the atomized fluid from the device contradicts, in plain language and no uncertain terms, the notion that Gao-2 teaches a dispersion of uniform fluid droplets as taught and required by the ‘918 Patent.

Therefore, Gao-2 does not disclose—either expressly or inherently—that compressed air and operative fluid mix together in a mixing chamber to form a “fluid dispersion” as required by claim 1 of the ’449 patent.

Accordingly, Petitioner’s reliance on Gao-2 fails as a matter of both fact and law. Gao-2 expressly teaches that mixing and atomization occur at the outlet of a liquid suction hole, not within a chamber where fluid droplets are dispersed after combination of compressed air and operative fluid as required by the independent claims of the ’918 Patent. Petitioner’s attempt to recast that outlet as a “mixing chamber” not only contradicts the plain language of Gao-2 but also conflicts with the characterization offered by Petitioner’s own expert. These internal inconsistencies underscore the absence of any disclosure in Gao-2 of the claimed mixing chamber structure and operation. Petitioner’s expert also misunderstands the product of the Gao-2 apparatus, which is plainly taught to be a non-uniform fluid spray. Because Gao-2 neither teaches nor suggests the required mixing chamber or fluid dispersion, it cannot render the independent claims of the ’918 Patent obvious, and Petitioner’s obviousness theory necessarily fails.

X. GROUND 4
(Claims 1 and 3-8 – Gao-2 in view of Goubet)

Petitioner’s Ground 4 fails to demonstrate Claims 1 and 3-8 are unpatentable under 35 U.S.C. § 103. As established above, neither Gao-2 nor Goubet teaches a

fluid dispersion in accordance with the '918 Patent. Even if a POSITA had motivation to combine the two references, said combination would still lack the dispersion of uniform fluid droplets required by the '918 Patent. Additionally, Gao-2 lacks a mixing chamber while Goubet introduces compressed air to operative fluid within a chamber; these mutually exclusive functionalities could not be reasonably combined. Petitioner's Ground 4, therefore, is deficient on its face and should be rejected in the Final Written Decision.

XI. CONCLUSION

For the foregoing reasons, the evidentiary record confirms that Petitioner has not met, and cannot meet, its burden under 35 U.S.C. § 316(e) to prove the unpatentability of claims 1 and 3-8 by a preponderance of the evidence. Petitioner's case rests on legally impermissible labelling of prior art, unsupported technical assumptions, and assertions that find no footing in the prior art or in reliable expert analysis. By contrast, Patent Owner has demonstrated that the asserted references neither disclose nor suggest the full scope of the challenged claims, and that Petitioner's theories fail both as a matter of law and as a matter of fact. Accordingly, Patent Owner respectfully asks the Board enter a Final Written Decision confirming the patentability of claims 1 and 3-8 of the '918 Patent and denying all grounds of unpatentability.

Dated: January 15, 2026

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH WORD COUNT LIMIT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Patent Owner's Response (the "POR") contains **4701** words, excluding the parts of the POR exempted by 37 C.F.R. § 42.24(a)(1), as determined by the word count function of the word-processing program used to prepare this document.

Dated: January 15, 2026

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of Patent Owner's Response (the "POR") has been served in its entirety on January 15, 2026, by causing the POR and accompany documents (if any) to be electronically mailed to the following attorneys of record for the Petitioner:

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