

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

R.J. REYNOLDS VAPOR COMPANY,
Petitioner,

v.

HEALTHIER CHOICES MANAGEMENT CORP.
Patent Owner.

Case IPR2024-01458
U.S. Patent No. 9,538,788

PATENT OWNER SUR-REPLY

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Exhibit List

Exhibit No.	Description
2001	Declaration of Charles A. Garris, Jr., Ph.D, P.E. In Support of Patent Owner's Response ("Garris")
2002	<i>Curriculum Vitae</i> of Charles A. Garris
2003	Deposition Transcript of Kelly R. Kodama, dated March 30, 2025 ("Kodama Tr.")
2004	Exhibit F to Kodama Tr.
2005	Exhibit G to Kodama Tr.
2006	Exhibit H to Kodama Tr.

I. INTRODUCTION

Petitioner has not shown by a preponderance of the evidence that the challenged claims 1, 7, 8, and 11 of the '788 Patent are unpatentable. In Petitioner's Reply (the "PR"), the Petitioner relies on the conclusory statements of their expert, who attempts to introduce new arguments into the proceeding, masquerading as an expansion of previously raised arguments. The PR is also replete with mischaracterizations of the Patent Owner's Response ("POR") and expert, Dr. Charles Garriss, Jr., in an attempt to undermine the fact that the challenged claims are patentable. The fact remains that the Petitioner has not shown, by a preponderance of the evidence, that the challenged claims are unpatentable. Therefore, the Board should conclude that the challenged claims of the '788 Patent are patentable.

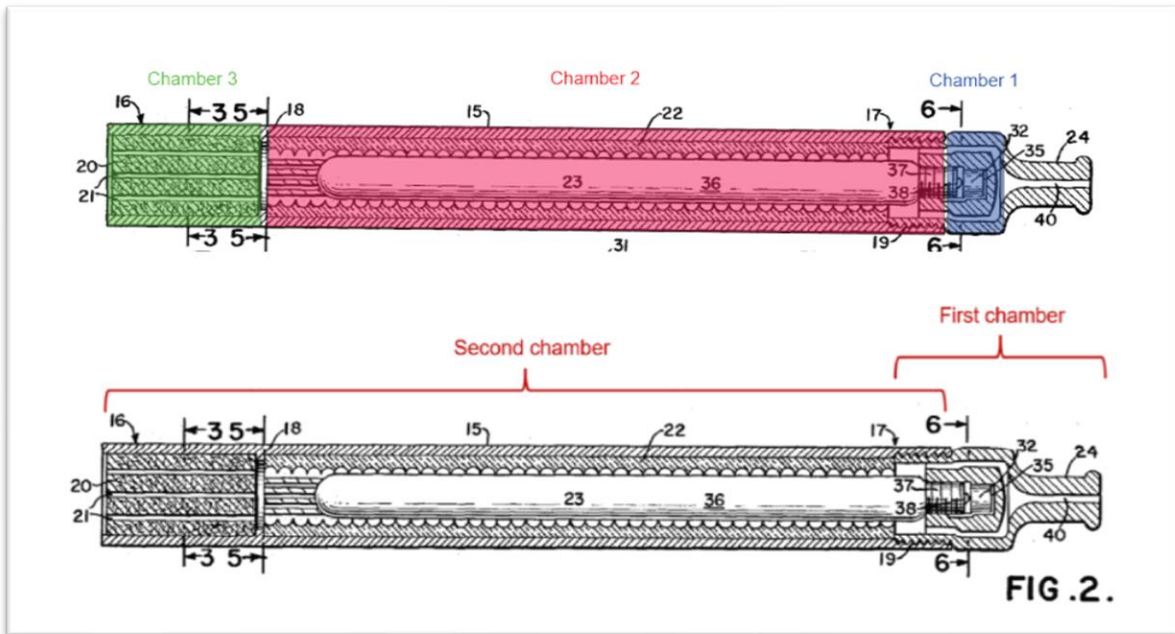
II. CLAIMS 1, 7, 8, AND 11 ARE NOT OBVIOUS OVER GROUNDS 1A AND 1B

A. Gilbert Does Not Disclose "A Fluid Containing Member Located in the Second Chamber"

Petitioner argues in its reply ("PR") that Gilbert's hollow shank 25 is what partitions Gilbert's first and second chambers because the sealing element does not need to form a complete physical barrier, isolating one chamber from the other. PR, 5. Therefore, the sealing element is the shank 25, which separates the bulb from the battery. *Id.* at 9-10. Petitioner, however, conspicuously ignores the express teachings of Gilbert, which state that the cigarette is subdivided by the internal shoulder at 18. Ex. 1004, 1:65-70. Based on the Petitioner's myopic reading, the Petition argues that

a POSITA would consider the shank 25 the sealing element, rather than, or in addition to, the internal shoulder 18. This is inconsistent with a proper obviousness analysis. A reference must be considered for everything that it teaches. *In re Applied Materials, Inc.*, 692 F.3d 1289, 1298 (Fed. Cir. 2012). Here, there is no question that the internal shoulder 18 partitions the tube into a longer chamber and a shorter chamber. Ex. 1004, 1:65-70. The fluid cartridge 20 is in the shorter chamber, and the bulb 36 is in the larger chamber. *Id.* at 2:5-15. Therefore, Gilbert's fluid-containing member is not provided in the second chamber.

Even assuming, for argument's sake, Petitioner's position that a POSITA would consider the shank 25 as a partition, a POSITA would also interpret the shoulder 18 of the Gilbert device to be a partition. Mr. Kodama, in his declaration, is conspicuously silent on this point and therefore concedes that Gilbert's shoulder 18 is a partition. Ex. 1026, ¶ 11. Indeed, Mr. Kodama admits that Gilbert can include more than one chamber. *Id.* To this end, as shown below, following Petitioner's proposed analysis, a POSITA would find that Gilbert's battery 35 is disposed in a first chamber, the bulb 36 is disposed in a second chamber, and the fluid cartridge 20 is disposed in a third chamber.



PR, 8.

As noted by Petitioner, the partition separating the chambers can be an element that does not form a seal (i.e., a shank and shoulder); therefore, Gilbert can comprise, under Petitioner’s and Mr. Kodama’s view, more than one chamber. PR, 5-6; Ex. 1026, ¶ 12. Accordingly, whether looking at Gilbert through Petitioner’s erroneous purview or through Gilbert’s disclosure of a short and long chamber, Gilbert fails to disclose that the fluid cartridge 20 is in the second chamber.

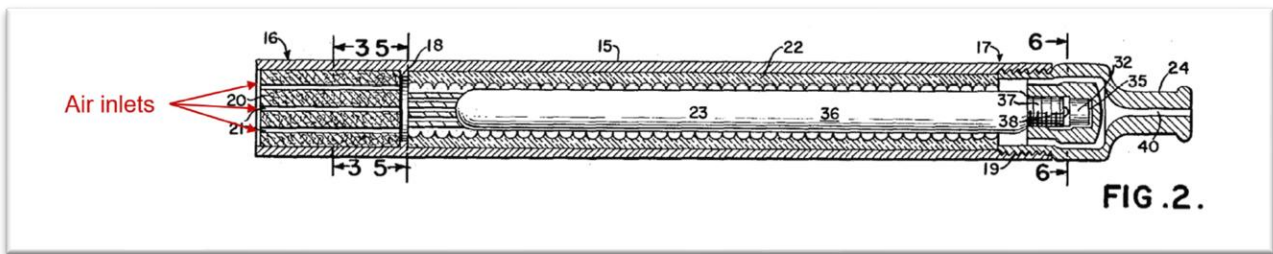
Notwithstanding the above, Patent Owner’s Response (“POR”) explains thoroughly why a POSITA would not consider the shank 25 as the partition, as this would render the chambers to be radially concentric. POR, 21; Ex. 2001, ¶ 79.

B. Gilbert Does Not Disclose “An Air Inlet On An External Wall Of The Casing”

A petitioner cannot submit new evidence or argument in a reply that it could

have presented earlier, for example, to demonstrate a prima facie case of unpatentability of a claim. Consolidated Trial Practice Guide at 74 (citing *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369-70 (Fed. Cir. 2016)).

Here, Petitioner in its PR improperly changes its argument from what constitutes the air inlets in the Gilbert device. PR. 11-12. In its Petition, the Petitioner argued that air inlets 21 were the inlets on the cartridge 20, and reproduced the following image:



Petition, 47.

Now, however, the Petitioner presents a new argument that the opening at the end of the Gilbert device is what serves as the air inlet. POR, 11-12. This raises a new argument that was not previously considered. As such, the Board should hold Petitioner's failure to raise this argument in the original petition to be forfeited and improperly introduced for the first time in the PR. *See Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1377 (Fed. Cir. 2023).

The Petitioner attempts to circumvent this new argument by claiming a misunderstanding. That is false. The Petitioner clearly argued that the air inlets were on the cartridge, and Mr. Kodama supported Petitioner's position in his initial

declaration, declaring, “that the air inlets [in Gilbert] are shown in annotated Figure 2 [above].” *Id.* Petition, 47; Ex. 1003, ¶ 97.

Petitioner must not be permitted to change its initial argument after discovering its flaw, and the Board should not consider RJRV’s new argument and Mr. Kodama’s declaration in support of the PR as to this matter. In doing so, the Board would act consistently with what the Federal Circuit has emphasized in *Netflix*. In *Netflix*, the Federal Circuit emphasized that it is the petitioner’s responsibility to present a clear argument in the initial petition, and the Board is not required to decode or infer additional arguments beyond those clearly made. *Id.* at 1377-81. To this end, as previously noted by the Board in its Institution Decision (Paper 7, p. 19), the Board should conclude that Gilbert does not disclose an air inlet on an external wall of the casing.

C. Gilbert’s Bulb Raises the Temperature of Mixed Air, Not Fluid

HCMC does not concede that Gilbert’s bulb heats the fluid from the second chamber. PR, 14. On the contrary, HCMC demonstrates, which Dr. Garris expressly agrees, that Gilbert’s fluid does not make contact with the bulb. Ex. 2001, ¶ 89; POR, 24. Instead, Gilbert’s bulb makes contact with the mixture of atmospheric air that is first mixed with the flavoring cartridge 20 that is introduced “into the heating chamber and is caused to flow around the heating bulb.” *Id.*; Ex. 1004, 3:10-15.

Petitioner conflates Gilbert’s disclosure to attain element [1i] of claim 1. That

is improper. In determining the meaning of a claim term, “[t]he claims . . . do not stand alone.” *Apple Inc. v. Corephotonics, Ltd.*, 81 F.4th 1353, 1358-59 (Fed. Cir. 2023) (finding that the Court must look at the specification to determine the term’s meaning to construe the meaning of the term).

Here, the ‘788 Patent expressly teaches that it is the fluid in the second chamber that flows toward and makes contact with the bulb. Ex. 1001, 3:30-32. This is not what Gilbert discloses. Gilbert discloses an impregnated cartridge 20 that includes a chemical compound, which, when mixed with ambient air (drawn in from the outside of the electric cigarette), is drawn into the heating chamber and flows around the bulb. Ex. 1004, 3:9-30. Mr. Kodama concedes that fact. Ex. 1026, ¶ 9 (citing Ex. 1004, 3:12-15). Petitioner tries to conflate the issue by mischaracterizing Dr. Garriss’ testimony, purporting that because there is air surrounding the heating element in the ‘788 Patent, air and fluid are coming in contact with the bulb. PR, 15-16. That is a red herring. In the ‘788 Patent, the fluid gets heated by the heating member in two steps. First, the fluid from the second chamber is introduced to the heating element to be vaporized. Second, the vaporized fluid mixes with the ambient air drawn into the device and inhaled by the user through the mouthpiece. Ex. 1001, 4:45-55. In contrast, Gilbert’s heating of the air mixture occurs in two distinct steps. First, the ambient air is drawn into the fluid cartridge to be mixed in the shorter chamber. Second, the impregnated air with flavoring, not the fluid in the cartridge,

is introduced to the heating element to be heated, not vaporized, by the bulb. Ex. 1004, 3:9-16. Not only does Gilbert disclose the inverse of the ‘788 Patent, but it is not designed to vaporize any fluid. Gilbert’s heating bulb is designed to raise the temperature of the mixed air. Therefore, Gilbert does not disclose element [1i].

III. CLAIMS 1, 7, 8, AND 11 ARE NOT OBVIOUS OVER GROUNDS 2A AND 2B

A. Petitioner Fails To Evidence It Would Have Been Obvious To Combine Lee and Gilbert

Petitioner fails to carry its burden that it would have been obvious to combine Lee, Gilbert, Cohen, and Levin to attain the challenged claims. In the PR, Petitioners argue that modifying an electronic cigarette (Lee, Cohen, and Levin) with the components of an electric cigarette (Gilbert) is elementary to circumvent the actual need to explain how the purported combination would work without a significant reconstruction of the primary reference. The Petitioner also confirms that it used hindsight reasoning to support its case of obviousness. Indeed, the Petitioner’s own expert declares that he relied on information published after the effective filing date of the ‘788 Patent to support the Petitioner’s hindsight construction of the prior art, which was used to attain the challenged claims. *See* POR, 36-38

i. Petitioner Fails to Prove That A POSITA Would Combine Gilbert, an Electric Cigarette, With Lee, An Electronic Cigarette, or Cohen, An Electronic Cigarette

Petitioner, in its bid to have the challenged claims canceled, attempts to frame the inquiry as whether a person of ordinary skill in the art (“POSITA”), with two

references sitting before them, would have been motivated or able to combine the references in a way that renders the '788 claimed invention obvious. That is not the real question. **“The real question is whether a skilled artisan would have plucked one reference out of the sea of prior art [Gilbert] and combined it with [Lee or Cohen] to address some need present in the field (the need [for an electronic cigarette]). Whether a skilled artisan would be motivated to make a combination includes whether he would select particular references in order to combine their elements...Objective indicia minimize hindsight’s impact...[and is] substantial evidence that one of skill would not have found the claimed combination obvious.”** *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1337 (Fed. Cir. 2016) (emphasis added).

Here, Gilbert discloses a **smokeless non-tobacco electric cigarette** designed to raise the temperature of, not vaporize, the inhalant mixture. Ex. 1004, 1:19-29. Lee, on the other hand, discloses an **electronic cigarette for powering a circuit board to control the operation of the device and vaporize a nicotine solution**. Ex. 1005, ¶¶ [0001]-[0004]. Cohen, akin to Lee, discloses an **electronic cigarette** that includes an **electronic section**. Cohen’s electronic cigarette is also designed to vaporize fluid. Ex. 1007, ¶¶ 17, 21, 27.

To this end, Gilbert teaches away from the use of devices that vaporize substances and include electronics. For one, Gilbert’s primary goal as an electric

cigarette is to provide “a safe and harmless means for **replacing** burning tobacco and paper with heated, moist, flavored air.” Ex. 1004, 1:9-10. A POSITA reading that would lead away from using Gilbert with other electronic devices that include circuits and the like, and focused on the vaporization of fluids, because doing so would render the electronic device, such as Lee and Cohen, inoperable and defeat its stated purpose. *See Polaris Indus. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1061, 1067–69 (Fed. Cir. 2018) (vacating Board decision that failed to consider whether modifying prior art reference would undermine its goal of constructing stable all-terrain vehicles). A device that does not vaporize fluids and is designed not to include electronics does not readily lend itself to a device that focuses on vaporizing fluids and incorporates electronics. Specifically, Gilbert’s bulb does not vaporize fluids and lacks PCB-based electronics and is architected to heat airflow rather than vaporize liquid, a materially different design objective from Lee and Cohen. Accordingly, Petitioner’s assertions that it would have been obvious to combine Gilbert with Lee or Cohen are unsubstantiated. POR, 17; *See Cargill v. Bunge Loders Croklaan USA, LLC*, IPR2024-01360, Paper 18, p. 4 (“obviousness concerns whether a skilled artisan not only could have made but would have been motivated to make the combinations or modifications of prior art to arrive at the claimed invention.”).

ii. Petitioner Fails to Provide Motivation Outside Improper Hindsight Reasoning That A POSITA Would Replace Lee's Nichrome Wire with a Bulb

Petitioner argues that Mr. Kodama can rely on articles post the effective filing date of the '788 Patent to show that a POSITA "would have naturally explored the use of heat-conducting materials that were safe when heated to temperatures required for vaporization." PR, 17 (citing Ex. 1003, ¶¶117-18). In other words, Petitioner believes Mr. Kodama is entitled to cite to information that issued years after the effective filing date of the '788 Patent to show that a POSITA would have combined the prior art references of the past. PR, 18. In support of this, Petitioner cites *Plant Genetic Systems*, alleging that reviewing the state of the art is permissible to prove that it would have been obvious to modify Lee with the heating element of Gilbert. PR, 18. Petitioner, however, mischaracterizes *Plant Genetic System* findings.

In *Plant Genetic Systems*, the Federal Circuit found that it was not an abuse of discretion to consider or review the state of the art for purposes of determining whether the specification and claims of the subject patent were **enabled**. *Plant Genetic Sys., N.V. v. DeKalb Genetics Corp.*, 315 F.3d 1335, 1346 (Fed. Cir. 2003). The Federal Circuit in *Plant Genetic Systems* does not support Petitioner's proposition that it is appropriate for Mr. Kodama to rely upon the state of the art to support a motivation to combine the prior art.

Petitioner argues that Mr. Kodama relies on the cited sources to show that

“users were concerned with possible inhalation risks and metallic taste issues with the use of the metal wire heating elements’ before 2017.” PR, 19 (citing Ex. 1003, ¶ 118). This, however, is disingenuous. A reading of the cited sources quickly confirms that none of the references discuss the utilization of a heating bulb in lieu of a wire. POR, 36-39. Indeed, the users in the cited references discuss the use of alternative wires (e.g., Kanthal wires versus nichrome wires). Ex. 2006. Mr. Kodama and Petitioner stretch the reality of what those sources provide to connect dots that are not there.

Moreover, relying on those postdated sources to support the proposition that a POSITA would combine Gilbert with Lee or Cohen with Gilbert demonstrates that Mr. Kodama and Petitioner are relying on hindsight. “A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field.” *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000).

Here, Petitioner cites to Gilbert, Cohen, and Lee, which, although they predate the ‘788 Patent, do not teach, suggest, or otherwise provide the challenged claims. It is also evident that Gilbert, as discussed above and in the POR, teaches away from both Lee and Cohen. To counteract that, Petitioner, with the help of Mr. Kodama’s conclusory analysis, uses sources that were published years after the effective filing

date of the '788 Patent to improperly support Petitioner's stance that it would have been obvious to exchange Lee's wire with Gilbert's bulb or modify Gilbert with Cohen. Most, if not all, inventions arise from a combination of old elements. *See In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). Therefore, in analyzing obviousness, "close adherence to the methodology of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art is especially important in cases where the very ease with which the invention can be understood may prompt one to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher. *Kotzab*, 217 F.3d at 1369 (cleaned up).

Petitioner and Mr. Kodama's analysis runs afoul of the appropriate obviousness analysis methodology by using the '788 Patent as a roadmap. For the reasons provided herein and in the POR, it would not have been obvious to combine Lee with Gilbert or Gilbert with Cohen. Consequently, Petitioner fails to carry its burden that it would have been obvious to combine Lee, Gilbert, or Cohen to attain the challenged claims.

iii. Petitioner Provides No Support for Why It Would Be Obvious to Modify Lee

Petitioner dismisses Dr. Garriss' opinion that a POSITA would offer some motivation to replace Lee's nichrome wire with the heating bulb of Gilbert, such as a life-cycle analysis, cost-benefit analysis, or customer acceptability surveys to show

motivation, because all that is purportedly needed is that the combination be a suitable one. PR, 20. Petitioner's cavalier stance that the modification of Lee is appropriate because it is suitable without considering other factors goes against the grain of a proper obviousness analysis. *Cargill v. Bunge Loders Croklaan USA, LLC*, IPR2024-01360, Paper 18, p. 4 ("obviousness concerns whether a skilled artisan not only could have made but would have been motivated to make the combinations or modifications of prior art to arrive at the claimed invention."); *Deere & Co. v David's Dozer V-Loc System, Inc.*, IPR2024-01442, Paper 10, p. 10 ("a sufficient reason to combine reference teachings is absent, if a reference teaches away from its combination...."); "A reference teaches away from a combination, if 'a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.'" *Id.* (citing *In re Gurly*, 27 F.3d 551, 553 (Fed. Cir. 1994)).

Here, as well as in its POR, HCMC has offered several reasons why Gilbert would not have been used to modify Lee and why the modification would not have been effective. Dr. Garriss, having reviewed the material presented by Mr. Kodama, opined that a POSITA would not have modified Lee with a heating bulb and explained the reasoning behind this conclusion that a POSITA would have been motivated to modify Lee with an alternative wire, such as a Kanthal. Ex. 2001, ¶ 96-

99.

Petitioner, however, only offers conclusory statements by Mr. Kodama, who generically opines that “a POSITA would have been motivated to implement a bulb heater in the Lee device...[because] such a heater would have been well within the knowledge and skill of a POSITA.” Ex. 1003, 39-45; PR, 20. Expert testimony offering a generic motivation for combining, however, is legally insufficient. *ActiveVideo Networks Inc., v. Verizon Communications Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012). Besides relying on information that lacks support for the preference of bulbs over wires and being dated well after the effective filing date of the ‘788 Patent, Mr. Kodama offers no additional information beyond stating that the vaporization of fluids dates back to the 1920s, citing an electric vaporizer. Ex. 1003, ¶¶ 39-40. None of which, by the way, discloses a bulb containing a heating wire in communication with the battery.

Moreover, Petitioner relies on Mr. Kodama’s new declaration, stating that he’s done work in the past that supports his opinion that a POSITA would have been motivated to modify Lee. Mr. Kodama’s work, however, was done well after the effective filing date of the ‘788 Patent, on e-cigarettes and vaporizers. PR, 18. And the work he performed and relies upon, again, is information that was not available at the relevant time of the ‘788 Patent.

Neither Petitioner nor Mr. Kodama disclose, let alone provide, sufficient facts

that would allow HCMC or the Board to test the sufficiency of the information. Mr. Kodama provides no details, no analysis, and maintains his generic opinion that it would have been obvious to a POSITA to replace Lee's nichrome wire with Gilbert's bulb. Ex. 1026, ¶ 28. Mr. Kodama looks to the future, beyond the effective filing date of the '788 Patent, to justify the motivation to select the prior art. Effectively using the '788 Patent as a road map. Accordingly, his opinion should be awarded little to no weight. *See Icon Health and Fitness, Inc. v. Strava, Inc.*, 849 F.3d 1034 (2017) (recognizing PTAB's authority to weigh expert testimony and to rely on certain portions of an expert's declaration while disregarding others).

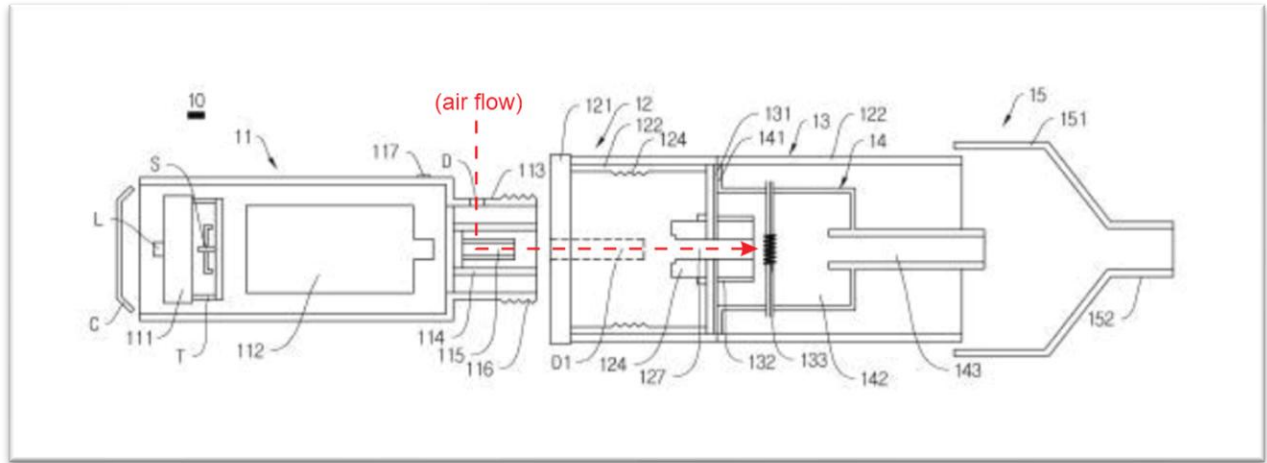
**iv. Petitioner Improperly Changes Argument After
Erroneously Concluding It Would Have Been Obvious To
Combine Lee with Gilbert or Levin**

Petitioner attacks HCMC's inoperability argument by arguing that it did not propose replacing Lee's nichrome wire with Gilbert's bulb. PR, 23. Accusing HCMC of a strawman argument.

In the Petition, RJRV explicitly states that it would have been obvious to implement Gilbert's bulb heater in the Lee device. Petition, 57. Mr. Kodama also supported RJRV's implementation of Gilbert's bulb in his declaration, stating it would have been obvious to include a bulb structure like the structure of the Gilbert device. Ex. 1003, ¶116. Mr. Kodama further states that it would be possible to implement the Gilbert bulb heater in the Lee device. *Id.* at ¶ 119.

Gilbert, however, discloses a vacuum tube or bulb that is elongated to provide

an elongated heating passage through the length of the bulb and the complete circumference of the bulb. Ex. 1004, 2:46-54. An elongated tube structure, as taught by Gilbert, is designed to fit the length of the second chamber, and cannot be disposed inside Lee for apparent reasons. Ex. 2001, ¶¶ 94-105.

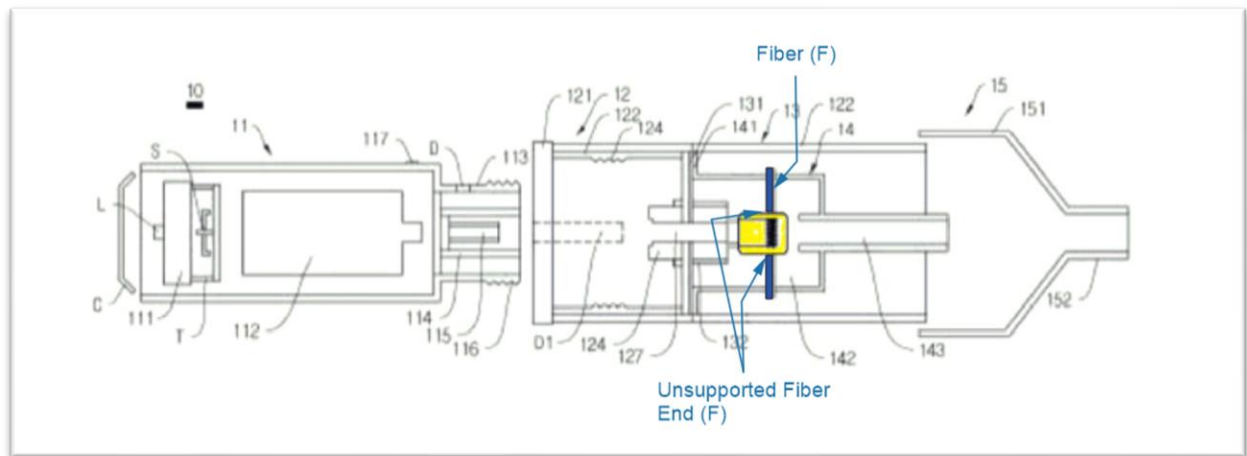


The combination would frustrate Lee's guide groove and obstruct the internal space of the second chamber, which is designed to feed air from the first housing to the second housing. *See* Ex. 2001, ¶ 103. To avoid obstructing Lee's airway pathway, Lee would have to be significantly modified or reimagined in some unstated way to adopt Gilbert's bulb or a bulb similar to that disclosed. Ex. 2001, at ¶ 104.

Notwithstanding the fact that Petitioner did propose replacing Lee's nichrome wire with Gilbert's bulb, replacing the nichrome wire with a bulb, such as Levin's, would require a substantial reconstruction and change of fundamental principles with respect to vaporization of Lee's fluid, rendering the combination non-obvious.

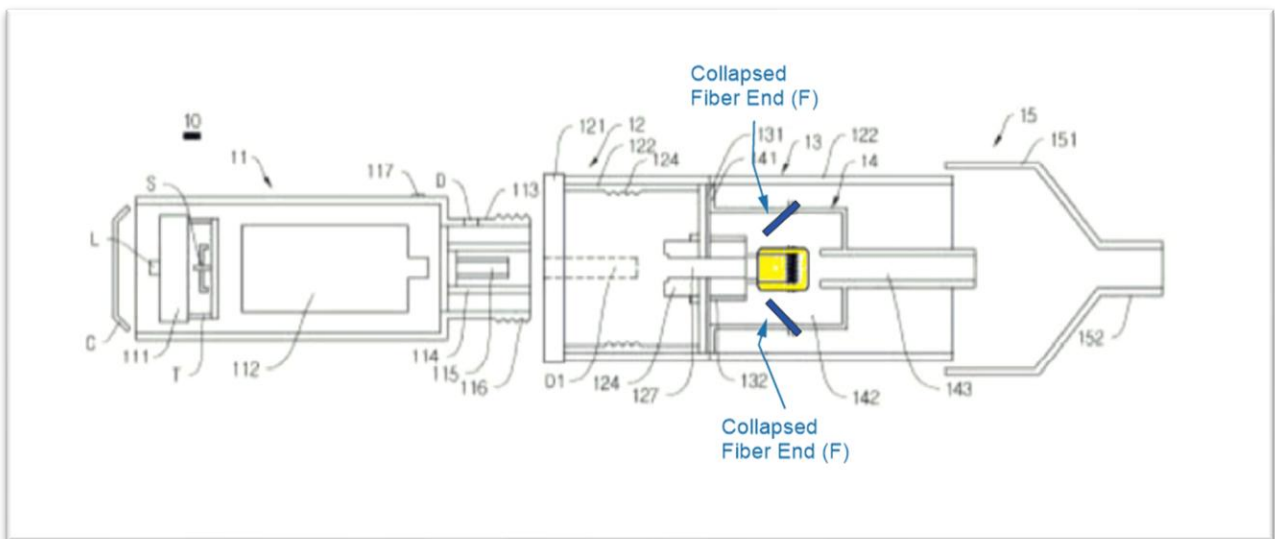
Microsoft Corp. v. Philips, IPR2018-00185, Paper 7, p. 12 (citing *In re Ratti*, 270 F.2d 810, 813 (C.C.P.A. 1959)) (if there is a substantial reconstruction and redesign of the elements of the prior art, as well as a change in the basic principles under which the prior art reference construction was designed to operate, the proposed combination is not obvious).

The Petitioner provides an oversimplified image showing why the combination would work, which is reproduced below and includes HCMC's annotations in blue. PR, 22. Petitioner argues that Lee would work by merely replacing Lee's heating element 133 with a bulb heater inside the vaporization unit. *Id.* (citing Ex. 1003, ¶ 123). That is false.



Lee discloses a fiber assembly (F) being held in position through its opposing ends traversing through-holes formed on the circumferential surface of the supply passage. Ex. 1005, ¶ [0032]. The fiber rod is also held in position by the nichrome wire, which is wrapped around it (Ex. 1005, Fig. 1c). *Id.* Despite this, the Petitioner

asserts that replacing Lee's nichrome wire with a heating bulb would be done with minimal reconstruction. This is not the case. As exemplarily shown below, if the wire were replaced, the fiber aggregate rod traversing the wire would need to be altered, and the fiber rod would no longer be held in place by the nichrome wire. Consequently, the fiber rod would not be held in place, and it would collapse from its position. This, in turn, as shown below, will cause at least two issues to occur, rendering the Lee device inoperable. First, the fiber rod would collapse from its position and would cease to make contact with the heating bulb. Second, the fiber rod, without being held in position by the nichrome wire, is easily dislodged from its current position, leaving the through-holes formed on the circumferential surface of the supply passage open. In turn, the fluid in the fluid chamber of the Lee device would flood the heating chamber, rendering Lee's device inoperable. Ex. 2001, ¶ 114.



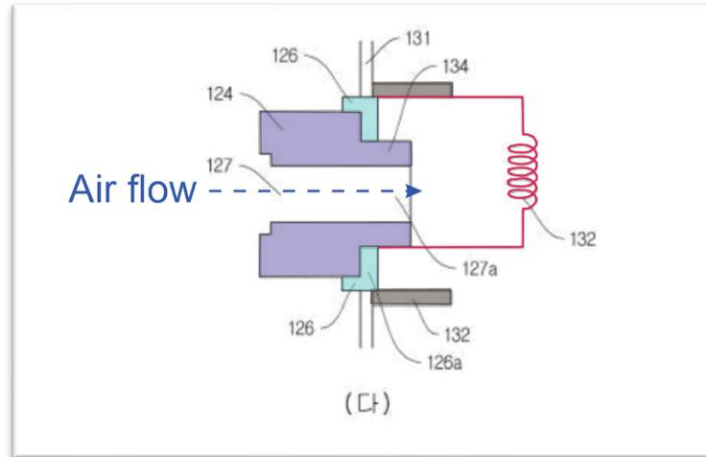
Mr. Kodama argues that the fiber rod could be wrapped around the bulb or placed in-line touching the bulb. Ex. 1026, ¶ 30. Mr. Kodama offers no explanation why such an endeavor would not require a substantial redesign of Lee, relying solely on his experience. In contrast, Dr. Garriss opined on why such an endeavor would be an issue. Ex. 2001, ¶¶ 113-15. Specifically, the Lee device would need to be substantially reconstructed to incorporate a new support structure for the bulb, the fiber aggregate rod removed, and a new supply passage would have to be engineered. *Id.* at ¶¶ 110-11. Otherwise, the nicotine solution in Lee’s fluid chamber would not reach the bulb. Ex. *Id.* Nevertheless, Mr. Kodama argues that the modification is elementary, and no further explanation is necessary. Ex. 1026, ¶ 31. Where expert testimony relies solely on experience, it should be afforded little weight. *See, e.g., Apple Inc. v. MPH Techs. Oy*, 28 F.4th 254, 262 (Fed. Cir. 2022) (PTAB was free to reject expert testimony that was conclusory and lacked factual support); *TikTok Inc. v. NTech Properties, Inc.*, IPR2024-01339, Paper 9 (PTAB Feb. 25, 2025) (the PTAB gave “little or no weight” to the testimony of the petitioner’s expert because the declaration was wholly conclusory, “repeat[ing], almost verbatim, the language in the Petition without any further explanation or supporting reasoning or evidence.”)

B. Petitioner Fails to Provide Evidence As To Why It Would Have Been Obvious to Combine Lee with Levin

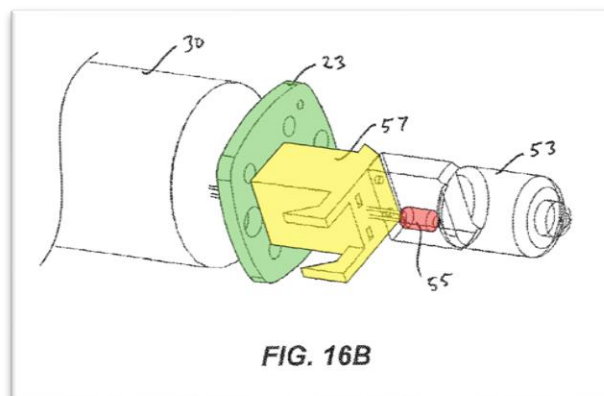
Petitioner argues that it did not mention using Levin’s heating unit. Instead,

argues that it would be obvious to extract the quartz bulb from the heating unit taught by Levin to be used to replace Lee's wire. PR, 28. However, references must be read together, not in isolation, in an obviousness inquiry. *See, e.g., Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013) (explaining that in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court rejected the focus on individual prior art references and required an analysis that reads the prior art in context).

Lee discloses an e-cigarette that includes, *inter alia*, a heating element, which is described as a nichrome wire wrapped around a porous fiber aggregate rod (F) that traverses the nichrome wire and passes through a supply passage (143), which comprises two through-holes formed on the circumferential surface of the vaporization chamber (142) to allow the fiber assembly (F) to pass through. Ex. 1005, ¶ [0032]. The heating element (132) includes two terminals, with one terminal connected to the support and the other terminal connected to the air conduit (127). *Id.* at ¶ [0028]. Between the air conduit and the support, an insulating ring (126a) is located to separate the support from the air conduit. *Id.*



Levin discloses a bulb heater comprising a tungsten filament in a quartz bulb. Ex. 1009, ¶ [0049]. The bulb is mounted on a lamp holder (57) within a bulb chamber, and the lamp holder is electrically coupled to a PCB (23). *Id.* at ¶ [0057]. The PCB is adapted to selectively energize the bulb heater based on the temperature measurements of the thermistor (55). Levin's bulb is incorporated into the lamp holder, which is configured to be controlled by the PCB. *Id.* In other words, Levin's bulb is designed and otherwise configured to be part of an assembly comprising the bulb holder (57) that connects the bulb to the PCB (23). Removing Levin's bulb does not supply the mounting, retention, electrical, and control interfaces required in Lee.



In order to incorporate Levin's bulb and holder into Lee, Lee must be significantly reconstructed to modify the structure surrounding the aggregate rod, the supply passage, and the support structures of the nichrome wire. Ex. 2001, ¶ 110. Moreover, Lee must be modified in a way that allows the air flow to remain unrestricted, which cannot happen if Levin's heating element is used to modify Lee. Moreover, as discussed at great length above, such a modification would materially affect the fiber rod taught by Lee. Petitioner and Mr. Kodama only offer that the swapping of one heater for another is elementary. Ex. 1026, ¶ 31; PR, 30.

C. Petitioner Mischaracterizes POR and Dr. Garriss' Declaration

Petitioner argues that POR does not challenge the combination of Gilbert's electric cigarette with Cohen's electronic cigarette. PR, 4. That is not true. HCMC argues in the POR that the combination of Gilbert and Cohen would not have been obvious. POR, 18-23.

Petitioner argues that the POR does not address Dr. Garriss' opinion that "[i]f a POSA were to accept that the shank 25 in Gilbert's device is the [claimed 'sealing element'], the chambers would be partitioned in a manner that they'd be radially concentric." PR, 9. That is not true. HCMC argues in the POR that the shaft is not a sealing element forming a partition, citing to Dr. Garriss' declaration providing that if it were, the chambers would be partitioned in a manner that they'd be radially concentric. POR, 21. The Petitioner further argues that Dr. Garriss did not explain why such an arrangement would run afoul of the claims. That is not the case.

Dr. Garris explains why such an arrangement would fail to read on all of the elements of claim 1. Ex. 2001, ¶ 79.

Petitioner argues that HCMC and Dr. Garris did not address Mr. Kodama's testimony that Gilbert's fluid was introduced to and came into contact with the bulb. PR, 14. Again, this is a mischaracterization. HCMC argues that Gilbert does not disclose fluid from the second chamber being introduced and making contact with the bulb. POR, 23-25. Similarly, Dr. Garris opines that Gilbert does not teach fluid from the second chamber being introduced and making contact with the bulb. Ex. 2001, ¶¶ 87-92.

Petitioner argues that Dr. Garris does not address Mr. Kodama's opinion that a bulb heater could be connected to Lee's circuitry and battery assembly. POR, 22. Dr. Garris expressly opines that replacing Lee's nichrome wire with a bulb would necessitate substantial reconstruction of the heating elements and their surrounding components. Ex. 2001, ¶¶ 98-111.

IV. CONCLUSION

For the reasons stated herein, Petitioner fails to carry its burden to demonstrate that any of the challenged claims are unpatentable.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on October 8, 2025, a true and correct copy of the foregoing PATENT OWNER SUR-REPLY UNDER 37 C.F.R. §42.23 was served on counsel of record for Petitioner by filing this document through the P-TACTS System as well as delivering a copy via electronic mail to the following addresses on the service list.

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CERTIFICATE OF WORD COUNT UNDER 37 C.F.R. § 42.24(b)

I hereby certify that the foregoing Patent Owner Sur-Reply contains 5,141 words, as measured by the Word Count function of Microsoft Word for Microsoft 365. This is less than the limit of 5,600 words as specified by 37 C.F.R. § 42.24(c)(i).

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