

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NU MARK LLC,
Petitioner,

v.

FONTEM HOLDINGS 1 B.V.,
Patent Owner.

Case No. **IPR2016-01707**
Patent No. **9,326,550**

**PATENT OWNER PRELIMINARY RESPONSE TO PETITION FOR
INTER PARTES REVIEW**

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| Petitioner's Exhibits | |
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| Exhibit | Description |
| Ex. 1001 | U.S. Patent No. 9,326,550 (the "550 Patent") |
| Ex. 1002 | File History for App. No. 13/754,521 (the "521 Application") (issued as U.S. Pat. No. 9,370,205) (excerpt) |
| Ex. 1003 | Declaration of John M. Collins, Ph.D. |
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| Ex. 1005 | U.S. Pat. App. Pub. No. 2009/0126745 ("Hon 745") |
| Ex. 1006 | File History for App. No. 12/226,819 ("the 819 Application") (issued as U.S. Pat. No. 8,375,957) (excerpt) |
| Ex. 1007 | U.S. Pat. No. 8,375,957 ("the 957 Patent") |
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| Ex. 1010 | Claim Construction Order, <i>Fontem Ventures B.V. et al. v. NJOY, Inc., et al.</i> , Civil Action No. 2:14-cv-1645 (C.D. Cal.), Jan. 29, 2015 [DI-65] |
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| Ex. 1012 | U.S. Patent No. 8,689,805 (the "805 Patent") |
| Ex. 1013 | File History for App. No. 13/426,817 (issued as U.S. 8,689,805) (excerpt) |

| Ex. 1014 | Certified Translation of WO 2007/131450 (Chinese original included) |
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| Ex. 1015 | Patent Owner Prelim. Resp., <i>Logic Technology Development, LLC v. Fontem Holdings I B.V.</i> , IPR2015-00098, Paper 7 (Feb. 18, 2015)) |
| Ex. 1016 | U.S. Pat. App. Pub. No. 2009/0188490 |
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| Ex. 2001 | Declaration of Richard Meyst |
| Ex. 2002 | The Oxford American Dictionary and Thesaurus (2003), selected pages |
| Ex. 2003 | Random House Webster's Unabridged Dictionary (2 nd ed. 2001), selected pages |
| Ex. 2004 | U.S. Patent No. 9,370,205 |
| Ex. 2005 | Claim chart showing written description for claims 1-12 of U.S. Patent No. 9,326,550 in U.S. Patent Publ. No. 2009/0126745 and U.S. Patent Appl. No. 13/754,521 |
| Ex. 2006 | <i>Apple Inc. v. Contentguard Holdings, Inc.</i> , IPR2015-00457, Paper 9, Decision – Denying Institution of <i>Inter Partes</i> Review – 37 C.F.R. § 42.108 (PTAB June 30, 2015) |
| Ex. 2007 | State Intellectual Property Office of the People's Republic of China, How Many Types of Industrial Property Rights Exist in China?, http://english.sipo.gov.cn/FAQ/200904/t20090408_449727.html (last visited Sept. 26, 2016) |
| Ex. 2008 | PCT Publ. No. WO07/131450 |

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| Ex. 2009 | <i>Nu Mark LLC v. Fontem Holdings I B.V.</i> , IPR2016-01283, Paper 12, Decision – Denying <i>Inter Partes</i> Review – 37 C.F.R. § 42.108 (PTAB November 30, 2016) |
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I. INTRODUCTION

Petitioner asserts that claims 1-12 of U.S. Patent No. 9,326,550 ("550 Patent"; Ex. 1001) are anticipated by U.S. Patent Publ. No. 2009/0126745 ("Hon '745"; Ex. 1005). Petition (Paper 1) at 17. Hon '745 is the U.S. publication of U.S. Patent Appl. No. 12/226,819 ("819 Application"), a priority application to the '550 Patent. Petitioner asserts that the challenged '550 Patent claims are not entitled to their priority claim to the '819 Application because the '819 Application does not describe the '550 Patent claims. The issue in this proceeding is straightforward: if the '819 Application provides written description for the challenged '550 Patent claims, then those claims are entitled to priority to the '819 Application, and Hon '745 is not prior art.¹

Petitioner challenges only one aspect of the '819 Application's written description, namely whether the disclosure of the '819 Application requires that all claims include a limitation to a detachable "cigarette bottle assembly." Petition (Paper 1) at 2-5.

¹ Petitioner asserts essentially the same ground for three related patents, namely U.S. Patent No. 9,370,205 in IPR2016-01642, U.S. Patent No. 9,339,062 in IPR2016-01705, and U.S. Patent No. 9,326,551 in IPR2016-01706.

Challenged independent claim 1 of the '550 Patent recites a "liquid supply" in a tubular atomizer assembly housing. Petitioner does not dispute that the '819 Application describes a liquid supply. *See, e.g.*, Petition (Paper 1) at 27-29. Instead, Petitioner asserts that the '819 Application's written description is limited to devices that include a separate "cigarette bottle assembly." Petition (Paper 1) at 2-5, 63-71. Since the '550 Patent claims recite no such limitation, Petitioner asserts that the '819 Application does not meet the written description requirement for the "bottle-less" claims of the '550 Patent. Petition (Paper 1) at 2-5, 63-71.

Petitioner made a similar argument in IPR No. 2016-01283 involving unrelated U.S. Patent No. 8,490,628. In that proceeding, Petitioner asserted that the priority application did not provide written description for a "liquid supply." The Board denied institution and held that the term liquid supply "simply requires the liquid itself (i.e., 'a stock, store, amount, etc., of liquid)" such that the limitation "liquid supply" was described in the parent application. Ex. 2009 at 10-12. If the Board adopts that construction here, the Petition should be denied for the same reasons.

Regardless of the construction of "liquid supply," Petitioner's arguments are at odds with the law. The Federal Circuit has rejected the argument that a patent's claims should be limited to preferred embodiments, whether through claim construction or written description. The court explained that "[i]f everything in the

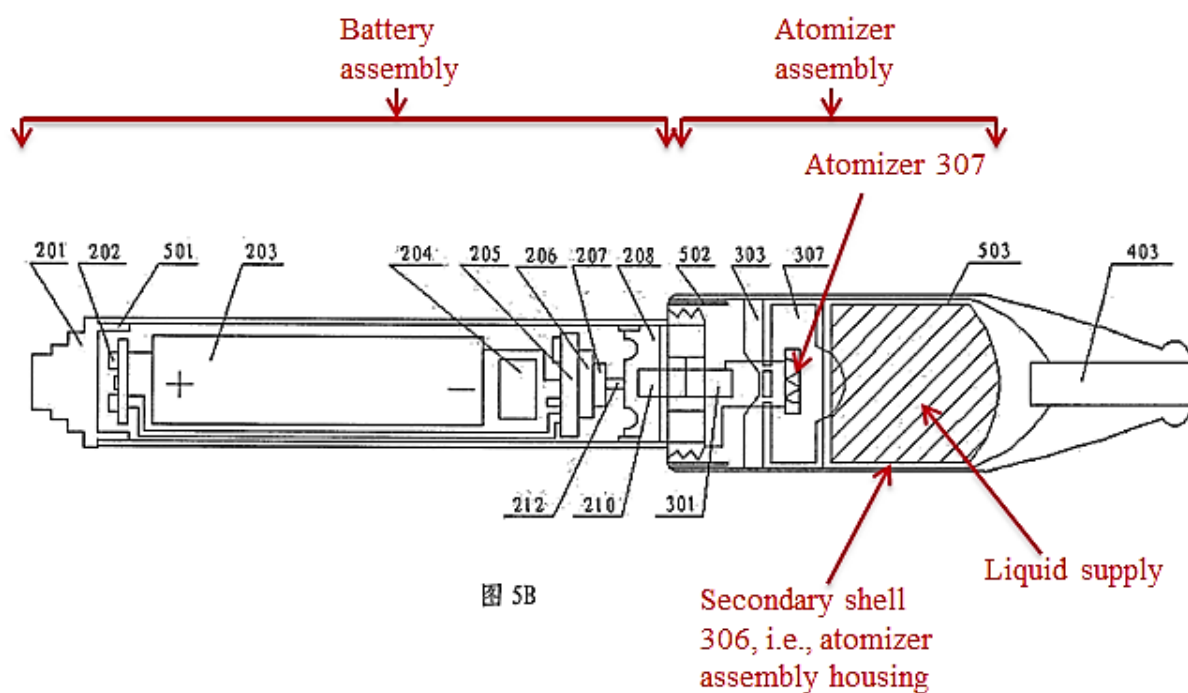
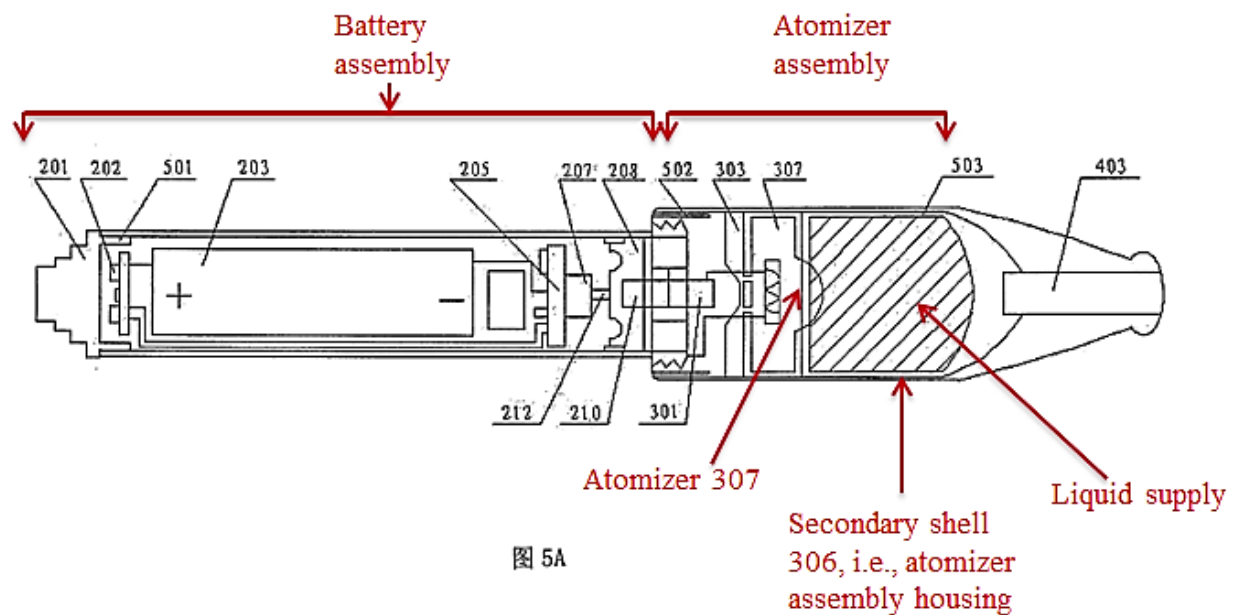
specification were required to be read into the claims, or if structural claims were to be limited to devices operated precisely as a specification-described embodiment is operated, there would be no need for claims." *SRI Int'l v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985). The court continued, "[n]or could an applicant, regardless of the prior art, claim more broadly than that embodiment. Nor would a basis remain for the statutory necessity that an applicant conclude his specification with 'claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.'" *Id.*

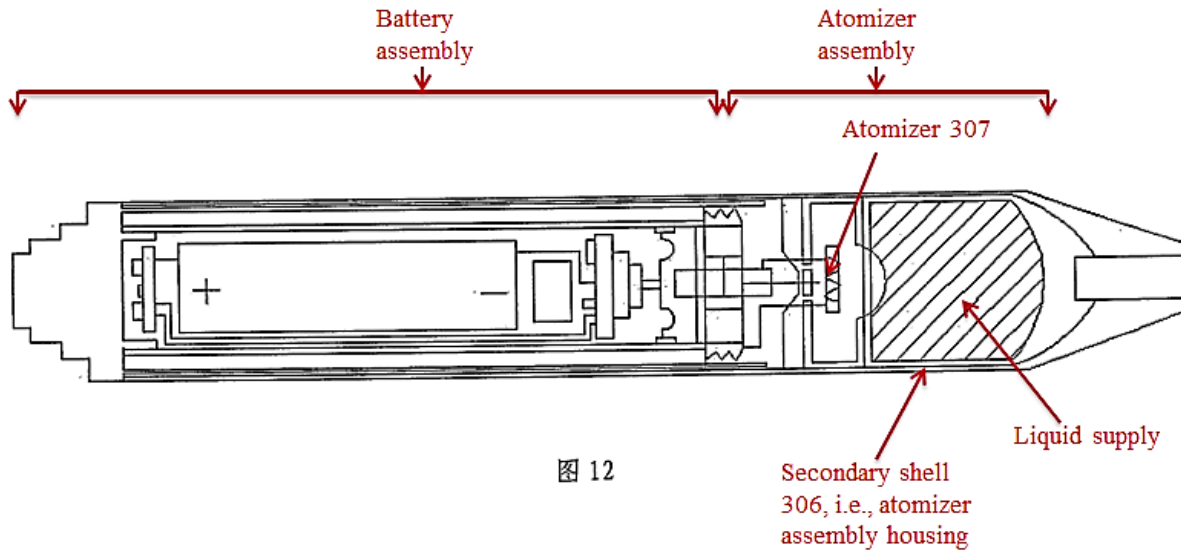
Accordingly, the Federal Circuit has rejected attempts like Petitioner's here to insert limitations into claims via the written description requirement. For example, the Federal Circuit applied the reasoning from the court's "claim construction cases" to reject the assertion that a claim must include features from the specification to address two separate problems identified in the prior art. *Revolution Eyewear, Inc. v. Aspex Eyewear, Inc.*, 563 F.3d 1358, 1367 (Fed. Cir. 2009). The court found that "it is unnecessary for each and every claim in the patent to address both problems." *Id.* In other words, the applicant was free to claim either "invention" in a single claim, and that claim was not invalid under the written description requirement. As the court summarized, "[i]nventors can frame their claims to address one problem or several, and the written description

requirement will be satisfied as to each claim as long as the description conveys that the inventor was in possession of the invention recited in that claim." *Id.* See also *Cordis Corp. v. Boston Scientific Corp.*, 2006 WL 1876839, *6; 188 Fed. Appx. 984, 990 (Fed. Cir. 2006) ("when a patent includes two inventive components, particular claims may be directed to one of those inventive components and not to the other."). There is no requirement that every patent claim must address every problem identified or every inventive feature disclosed in the specification.

Here, the '819 Application literally describes what is claimed, namely a vaporizing device comprising an electronic cigarette that includes a liquid supply located within a tubular atomizer assembly housing. For example, Figs. 5A, 5B, and 12 of the '819 Application,² below (annotations added), all show a liquid supply located inside the tubular atomizer assembly housing in the assembled electronic cigarette. Hon '745 (Ex. 1005), ¶¶0031, 0032, 0040.

² The '819 Application figures reproduced herein are from WO07/131450 (Ex. 2008), the publication of the '576 Application, rather than from the '819 Application. The PCT publication figures are substantively identical to the original '819 Application figures, but are of higher quality.





Petitioner's attempt to write unclaimed features and benefits disclosed in the '819 Application into the claims through the written description requirement should be rejected.

Because the '819 Application provides written description for the "bottle-less" claims of the '550 Patent, Hon '745 is not prior art against the '550 Patent. Accordingly, the Petition should be denied.

II. DISCUSSION

A. '550 Patent Priority Claim

The '550 Patent issued from U.S. Patent Appl. No. 14/720,288 ("288 Application"), filed May 22, 2015. The '288 Application is a continuation of U.S. Patent Appl. No. 13/754,521 ("521 Application"), filed on January 30, 2013, and issued as U.S. Patent No. 9,370,205 ("205 Patent"), which in turn is a continuation of the '819 Application, published as Hon '745 and issued as U.S. Patent No.

8,375,957 ("957 Patent"). The '819 Application is a national phase entry of PCT Appl. No. PCT/CN07/01576 ("576 Application"),³ filed May 15, 2007, and published as PCT Publ. No. WO07/131450 (Ex. 2008) on November 22, 2007. The '576, '819, '521, and '288 Applications claim priority to Chinese Patent Appl. No. 200620090805.0 ("805 Application"), filed May 16, 2006. Because the '819 Application is a national phase entry of the '576 Application, the actual filing date of the '819 Application is the filing date of the '576 Application, i.e., May 15, 2007. M.P.E.P. § 1893.03(b).

In discussing the disclosure of the '819 Application in this response, Patent Owner refers to Hon '745 (Ex. 1005), the U.S. publication of the '819 Application. Hon '745 is substantially identical to the '819 Application as originally filed, and is the same document Petitioner relies on to establish the content of the '819 Application. Petition (Paper 1) at 54.

B. Person of Ordinary Skill in the Art

Here, a POSITA has a mechanical or electrical engineering degree, industrial design degree, or a similar technical degree or equivalent work

³ The timeline provided by Petitioner incorrectly identifies the '521 Application as a continuation of the '576 Application rather than the '819 Application. Petition (Paper 1) at 50.

experience, and 5–10 years of working in the area of electromechanical devices, including medical devices. Meyst (Ex. 2001) at ¶19. Petitioner asserts that a POSITA has "a Bachelor of Science degree in mechanical engineering, or a similar technical degree, along with at least 3–5 years of experience in designing and developing handheld devices with thermal management and fluid handling technologies." Petition (Paper 1) at 19. Under either definition, Petitioner has failed to meet its burden.

C. '550 Patent Claims

The lone challenged independent claim of the '550 Patent (claim 1) recites "[a] vaporizing device" comprising "an electronic cigarette" that includes a "battery assembly comprising a tubular battery assembly housing" and an "atomizer assembly comprising: a tubular atomizer assembly housing." The "atomizer assembly housing" contains a "liquid supply" and an "atomizer having a porous body."

D. Claim Construction

1. "Electronic cigarette," "atomizer," and "porous component"

Petitioner cites constructions for the terms "electronic cigarette," "atomizer" and "porous component" which were originally proposed by Patent Owner in IPR2015-00098 (relating to the '957 Patent). Petition (Paper 1) at 18-19. The meaning of these terms, however, is not relevant to the issues raised by Petitioner

and to resolution of the Petition. Thus, while Patent Owner agrees with the proffered constructions, Patent Owner will not address them further, and urges the Board to decline to construe the terms.

2. "Liquid supply"

| Patent Owner's Construction | Petitioner's Construction |
|---|---------------------------|
| No construction necessary, or, in the alternative, "a store for liquid" | No proposed construction |

Independent claim 1 recites "an atomizer assembly comprising...an atomizer having a porous body, and a *liquid supply* in the tubular atomizer assembly housing" (emphasis added).⁴ The term "liquid supply" needs no construction because its plain meaning is clear to a POSITA. In the alternative, "liquid supply" means "a store for liquid."

Patent Owner's proposed construction is supported by the '550 Patent specification. For example, the '550 Patent discloses "fiber (402) containing cigarette liquid. . . ." '550 Patent (Ex. 1001), 2:50, Fig. 4. In certain embodiments, fiber 402 is "made of polypropylene or nylon fiber to absorb cigarette liquid." '550

⁴ As set forth above, in IPR No. 2016-01283 the Board denied institution and construed "liquid supply" to "simply require[] the liquid itself (i.e., 'a stock, store, amount, etc., of liquid)," but noted that the term "is not limited to the liquid itself, and may include other things in the liquid." Ex. 2009 at 5-10.

Patent (Ex. 1001), 3:40-41. When the device is fully assembled, fiber 402 is positioned against atomizer 307 inside the atomizer assembly housing, allowing liquid from the fiber to soak micro-porous ceramics inside the atomizer. '550 Patent (Ex. 1001), 2:50-53, 3:7-17, 4:15-25. Thus, the fiber provides a store for liquid for vaporization by the atomizer.

Extrinsic evidence also supports Patent Owner's proposed construction. The Oxford American Dictionary defines "supply" to mean "a stock, store, amount, etc., of something provided or obtainable (*a large supply of water; the gas supply*)." Ex. 2002 at 1535. Random House Webster's Unabridged Dictionary defines "supply" to mean "7. Something that is supplied: *The storm cut off our water supply.* 8. A quantity of something on hand or available, as for use, a stock or store: *Did you see our new supply of shirts?* 9. ... a provision, stock or store of food or other things necessary for maintenance...." Ex. 2003 at 1912.

In view of the claims and the specification of the '550 Patent and the extrinsic evidence regarding the ordinary meaning of the term "supply," the broadest reasonable construction of "liquid supply" is "a store for liquid." Meyst (Ex. 2001) at ¶¶23-26.

E. The Petition Fails to Show a Reasonable Likelihood That the '550 Patent Claims Are Unpatentable

Petitioner proposes one ground of unpatentability, namely that claims 1-12 of the '550 Patent are unpatentable as anticipated by Hon '745. Petition (Paper 1)

at 17, 44-45. In summary, Petitioner asserts that the disclosure of one of the '550 Patent's priority applications, the '819 Application, does not meet the written description requirement for claims 1-12 of the '550 Patent. Based on that assertion, Petitioner argues that the publication of that same priority application, Hon '745, anticipates the challenged '550 Patent claims.

But, for the reasons set forth herein, the challenged '550 Patent claims are described by and entitled to priority to the '819 Application. First, the '819 Application provides literal support for every limitation recited in the '550 Patent claims. Second, Petitioner's assertion that the '550 Patent claims must include additional unclaimed features disclosed in the '819 Application, namely a separate "cigarette bottle assembly," is contrary to law.

Since the '819 Application provides written description for the challenged '550 Patent claims, those claims are entitled to the benefit of the filing date of the '819 Application and cannot be anticipated by Hon '745.

1. Requirements for a priority claim under 35 U.S.C. § 120

The effective filing date for a patent claim is the filing date of an earlier filed patent application if four conditions are met. First, the earlier filed patent application must have at least one inventor in common with the later filed patent application. 35 U.S.C. § 120 (pre-AIA). Second, the patent must contain a specific reference to the earlier filed application. *Id.* Third, the later filed

application must be "filed before the patenting or abandonment of...the first application or on an application similarly entitled to the benefit of the filing date of the first application." *Id.* Fourth, the claim must be described and enabled under 35 U.S.C. § 112 by the earlier filed patent application. *Id.*

The challenged '550 Patent claims are entitled to priority to the '819 through the '521 Application because all of the above conditions are satisfied.

First, the earlier filed patent applications have the same inventor as the later filed patent application. Lik Hon, the sole inventor of the '550 Patent, is also the sole inventor of the '819 and '521 Applications. '550 Patent (Ex. 1001) at Title Page; Hon '745 (Ex. 1005) at Title Page; '521 Application (Ex. 1002) at p. 2.

Second, the '550 Patent includes a specific reference to the earlier filed applications, specifically to the '819 and '521 Applications. '550 Patent (Ex. 1001) at 1:6-14.

Third, the '288 Application which issued as the '550 Patent was filed on May 22, 2015, which was before June 21, 2016, the issue date of the '205 Patent from the '521 Application. '550 Patent (Ex. 1001) at Title Page; '205 Patent (Ex. 2004) at Title Page. The '521 Application was filed on January 30, 2013, before February 19, 2013, the issue date of the '957 Patent from the '819 Application. '205 Patent (Ex. 2004) at Title Page; '957 Patent (Ex. 1007) at Title Page.

Fourth, the '819 and '521 Applications provide written description for all of the limitations of the challenged '550 Patent claims. This is illustrated in the arguments set forth below, and in the claim chart provided as Exhibit 2005. Meyst (Ex. 2001) at ¶49.

Petitioner does not dispute that the '550 Patent claims meet the first three requirements set forth above, or that the '550 Patent is entitled to priority to the '521 Application. However, Petitioner disputes whether the '819 Application provides written description for the '550 Patent claims.

2. The '819 Application provides written description for the so-called "bottle-less" claims of the '550 Patent

Petitioner states that the '550 Patent claims "encompass a vaporizing device that includes battery and atomizer assemblies, but lacks a bottle assembly for storing liquid." Petition (Paper 1) at 63. According to Petitioner, those so-called "bottle-less" claims are not described by the '819 Application because the '819 Application is "plainly directed and limited to a three-assembly device that requires a battery assembly, an atomizer assembly, *and* a cigarette bottle assembly." Petition (Paper 1) at 54-58 (emphasis in original). In other words, Petitioner does not assert that any actual limitation recited in the challenged '550 Patent claims is not described by the '819 Application. Instead, Petitioner asserts that the '819 Application does not satisfy the written description requirement because the

challenged '550 Patent claims do not include limitations to an additional feature disclosed in the '819 Application, namely a separate "cigarette bottle assembly."⁵

a. The '550 Patent claims do not need to recite every feature disclosed in the '819 Application

It is well established that a claim does not need to recite every feature or achieve every purpose disclosed in the specification. The Federal Circuit has held that "patentees [are] not required to include within each of their claims all of [the] advantages or features described as significant or important in the written description." *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1331 (Fed. Cir. 2004). Similarly, in *Revolution Eyewear* the Federal Circuit held that "[i]nventors can frame their claims to address one problem or several, and the written description requirement will be satisfied as to each claim as long as the description conveys that the inventor was in possession of the invention recited in the claim." *Revolution Eyewear*, 563 F.3d at 1367. *See also Greene's Energy*

⁵ As set forth above, in denying institution of IPR No. 2016-01283 involving an unrelated patent, the Board held that the term "liquid supply" "simply requires the liquid itself (i.e., 'a stock, store, amount, etc., of liquid)," such that the limitation "liquid supply" was described in the parent application. Ex. 2009 at 10-12. If the Board adopts that construction here, the Petition should be denied for the same reasons.

Group, LLC v. Oil States Energy Services, LLC, IPR2014-00364, 2015 WL 2089119, *7 (PTAB May 1, 2015) ("It is well-settled that each claim does not necessarily cover every feature disclosed in the specification"); *Ventana Med. Sys., Inc. v. Biogenex Labs, Inc.*, 473 F.3d 1173, 1181 (Fed. Cir. 2006) ("When the claim addresses only some of the features disclosed in the specification, it is improper to limit the claim to other, unclaimed features."). Similarly, the Federal Circuit in *Cordis* held that "when a patent includes two inventive components, particular claims may be directed to one of those inventive components and not to the other." *Cordis*, 2006 WL 1876839, at *6; 188 Fed. Appx. at 990. As the Federal Circuit has summarized: "It is certainly reasonable that different claims could be directed to covering [] different aspects of the invention. Not every claim must contain every limitation or achieve every disclosed purpose." *ScriptPro LLC v. Innovation Associates, Inc.*, 833 F.3d 1336, 1342 (Fed. Cir. 2016).

That principle was applied by the Board in *Apple Inc., v. Contentguard Holdings, Inc.* to deny institution of *Inter Partes* review. IPR2015-00457, Paper 9 (Decision Denying Institution of *Inter Partes* Review, June 30, 2015) (Ex. 2006). In *Apple*, the petitioner argued that the parent application of the patent at issue failed to provide written description for the challenged patent claims because the claims did not require "repositories"—an aspect which petitioner alleged was an "essential" element of the invention based on the disclosure of the parent

application. *Id.* at 15. The Board recognized that "it is not necessary that a claim recite each and every element needed for the practical utilization of the claimed subject matter, as it is entirely appropriate, and consistent with § 112, to present claims to only one aspect." *Id.* at 15-16 (citing *Carl Zeiss Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1181 (Fed. Cir. 1991)). Consequently, the Board concluded that the absence of a specific limitation directed to one aspect of the invention—when the claims are directed to another aspect of the invention—does not mean that the parent application fails to provide written description support for the patent claims. *Id.* at 15-16.

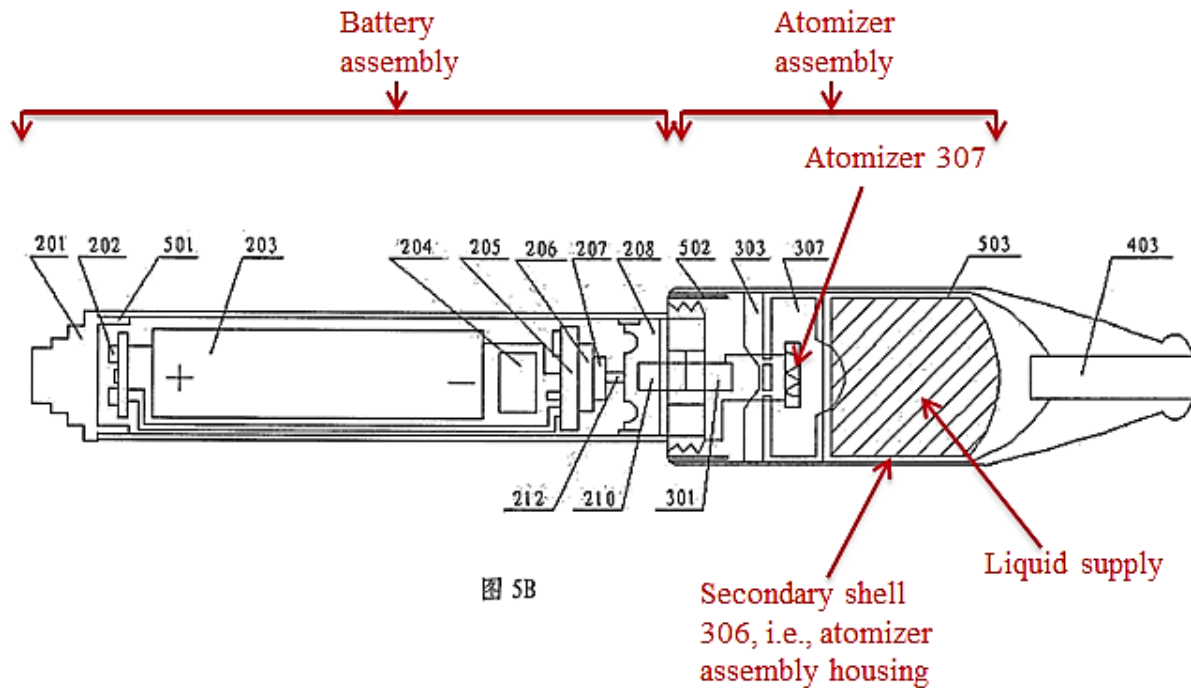
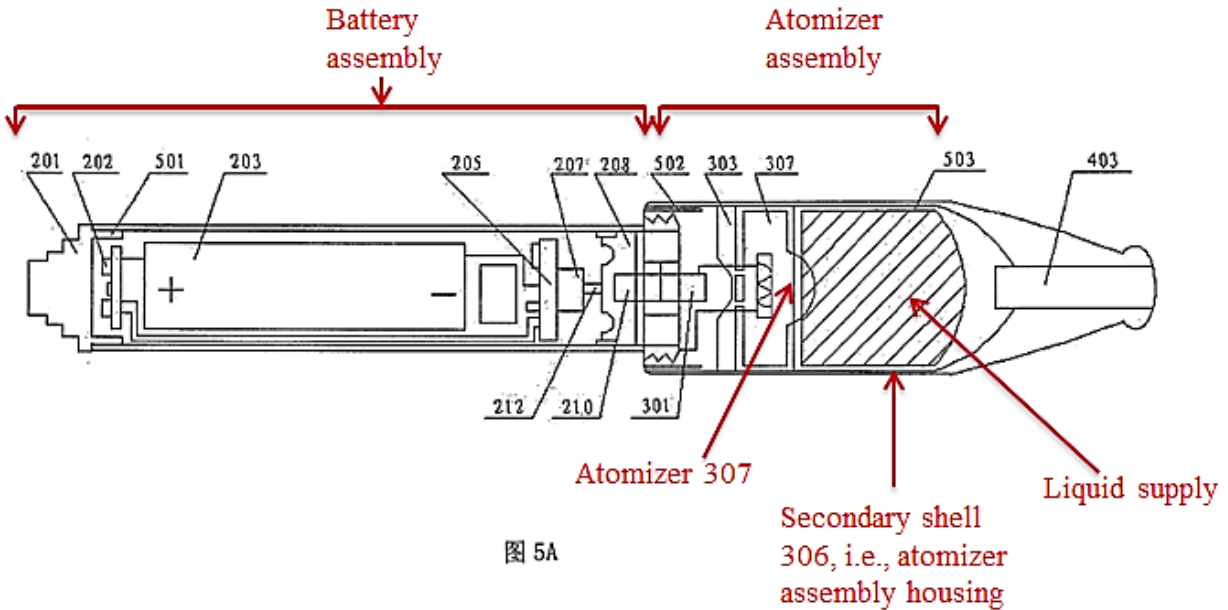
Here, as in *Apple Inc., v. Contentguard*, the '819 Application describes multiple inventive components that are related to different advantages or benefits of the disclosed electronic cigarettes. The battery and atomizer assemblies are configured to be readily attachable/detachable for device assembly and recharging, and to allow for electricity to flow from the battery assembly to the atomizer assembly in order to heat the atomizer. Meyst (Ex. 2001) at ¶39. Those aspects of the invention do not require the presence of a separate, detachable cigarette bottle assembly. Meyst (Ex. 2001) at ¶¶39, 40. Thus, although the '819 Application describes an electronic cigarette that includes a cigarette bottle assembly, the patentee is not required to limit the claims to this feature.

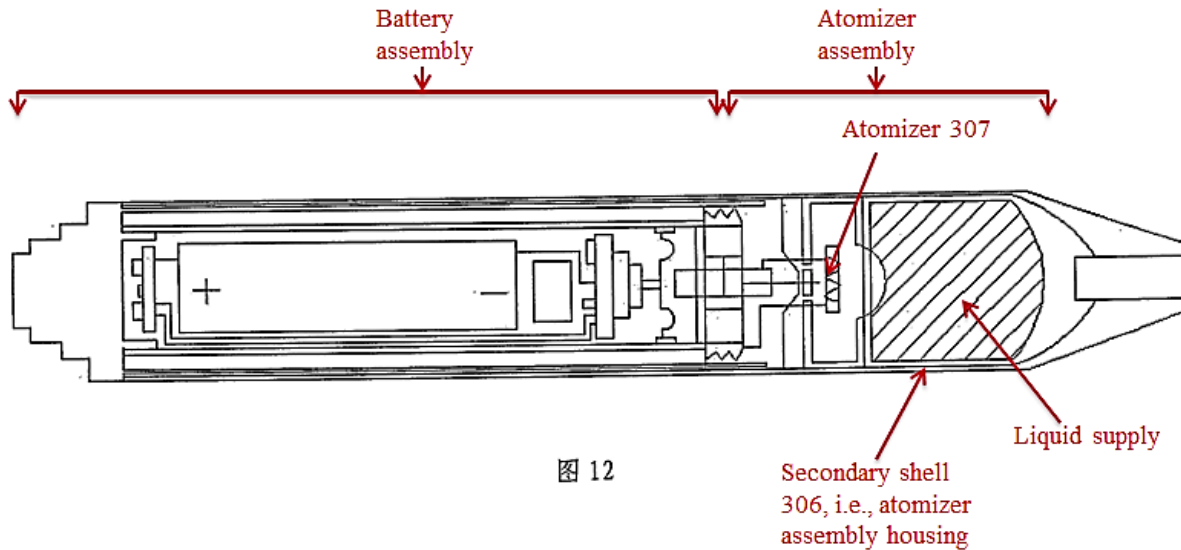
b. The '819 Application provides explicit written description for "a liquid supply in the tubular atomizer assembly housing"

Claims 1-12 of the '550 Patent all recite "a liquid supply in the tubular atomizer assembly housing." As set forth below and in the claim chart of Ex. 2005, the '819 Application literally describes a device having this precise configuration. Petitioner does not dispute this, but instead attempts to import other features into the claims through the written description requirement.

The '819 Application generally discloses an electronic cigarette comprising a battery assembly containing battery 203 and an atomizer assembly containing atomizer 307. Hon '745 (Ex. 1005), ¶¶0027, 0029, 0032, 0040. The atomizer comprises micro-porous ceramics (801). Hon '745 (Ex. 1005), ¶¶0009, 0032, 0034, 0040. The battery and atomizer assemblies are electrically connected via electrodes located at an end of each assembly. Hon '745 (Ex. 1005), ¶¶0026, 0032, 0040. When a user sucks on suction nozzle 403 at the end of the device, a change in internal pressure triggers sensor 207, which activates MOSFET electric circuit board 205. Hon '745 (Ex. 1005), ¶¶0032, 0040. This results in electricity being transmitted from the battery to the atomizer via the electrodes, causing the atomizer to heat up and vaporize cigarette liquid to create an aerosol or vapor for inhalation. Hon '745 (Ex. 1005), ¶¶0032, 0040.

Embodiments of the fully assembled electronic cigarette are set forth in Figs. 5A, 5B, and 12 of the '819 Application, below (annotations added).





In the device of Figs. 5A, 5B, and 12, a cigarette bottle assembly is inserted into secondary shell 306 of the atomizer assembly housing. This cigarette bottle assembly is illustrated in Fig. 4 of the '819 Application, below. The cigarette bottle assembly includes cigarette liquid bottle 401, with fiber 402 containing cigarette liquid located at one end of the bottle. Hon '745 (Ex. 1005), ¶0031. The '819 Application describes "fiber (402) [as] containing cigarette liquid." Hon '745 (Ex. 1005), ¶0031. Thus, fiber 402 is a "liquid supply" as the term is construed herein, i.e., a "store for liquid."

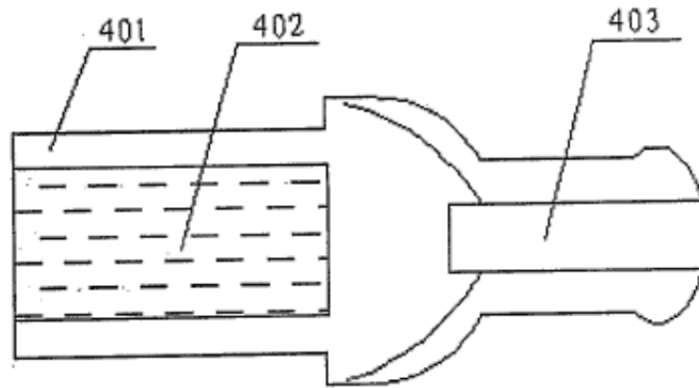


图 4

The '819 Application discloses that the cigarette bottle assembly is inserted into secondary shell 306, *i.e.*, the atomizer assembly housing, such that fiber 402 lies against atomizer 307. Hon '745 (Ex. 1005), ¶0031. In this configuration, fiber 402 containing liquid is located inside the atomizer assembly housing, with the liquid in the fiber 402 in contact with the atomizer. As such, the '819 Application explicitly describes "a liquid supply in the tubular atomizer assembly housing" as recited in the challenged '550 Patent claims. Meyst (Ex. 2001), ¶44.

Accordingly, the '819 Application describes precisely what is claimed in the '550 Patent. Meyst (Ex. 2001), ¶45.

c. The terms "the present invention" and "this invention" do not limit the disclosure of the '819 Application to devices comprising a separate cigarette bottle assembly

While the Federal Circuit has held that a patentee's use of "the invention" or "the present invention" can limit written description to a single disclosed embodiment, the court has also confirmed that "the use of the phrase 'present invention' or 'this invention' is not always so limiting, such as...where other portions of the intrinsic evidence do not support applying the limitation to the entire patent." *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1136 (Fed. Cir. 2011). The court reached a similar decision in *Golight*, which involved a patent in which the specification referred to "[a] searchlight apparatus in accordance with the present invention" that included, among other things, "a motor-driven horizontal drive mechanism for rotating the lamp unit in a horizontal direction through at least 360°." *Golight*, 355 F.3d at 1331. The Federal Circuit found that although the patentees did "describe their invention as having the ability to rotate through 360°, this particular advantage is but one feature of the invented search light" and because other significant features were also described, "patentees were not required to include within each of their claims all of these advantages or features described as significant or important in the written description." *Id.*

Here, just like in *Absolute Software* and *Golight*, the '819 Application's use of the phrase "invention" does not limit the written description to require all of the features referred to as the "invention."

First, the '819 Application expressly states the disclosed examples are not limiting. In the final paragraph of the specification, the '819 Application confirms that its disclosure includes "a concrete example and applied example [] of this invention." Hon '745 (Ex. 1005) at ¶0043. The '819 Application goes on to state that "[t]his doesn't necessarily restrict the scope of protection of this invention[,]" and that "[a]ny equivalent modification or decoration made on the basis of the design spirit of this invention shall fall into the scope of protection of this invention." Hon '745 (Ex. 1005) at ¶0043. This language confirms that the '819 Application's written description is not limited to a "cigarette bottle assembly." Meyst (Ex. 2001) at ¶40.

Second, Petitioner cites only two instances where the '819 Application recites the phrase "invention." A POSITA would recognize that neither of those instances are limiting. In the first instance, Petitioner points to the "Contents of the Invention" section describing how the "purpose of this invention" is fulfilled. Petition (Paper 1) at 54-56, citing Hon '745 (Ex. 1005) at ¶¶0006-0010. However, Petitioner does not address what that purpose is, namely "to provide an emulation aerosol sucker that substitutes for cigarettes and helps the smokers to quit

smoking." Hon '745 (Ex. 1005) at ¶0006. The '819 Application goes on to describe how that purpose is fulfilled, stating that "[t]he purpose of this invention is fulfilled with the following solution: this invention includes..." Hon '745 (Ex. 1005) at ¶0008. This is followed by an extensive list of features spanning over one full column. Hon '745 (Ex. 1005) at ¶¶0008-0009. No reasonable POSITA would interpret the disclosure of the '819 Application to be limited to any one specific feature of this list, including a cigarette bottle assembly. Meyst (Ex. 2001) at ¶48.

This is confirmed by the ensuing paragraph of the '819 Application, which states that "[t]his invention will bring the following benefits and active effects: For this invention, smoking doesn't bring any cigarette tar, considerably reducing the carcinogenic risks. At the same time, the smokers can still enjoy the feel and excitement of smoking, and there is no fire hazard since there is no need for igniting." Hon '745 (Ex. 1005) at ¶0010. Those benefits and effects are not tied to the presence of a separate cigarette bottle assembly. As such, a POSITA would understand that a separate cigarette bottle assembly is unrelated to and not required to achieve the purpose and benefits of the '819 Application, and that the '819 Application's written description is not limited to devices including such a bottle assembly. Meyst (Ex. 2001) at ¶48.

The second instance of the phrase "this invention" cited by Petitioner is the in the "Description of Drawings" section of the '819 Application. Petition (Paper

1) at 56, citing Hon '745 (Ex. 1005) at ¶¶0011-0024. The '819 Application recites that "Figure 4 is a diagram of the cigarette bottle assembly of this invention," but, as in *Golight*, nothing in this phrase indicates that the invention must include a cigarette bottle assembly. Instead, a POSITA would understand this to simply mean that the cigarette bottle assembly of the invention is shown in the figure. Further, the description of Figs. 5A and 5B, which show examples of fully assembled vaporizing devices, state that these figures provide "*one* internal structure of this invention" and "*another* internal structure of this invention," respectively. Hon '745 (Ex. 1005), ¶¶0016-0017 (emphasis added). A POSITA would understand that this language indicates that the figures provide examples of the disclosed devices, not the only possible versions of those devices. Meyst (Ex. 2001) at ¶47.

Petitioner's other citations to the '819 Application's specification all refer to the "cigarette bottle assembly" without any limiting language that would indicate the cigarette bottle assembly to be required for the disclosed devices. Petition (Paper 1) at 56-57, citing Hon '745 (Ex. 1005) at ¶¶0026, 0029, 0031, 0039, 0040.

Petitioner notes that that the original claims in the '819 Application were limited to devices comprising a "cigarette bottle assembly," but that does not mean the written description of the '819 Application is also so limited. Petition (Paper 1) at 58. As the Federal Circuit held in *ScriptPro*, "[i]t is certainly reasonable that

different claims could be directed to covering [] different aspects of the invention.

Not every claim must contain every limitation or achieve every disclosed purpose."

ScriptPro, 833 F.3d at 1342.

d. Applicant's amendments to the specification of the '521 Application do not limit the '819 Application's written description

Petitioner asserts that amendments to the substitute specification filed with the '521 Application broadened the specification from what was disclosed in the '819 Application. Petition (Paper 1) at 58-62. As Petitioner admits, however, the only relevant question in this proceeding is whether the '819 Application provides written description for the challenged claims of the '550 Patent. Petition (Paper 1) at 49. This analysis requires comparison of the '550 Patent *claims* to the '819 Application's *specification*, not a comparison of the two specifications. Even if new matter was added by the amendments—it was not—so long as the priority application provides written description for a claim, that claim is entitled to the priority application's filing date. Therefore, whether new matter was added by the amendments to the '521 Application is not relevant to the issue at hand.

Like Petitioner here, the petitioner in *Apple v. Contentguard* argued that the claims at issue were not entitled to claim priority to an earlier filed parent application because the specification of a later filed continuation application purportedly enlarged the application's scope by omitting language recited in the

parent application. The Board disagreed, holding that regardless of whether the terms were redefined in any meaningful way through the amendments, comparison of the parent application to the later filed continuation application's specification is not relevant to whether the claims at issue were supported by the parent application because the inquiry "requires a comparison of the '001 application with the '160 patent's claims, to determine whether the former provides to the latter adequate written-description support under 35 U.S.C. § 112 ¶ 1." *Apple v. Contentguard*, IPR2015-00457, Paper 9 at 14 (Ex. 2006).

Here, because the '819 Application provides written description for each limitation actually recited in the challenged '550 Patent claims, the amendments to the '521 Application cannot limit the '819 Application's written description.

Petitioner's implication that the applicant somehow deceived the Patent Office with the amendments to the specification is also baseless. Petition (Paper 1) at 61-62. Applicant told the Patent Office why the changes were made, and the Patent Office accepted those changes without objection. Ex. 1002 at 2.

Petitioner's suggestion that the Patent Office did not do its job is meritless.

Amendments to the Contents of Invention section of the '521 Application were made in part to reflect the new claims set filed with the new application. Ex. 1002 at 12-15. As provided by 37 C.F.R. § 1.73, the Summary of the Invention should "be commensurate with the invention as claimed and any object recited

should be that of the invention as claimed." *See* M.P.E.P. § 608.01(d) ("The brief summary of invention should be consistent with the subject matter of the claims").

In accordance with these guidelines, the amendments to the specification were consistent with the subject matter of the new claim set.

Further, the amendments submitted in the '521 Application did not expand the disclosure of the specification beyond what was disclosed in the original Chinese priority application (the '805 Application). The '805 Application does not include the phrase "this invention" or similar language. Instead, the '805 Application consistently recites the "present utility model." *See, e.g.*, '805 Application (Ex. 1009) at p. 6, 1st ¶, p. 6, 6th ¶, p. 6, 7th ¶, ¶ spanning pp. 6-7, p. 8, 3rd-16th ¶ (corresponding to Hon '745 (Ex. 1005) at ¶0001, ¶0006, ¶0007, ¶0008, and ¶0011-0024, respectively). The phrase "present utility model" refers to a specific type of patent application in China – it is not limiting. Ex. 2007. Thus, applicant's deletion of the phrase "the present invention" during prosecution of the '521 Application did not add new matter and was made for the reason given at the time of amendment, i.e., to "delete extraneous and redundant content." Ex. 1002 at 2.

e. Statements made during prosecution of an unrelated application about an unrelated reference do not limit the '819 Application's written description

Petitioner asserts that "[a]ny argument by Patent Owner that the disclosure of a cigarette liquid bottle within a 'cigarette bottle assembly' is sufficient to describe a broader class of vaporizing devices that store liquid using bottle-less structures would be inconsistent with prior statements made by the applicant and inventor to the Patent Office during prosecution of U.S. 8,689,805 ('the 805 Patent')." Petition (Paper 1) at 64.

The prosecution statements referenced by Petitioner relate to distinguishing the '805 Patent claims from U.S. Patent Publ. No. 2009/0188490 ("Hon '490"). Those statements cannot limit the '819 Application's written description to one embodiment because the '805 Patent and Hon '490 are not related to the '819 Application or the '550 Patent. *See* '550 Patent (Ex. 1001) at 1:6-14; Hon '745 (Ex. 1005) at Title Page; Ex. 1012 at 1:6-11; Ex. 1016 at Title Page. Statements about an unrelated reference in an unrelated application have no bearing on what the '819 Application does or does not describe.

Further, Petitioner mischaracterizes the prosecution history of the '805 Patent. Petitioner asserts that the applicant in the '805 Patent argued that Hon '490 "did not disclose or suggest the bottle-less liquid storage component described in the 805 Patent." Petition (Paper 1) at 64. However, the sole issue in dispute with

regard to Hon '490 was whether the reference disclosed a "channel extending centrally through and surrounded by a liquid storage component" or similar, as recited in the '805 Patent claims. Ex. 1013 at 7-10. Applicant submitted a declaration from the inventor, Lik Hon, stating that Hon '490 did not disclose such a channel. Ex. 1013 at 11-13. The "liquid storage component" of the '805 Patent claims was not at issue, and as such the applicant did not discuss whether Hon '490 disclosed a liquid supply or not—of course it did. Rather, applicant's only argument was that Hon '490 discloses that air passes around a "liquid storage compartment," not through it. Ex. 1013 at 9-10. Statements that air passes through or around a liquid supply in an unrelated application do not mean that the '819 Application is limited to devices in which the liquid supply is located in a separate cigarette bottle assembly.

III. CONCLUSION

For the reasons discussed above, Patent Owner requests that the Board deny the Petition.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

The undersigned certifies that this brief complies with the type-volume limitations of 37 CFR § 42.24. This brief contains 5,772 words as calculated by the "Word Count" feature of Microsoft Word 2010, the word processing program used to create it.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that service on Petitioner was made as follows, in accordance with 37 CFR 42.6(e):

Date of service: December 13, 2016

Manner of service: 1. Electronic submission through the USPTO Patent Trial and Appeal Board End-to-End System
2. Electronic mail

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