

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NJOY, INC., CB DISTRIBUTORS, INC., DR DISTRIBUTORS, LLC,
FIN BRANDING GROUP, LLC, ELECTRONIC CIGARETTES
INTERNATIONAL GROUP, LTD. F/K/A VICTORY ELECTRONIC
CIGARETTES CORPORATION, AND
LOGIC TECHNOLOGY DEVELOPMENT LLC,
Petitioners,

v.

FONTEM HOLDINGS 1 B.V.,
Patent Owner.

Case IPR2015-01301
Patent 8,863,752 B2

Before JOSIAH C. COCKS, DONNA M. PRAISS, and
JO-ANNE M. KOKOSKI, *Administrative Patent Judges*.

KOKOSKI, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

NJOY, Inc., CB Distributors, Inc., DR Distributors, LLC, FIN Branding Group, LLC, Electronic Cigarettes International Group, Ltd. f/k/a Victory Electronic Cigarettes Corporation, and Logic Technology Development LLC (collectively, “Petitioner”) filed a Petition (“Pet.”) to institute an *inter partes* review of claims 1– 20 of U.S. Patent No. 8,863,752 B2 (“the ’752 patent,” Ex. 1001). Paper 1. Fontem Holdings 1 B.V. (“Patent Owner”) filed a Preliminary Response (“Prelim. Resp.”). Paper 7. We have jurisdiction under 35 U.S.C. § 314.

Upon consideration of the Petition, Preliminary Response, and the evidence of record, we determine that Petitioner has not established a reasonable likelihood of prevailing with respect to the unpatentability of claims 1–20 of the ’752 patent. Accordingly, we deny the Petition and do not institute an *inter partes* review.

A. *Related Proceedings*

Petitioner identifies multiple cases pending in the Central District of California that could be affected by this proceeding. Pet. 2–3. Petitioner also identifies ten related *inter partes* review proceedings. *Id.* at 3. Petitioner additionally identifies four petitions for *inter partes* review “filed by JT International S.A. prior to Logic Technology Development LLC’s acquisition.” Paper 6, 1.

B. *The ’752 Patent*

The ’752 patent, titled “Electronic Cigarette,” is directed to an electronic cigarette that includes a battery assembly connected to one end of an atomizer assembly and a cigarette bottle assembly inserted into the other

end of the atomizer assembly, forming one cigarette-type body. Ex. 1001, 1:34–38.

Figures 2A, 3, and 4 of the '752 patent are reproduced below:

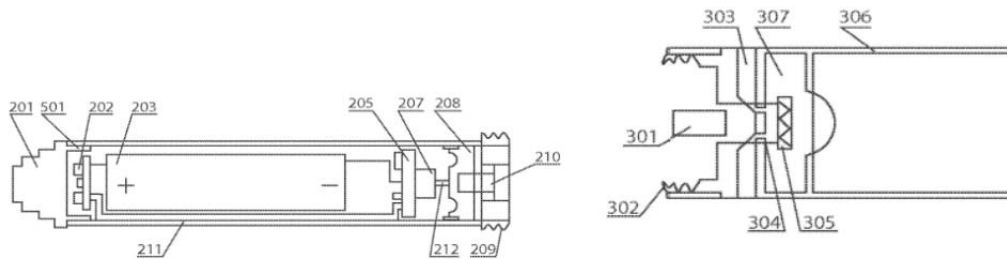


Figure 2A

Figure 3

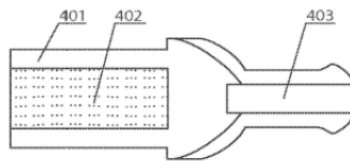


Figure 4

Figure 2A is a view of the battery assembly, Figure 3 is a diagram of the atomizer assembly, and Figure 4 is a diagram of the cigarette bottle assembly. *Id.* at 1:45, 47–48. The battery assembly includes primary shell 211, lithium ion battery 203, electric circuit board 205, and primary screw thread electrode 209. *Id.* at 2:5–9. Indicator 202 is at one end of primary shell 211, and external thread electrode 209 is at the other end of primary shell 211. *Id.* at 2:9–11. The atomizer assembly includes internal thread electrode 302, air-liquid separator 303, atomizer 307, and secondary shell 306. *Id.* at 2:33–35. The cigarette bottle assembly includes cigarette liquid bottle assembly 401, fiber 402, and suction nozzle 403. *Id.* at 2:48–50. Cigarette-liquid-containing fiber 402 is located on the end of cigarette liquid

bottle 401 that is inserted into secondary shell 306 of the atomizer assembly, such that it lies against atomizer 307. *Id.* at 2:50–53.

Figure 5A of the '752 patent is reproduced below:

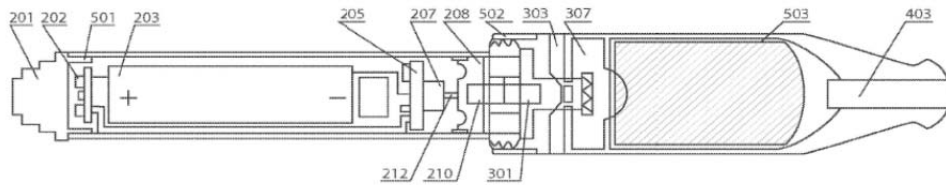


Figure 5A

Figure 5A is a section view of an electronic cigarette described in the '752 patent. *Id.* at 1:49. Figure 5A shows the battery assembly depicted in Figure 2A fastened onto the atomizer assembly depicted in Figure 3, and inserted into the cigarette bottle assembly depicted in Figure 4. *Id.* at 2:57–60.

C. Illustrative Claims

Petitioner challenges claims 1–20 of the '752 patent. Claims 1, 11, 14, 16, and 19 are independent. Claims 1 and 11 are illustrative, and read as follows:

1. An atomizer assembly for an electronic cigarette, comprising:
an atomizer assembly housing containing an atomizer, liquid storage, and a screw thread electrode on one end of the atomizer assembly housing, with the screw thread electrode having a through hole centered on the screw thread electrode; and
with the atomizer in physical contact with the liquid storage;
and
a flow passageway leading from the atomizer to an outlet of the atomizer assembly housing.

Ex. 1001, 4:44–54.

11. An atomizer assembly for an electronic cigarette, comprising:
- an atomizer assembly housing containing an atomizer and liquid storage;
 - a screw thread electrode on one end of the atomizer assembly housing;
 - a through-hole in the screw thread electrode substantially aligned with the atomizer;
 - the atomizer electrically connected to the screw thread electrode and with the atomizer in physical contact with the liquid storage; and
 - a flow passageway leading from the atomizer to an outlet of the atomizer assembly housing.

Id. at 5:15–27.

D. The Prior Art

Petitioner relies on the following prior art references:

Reference	Description	Date	Exhibit No.
Gilbert	US 3,200,819	Aug. 17, 1965	1004
Takeuchi	US 6,155,268	Dec. 5, 2000	1005
Hon '134	Canadian Patent App. No. 2,752,134 A1	Nov. 11, 2004	1003

E. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–20 of the '752 patent on the following grounds:

References	Basis	Claims Challenged
Hon '134 and Gilbert	§ 103	1–3, 6–11, 13–20
Hon '134, Gilbert, and Takeuchi	§ 103	4, 5, 12

II. ANALYSIS

A. *Claim Interpretation*

We interpret claims of an unexpired patent using the “broadest reasonable construction in light of the specification of the patent in which [the claims] appear[.]” 37 C.F.R. § 42.100(b). For purposes of this Decision, based on the record before us, we determine that none of the claim terms requires an explicit construction.

B. *Obviousness over Hon ’134 and Gilbert*

Petitioner contends that the subject matter of claims 1–3, 6–11, and 13–20 would have been obvious under 35 U.S.C. § 103 over the combination of Hon ’134 and Gilbert. Pet. 14–50. Petitioner provides claim charts and relies on the Declaration of Samir Nayfeh, Ph.D. (“the Nayfeh Declaration,” Ex. 1002) in support of its contentions. *Id.*

1. *Overview of Hon ’134*

Hon ’134 is directed to a non-smokable electronic spray cigarette. Ex. 1003, 1:6–7. The Hon ’134 electronic cigarette includes a shell, nicotine solution and its container, a control circuit, an airflow sensor, and a vaporization nozzle arranged within the air-suction end of the shell that is connected with the nicotine solution storage container. *Id.* at 2:14–20.

Figure 9 of Hon ’134 is reproduced below:

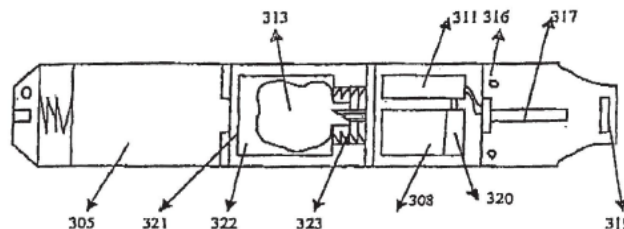


FIG. 9

Figure 9 is a structural diagram of an embodiment of the Hon '134 electronic cigarette. *Id.* at 4:13–14. Vaporization nozzle 317, electronic valve 311 (which is connected to metering cavity 320), and liquid storage container 313 form a liquid transmission passage. *Id.* at 9:20–22. When electronic valve 311 is activated, nicotine solution enters metering cavity 320 from liquid storage container 313 under pressure and pushes a piston that allows a constant volume of liquid to enter vaporization nozzle 317 to be vaporized and condensed to form aerosols. *Id.* at 9:25–30.

Figure 3 of Hon '134 is reproduced below:

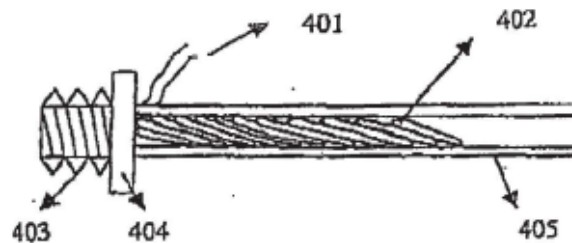


FIG. 3

Figure 3 is a schematic diagram of the structure of the high temperature vaporization nozzle and electric-thermal element described in Hon '134. *Id.* at 3:33–4:2. The depicted vaporization nozzle comprises electrode lead wire 401, heating wire 402, thread 403, base 404, and nozzle 405. *Id.* at 8:24–25.

2. Overview of Gilbert

Gilbert is directed to a smokeless, non-tobacco cigarette that provides heated, moist, flavored air. Ex. 1004, 1:7–11. According to Gilbert, the size and shape of the described device “may approximate the size and shape of a cigarette” so that “its use will not call undue attention to the user.” *Id.* at 3:60–63.

Gilbert describes an outer tube having an inner end portion and an outer end portion, with internal threads at the inner end portion used to connect a mouthpiece. *Id.* at 1:71–2:2. The mouthpiece includes a threaded electrical socket, and a battery cavity for detachably receiving a battery. *Id.* at 2:41–45. A heating element, such as a vacuum tube or bulb with a screw plug, is detachably engaged with the threaded electrical socket. *Id.* at 2:46–48. According to Gilbert, the screw plug has an end contact adapted to close against the outer battery contact. *Id.* at 2:48–50. When the vacuum tube or bulb is assembled to the threaded electrical socket, its tip end engages the inner battery contact and completes the circuit through the filament of the vacuum tube or bulb by a contact strip, illuminating or energizing the vacuum tube or bulb before assembly to the external tube. *Id.* at 2:71–3:3.

3. Discussion

Petitioner contends that Hon '134 teaches or suggests a device having all of the limitations recited in independent claim 1, except the recited “screw thread electrode on one end of the atomizer assembly housing.” Pet. 21–32. Petitioner contends that the combination of Hon '134 and Gilbert meets this limitation. *Id.* at 22–25, 29–30. Petitioner contends that “Hon '134 describes that the ‘vaporization nozzle’ has ‘thread 403’ at one end of the ‘nozzle 405’” and “suggest[s] that ‘thread 403’ can be an electrode and Gilbert explains how to complete the electric circuit through the heating filament and the screw thread.” *Id.* at 22–23.

Specifically, Petitioner contends that Hon '134 describes the vaporization nozzle depicted in Figure 3 as having “a single ‘electrode lead wire 401’ attached to the ‘heating wire 402’” because “[t]he two parallel lines identified as a single ‘electrode lead wire 401’ depict the outline of the

wire, much like the two lines used to depict the outline of the single ‘heating wire 402’ in Fig. 3 depict a single wire.” Pet. 14. Petitioner contends that a person having ordinary skill in the art “would have known that an electric circuit needs two connections,” and that “[t]he lack of an explicitly illustrated second connection to the electric circuit means that the circuit is completed either by some structure that is not depicted, such as some other wire, or the circuit is completed by an existing point of contact.” *Id.* at 15. Petitioner further contends that a person having ordinary skill in the art “would have realized that ‘thread 403’ is a depicted point of contact.” *Id.*

According to Petitioner, “[g]iven how the ‘vaporization nozzle’ is depicted in Figs. 3 and 9, one implementation would be to use the ‘thread 403’ as one of the two electrical connections for the circuit, allowing the ‘vaporization nozzle’ to be attached and electrically connected by screwing it into the assembly.” *Id.* at 17 (citing Ex. 1002 ¶ 34). Petitioner contends that “[o]ne well-known way to use a screw thread as an electrode is to use standard lightbulb socket ‘technology,’ and Gilbert illustrates how such a socket can be used in the context of electronic cigarettes.” *Id.* Petitioner further contends “[i]mplementing Hon ’134 and Gilbert together was well within the ordinary skill of the POSA [person having ordinary skill in the art], as it requires no more than using a well-known part in a place and in a way that it is suggested to be.” *Id.* at 18.

Patent Owner argues that “Hon ’134 does not disclose the use of screw thread electrodes in conjunction with its disclosed devices” and that Petitioner’s “entire argument is based on impermissible hindsight.” Prelim. Resp. 30. Patent Owner argues that “[t]hreads 403 in Hon ’134 are presented as a means for mechanically attaching nozzle 405 to baffle 15”

and that “Hon ’134 never refers to the threads 403 as screw thread electrodes, and never teaches that these threads be used to create an electrical connection.” *Id.* at 33. Patent Owner further argues that, because “Hon ’134 does not teach or suggest the use of a screw thread electrode,” Petitioner does not “provide a credible motivation for one of ordinary skill in the art to replace the wire connections in Hon ’134 with a screw thread electrode.” *Id.* at 34.

We agree with Patent Owner. Petitioner’s contention that Hon ’134 suggests that the vaporization nozzle is connected with a screw thread electrode is premised on Petitioner’s interpretation of Figure 3. *See* Pet. 14–16. Petitioner and Dr. Nayfeh assert that the two parallel lines identified as electrode lead wire 401 in Figure 3 depict the outline of a single wire, but do not explain adequately why a person having ordinary skill in the art would interpret Figure 3 in this manner. Although Petitioner and Dr. Nayfeh suggest that the depiction of heating wire 402 using two lines to form an outline of the single wire confirms that electrode lead wire 401 is similarly depicted, it is not apparent from Figure 3 that heating wire 402 is depicted as Petitioner and Dr. Nayfeh describe. *See* Pet. 15; Ex. 1002 ¶ 30. Neither Petitioner nor Dr. Nayfeh direct us to statements in Hon ’134 that support the assertion that lead electrode wire 401 is a single wire. On the contrary, as Patent Owner notes, Hon ’134 includes other figures that use two lines to depict paired wires, such as electrodes 508, 509, and 510 shown in Figure 5. Prelim. Resp. 30–31; *see* Ex. 1001, 8:27–28, Fig. 5. We also are persuaded by Patent Owner’s argument that Hon ’134’s use of the singular form when referring to “lead electrode wire 401” was not necessarily meant to limit it to a single wire, as “Hon ’134 uses the singular form for ‘spring 506,’ ‘alloy

wire 507,’ and ‘pinch roller 602’ in the specification, but Figures 5 and 6 show two or more of each of these elements in the illustrate[d] embodiments.” Prelim. Resp. 32. For these reasons, we are not persuaded that Petitioner has established sufficiently that Hon ’134 suggests the use of a screw thread electrode.

To the extent that Petitioner argues that a person having ordinary skill in the art would be motivated to combine Hon ’134 and Gilbert because “[t]o use the screw thread electrode of Gilbert asks a POSA to merely ‘implement a predictable variation’ of Hon ’134” and “is a combination of known elements with predictable results” (Pet. 20–21), this argument is equally unavailing. These conclusory statements are nothing more than a restatement of basic tests identified by the Supreme Court for determining whether an invention would have been obvious. *See KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007) (“whether the improvement is more than the predictable use of prior elements according to their established functions”). General principles on what may constitute a supporting rationale cannot substitute for specific application of those principles to the facts. Petitioner does not provide a persuasive, fact-based analysis to support the asserted combination of Hon ’134 and Gilbert.

Accordingly, we are not persuaded that the Petition establishes why a person having ordinary skill in the art would attempt to modify Hon ’134 by looking to Gilbert. Petitioner and Dr. Nayfeh contend that each element of the ’752 patent was known in the prior art, but an articulated reasoning with rational underpinning as to why a person having ordinary skill in the art would have combined the elements to achieve the claimed invention is missing. Without such articulated reasoning, Petitioner’s contentions are

insufficient to establish that the claims of the '752 patent would have been obvious based on the combination of Hon '134 and Gilbert. *See Cheese Sys. Inc. v. Tetra Pak Cheese and Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013) (“Obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.” (internal quotation marks omitted)). As explained in *KSR*, “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR*, 550 U.S. at 418.

For these reasons, Petitioner has not established a reasonable likelihood that it would prevail on the ground that claims 1–3, 6–11, and 13–20 would have been obvious under 35 U.S.C. § 103 over the combination of Hon '134 and Gilbert.

C. Obviousness over Hon '134, Gilbert, and Takeuchi

Petitioner contends that the subject matter of claims 4, 5, and 12 would have been obvious under 35 U.S.C. § 103 over the combination of Hon '134, Gilbert, and Takeuchi. Pet. 50–60. Petitioner provides claim charts and relies on the Nayfeh Declaration in support of its contentions. *Id.* We already have determined that Petitioner did not set forth sufficient articulated reasoning with rational underpinnings to support the combination of Hon '134 and Gilbert. Petitioner does not provide any additional arguments with respect to the proposed combination of Hon '134, Gilbert, and Takeuchi with respect to an ordinarily-skilled artisan’s motivation to combine the cited references. Accordingly, Petitioner has not established a reasonable likelihood of prevailing on the ground that claims 4, 5, and 12

would have been obvious under 35 U.S.C. § 103(a) over the combination of Hon '134, Gilbert, and Takeuchi.

III. CONCLUSION

For the foregoing reasons, we conclude that, on the present record, Petitioner has not established a reasonable likelihood that it would prevail on its challenge that claims 1–20 of the '752 patent are unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby
ORDERED that the Petition is *denied*.

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