

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA
MIAMI DIVISION

AIR ESSSENTIALS, INC.,)	
a Florida corporation,)	
)	
Plaintiff/Counter-Defendant,)	Case No. 24-cv-20594-KMW
)	
vs.)	
)	
AROMA360, LLC,)	
a Florida Limited Liability Company,)	
)	
Defendant/Counter-Plaintiff.)	

**PLAINTIFF’S PRELIMINARY RESPONSE TO DEFENDANT’S PRELIMINARY
INVALIDITY CONTENTIONS**

Pursuant to the Amended Scheduling Order [DE 040], Plaintiff/Counter-Defendant, AIR ESSSENTIALS, INC. ("AIR ESSSENTIALS" or "Plaintiff") hereby serves its preliminary response to Defendant’s Preliminary Invalidity Contentions (“Contentions”).

I. Preliminary Statements

This preliminary response to Defendant’s Preliminary Invalidity Contentions is preliminary in nature due to the fact that discovery is ongoing. The arguments raised herein are, therefore, based on the information available to Plaintiff to-date and reflect Plaintiff’s current knowledge, thinking, and understanding of the case, which may be imperfect at this juncture. Accordingly, Plaintiff reserves the right to supplement, modify, amend, or expand this preliminary response based on further investigation, fact, or expert discovery, and any other arguments advanced by Defendant. Plaintiff further reserves the right to supplement, amend, modify, or expand this preliminary response after any additional disclosure of claim construction, non-

infringement, or invalidity position advanced by Defendant. Nothing herein should be construed as an admission on any infringement or claim construction issue.

While Defendant has cited several alleged references, Plaintiff notes that the Contentions only discuss Sevy, Shin, Gao, Blaylock, and Dorendorf in any manner of detail. Defendant does not its bases as to how Rajala, Robert, Van Roemburg, Hugon, Brenez, Malone, Sevy Design Patent, or Senhao render the claims invalid. Plaintiff reserves the right to supplement this preliminary response if and when Defendant introduces specific arguments based on these references.

Defendant has also raised questions regarding the domestic benefit claims of the asserted patents. Attached hereto as Exhibit A are charts of the asserted claims which detail the earliest known domestic benefit date of each element. This chart was prepared based on information known to Plaintiff at this time and is based on Plaintiff's current understanding of the case, which may be imperfect. Therefore, Plaintiff reserves the right to amend or correct the charts attached as Exhibit A. Additionally, the charts attached as Exhibit A should not be taken as a concession or admission of any particular claim's benefit date. Instead, Plaintiff has prepared the charts in a good faith attempt to facilitate the parties' discovery and analysis of the alleged prior art.

II. Primary Reference Already Considered During Examination of Asserted Patents

As an initial matter, Defendant's Contentions identify three primary references:

1. U.S. Patent Publication No. 2010/0084484 ("SEVY");
2. Korean Patent No. KR9700011444A ("SHIN"); and
3. Chinese Patent No. CN 201832737U ("GAO").

Contentions at 16.

While Defendant includes information relative to the publication of SEVY—which occurred on April 8, 2010—SEVY matured into U.S. Patent No. 7,878,418 less than a year later

on February 1, 2011. In this regard, Plaintiff takes this opportunity to note that U.S. Patent No. 7,878,418 (*i.e.*, the patent which subsequently issued following the publication of SEVY) is listed as a cited reference on each of U.S. Patent Nos. 9,527,094 (the “’094 Patent”) and 10,092,918 (the “’918 Patent”)—thereby indicating the United States Patent and Trademark Office (“USPTO”) fully considered the same when examining the applications which eventually matured into the ‘094 Patent and ‘918 Patent. *See* [DE 017-1]. Similarly, given that U.S. Patent No. 10,583,449 (the “’449 Patent”) claims priority to both the ‘094 Patent and ‘918 Patent, pursuant to MPEP 609.02, the examiner of record considered all information which was considered in the parent applications. Accordingly, Plaintiff contends SEVY, either alone or in combination with one or more other references cited in Defendant’s Contentions, does not invalidate any claims of the ‘094 Patent, the ‘918 Patent, or the ‘449 Patent (collectively, the “Asserted Patents”).

III. No Meaningful Distinction Between “Compressed Air Source” and “Air Pump” or “Forced Air.”

Defendant argues its Accused Products do not include a “compressed air source”—language which Plaintiff employs in the preambles of claim 7 of the ‘094 Patent, claims 1 and 5 of the ‘918 Patent, and claims 1 and 7 of the ‘449 Patent (the “Asserted Independent Claims”). *See* Contentions at 18. In this regard, Defendant argues that “based on a plain reading of the claims in light of the intrinsic record, [a “compressed air source”] excludes forced air,” and as such, the Accused Products do not infringe upon Plaintiff’s Asserted Independent Claims or otherwise. *See id.*

Notwithstanding Plaintiff’s vehement disagreement that the “compressed air source” language seen in the Asserted Independent Claims breathes “life, meaning, and vitality” to the relevant claims—and thereby limits the scope of protection offered by such claims—Plaintiff notes one of Defendant’s above-noted primary references, SHIN, explicitly states that “the *compressed*

air generator (300) consists of an *air pump* (not depicted) *that generates compressed air . . .*” SHIN at 6-3 (emphasis added). Accordingly, Plaintiff contends that at least the cited reference of SHIN, upon which Defendant primarily relies, casts doubt as to Defendant’s claim that a compressed air source and an air pump are “fundamentally different.”

IV. SEVY, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘094 Patent

1. **Diffusion Assembly v. Atomizer Assembly**

When analyzing the validity of the ‘094 Patent—namely, clauses [c.1] and [c.2] of claim 7—Defendant argues that SEVY “discloses or renders obvious a diffusion assembly disposed in an operative engagement with said diffusion unit.” Contentions at 40. In this regard, Defendant points to the following language of SEVY:

“[T]he shape of the nozzle (92) and its cooperative, fitted groove in the atomizer (16) provides a seal therebetween. Thus, the interior of the nozzle (92) is completely sealed by the seal (94), the outlet (11), and the body of the atomizer (16), in addition to the surfaces of the nozzle (92), itself.”

Id. (citing SEVY at ¶ [0078]). Accordingly, Defendant argues SEVY “thus teaches a diffusion assembly (*e.g.*, at least [the] nozzle . . . and its cooperative, fitted groove) that is disposed in an operative engagement with the diffusion unit.” *Id.*

In furtherance of the above, Defendant argues that SEVY “discloses or renders obvious a diffusion assembly comprising an atomizer assembly.” *Id.* at 41. Similar to the above, Defendant points to the following language of SEVY:

“The momentum of the jet of air passing out of the nozzle (92) creates a localized vacuum at the top of the siphon (96), drawing liquid up the siphon (96) from the reservoir (18), and transferring momentum into that liquid to atomize it and throw it into the atomizer (16).”

Id. (citing SEVY at ¶ [0067]). As such, Defendant claims the “diffusion assembly” of SEVY “comprises an atomizer assembly.” *Id.*

Contrary to Defendant’s arguments, above, Plaintiff argues Defendant has misapplied the claimed reference of SEVY—namely, Defendant has improperly analogized the “atomizer assembly” of the ‘094 Patent to the “localized vacuum at the top of the siphon” created by the “momentum of the jet of air passing out of the nozzle” and which “draw[s] liquid up . . . from the reservoir . . . [to transfer] momentum into that liquid to atomize it” *Id.* In particular, and at an absolute minimum, the language seen in SEVY which Defendant analogizes to the “atomizer assembly” of the ‘094 Patent ***does not appear to be a discrete structure***. In fact, the language of SEVY analogized to the “atomizer assembly” of the ‘094 Patent merely appears to be relating to the ***expected effects of applying Bernoulli’s Principle*** to the system of SEVY, as the high-speed flow of air passing through the nozzle would necessarily lower the internal pressure of the system, leading to “localized vacuum” conditions and thereby forcing liquid to be drawn “up the siphon . . . from the reservoir” *Id.* Accordingly, the cited reference of SEVY does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘094 Patent.

2. **Silencer Assembly**

When analyzing the validity of the ‘094 Patent—namely, clause [d] of claim 7—Defendant argues that SEVY “discloses or renders obvious a silencer assembly having a silencer inlet, a silencer outlet, and a baffle.” *Id.* In this regard, Defendant points to language explaining that the “separator plate” and/or “traps” of SEVY is “used to restrain the flow of droplets,” and as such, a POSITA would understand that the “restrain[t] of fluid flow would also inherently limit [any] sound associated therewith” and, separately, that “the combination of the separator plate . . . and the traps . . . is a baffle, the inlets of apertures . . . are the silencer inlet, and passage . . . is the silencer outlet.” *Id.* Accordingly, Defendant argues SEVY, including “its separator plate[,] . . . the

traps[,] . . . the inlets of apertures[,] . . . and the passage . . . teaches a silencer assembly having a silencer inlet, a silencer outlet, and a baffle.” *Id.*

As an initial matter, neither of the “one or more apertures (122)” or “traps (124)” are present in the figures of SEVY, and as such, Plaintiff is largely unable to make specific conclusions as to these particular features at this time. However, Defendant has again misapplied the claimed reference of SEVY—namely, that the combination of the “separator plate[,] . . . the traps[,] . . . the inlets of apertures[,] . . . and the passage . . . teaches a silencer assembly having a silencer inlet, a silencer outlet, and a baffle.” *Id.* In particular, and at an absolute minimum, (1) the “combination of the separator plate . . . and the traps”—which Defendant claims is analogous to the “baffle” of the ‘094 Patent—*serves a different purpose and functions differently* as compared to the “baffle” of the ‘094 Patent; and, separately, (2) the *above-noted combination of components is structurally distinct from the “silencer assembly”* of the ‘094 Patent.

a. Differences in Purpose and Function

As explained by SEVY, the “separator plate” is intended to control the “outflow from a separation chamber, *separating comparatively larger droplets from comparatively smaller droplets prior to exist of the comparatively smaller droplets from the atomizer*” SEVY at ¶ [0019] (emphasis added). In this regard, SEVY explains that the purpose of the “separator plate” is to separate the “comparatively larger droplets” (which are too heavy to be expelled from the device and which will get “trapped in the traps” and thus return to the “separator plate” to “eventually be re-entrained or find their way to the reservoir”) from the “comparatively smaller droplets” (which will be expelled from the device). *See id.* at ¶ [0083].

On the other hand, and as seen in the ‘094 Patent, the “silencer assembly . . . serves to *further minimize the amount of noise generated during operation of the fluid dispersion*

assembly” and “*comprises a baffle . . . structured and disposed to further disrupt the flow of the fluid dispersion . . . through the fluid dispersion assembly[,] . . . and more specifically, through the silencer chamber.*” ‘094 Patent at [col. 7, lines 52-60] (emphasis added). Accordingly, while the “baffle” of the ‘094 Patent may, in some instances, separate droplets, the purpose of the “separator plate” is not to minimize the amount of noise generated—at least in part because nowhere in SEVY is this notion contemplated.

b. Differences in Structure

As set forth in the ‘094 Patent, the “silencer assembly . . . comprises a baffle . . . *disposed in a silencer chamber . . . between a silencer inlet . . . and a silencer outlet.*” *Id.* at [col. 7, lines 55-57] (emphasis added). In this regard, and as can be seen in at least FIG. 1 of the ‘094 Patent, it is clear that the fluid dispersion assembly includes a *distinct chamber* (*i.e.*, the “silencer chamber,” identified as reference numeral 138) *which itself comprises a “silencer inlet”* (*i.e.*, reference numeral 135), *a “baffle”* (*i.e.*, reference numeral 136), *and a “silencer outlet”* (*i.e.*, reference numeral 137). *See id.* at FIG. 1. In stark contrast to the ‘094 Patent, however, SEVY does not disclose and/or teaches away from a distinct chamber which itself comprises an inlet, a baffle, and an outlet. Accordingly, unlike the invention which is the subject of the ‘094 Patent—which provides for a “silencer chamber” comprising an inlet, a baffle, and an outlet—the cited reference of SEVY does not include any such component(s), either alone or in combination, which could serve as the “silencer chamber” as described in the ‘094 Patent.

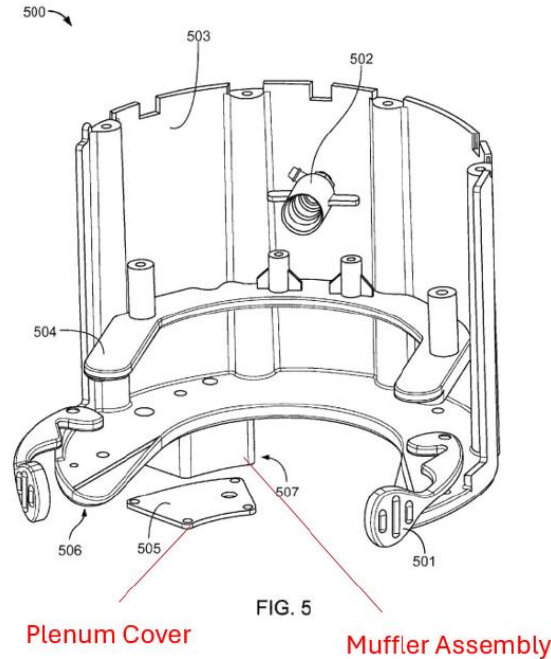
c. Other Cited References

i. Blaylock

As per the Contentions, to the extent SEVY “is found not to expressly or inherently disclose” the above-noted limitations, Defendant argues “it would have been obvious to a POSITA

to combine [SEVY] with one or more of Aroma360’s identified prior art references including” BLAYLOCK (*i.e.*, U.S. Patent Publication No. 2012/0018530). Contentions at 43. In this regard, Defendant cites BLAYLOCK as teaching a “bottom chassis assembly . . . [that] includes . . . a muffler assembly [and] . . . a plenum cover,” and that “[t]he combination of the muffler assembly . . . and a plenum can be designed to ***reduce the noise from the air intake of the air pump by providing a restricted air input passageway.***” *Id.* at 44 (citing BLAYLOCK at ¶ [0032] (emphasis added)). Accordingly, Defendant argues a POSITA “would have recognized that fluid dispersion assemblies, including those that use a compressed air source, can be noisy and would have found it obvious to apply a silencer assembly therein to improve user enjoyment and satisfaction.” *Id.* at 45.

Contrary to Defendant’s arguments, the combination of the “muffler assembly” and “plenum cover” of BLAYLOCK is specifically “designed to reduce the noise from the air intake of the air pump...” As such, the combination provides a different function than the “silencer assembly” of the ‘094 Patent. In particular, because the “silencer assembly” of the ‘094 Patent is structurally disposed “in communication with the discharge port” of the ‘094 Patent, the “silencer assembly” specifically is designed to “dampen[] . . . the sound waves” ***produced from the flow of fluid dispersion through the device*** of the ‘094 Patent and out of the “discharge port.” *See* ‘094 Patent at [col. 7, lines 49-67] – [col. 8, lines 1-4]. Therefore the principle of operation associated therewith is distinct—at least in part because ***the “silencer assembly” of the ‘094 Patent interfaces directly with the fluid dispersion prior to the exodus of the same,*** whereas ***the combination of the “muffler assembly” and “plenum cover” of BLAYLOCK,*** seen in the image immediately below, ***does not interface with the fluid dispersion directly.***



Accordingly, the principle of operation of BLAYLOCK is different than the principle of operation of the '094 Patent; a POSITA would not have looked to BLAYLOCK to solve the problem of noise generation produced from the flow of the fluid dispersion through the device, and would further have no motivation to combine SEVY with BLAYLOCK; and the combination of SEVY and BLAYLOCK does not teach the invention of the '094 Patent.

ii. Dorendorf

Similarly, to the extent SEVY “is found not to expressly or inherently disclose” the above-noted limitations, Defendant argues “it would have been obvious to a POSITA to combine [SEVY] with . . . the various fluid dispersion assemblies identified and discussed in connection with the AAPA or elsewhere in [Defendant’s] Preliminary Invalidity Contentions,” such as DORENDORF (i.e., U.S. Patent Publication No. 2009/0025794). Contentions at 43. However, the principle of operation in DORENDORF is distinct from that of the '094 Patent—at least in part because DORENDORF is directed to a “fluid delivery system and method . . . disclosed for the *application*

of fluids to a region using a centrifugal radial compressor.” DORENDORF at Abstract (emphasis added). In this regard, and as would be known by a POSITA, centrifugal radial compressors *specifically require one or more fluids to flow through a rotor or impeller to increase fluid velocity, thereby decreasing the pressure of the system.* Accordingly, because the ‘094 Patent does not contemplate the incorporation of a centrifugal radial compressor and thus does not require fluid to flow through a rotor or impeller to increase fluid velocity, the principle of operation of DORENDORF is different than the principle of operation of the ‘094 Patent; a POSITA would not have looked to DORENDORF to solve the problem of reducing noise from fluid dispersion flowing through the system, and would further have no motivation to combine SEVY with DORENDORF. The combination of SEVY and DORENDORF does not teach the invention of the ‘094 Patent.

V. SEVY, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘918 Patent

1. Diffusion Assembly v. Atomizer Assembly

When analyzing the validity of the ‘918 Patent—namely, clause [d] of claim 1 and clauses [d.1] and [d.2] of claim 5—Defendant argues that SEVY “discloses or renders obvious a diffusion assembly disposed in an operative engagement with said diffusion unit, wherein said diffusion assembly comprises an atomizer assembly.” Contentions at 78, 87-89. In this regard, Defendant points to the following language of SEVY:

“[T]he shape of the nozzle (92) and its cooperative, fitted groove in the atomizer (16) provides a seal therebetween. Thus, the interior of the nozzle (92) is completely sealed by the seal (94), the outlet (11), and the body of the atomizer (16), in addition to the surfaces of the nozzle (92), itself.”

Id. at 78, 87 (citing SEVY at ¶ [0078]). Accordingly, Defendant argues SEVY “thus teaches a diffusion assembly (*e.g.*, at least [the] nozzle . . . and its cooperative, fitted groove) that is disposed

in an operative engagement with the diffusion unit.” *Id.* at 78, 88. Similarly, Defendant points to the following language of SEVY:

“The momentum of the jet of air passing out of the nozzle (92) creates a localized vacuum at the top of the siphon (96), drawing liquid up the siphon (96) from the reservoir (18), and transferring momentum into that liquid to atomize it and throw it into the atomizer (16).”

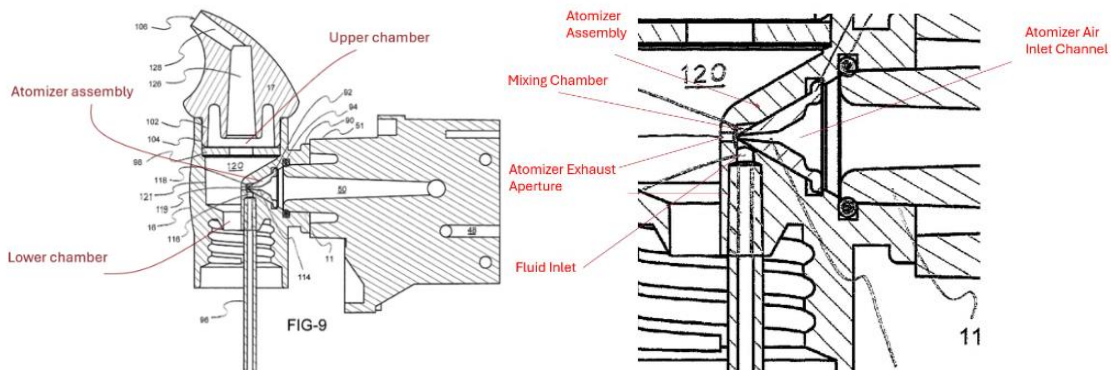
Id. (citing SEVY at ¶ [0067]). As such, Defendant claims the “diffusion assembly” of SEVY “comprises an atomizer assembly.” *Id.*

Contrary to Defendant’s arguments, above, Plaintiff argues Defendant has misapplied the claimed reference of SEVY—namely, Defendant has improperly analogized the “atomizer assembly” of the ‘918 Patent to the “localized vacuum at the top of the siphon” created by the “momentum of the jet of air passing out of the nozzle” and which “draw[s] liquid up . . . from the reservoir . . . [to transfer] momentum into that liquid to atomize it” *Id.* In particular, and at an absolute minimum, the language seen in SEVY which Defendant analogizes to the “atomizer assembly” of the ‘918 Patent *does not appear to be a discrete structure*. In fact, the language of SEVY analogized to the “atomizer assembly” of the ‘918 Patent merely appears to be relating to the *expected effects of applying Bernoulli’s Principle* to the system of SEVY, as the high-speed flow of air passing through the nozzle would necessarily lower the internal pressure of the system, leading to “localized vacuum” conditions and thereby forcing liquid to be drawn “up the siphon . . . from the reservoir” *Id.* Accordingly, the cited reference of SEVY does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘918 Patent.

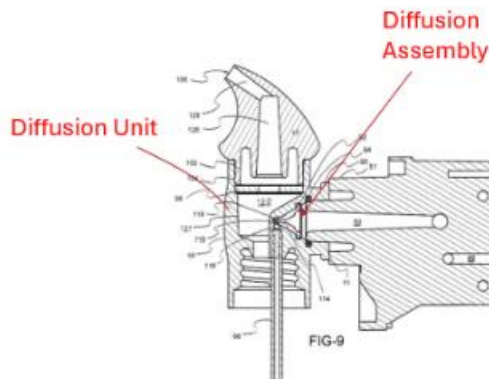
2. Components of the “Atomizer Assembly”

When analyzing the validity of the ‘918 Patent—namely, clause [f] of claim 1—Defendant argues that SEVY “discloses or renders obvious an atomizer assembly comprising an atomizer air

inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Contentions at 79. In this regard, Defendant points to several components, seen in the images immediately below, which Defendant argues collectively discloses the above-noted limitations of the ‘918 Patent. *Id.* at 79-81.



With reference to the features of SEVY which Defendant analogizes to the “atomizer air inlet channel, . . . fluid inlet, . . . mixing chamber, and . . . atomizer exhaust aperture” of the ‘918 Patent in connection with the above images and the image (and corresponding language) provided by Defendant, which is also used to define the components allegedly most akin to the “diffusion unit” and the “diffusion assembly” of the ‘918 Patent, the “component” Defendant analogizes to the “atomizer assembly” of the ‘094 Patent *does not appear to be a discrete structure*.



As previously noted, the language of SEVY analogized to the “diffusion assembly” of the ‘918 Patent relates to “at least [the] nozzle . . . and its cooperative, fitted groove.” *Id.* at 78. As such,

Defendant has improperly analogized the “atomizer assembly” of the ‘918 Patent to the “localized vacuum at the top of the siphon” created by the “momentum of the jet of air passing out of the nozzle” and which “draw[s] liquid up . . . from the reservoir . . . [to transfer] momentum into that liquid to atomize it”—as the “atomizer assembly” of the ‘918 Patent merely appears to be relating to the *expected effects of applying Bernoulli’s Principle* to the system of SEVY, as the high-speed flow of air passing through the nozzle would necessarily lower the internal pressure of the system, leading to “localized vacuum” conditions and thereby forcing liquid to be drawn “up the siphon . . . from the reservoir” *Id.*

In light of the above, the cited reference of SEVY does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘918 Patent. As such, the grouping of features Defendant has analogized to the “atomizer assembly” of the ‘918 Patent cannot possibly further comprise “an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Therefore, the cited reference of SEVY, either alone or in combination with one or more of Defendant’s cited references, does not teach the invention of the ‘918 Patent.

3. **“Upper Chamber” and “Lower Chamber”**

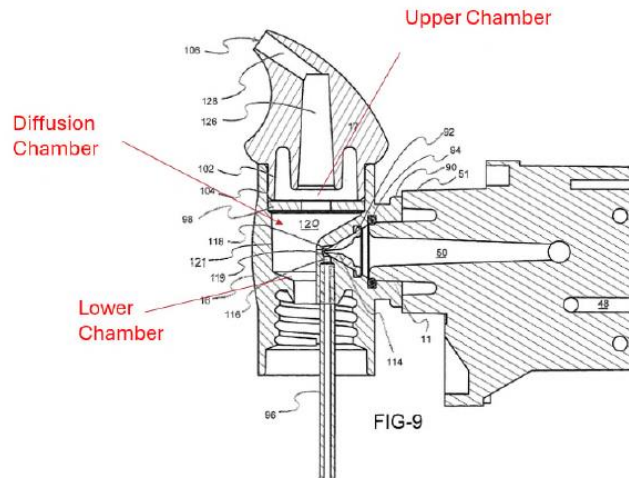
When analyzing the validity of the ‘918 Patent—namely, clause [b] of claim 1 and clause [b] of claim 5—Defendant argues that SEVY “discloses or renders obvious [a] diffusion chamber comprising an upper chamber and a lower chamber.” Contentions at 76, 85. In this regard, Defendant points to language of SEVY indicating a “separator is formed by the main walls of the atomizer . . . and a separator plate.” *Id.* (citing SEVY at ¶ [0068]). Defendant thus argues SEVY teaches that the “separator plate . . . divides the diffusion chamber and forms an upper chamber above the separator plate.” *Id.* Similarly, Defendant points to the following language of SEVY:

“As illustrated in FIG. 9 of [SEVY], the inner wall of atomizer (16) tapers inwardly at a bottom portion and is received by the neck of reservoir (18). In this regard, ‘some droplet agglomerate against wall (121) and begin to drift or drip down toward reservoir (18). Other droplets, having comparatively smaller effective diameters, are more easily entrained in the air’” *Id.* (citing SEVY at ¶ [0082]). Accordingly, Defendant argues “the lower portion of the diffusion chamber (*i.e.*, at and below the taper) forms a lower chamber.” *Id.* at 76, 86.

Contrary to Defendant’s contentions, Plaintiff argues Defendant has misapplied the claimed reference of SEVY, at a minimum because (1) the component which Defendant analogizes to the “upper chamber” of the ‘918 Patent *serves a different purpose and functions differently* as compared to the “upper chamber” of the ‘918 Patent; and, separately, (2) the “component” which Defendant analogizes to the “lower chamber” of the ‘918 Patent (*i.e.*, the “lower portion of the diffusion chamber (*i.e.*, at and below the taper)) *does not appear to be a discrete structure*.

a. Differences in Purpose and Function

As explained in SEVY, the “separator is formed by the main walls of the atomizer . . . and a separator plate.” *Id.* at 76, 85 (citing SEVY at ¶ [0068]). In this regard, and as alluded to in the image immediately below, Defendant thus argues that SEVY teaches the “separator plate . . . divides the diffusion chamber and forms an upper chamber above the separator plate.” *Id.*



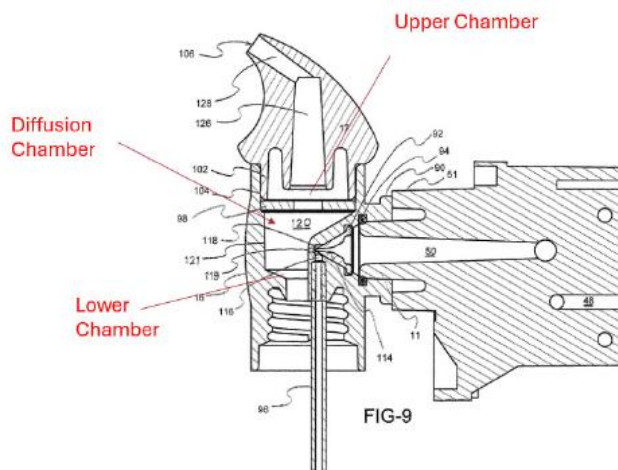
As taught by the '918 Patent, the “*fluid dispersion discharged from the atomizer assembly . . . through [the] atomizer exhaust aperture . . . into [the] diffusion chamber is interrupted and redirected by virtue of [the] lower chamber . . . and upper chamber . . . therein.*” ‘918 Patent at [col. 11, lines 1-5] (emphasis added). Moreover, certain embodiments of the ‘918 Patent teach that the “*interrupt[ed] and redirect[ed] . . . flow . . . during operation of the fluid dispersion assembly . . . serves to suppress or dampen sound waves generated therein Id. at [col. 11, lines 5-9].* Accordingly, the “upper chamber” of the ‘918 Patent primarily serves to, at a minimum, “redirect” the “fluid dispersion discharged from the atomizer assembly.” *Id.* at [col. 11, lines 1-5].

On the other hand, and as also explained in SEVY, because the “separator plate” of SEVY is intended to control the “outflow from a separation chamber, *separating comparatively larger droplets from comparatively smaller droplets prior to exist of the comparatively smaller droplets from the atomizer,*” SEVY explains that the purpose of the “separator plate” is to separate the “comparatively larger droplets” (which are too heavy to be expelled from the device and which will get “trapped in the traps” and thus return to the “separator plate” to “eventually be re-entrained or find their way to the reservoir”) from the “comparatively smaller droplets” (which will be expelled from the device). *See SEVY at ¶ [0019], [0083] (emphasis added).* Accordingly, unlike

the “upper chamber” of the ‘918 Patent—which, again, primarily serves to “redirect” the “fluid dispersion discharged from the atomizer assembly”—the component of SEVY Defendant has analogized to the “upper chamber” of the ‘918 Patent does not primarily serve to “redirect” the fluid dispersion. Instead, the “separator plate” taught by SEVY accomplishes that goal, as the “separator plate” of SEVY “divides the diffusion chamber,” thus structurally requiring the fluid dispersion produced by the device of SEVY to pass through it (*i.e.*, the “separator plate”) before the fluid dispersion can enter the component analogized to the “upper chamber” of the ‘918 Patent.

b. Differences in Structure

As explained in SEVY, the “component” which Defendant analogizes to the “lower chamber” of the ‘918 Patent is the “lower portion of the diffusion chamber (*i.e.*, at and below the taper).” Contentions at 76, 86. In this regard, Defendant points to a particular region of the component analogized to the “diffusion unit” of SEVY—seen in the image immediately below—as teaching the “lower chamber” of the ‘918 Patent.



As can be seen by a brief review of the language of SEVY which Defendant analogizes to the “lower chamber” of the ‘918 Patent in connection with the above image, the “component” Defendant analogizes to the “lower chamber” of the ‘918 Patent *does not appear to be a discrete*

structure. In fact, the “component” analogized to the “lower chamber” of the ‘918 Patent is not identified in SEVY as being a discrete component (*i.e.*, the “component” is not identified with a reference numeral) and merely appears to be either an extension of the reservoir wherein the operative fluid rests or an extension of the component analogized to the “diffusion chamber” of the ‘918. In either case, however, the “component” analogized to the “lower chamber” of the ‘918 Patent merely appears to direct heavier droplets (*i.e.*, those not sufficiently small enough to be expelled from the device of SEVY) back into the reservoir to be re-atomized and, eventually, expelled from the device of SEVY.

VI. SEVY, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘449 Patent

1. Diffusion Assembly v. Atomizer Assembly

When analyzing the validity of the ‘449 Patent—namely, clause [c] of claim 1 and clause [c] of claim 7—Defendant argues that SEVY “discloses or renders obvious a diffusion assembly disposed in an operative engagement with said diffusion unit, wherein said diffusion assembly comprises an atomizer assembly.” Contentions at 58, 66. In this regard, Defendant points to the following language of SEVY:

“[T]he shape of the nozzle (92) and its cooperative, fitted groove in the atomizer (16) provides a seal therebetween. Thus, the interior of the nozzle (92) is completely sealed by the seal (94), the outlet (11), and the body of the atomizer (16), in addition to the surfaces of the nozzle (92), itself.”

Id. at 59, 66 (citing SEVY at ¶ [0078]). Accordingly, Defendant argues SEVY “thus teaches a diffusion assembly (*e.g.*, at least [the] nozzle . . . and its cooperative, fitted groove) that is disposed in an operative engagement with the diffusion unit.” *Id.* Similarly, Defendant points to the following language of SEVY:

“The momentum of the jet of air passing out of the nozzle (92) creates a localized vacuum at the top of the siphon (96), drawing liquid up the siphon (96) from the reservoir (18), and transferring momentum into that liquid to atomize it and throw it into the atomizer (16).”

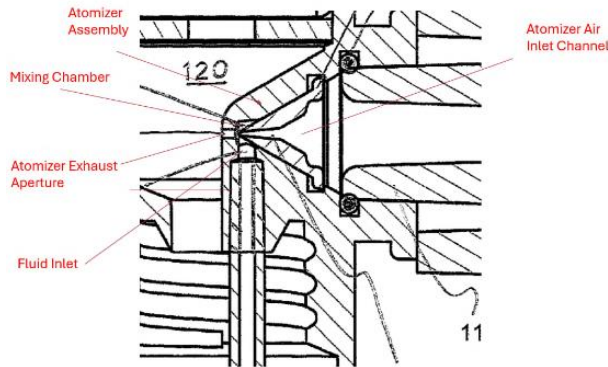
Id. (citing SEVY at ¶ [0067]). As such, Defendant claims the “diffusion assembly” of SEVY “comprises an atomizer assembly.” *Id.*

Contrary to Defendant’s arguments, above, Defendant has misapplied the claimed reference of SEVY—namely, Defendant has improperly analogized the “atomizer assembly” of the ‘449 Patent to the “localized vacuum at the top of the siphon” created by the “momentum of the jet of air passing out of the nozzle” and which “draw[s] liquid up . . . from the reservoir . . . [to transfer] momentum into that liquid to atomize it” *Id.* In particular, and at an absolute minimum, the language seen in SEVY which Defendant analogizes to the “atomizer assembly” of the ‘449 Patent *does not appear to be a discrete structure*. In fact, the language of SEVY analogized to the “atomizer assembly” of the ‘449 Patent merely appears to be relating to the *expected effects of applying Bernoulli’s Principle* to the system of SEVY, as the high-speed flow of air passing through the nozzle would necessarily lower the internal pressure of the system, leading to “localized vacuum” conditions and thereby forcing liquid to be drawn “up the siphon . . . from the reservoir” *Id.* Accordingly, the cited reference of SEVY does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘449 Patent.

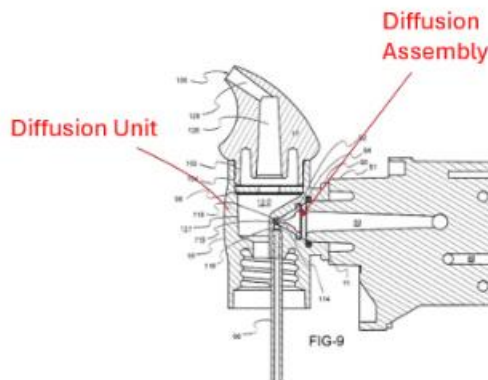
2. Components of the “Atomizer Assembly”

When analyzing the validity of the ‘449 Patent—namely, clause [d] of claim 1 and clause [d] of claim 7—Defendant argues that SEVY “discloses or renders obvious [an] atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Contentions at 60, 67. In this regard, Defendant points to several components, seen in

the image immediately below, which Defendant argues collectively discloses the above-noted limitations of the '449 Patent. *Id.* at 60-61, 67-68.



With reference to the language of SEVY which Defendant analogizes to the “atomizer air inlet channel, . . . fluid inlet, . . . mixing chamber, and . . . atomizer exhaust aperture” of the ‘449 Patent in connection with the above image and the image (and corresponding language) provided by Defendant, which is further used to define the components most akin to the “diffusion unit” and the “diffusion assembly” of the ‘449 Patent, the feature Defendant analogizes to the “atomizer assembly” of the ‘449 Patent *does not appear to be a discrete structure.*



As previously noted, the language of SEVY analogized to the “diffusion assembly” of the ‘449 Patent relates to “at least [the] nozzle . . . and its cooperative, fitted groove.” *Id.* at 59, 66. As such, Defendant has improperly analogized the “atomizer assembly” of the ‘449 Patent to the “localized vacuum at the top of the siphon” created by the “momentum of the jet of air passing out of the

nozzle” and which “draw[s] liquid up . . . from the reservoir . . . [to transfer] momentum into that liquid to atomize it”—as the “atomizer assembly” of the ‘449 Patent merely appears to be relating to the *expected effects of applying Bernoulli’s Principle* to the system of SEVY, as the high-speed flow of air passing through the nozzle would necessarily lower the internal pressure of the system, leading to “localized vacuum” conditions and thereby forcing liquid to be drawn “up the siphon . . . from the reservoir” *Id.*

In light of the above, the cited reference of SEVY does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘449 Patent. As such, the grouping of “components” Defendant has analogized to the “atomizer assembly” of the ‘449 Patent cannot possibly further comprise “an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Therefore, the cited reference of SEVY, either alone or in combination with one or more of Defendant’s cited references, does not teach the invention of the ‘449 Patent.

VII. SHIN, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘094 Patent

1. Diffusion Assembly v. Atomizer Assembly

When analyzing the validity of the ‘094 Patent—namely, clauses [c.1] and [c.2] of claim 7—Defendant argues that SHIN “discloses or renders obvious a diffusion assembly disposed in an operative engagement with said diffusion unit.” Contentions at 128. In this regard, Defendant points to the following language of SHIN:

“The tube (210) in the vaporizer unit (200) is a double tube formed by an internal tube (211) and an external tube (212); the external tube (212) is formed integrally with the pressure chamber (220) in a state of being fluidically connected to the lower end of the pressure chamber (220) of the vaporizer unit (200), the internal tube (211) is formed to extend to the vicinity of the end of the air injection tube (410) that is introduced into the pressure chamber (220), and the end is extremely narrowed to have a diameter of 1/10 to

1/5 of the original diameter of the internal tube (211) and bent toward the end of the air injection tube (410) in order to effectively mix the liquid fragrance due to the effect of the pressure reduction generated by the air flow flowing out through the air injection tube (410).”

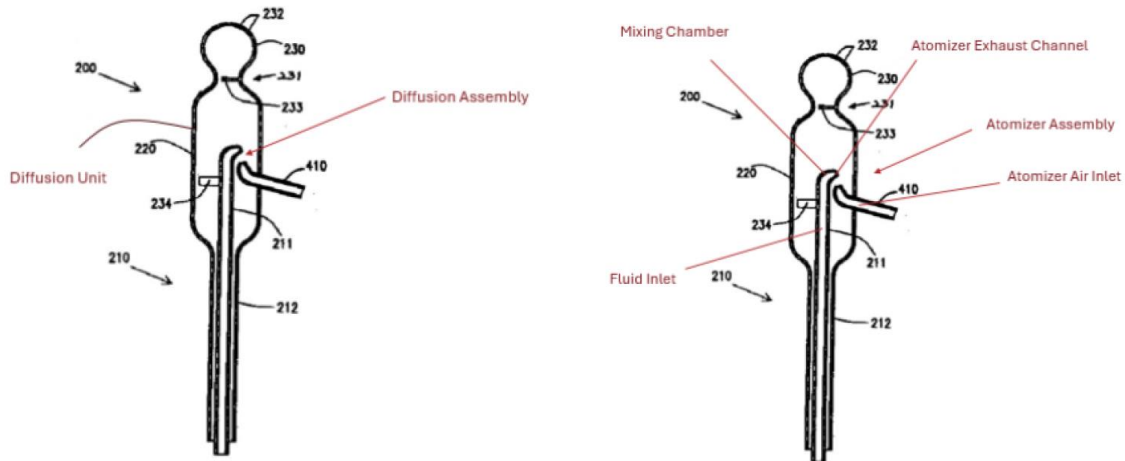
Id. at 128-29 (citing SHIN at 6-3). Accordingly, Defendant argues SHIN “discloses a diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)).” *Id.* at 129.

In furtherance of the above, Defendant argues that SHIN “discloses or renders obvious a diffusion assembly comprising an atomizer assembly.” *Id.* at 130. Similar to the above, Defendant points to the following language of SHIN:

“[T]he air flow introduced into the pressure chamber (220) continues to flow in an upward direction, the end of the internal tube (211) among the tubes (210) located in the air flow having this directionality is exposed, so that a pressure drop occurs at the end of the internal tube (211), and accordingly, the volatile fragrance is evaporated and dispersed into the air as very small particles at the same time, and is dispersed into the atmosphere through the injection port (232) of the head (230) according to the continuous flow of compressed air.”

Id. (citing SHIN at 6-5). As such, Defendant claims SHIN “discloses a diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)) that comprises an atomizer assembly.” *Id.*

Contrary to Defendant’s arguments, above, Plaintiff argues Defendant has misunderstood the claimed reference of SHIN. In particular, and as seen in the images immediately below—taken from the Contentions—in light of how Defendant has analogized the “diffusion assembly” of the ‘094 Patent to the above-noted structure(s) taught by SHIN, Defendant has improperly analogized the “atomizer assembly” of the ‘094 Patent to a generalized region of the fragrance dispenser device taught by SHIN.



As can be seen by a brief review of the above images, and at an absolute minimum, the language seen in SHIN which Defendant analogizes to the “atomizer assembly” of the ‘094 Patent *does not appear to be a discrete structure*. In fact, and as previously noted, Defendant has analogized the “atomizer assembly” of the ‘094 Patent to a generalized region of the fragrance dispenser taught by SHIN—a region which surely is not comprised within the analogized “diffusion assembly (e.g., air injection tube (410) and internal tube (211)).” *See id.* at 129. Accordingly, the cited reference of SHIN does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘094 Patent.

2. Silencer Assembly

When analyzing the validity of the ‘094 Patent—namely, clause [d] of claim 7—Defendant argues that SHIN “discloses or renders obvious a silencer assembly having a silencer inlet, a silencer outlet, and a baffle.” *Id.* at 130. In this regard, Defendant points to language explaining that SHIN discloses a “baffle plate . . . formed in the neck . . . of the pressure chamber,” and also that SHIN discloses that the “baffle plate” prevents “the air flow path of the compressed air connected to the pressure chamber . . . discharged through the injection port . . . formed in the head,” thereby “providing resistance to the air flow” and “preventing the dispersion of a liquid

fragrance dispersed in the air flow, which has a diameter larger than a certain size, from being discharged into the atmosphere as it is.” *Id.* at 130-31. Moreover, Defendant argues that a POSITA would understand that “a baffle that restrains fluid flow would also inherently limit sound associated therewith. *Id.* at 131. Accordingly, Defendant argues SHIN discloses a silencer assembly including a silencer inlet (*e.g.*, the inlet formed by the neck below the baffle plate), a silencer outlet (*e.g.*, the outlet formed by the neck above the baffle plate . . . and a baffle (*e.g.*, baffle plate (233)). *Id.*

With the above understood, and contrary to Defendant’s arguments, Plaintiff argues Defendant has misapplied the claimed reference of SHIN—namely, that the combination of the “inlet formed by the neck below the baffle plate,” the “outlet formed by the neck above the baffle plate,” and the “baffle plate” of SHIN teach a silencer assembly having a silencer inlet, a silencer outlet, and a baffle. *Id.* In particular, and at an absolute minimum, (1) the combination of the components alluded to immediately above—components which Defendant claims is analogous to the “silencer inlet,” “silencer outlet,” and “baffle” of the ‘094 Patent—*serves a different purpose and functions differently* as compared to the “silencer inlet,” “silencer outlet,” and “baffle” of the ‘094 Patent; and, separately, (2) the *above-noted combination of components is structurally distinct from the “silencer assembly”* of the ‘094 Patent.

a. Differences in Purpose and Function

As explained in SHIN, the “baffle plate” prevents “the air flow path of the compressed air connected to the pressure chamber . . . discharged through the injection port . . . formed in the head,” thereby “*providing resistance to the air flow*” and “*preventing the dispersion of a liquid fragrance dispersed in the air flow, which has a diameter larger than a certain size, from being discharged into the atmosphere as it is.*” SHIN at 6-3 (emphasis added). In this regard, SHIN—

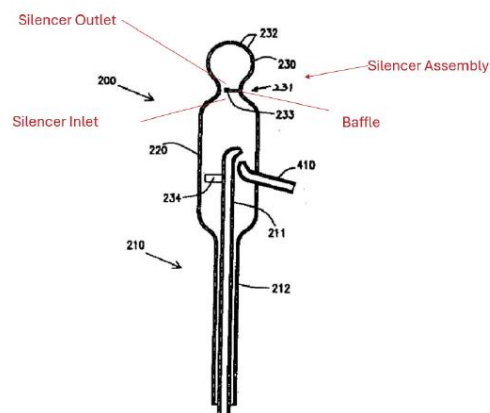
alike SEVY—explains that the purpose of the “baffle plate” is to generally separate the comparatively larger droplets (which are too heavy to be expelled from the device and which will “fall downwards by gravity along the external tube . . . of the tube . . . [to be] re-introduced into the main tank”) from the comparatively smaller droplets (which will be expelled from the device). *See id.* at 6-3, 6-5. More particularly, however, the “baffle plate” ensures that “*only the fragrance particles having very small diameters are released into the atmosphere . . . through the injection port . . . of the head.*” *Id.* at 6-5. Accordingly, the “baffle plate” aids to “*eliminat[e] the factor of wasting fragrances,*” as the component prevents the comparatively larger droplets from being “released through the injection port . . . of the head . . . [and] *immediately stall[ing] and fall[ing] to the surroundings of the head . . . or . . . to the surroundings of the fragrance dispenser,*” thereby “*preventing malfunction of the mechanical device or contamination of the surroundings of the fragrance dispenser*” and “*enabling the operation of the fragrance dispenser in a pleasant state at all times.*” *See id.* (emphasis added).

On the other hand, and as seen in the ‘094 Patent, the “silencer assembly . . . serves to *further minimize the amount of noise generated during operation of the fluid dispersion assembly*” and “*comprises a baffle . . . structured and disposed to further disrupt the flow of the fluid dispersion* through the fluid dispersion assembly[,] . . . and more specifically, *through the silencer chamber.*” ‘094 Patent at [col. 7, lines 52-60] (emphasis added). Accordingly, while the “baffle” of the ‘094 Patent may, in some instances, separate droplets, the purpose of the “baffle plate” surely cannot be to minimize the amount of noise generated—at least in part because nowhere in SHIN is this notion contemplated.

b. Differences in Structure

As set forth in the ‘094 Patent, the “silencer assembly . . . comprises a baffle . . . *disposed*

in a silencer chamber . . . between a silencer inlet . . . and a silencer outlet.” *Id.* at [col. 7, lines 55-57] (emphasis added). In this regard, and as can be seen in at least FIG. 1 of the ‘094 Patent, it is clear that Plaintiff’s patented fluid dispersion assembly explicitly includes a *distinct chamber* (i.e., the “silencer chamber,” identified as reference numeral 138) *which itself comprises a “silencer inlet”* (i.e., reference numeral 135), *a “baffle”* (i.e., reference numeral 136), *and a “silencer outlet”* (i.e., reference numeral 137). *See id.* at FIG. 1. In stark contrast to the ‘094 Patent, however, and as seen in the image immediately below—taken from the Contentions—SHIN does not disclose and/or teaches away from a distinct chamber which itself comprises an inlet, a baffle, and an outlet.



Accordingly, the cited reference of SHIN does not include any such component(s), either alone or in combination, which could serve as the “silencer chamber” as described in the ‘094 Patent.

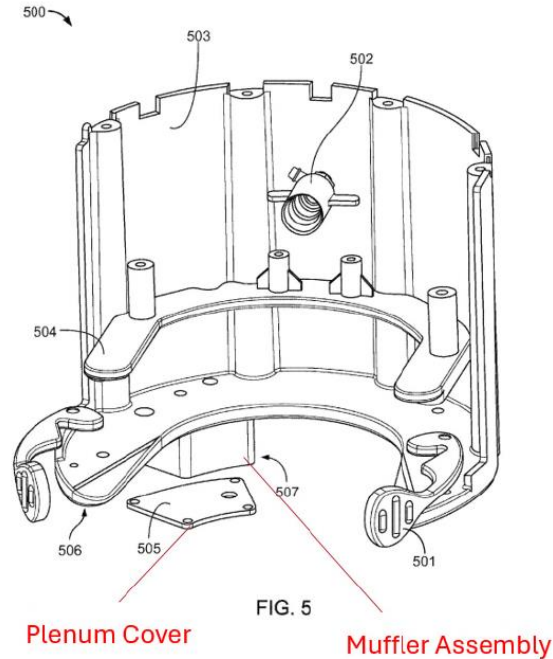
c. Other Cited References

i. Blaylock

As per the Contentions, to the extent SHIN “is found not to expressly or inherently disclose” the above-noted limitations, Defendant argues “it would have been obvious to a POSITA to combine [SHIN] with one or more of Aroma360’s identified prior art references including” BLAYLOCK (i.e., U.S. Patent Publication No. 2012/0018530). Contentions at 132. In this regard,

Defendant cites BLAYLOCK as teaching a “bottom chassis assembly . . . [that] includes . . . a muffler assembly [and] . . . a plenum cover,” and that “[t]he combination of the muffler assembly . . . and a plenum can be designed to *reduce the noise from the air intake of the air pump by providing a restricted air input passageway.*” *Id.* at 133 (citing BLAYLOCK at ¶ [0032] (emphasis added)). Accordingly, Defendant argues a POSITA “would have recognized that fluid dispersion assemblies, including those that use a compressed air source, can be noisy and would have found it obvious to apply a silencer assembly therein to improve user enjoyment and satisfaction.” *Id.* at 134.

Contrary to Defendant’s arguments, the combination of the “muffler assembly” and “plenum cover” of BLAYLOCK is specifically “designed to reduce the noise from the air intake of the air pump...” Therefore, the combination provides a different function than the “silencer assembly” of the ‘094 Patent. In particular, because the “silencer assembly” of the ‘094 Patent is structurally disposed “in communication with the discharge port” of the ‘094 Patent, the “silencer assembly” specifically is designed to “dampen[] . . . the sound waves” *produced from the flow of fluid dispersion through the device* of the ‘094 Patent and out of the “discharge port.” *See* ‘094 Patent at [col. 7, lines 49-67] – [col. 8, lines 1-4]. As such, the principle of operation associated therewith is distinct—at least in part because *the “silencer assembly” of the ‘094 Patent interfaces directly with the fluid dispersion prior to the exodus of the same*, whereas *the combination of the “muffler assembly” and “plenum cover” of BLAYLOCK*, seen in the image immediately below, *does not interface with the fluid dispersion directly.*



Accordingly, the principle of operation of BLAYLOCK is different than the principle of operation of the '094 Patent; a POSITA would not have looked to BLAYLOCK to solve the problem of noise generated by the flow of the fluid dispersion, and would have no motivation to combine SHIN with BLAYLOCK. The combination of SHIN and BLAYLOCK does not teach the invention of the '094 Patent.

ii. Dorendorf

Similarly, to the extent SHIN “is found not to expressly or inherently disclose” the above-noted limitations, Defendant argues “it would have been obvious to a POSITA to combine [SHIN] with . . . the various fluid dispersion assemblies identified and discussed in connection with the AAPA or elsewhere in Aroma360’s Preliminary Invalidity Contentions,” such as DORENDORF (i.e., U.S. Patent Publication No. 2009/0025794). Contentions at 132. However, the principle of operation in DORENDORF is distinct from that of the '094 Patent—at least in part because DORENDORF is directed to a “fluid delivery system and method . . . disclosed for the *application*

of fluids to a region using a centrifugal radial compressor.” DORENDORF at Abstract (emphasis added). In this regard, and as would be known by a POSITA, centrifugal radial compressors *specifically require one or more fluids to flow through a rotor or impeller to increase fluid velocity, thereby decreasing the pressure of the system.* Accordingly, because the ‘094 Patent does not contemplate the incorporation of a centrifugal radial compressor and thus does not require fluid to flow through a rotor or impeller to increase fluid velocity, the principle of operation of DORENDORF is different than the principle of operation of the ‘094 Patent. A POSITA would have no motivation to combine SHIN with DORENDORF; and the combination of SHIN and DORENDORF does not teach the invention of the ‘094 Patent.

VIII. SHIN, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘918 Patent

1. **Diffusion Assembly v. Atomizer Assembly**

When analyzing the validity of the ‘918 Patent—namely, clauses [d.1] and [d.2] of claim 1 and clauses [d.1] and [d.2] of claim 5—Defendant argues that SHIN “discloses or renders obvious a diffusion assembly disposed in an operative engagement with said diffusion unit.” Contentions at 150, 164. In this regard, Defendant points to the following language of SHIN:

“The tube (210) in the vaporizer unit (200) is a double tube formed by an internal tube (211) and an external tube (212); the external tube (212) is formed integrally with the pressure chamber (220) in a state of being fluidically connected to the lower end of the pressure chamber (220) of the vaporizer unit (200), the internal tube (211) is formed to extend to the vicinity of the end of the air injection tube (410) that is introduced into the pressure chamber (220), and the end is extremely narrowed to have a diameter of 1/10 to 1/5 of the original diameter of the internal tube (211) and bent toward the end of the air injection tube (410) in order to effectively mix the liquid fragrance due to the effect of the pressure reduction generated by the air flow flowing out through the air injection tube (410).”

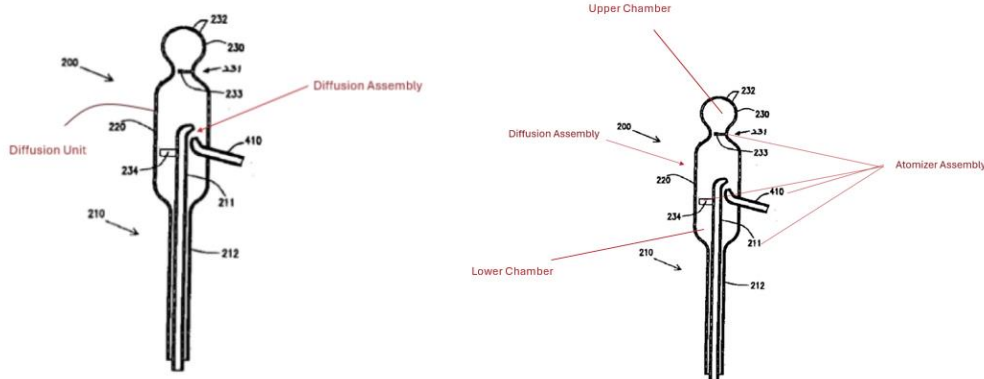
Id. at 150-51, 164-65 (citing SHIN at 6-3). Accordingly, Defendant argues SHIN “discloses a diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)). *Id.* at 151, 165.

In furtherance of the above, Defendant argues that SHIN “discloses or renders obvious a diffusion assembly comprising an atomizer assembly.” *Id.* at 152, 166. Similar to the above, Defendant points to the following language of SHIN:

“[T]he air flow introduced into the pressure chamber (220) continues to flow in an upward direction, the end of the internal tube (211) among the tubes (210) located in the air flow having this directionality is exposed, so that a pressure drop occurs at the end of the internal tube (211), and accordingly, the volatile fragrance is evaporated and dispersed into the air as very small particles at the same time, and is dispersed into the atmosphere through the injection port (232) of the head (230) according to the continuous flow of compressed air.”

Id. (citing SHIN at 6-5). As such, Defendant claims SHIN “discloses a diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)) that comprises an atomizer assembly.” *Id.*

Contrary to Defendant’s arguments, above, Defendant has misapplied the claimed reference of SHIN. In particular, and as seen in the images immediately below—taken from the Contentions—in light of how Defendant has analogized the “diffusion assembly” of the ‘918 Patent to the above-noted structure(s) taught by SHIN, Defendant has improperly analogized the “atomizer assembly” of the ‘918 Patent to the region of the fragrance dispenser device taught by SHIN which was at least in part previously denoted as the component(s) most analogous to the “diffusion assembly” of the ‘918 Patent.

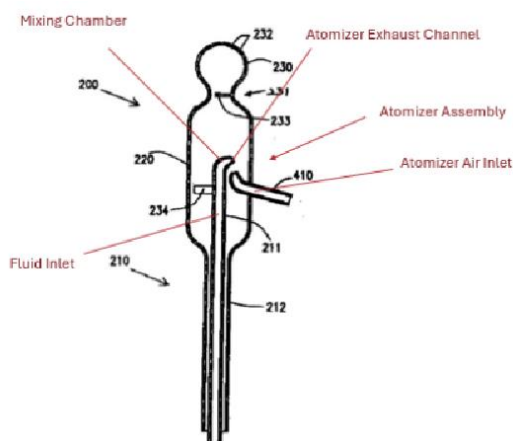


As can be seen by a brief review of the above images, and at an absolute minimum, the language seen in SHIN which Defendant analogizes to the “atomizer assembly” of the ‘918 Patent **does not**

appear to be a discrete structure. In fact, and as previously noted, Defendant has analogized the “atomizer assembly” of the ‘918 Patent to the region of the fragrance dispenser device taught by SHIN which was at least in part denoted as the component(s) most analogous to the “diffusion assembly” of the ‘918 Patent—a region which surely is not comprised within the analogized “diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)).” *See id.* at 151, 165. Accordingly, the cited reference of SHIN does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘918 Patent.

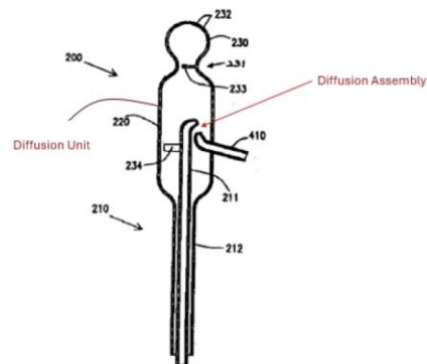
2. Components of the “Atomizer Assembly”

When analyzing the validity of the ‘918 Patent—namely, clause [f] of claim 1—Defendant argues that SHIN “discloses or renders obvious an atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Contentions at 153. In this regard, Defendant points to several “components,” seen in the image immediately below, which Defendant argues collectively discloses the above-noted limitations of the ‘918 Patent. *Id.* at 153-54.



As can be seen by a brief review of the language seen in SHIN which Defendant analogizes to the “atomizer air inlet channel, . . . fluid inlet, . . . mixing chamber, and . . . atomizer exhaust aperture” of the ‘918 Patent in connection with the above image and the image provided by

Defendant which is used to define the components most akin to the “diffusion unit” and the “diffusion assembly” of the ‘918 Patent—reproduced immediately below—the “component” Defendant analogizes to the “atomizer assembly” of the ‘094 Patent *does not appear to be a discrete structure*.



In fact, and as previously noted, Defendant has analogized the “atomizer assembly” of the ‘918 Patent to a generalized region of the fragrance dispenser taught by SHIN—a region which surely is not comprised within the analogized “diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)).” *See id.* at 151. Accordingly, the cited reference of SHIN does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘918 Patent. As such, the grouping of “components” Defendant has analogized to the “atomizer assembly” of the ‘918 Patent cannot possibly further comprise “an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Therefore, the cited reference of SHIN, either alone or in combination with one or more of Defendant’s cited references, does not teach the invention of the ‘918 Patent.

IX. SHIN, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘449 Patent

1. **Diffusion Assembly v. Atomizer Assembly**

When analyzing the validity of the ‘449 Patent—namely, clauses [c.1] and [c.2] of claim 1 and clauses [c.1] and [c.2] of claim 7—Defendant argues that SHIN “discloses or renders obvious a diffusion assembly disposed in an operative engagement with said diffusion unit”

Contentions at 100, 112. In this regard, Defendant points to the following language of SHIN:

“The tube (210) in the vaporizer unit (200) is a double tube formed by an internal tube (211) and an external tube (212); the external tube (212) is formed integrally with the pressure chamber (220) in a state of being fluidically connected to the lower end of the pressure chamber (220) of the vaporizer unit (200), the internal tube (211) is formed to extend to the vicinity of the end of the air injection tube (410) that is introduced into the pressure chamber (220), and the end is extremely narrowed to have a diameter of 1/10 to 1/5 of the original diameter of the internal tube (211) and bent toward the end of the air injection tube (410) in order to effectively mix the liquid fragrance due to the effect of the pressure reduction generated by the air flow flowing out through the air injection tube (410).”

Id. at 100-01, 112-13 (citing SHIN at 6-3). Accordingly, Defendant argues SHIN “discloses a diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)). *Id.* at 101, 113.

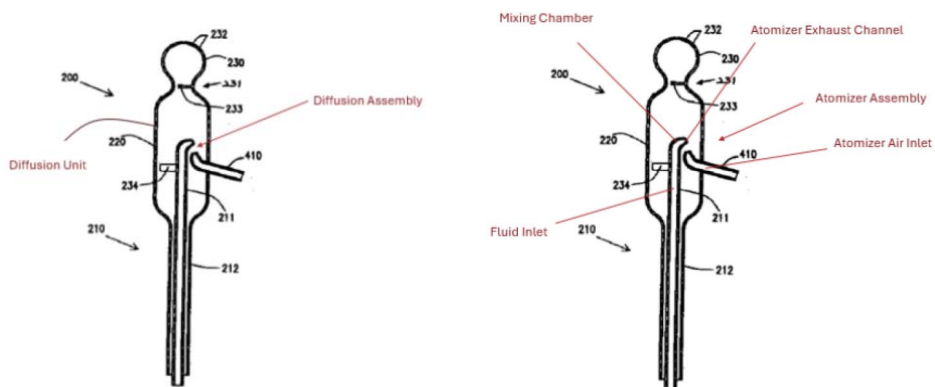
In furtherance of the above, Defendant argues that SHIN “discloses or renders obvious a diffusion assembly comprising an atomizer assembly.” *Id.* at 102, 114. Similar to the above, Defendant points to the following language of SHIN:

“[T]he air flow introduced into the pressure chamber (220) continues to flow in an upward direction, the end of the internal tube (211) among the tubes (210) located in the air flow having this directionality is exposed, so that a pressure drop occurs at the end of the internal tube (211), and accordingly, the volatile fragrance is evaporated and dispersed into the air as very small particles at the same time, and is dispersed into the atmosphere through the injection port (232) of the head (230) according to the continuous flow of compressed air.”

Id. (citing SHIN at 6-5). As such, Defendant claims SHIN “discloses a diffusion assembly (*e.g.*, air injection pipe (410) and internal tube (211)) that comprises an atomizer assembly.” *Id.*

Contrary to Defendant’s arguments, above, Plaintiff argues Defendant has misunderstood the claimed reference of SHIN. In particular, and as seen in the images immediately below—taken from the Contentions—in light of how Defendant has analogized the “diffusion assembly” of the

‘449 Patent to the above-noted structure(s) taught by SHIN, Defendant has improperly analogized the “atomizer assembly” of the ‘449 Patent to a generalized region of the fragrance dispenser device taught by SHIN.

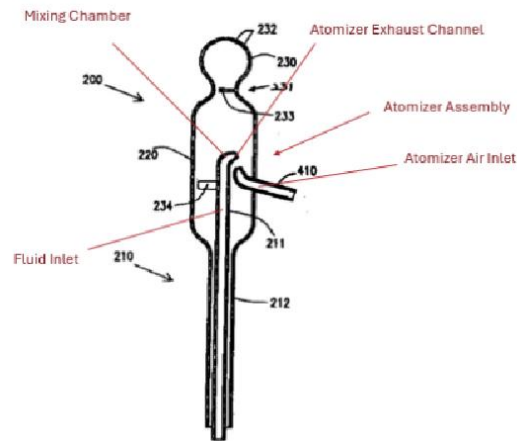


As can be seen by a brief review of the above images, and at an absolute minimum, the language seen in SHIN which Defendant analogizes to the “atomizer assembly” of the ‘449 Patent **does not appear to be a discrete structure**. In fact, and as previously noted, Defendant has analogized the “atomizer assembly” of the ‘449 Patent to a generalized region of the fragrance dispenser taught by SHIN—a region which surely is not comprised within the analogized “diffusion assembly (*e.g.*, air injection tube (410) and internal tube (211)).” *See id.* at 102, 114. Accordingly, the cited reference of SHIN does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘449 Patent.

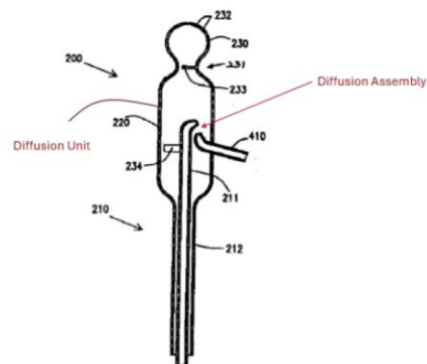
2. Components of the “Atomizer Assembly”

When analyzing the validity of the ‘918 Patent—namely, clause [d] of claim 1 and clause [d] of claim 7—Defendant argues that SHIN “discloses or renders obvious an atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Contentions at 102, 114. In this regard, Defendant points to several “components,” seen in the image immediately below, which Defendant argues collectively discloses the above-noted

limitations of the '449 Patent. *Id.* at 102-04, 114-16.



As can be seen by a brief review of the language seen in SHIN which Defendant analogizes to the “atomizer air inlet channel, . . . fluid inlet, . . . mixing chamber, and . . . atomizer exhaust aperture” of the ‘449 Patent in connection with the above image and the image provided by Defendant which is used to define the components most akin to the “diffusion unit” and the “diffusion assembly” of the ‘918 Patent—reproduced immediately below—the “component” Defendant analogizes to the “atomizer assembly” of the ‘094 Patent *does not appear to be a discrete structure*.



In fact, and as previously noted, Defendant has analogized the “atomizer assembly” of the ‘449 Patent to a generalized region of the fragrance dispenser taught by SHIN—a region which surely is not comprised within the analogized “diffusion assembly (*e.g.*, air injection tube (410) and

internal tube (211)).” *See id.* at 101, 113. Accordingly, the cited reference of SHIN does not include any component(s), either alone or in combination, which could serve as the “atomizer assembly” as described in the ‘449 Patent. As such, the grouping of “components” Defendant has analogized to the “atomizer assembly” of the ‘449 Patent cannot possibly further comprise “an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.” Therefore, the cited reference of SHIN, either alone or in combination with one or more of Defendant’s cited references, does not teach the invention of the ‘449 Patent.

X. GAO, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘094 Patent

1. Silencer Assembly

When analyzing the validity of the ‘094 Patent—namely, clause [d] of claim 7—Defendant argues that GAO “discloses or renders obvious a silencer assembly having a silencer inlet, a silencer outlet, and a baffle.” Contentions at 181. In this regard, Defendant points to language explaining that GAO discloses an “upper part of [a] first cavity [that] is provided with a baffle,” and that the “baffle [that] regulates the flow of atomized particles out of [an] atomizing gas outlet.” *Id.* at 181, 183. Moreover, Defendant argues that a POSITA would understand that “a baffle that restrains fluid flow would also inherently limit sound associated therewith. *Id.* at 183. Accordingly, Defendant argues GAO discloses a “silencer assembly (*e.g.*, cover body (1) and baffle (3)) having a silencer inlet (*e.g.*, the inlet upstream of baffle (3)), a silencer outlet (*e.g.*, the outlet downstream of baffle (3)), and a baffle (*e.g.*, baffle (3)). *Id.*

With the above understood, and contrary to Defendant’s arguments, Defendant has misapplied the claimed reference of GAO—namely, that the combination of the “cover body . . . and baffle,” the “inlet upstream of baffle,” the “outlet downstream of baffle,” and the “baffle” of

GAO teach a silencer assembly having a silencer inlet, a silencer outlet, and a baffle. *Id.* In particular, and at an absolute minimum, (1) the combination of the components alluded to immediately above—components which Defendant claims is analogous to the “silencer inlet,” “silencer outlet,” and “baffle” of the ‘094 Patent—*serves a different purpose and functions differently* as compared to the “silencer inlet,” “silencer outlet,” and “baffle” of the ‘094 Patent; and, separately, (2) the *above-noted combination of components is structurally distinct from the “silencer assembly”* of the ‘094 Patent.

a. Differences in Purpose and Function

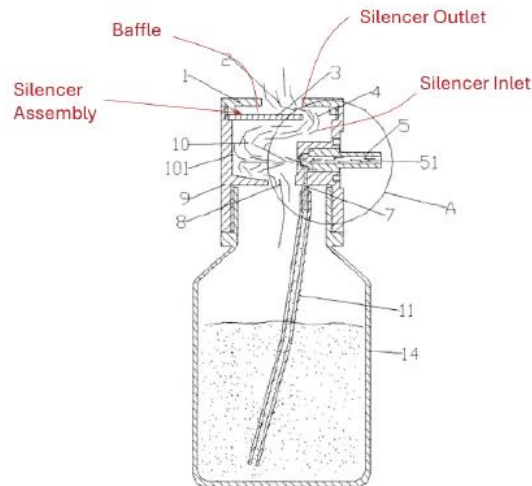
Similar to the “separator plate” of SEVY and the “baffle plate” of SHIN, the “baffle” of GAO is *largely intended to prevent the dispersion of a liquid fragrance, which has a diameter larger than a certain size, from being discharged into the atmosphere.* See GAO at ¶ [0021], [0025]. In this regard, GAO explains that the “smaller the particles, the easier it is to convert [the rising gas flow] into gas,” and as such, the “smallest particles will float in the air, and drift out through the through hole” *Id.* at ¶ [0025]. Similarly, the “larger particles [will be] recovered in the lower part cavity . . . and refluxed into the bottle as essence and essential oil through the reflux hole.” *Id.*

On the other hand, and as seen in the ‘094 Patent, the “silencer assembly (134) serves to *further minimize the amount of noise generated during operation of the fluid dispersion assembly*” and “*comprises a baffle . . . structured and disposed to further disrupt the flow of the fluid dispersion* through the fluid dispersion assembly[,] . . . and more specifically, *through the silencer chamber.*” ‘094 Patent at [col. 7, lines 52-60] (emphasis added). Accordingly, while the “baffle” of the ‘094 Patent may, in some instances, separate droplets, the purpose of the “baffle” of GAO surely cannot be to minimize the amount of noise generated—at least in part because

nowhere in GAO is this notion contemplated.

b. Differences in Structure

As set forth in the ‘094 Patent, the “silencer assembly . . . comprises a baffle . . . *disposed in a silencer chamber* . . . between a silencer inlet . . . and a silencer outlet.” *Id.* at [col. 7, lines 55-57] (emphasis added). In this regard, and as can be seen in at least FIG. 1 of the ‘094 Patent, it is clear that Plaintiff’s patented fluid dispersion assembly explicitly includes a *distinct chamber* (i.e., the “silencer chamber,” identified as reference numeral 138) *which itself comprises a “silencer inlet”* (i.e., reference numeral 135), *a “baffle”* (i.e., reference numeral 136), *and a “silencer outlet”* (i.e., reference numeral 137). *See id.* at FIG. 1. In stark contrast to the ‘094 Patent, however, and as seen in the image immediately below—taken from the Contentions—GAO does not disclose and/or teaches away from a distinct chamber which itself comprises an inlet, a baffle, and an outlet.



Accordingly, the cited reference of GAO does not include any such component(s), either alone or in combination, which could serve as the “silencer chamber” as described in the ‘094 Patent.

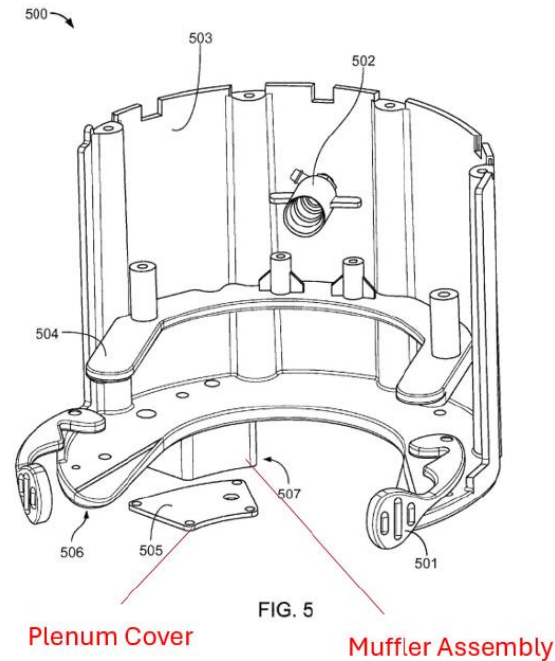
c. Other Cited References

i. Blaylock

As per the Contentions, to the extent GAO “is found not to expressly or inherently disclose” the above-noted limitations, Defendant argues “it would have been obvious to a POSITA to combine [GAO] with one or more of Aroma360’s identified prior art references including” BLAYLOCK (*i.e.*, U.S. Patent Publication No. 2012/0018530). Contentions at 183. In this regard, Defendant cites BLAYLOCK as teaching a “bottom chassis assembly . . . [that] includes . . . a muffler assembly [and] . . . a plenum cover,” and that “[t]he combination of the muffler assembly . . . and a plenum can be designed to *reduce the noise from the air intake of the air pump by providing a restricted air input passageway.*” *Id.* at 185 (citing BLAYLOCK at ¶ [0032] (emphasis added)). Accordingly, Defendant argues a POSITA “would have recognized that fluid dispersion assemblies, including those that use a compressed air source, can be noisy and would have found it obvious to apply a silencer assembly therein to improve user enjoyment and satisfaction.” *Id.* at 186.

Contrary to Defendant’s arguments, Plaintiff notes because the combination of the “muffler assembly” and “plenum cover” of BLAYLOCK is specifically “designed to reduce the noise from the air intake of the air pump,” the combination provides a different function than the “silencer assembly” of the ‘094 Patent. In particular, because the “silencer assembly” of the ‘094 Patent is structurally disposed “in communication with the discharge port” of the ‘094 Patent, the “silencer assembly” specifically is designed to “dampen[] . . . the sound waves” *produced from the flow of fluid dispersion through the device* of the ‘094 Patent and out of the “discharge port.” *See* ‘094 Patent at [col. 7, lines 49-67] – [col. 8, lines 1-4]. As such, while the “silencer assembly” of the ‘094 Patent and the combination of the “muffler assembly” and “plenum cover” of BLAYLOCK are both generally intended to dampen sound waves, the principle of operation associated therewith is distinct—at least in part because *the “silencer assembly” of the ‘094 Patent interfaces directly*

with the fluid dispersion prior to the exodus of the same, whereas the combination of the “muffler assembly” and “plenum cover” of BLAYLOCK, seen in the image immediately below, does not interface with the fluid dispersion directly.



Accordingly, the principle of operation of BLAYLOCK is different than the principle of operation of the ‘094 Patent. A POSITA would not have looked to BLAYLOCK to solve the problem of noise generated by fluid dispersion flowing through the device, and would have no motivation to combine GAO with BLAYLOCK. The combination of GAO and BLAYLOCK does not teach the invention of the ‘094 Patent.

ii. Dorendorf

Similarly, to the extent GAO “is found not to expressly or inherently disclose” the above-noted limitations, Defendant argues “it would have been obvious to a POSITA to combine [GAO] with . . . the various fluid dispersion assemblies identified and discussed in connection with the AAPA or elsewhere in Aroma360’s Preliminary Invalidity Contentions,” such as DORENDORF

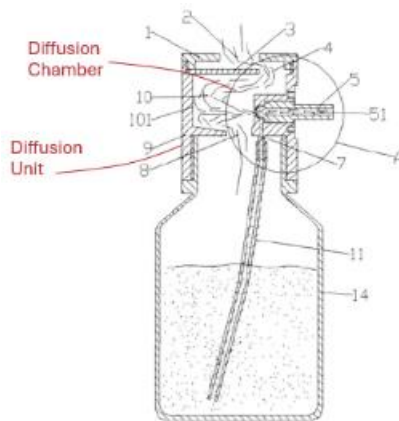
(i.e., U.S. Patent Publication No. 2009/0025794). Contentions at 183. However, the principle of operation in DORENDORF is distinct from that of the ‘094 Patent—at least in part because DORENDORF is directed to a “fluid delivery system and method . . . disclosed for the *application of fluids to a region using a centrifugal radial compressor.*” DORENDORF at Abstract (emphasis added). In this regard, and as would be known by a POSITA, centrifugal radial compressors *specifically require one or more fluids to flow through a rotor or impeller to increase fluid velocity, thereby decreasing the pressure of the system.* Accordingly, because the ‘094 Patent does not disclose the incorporation of a centrifugal radial compressor and thus does not require fluid to flow through a rotor or impeller to increase fluid velocity, the principle of operation of DORENDORF is different than the principle of operation of the ‘094 Patent. A POSITA would not have looked to DORENDORF to solve the problem of noise generated by fluid dispersion flowing through the device, and would have no motivation to combine GAO with DORENDORF. The combination of GAO and DORENDORF does not teach the invention of the ‘094 Patent.

XI. GAO, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the ‘918 Patent

1. **Enclosed Diffusion Assembly**

When analyzing the validity of the ‘918 Patent—namely, clause [a] of claim 1—Defendant argues that GAO “discloses or renders obvious a fluid dispersion assembly comprising a diffusion unit at least partially defining a[n enclosed] diffusion chamber.” Contentions at 218-19. In this regard, Defendant points to language in GAO indicating the “main body (9) (*i.e.*, the diffusion unit) at least partially defines an enclosed diffusion chamber.” *Id.* at 219. However, and as can be seen in the image immediately below, the component of GAO which Defendant analogizes to the

“enclosed diffusion chamber” of claim 1 the ‘918 Patent is *not truly enclosed, as the “enclosed diffusion chamber” of GAO is necessarily open on both ends* (i.e., open at the top toward the hole (4) and open at the bottom toward the reservoir (14)).



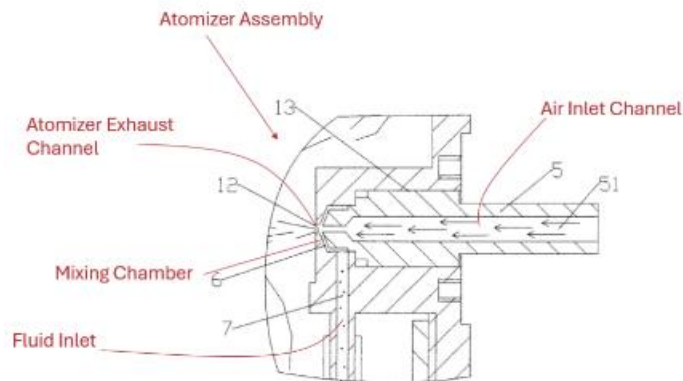
Accordingly, and as can be seen from a brief review of the above image, GAO does not disclose or distinctly teach away from an “enclosed diffusion chamber” as taught by the ‘918 Patent.

2. Components of the “Atomizer Assembly”

When analyzing the validity of the ‘918 Patent—namely, clause [f] of claim 1—Defendant argues that GAO “discloses or renders obvious . . . [an] atomizer assembly” comprising an “atomizer air inlet channel,” a “fluid inlet,” a “mixing chamber,” and an “atomizer exhaust channel.” Contentions at 224-25. In this regard, Defendant points to language in GAO indicating “an atomizer air inlet channel (i.e., gas flow pipe (51)), a fluid inlet (i.e., liquid pipeline (7)), a mixing chamber (i.e., atomization cavity (6)), and an atomizer exhaust channel (i.e., gas flow spray hole (12)). *Id.* at 225.

As an initial matter, Plaintiff notes claim 1 of the ‘918 Patent discloses an “atomizer exhaust *aperture*,” and not an “atomizer exhaust *channel*.” Accordingly, Defendant has not made a showing whether GAO teaches an “atomizer exhaust aperture” akin to the component seen in the ‘918 Patent.

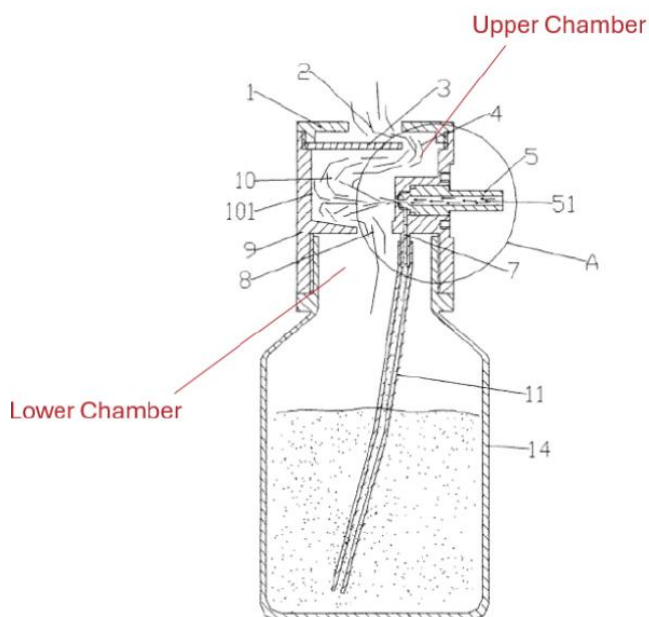
Furthermore, and assuming Defendant meant to analogize the “gas flow spray hole” of GAO to the “atomizer exhaust aperture” of the ‘918 Patent, the component of GAO which Defendant analogizes to the “mixing chamber” of claim 1 of the ‘918 Patent (*i.e.*, the “atomization cavity (6)” of GAO) is *not a discrete chamber, but rather a continuation of the path taken by the fluid as it rises up the component analogized to the “fluid inlet” of the ‘918 Patent*. In particular, and as may be understood by a POSITA, the structure analogized to the “air inlet channel” of the ‘918 Patent necessarily forces air to travel in a substantially horizontal manner toward the “inner wall (101),” thereby indicating the air and fluid formally interface not at the region denoted by Defendant as the “mixing chamber,” but rather at the region denoted by Defendant as the “atomizer exhaust channel,” as seen in the image immediately below.



Accordingly, the region in the above figure denoted by Defendant as the “mixing chamber” is dissimilar to the “mixing chamber” of the ‘918 Patent, at least in part because *the “mixing chamber” of the ‘918 Patent is where “[c]ompressed air and fluid are initially mixed together,”* and the *so-called “mixing chamber” of GAO is merely a region where fluid continues to rise via the effects of the Bernoulli Principle—a region in which the fluid has not yet interfaced with air.*

3. “Upper Chamber” and “Lower Chamber”

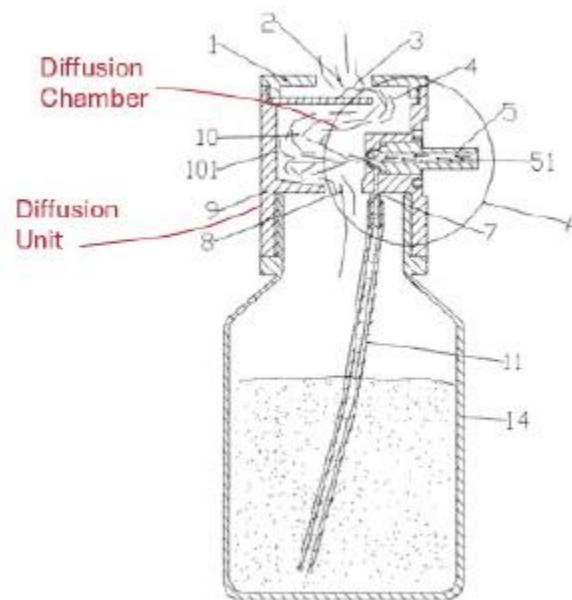
When analyzing the validity of the ‘918 Patent—namely, clause [b] of claim 1 and clause [b] of claim 5—Defendant argues that GAO “discloses or renders obvious [a] diffusion chamber comprising an upper chamber and a lower chamber.” Contentions at 219, 231. In this regard, Defendant points to language of GAO indicating GAO teaches a “main body . . . provided with an upper cavity and a lower cavity,” with a “communication hole [being] provided between the upper cavity and the lower cavity” (*i.e.*, the “reflux hole” of GAO). *Id.* (citing GAO at ¶ [0020]). Accordingly, and as alluded to in the image immediately below, Defendant thus argues GAO teaches “the upper cavity forms the claimed upper chamber and the lower cavity forms the claimed lower chamber.” *Id.* at 219, 232.



Contrary to Defendant’s contentions, however, Defendant has misapplied the claimed reference of GAO because the “components” which Defendant analogizes to the “upper chamber” and “lower chamber” of the ‘918 Patent *do not appear to be discrete structures*.

As an initial matter, and at an absolute minimum, the region Defendant has claimed is

analogous to the “lower chamber” of the ‘918 Patent merely appears to be an *extension of the reservoir intended to contain the operative fluid of GAO* (i.e., the “essential oil bottle (14)”). As such, the region Defendant claims is analogous to the “lower chamber” of the ‘918 Patent is *simply a region connecting the component Defendant analogized to the “diffusion chamber” of the ‘918 Patent—seen in the image immediately below—to the “essential oil bottle” taught by GAO.*



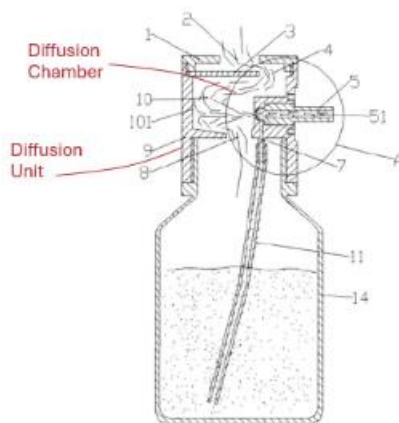
Moreover, based on the way in which Defendant has analogized the “components” of GAO to the “diffusion chamber,” “upper chamber,” and “lower chamber” of the ‘918 Patent, Plaintiff argues the “component” of GAO analogized to the “lower chamber” of the ‘918 Patent cannot possibly be akin to the “lower chamber” of the ‘918 Patent—at least in part because GAO teaches that the “*reflux hole (8)*” is “*provided between the upper cavity and the lower cavity*” and Defendant has explained “the *upper cavity forms the claimed upper chamber* and the *lower cavity forms the claimed lower chamber.*” *Id.* Accordingly, by following Defendant’s contentions, the “reflux hole (8)” is not between the component analogized to the “upper chamber” of the ‘918 Patent (i.e., the “upper cavity” of GAO) and the “component” analogized to the “lower chamber”

of the '918 Patent (*i.e.*, the “lower cavity” of GAO), but rather between the component analogized to the “diffusion chamber” of the '918 Patent and the “component” analogized to the “lower chamber” of the '918 Patent (*i.e.*, the “lower cavity” of GAO).

XII. GAO, either Alone or in Combination With One or More Other References, Does Not Anticipate or Render Obvious the Limitations of the Claims of the '449 Patent

1. Enclosed Diffusion Assembly

When analyzing the validity of the '449 Patent—namely, clause [a] of claim 1—Defendant argues that GAO “discloses or renders obvious a fluid dispersion assembly comprising a diffusion unit at least partially defining a[n enclosed] diffusion chamber.” Contentions at 196-97. In this regard, Defendant points to language in GAO indicating the “main body (9) (*i.e.*, the diffusion unit) at least partially defines an enclosed diffusion chamber.” *Id.* at 197. However, and as can be seen in the image immediately below, the component of GAO which Defendant analogizes to the “enclosed diffusion chamber” of claim 1 the '449 Patent is *not truly enclosed, as the “enclosed diffusion chamber” of GAO is necessarily open on both ends* (*i.e.*, open at the top toward the hole (4) and open at the bottom toward the reservoir (14)).



Accordingly, and as can be seen from a brief review of the above image, GAO does not disclose or distinctly teach away from an “enclosed diffusion chamber” as taught by the '449 Patent.

2. Components of the “Atomizer Assembly”

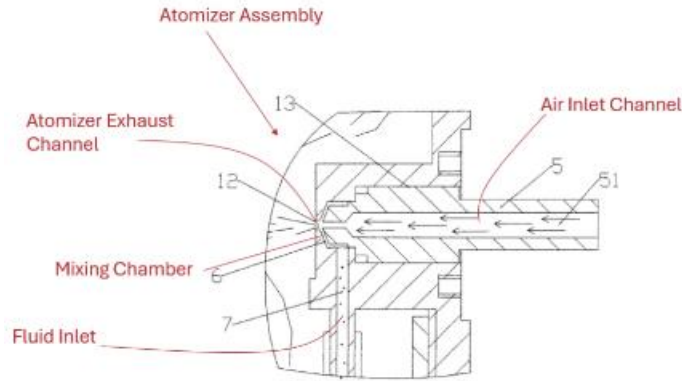
When analyzing the validity of the ‘449 Patent—namely, clause [d] of claim 1 and clause [d] of claim 7— Defendant argues that GAO “discloses or renders obvious . . . [an] atomizer assembly” comprising an “atomizer air inlet channel,” a “fluid inlet,” a “mixing chamber,” and an “atomizer exhaust aperture.” Contentions at 200-01, 210.

In this regard, Defendant points to language in GAO indicating “an atomizer air inlet channel (*i.e.*, gas flow pipe (51)), a fluid inlet (*i.e.*, liquid pipeline (7)), a mixing chamber (*i.e.*, atomization cavity (6)), and an atomizer exhaust *channel* (*i.e.*, gas flow spray hole (12)). *Id.* at 201 (emphasis added). Dissimilarly, Defendant points to language in GAO indicating “an atomizer air inlet channel (*i.e.*, gas flow pipe (51)), a fluid inlet (*i.e.*, liquid pipeline (7)), a mixing chamber (*i.e.*, atomization cavity (6)), and an atomizer exhaust *aperture* (*i.e.*, gas flow spray hole (12)). *Id.* at 210 (emphasis added).

As an initial matter, Plaintiff notes claim 1 of the ‘449 Patent discloses an “atomizer exhaust aperture,” and not an “atomizer exhaust channel.” Accordingly, Defendant has not made a showing whether GAO teaches an “atomizer exhaust aperture” akin to the component seen in claim 1 of the ‘449 Patent.

Furthermore, and assuming Defendant meant to analogize the “gas flow spray hole” of GAO to the “atomizer exhaust aperture” of the ‘449 Patent as it relates to claim 1, the component of GAO which Defendant analogizes to the “mixing chamber” of the ‘449 Patent (*i.e.*, the “atomization cavity (6)” of GAO) is ***not a discrete chamber, but rather a continuation of the path taken by the fluid as it rises up the component analogized to the “fluid inlet” of the ‘449 Patent.*** In particular, and as may be understood by a POSITA, the structure analogized to the “air inlet channel” of the ‘449 Patent necessarily forces air to travel in a substantially horizontal manner

toward the “inner wall (101),” thereby indicating the air and fluid formally interface not at the region denoted by Defendant as the “mixing chamber,” but rather at the region denoted by Defendant as the “atomizer exhaust channel,” as seen in the image immediately below.



Accordingly, the region in the above figure denoted by Defendant as the “mixing chamber” is dissimilar to the “mixing chamber” of the ‘449 Patent, at least in part because *the “mixing chamber” of the ‘449 Patent is where “[c]ompressed air and fluid are initially mixed together,”* and the *so-called “mixing chamber” of GAO is merely a region where fluid continues to rise via the effects of the Bernoulli Principle—a region in which the fluid has not yet interfaced with air.*

Dated: November 29, 2024

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Plaintiff's Initial Disclosures has been served by email on November 29, 2024 on all parties of record on the Service List below.

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Exhibit A

Patent Number 9,527,094

Patent Number 9,527,094 (the '094 Patent) has a filing date of September 3, 2015. However, the '094 Patent is a Continuation of Application Number 13/838,364 (now Patent Number 9,126,215) which has a filing date of March 15, 2013. Patent Number 9,126,215 (the '215 Patent) claims priority to Provisional Patent Application Number 61/694,500 (the '500 Provisional), which has a filing date of August 29, 2012.

Claim	Exemplary Support Location(s)	Earliest Benefit Date Currently Known to Plaintiff
<p>Claim 7:</p> <p>Preamble. fluid dispersion assembly is operatively interconnected to a container of an operative fluid and a compressed air source to generate and discharge a fluid dispersion into a surrounding airspace, said fluid dispersion assembly comprising:</p> <p>a. a diffusion unit at least partially defining a diffusion chamber,</p> <p>b. a discharge port disposed in fluid communication between said diffusion chamber and the surrounding airspace,</p> <p>c. a diffusion assembly disposed in an operative engagement with said diffusion unit, wherein said diffusion assembly comprises an atomizer assembly, and</p>	<p>Pre. '500 Provisional, P. 2, L. 14-22; <u>2.</u> '500 Provisional, Claim 1.</p> <p>a. '500 Provisional, P. 6, L. 17-25; <u>2.</u> '500 Provisional, Claim 1.</p> <p>b. <u>1.</u> '500 Provisional, P. 3, L. 1-5; P. 12, L. 20-24; <u>2.</u> '500 Provisional, Figures 1-3.</p> <p>c. <u>1.</u> '500 Provisional, P. 3, L. 21-22; P. 4, L. 5-6; P. 10, L. 12-25. <u>2.</u> '500 Provisional, Figure 1.</p>	<p>Pre. Aug. 29, 2012</p> <p>a. Aug. 29, 2012</p> <p>b. Aug. 29, 2012</p> <p>c. Aug. 29, 2012</p>

<p>d. a silencer assembly having a silencer inlet, a silencer outlet, and a baffle, wherein said baffle partially restricts movement of the fluid dispersion through said silencer chamber from said silencer inlet to said silencer outlet, thereby dampening Sound waves generated during operation of said fluid dispersion assembly.</p>	<p>d. '500 Provisional, P. 13-14, L. 24-19.</p>	<p>d. Aug. 29, 2012</p>
<p>Claim 8: The fluid dispersion assembly as recited in claim 7 wherein said atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust channel.</p>	<p>'500 Provisional, P. 10-11, L. 23-23; 2. '500 Provisional, Figure 1.</p>	<p>Aug. 29, 2012</p>
<p>Claim 9: The fluid dispersion assembly as recited in claim 8 wherein said atomizer air inlet channel is interconnected to the compressed air source and said fluid inlet disposed in fluid communication with the operative fluid in the container, wherein the compressed air and the operative fluid are mixed together in said mixing chamber to form the fluid dispersion.</p>	<p>1. '500 Provisional, P. 11, L. 1-3; 2. '500 Provisional, Claim 1.</p>	<p>Aug. 29, 2012</p>
<p>Claim 11: The fluid dispersion assembly as recited in claim 7 wherein said diffusion chamber facilitates formation of the fluid dispersion prior to discharge of the fluid dispersion from said diffusion chamber through said discharge port and into the surrounding airspace.</p>	<p>'500 Provisional, P. 2, Lines 19-22; P. 12, L. 20-24.</p>	<p>Aug. 29, 2012</p>

Patent Number 10,092,918

Patent Number 10,092,918 (the '918 Patent) has a filing date of November 17, 2016. However, the '918 Patent is a Continuation in Part of Patent Number 9,527,094 (the '094 Patent), which has a filing date of September 3, 2015. The '094 Patent is a Continuation of Application Number 13/838,364 (now Patent Number 9,126,215) which has a filing date of March 15, 2013. Patent Number 9,126,215 (the '215 Patent) claims priority to Provisional Patent Application Number 61/694,500 (the '500 Provisional), which has a filing date of August 29, 2012.

Claim	Exemplary Support Location	Earliest Benefit Date Currently Known to Plaintiff
<p>Claim 1:</p> <p>Preamble. A fluid dispersion assembly operatively engages a container of an operative fluid and a compressed air source and generates and discharges a fluid dispersion into a surrounding airspace, said fluid dispersion assembly comprising:</p> <p>a. a diffusion unit at least partially defining an enclosed diffusion chamber, wherein said diffusion chamber comprises an upper chamber and a lower chamber,</p> <p>b. a discharge port disposed in fluid communication between said diffusion chamber and the surrounding airspace,</p> <p>c. a diffusion assembly disposed in an operative engagement with said diffusion unit, wherein said diffusion assembly comprises an atomizer assembly,</p>	<p>Pre. '500 Provisional, P. 2, L. 14-22; 2. '500 Provisional, Claim 1.</p> <p>a. '918 Patent, C. 9, L. 37-60; C. 10, L. 57-67.</p> <p>b. 1. '500 Provisional, P. 3, L. 1-5; P. 12, L. 20-24; 2. '500 Provisional, Figures 1-3.</p> <p>c. 1. '500 Provisional, P. 3, L. 21-22; P. 4, L. 5-6; P. 10, L. 12-25. 2. '500 Provisional, Figure 1.</p> <p>d. '918 Patent, C. 9, L. 37-60; C. 10, L. 57-67.</p>	<p>Pre. Aug. 29, 2012</p> <p>a. Nov. 17, 2016</p> <p>b. Aug. 29, 2012</p> <p>c. Aug. 29, 2012</p> <p>d. Nov. 17, 2016</p>

<p>d. said diffusion assembly is disposed between said upper chamber and said lower chamber,</p> <p>e. said atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture, and</p> <p>f. said atomizer air inlet channel interconnected to the compressed air source and said fluid inlet disposed in fluid communication with the operative fluid in the container, wherein the compressed air and the operative fluid are mixed together in said mixing chamber to form the fluid dispersion.</p>	<p>e. ‘918 Patent, C. 10-11, L. 57-27.</p> <p>f. 1. ‘500 Provisional, P. 11, L. 1-3; 2. ‘500 Provisional, Claim 1.</p>	<p>e. Nov. 17, 2016</p> <p>f. Aug. 29, 2012</p>
<p>Claim 3: The fluid dispersion assembly as recited in claim 1 wherein said atomizer exhaust aperture is disposed in a communicating relation between said mixing chamber and said lower chamber to facilitate transfer of the fluid dispersion therebetween.</p>	<p>‘918 Patent, C. 10-11, L. 57-27.</p>	<p>Nov. 17, 2016</p>
<p>Claim 4: The fluid dispersion assembly as recited in claim 1 wherein said diffusion chamber facilitates formation of the fluid dispersion prior to discharge of the fluid dispersion from said diffusion chamber through said discharge port and into the surrounding airspace.</p>	<p>‘500 Provisional, P. 2, Lines 19-22; P. 12, L. 20-24.</p>	<p>Aug. 29, 2012</p>
<p>Claim 5: Preamble. A fluid dispersion assembly is operatively interconnected to a container of an operative fluid and a compressed air source to generate and discharge a fluid dispersion into a surrounding airspace, said fluid dispersion assembly comprising:</p> <p>a. a diffusion unit at least partially defining a diffusion chamber, wherein said diffusion chamber comprises an upper chamber and a lower chamber,</p> <p>b. a discharge port disposed in fluid communication between said diffusion</p>	<p>Pre. 500 Provisional, P. 2, L. 14-22; 2. ‘500 Provisional, Claim 1.</p> <p>a. ‘918 Patent, C. 9, L. 37-60; C. 10, L. 57-67.</p> <p>b. 1. ‘500 Provisional, P. 3, L. 1-5; P. 12, L. 20-</p>	<p>Pre. Aug. 29, 2012</p> <p>a. Nov. 17, 2016</p> <p>b. Aug. 29, 2012</p>

<p>chamber and the surrounding airspace, and</p> <p>c. a diffusion assembly disposed in an operative engagement with said diffusion unit, wherein said diffusion assembly comprises an atomizer assembly, said diffusion assembly is disposed between said upper chamber and said lower chamber.</p>	<p>24; <u>2.</u> '500 Provisional, Figures 1-3.</p> <p>c. <u>1.</u> '918 Patent, C. 9, L. 37-60; <u>2.</u> '918 Patent, Figure 6.</p>	<p>c. Nov. 17, 2016.</p>
<p>Claim 6: The fluid dispersion assembly as recited in claim 5 wherein said atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.</p>	<p>'918 Patent, C. 10-11, L. 57-27.</p>	<p>Nov. 17, 2016</p>
<p>Claim 7: The fluid dispersion assembly as recited in claim 6 wherein said atomizer air inlet channel is interconnected to the compressed air source and said fluid inlet disposed in fluid communication with the operative fluid in the container, wherein the compressed air and the operative fluid are mixed together in said mixing chamber to form the fluid dispersion.</p>	<p><u>1.</u> '500 Provisional, P. 11, L. 1-3; <u>2.</u> '500 Provisional, Claim 1.</p>	<p>Aug. 29, 2012</p>
<p>Claim 8: The fluid dispersion assembly as recited in claim 7 wherein said diffusion chamber facilitates formation of the fluid dispersion prior to discharge of the fluid dispersion from said diffusion chamber through said discharge port and into the surrounding airspace.</p>	<p>'500 Provisional, P. 2, Lines 19-22; P. 12, L. 20-24.</p>	<p>Aug. 29, 2012</p>

Patent Number 10,583,449

Patent Number 10,583,449 (the '449 Patent) has a filing date of October 8, 2018. However, the '449 Patent is a Continuation in Part of Patent Number 10,092,918 (the '918 Patent), which has a filing date of November 17, 2016. The '918 Patent is a Continuation in Part of Patent Number 9,527,094 (the '094 Patent), which has a filing date of September 3, 2015. The '094 Patent is a Continuation of Application Number 13/838,364 (now Patent Number 9,126,215) which has a filing date of March 15, 2013. Patent Number 9,126,215 (the '215 Patent) claims priority to Provisional Patent Application Number 61/694,500 (the '500 Provisional), which has a filing date of August 29, 2012.

Claim	Exemplary Support Location	Earliest Benefit Date Currently Known to Plaintiff
<p>Claim 1:</p> <p>Preamble. A fluid dispersion assembly operatively engages a container of an operative fluid and a compressed air source and generates and discharges a fluid dispersion into a surrounding airspace, said fluid dispersion assembly comprising:</p> <p>a. a diffusion unit at least partially defining an enclosed diffusion chamber,</p> <p>b. a discharge port disposed in fluid communication between said diffusion chamber and the surrounding airspace,</p> <p>c. a diffusion assembly disposed in an operative engagement with said diffusion unit,</p> <p>d. wherein said diffusion assembly comprises an atomizer assembly,</p>	<p>Pre. 500 Provisional, P. 2, L. 14-22; <u>2.</u> '500 Provisional, Claim 1.</p> <p>a. '500 Provisional, P. 6, L. 17-25.</p> <p>b. <u>1.</u> '500 Provisional, P. 3, L. 1-5; P. 12, L. 20-24; <u>2.</u> '500 Provisional, Figures 1-3.</p> <p>c. <u>1.</u> '500 Provisional, P. 3, L. 21-22; P. 4, L. 5-6; P. 10, L. 12-25. <u>2.</u> '500 Provisional, Figure 1.</p> <p>d. <u>1.</u> '500 Provisional, P. 3, L. 21-22; P. 4, L. 5-6; P. 10, L. 12-25. <u>2.</u> '500</p>	<p>Pre. Aug. 29, 2012</p> <p>a. Aug. 29, 2012</p> <p>b. Aug. 29, 2012</p> <p>c. Aug. 29, 2012</p> <p>d. Aug. 29, 2012</p>

<p>e. said atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture, and</p> <p>f. said atomizer air inlet channel interconnected to the compressed air source and said fluid inlet disposed in fluid communication with the operative fluid in the container, the compressed air and the operative fluid mix together in said mixing chamber to form the fluid dispersion.</p>	<p>Provisional, Figure 1.</p> <p>e. '918 Patent, C. 10-11, L. 57-27.</p> <p>f. 1. '500 Provisional, P. 11, L. 1-3; 2. '500 Provisional, Claim 1.</p>	<p>e. Nov. 17, 2016</p> <p>f. Aug. 29, 2012</p>
<p>Claim 4: The fluid dispersion assembly as recited in claim 1 wherein said diffusion chamber facilitates formation of the fluid dispersion prior to discharge of the fluid dispersion from said diffusion chamber through said discharge port and into the surrounding airspace.</p>	<p>'500 Provisional, P. 2, Lines 19-22; P. 12, L. 20-24.</p>	<p>Aug. 29, 2012</p>
<p>Claim 7:</p> <p>Preamble. A fluid dispersion assembly is operatively interconnected to a container of an operative fluid and a compressed air source to generate and discharge a fluid dispersion into a surrounding airspace, said fluid dispersion assembly comprising:</p> <p>a. a diffusion unit at least partially defining a diffusion chamber,</p> <p>b. a discharge port disposed in fluid communication between said diffusion chamber and the surrounding airspace, and</p> <p>c. a diffusion assembly disposed in an operative engagement with said diffusion unit, wherein said diffusion assembly comprises an atomizer</p>	<p>Pre. 500 Provisional, P. 2, L. 14-22; 2. '500 Provisional, Claim 1.</p> <p>a. '500 Provisional, P. 6, L. 17-25.</p> <p>b. 1. '500 Provisional, P. 3, L. 1-5; P. 12, L. 20-24; 2. '500 Provisional, Figures 1-3.</p> <p>c. '918 Patent, C. 10-11, L. 57-27.</p>	<p>Pre. Aug. 29, 2012</p> <p>a. Aug. 29, 2012</p> <p>b. Aug. 29, 2012</p> <p>c. Nov. 17, 2016</p>

<p>assembly, said atomizer assembly comprising an atomizer air inlet channel, a fluid inlet, a mixing chamber, and an atomizer exhaust aperture.</p>		
<p>Claim 8: The fluid dispersion assembly as recited in claim 7 wherein said atomizer air inlet channel is interconnected to the compressed air source and said fluid inlet disposed in fluid communication with the operative fluid in the container, the compressed air and the operative fluid mix together in said mixing chamber to form the fluid dispersion.</p>	<p><u>1.</u> '500 Provisional, P. 11, L. 1-3; <u>2.</u> '500 Provisional, Claim 1.</p>	<p>Aug. 29, 2012</p>
<p>Claim 9: The fluid dispersion assembly as recited in claim 8 wherein said diffusion chamber facilitates formation of the fluid dispersion prior to discharge of the fluid dispersion from said diffusion chamber through said discharge port and into the surrounding airspace.</p>	<p>'500 Provisional, P. 2, Lines 19-22; P. 12, L. 20-24.</p>	<p>Aug. 29, 2012</p>
<p>Claim 10: The fluid dispersion assembly as recited in claim 7 further comprising a container interconnect operatively interconnecting said diffusion unit to the container.</p>	<p>'500 Provisional, P. 3, Lines 10-20; P. 8; Lines 10-24.</p>	<p>Aug. 29, 2012</p>