

PATENT
Attorney Docket No. 269.0003-02000
Customer No. 22882

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Confirmation No.: 1065
Gregory D. Conley et al.	)	
Serial No.: 15/377,522	)	Group Art Unit: 3742
Filed: December 13, 2016	)	Examiner: Thor S. Campbell
For: ELECTRONIC VAPORIZER	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

DECLARATION UNDER 37 C.F.R. § 1.131

I, Gregory D. Conley, declare as follows:

1. I am one of the named inventors of the above-identified application, and the other named inventor and I are the sole inventors of the subject matter described and claimed therein.
2. The present application was filed on December 13, 2016 and claims priority as a continuation of U.S. Application No. 14/510,955 (now U.S. Patent No. 9,532,604), filed on October 9, 2014, which claims priority as continuation of U.S. Application No. 13/594,813 (now U.S. Patent No. 8,897,628), filed on August 25, 2012, which claims priority as continuation in part of U.S. Application No. 12/843,917, filed on July 27, 2010. U.S. Application No. 12/843,917 claims the benefit of U.S. Provisional Application No. 61/273,097, filed on July 31, 2009, and claims the benefit of U.S. Provisional Application No. 61/271,819, filed on July 27, 2009. U.S. Application No. 13/594,813 claims the benefit of U.S. Provisional Application No. 61/527,434, filed on August 25, 2011.
3. Prior to January 13, 2010 (the publication date listed on the face page of CN201379072), the other named inventor and I reduced to practice in this country the invention as described and claimed in the above-identified application. Evidence of our reduction to practice is set forth below and attached hereto as Exhibit A.
4. Exhibit A includes Figs. 1-17 that depict the product and the componentry thereof that embody the reduction to practice of the invention as described and claimed in the above-identified application. The figures of Exhibit A depict an Electronic

Cigarette Starter Kit (including an electronic cigarette having a cartridge (yellow portion of electronic cigarette in Exhibit A)) and replacement Cartridges (sold separately from the Electronic Cigarette Starter Kit). As depicted in Exhibit A, the electronic cigarette is provided to vaporize at least a portion of a vaping liquid contained in a holding medium contained in the cartridge. The vaporization is facilitated using a heating element included in the cartridge responsive to electrical power received from a battery (white portion of electronic cigarette in Exhibit A), and the vaporized liquid is for oral provisioning to an individual in an airflow that travels through the electronic cigarette.

5. The relationship of the subject matter of the claims to the product and the componentry thereof shown in Exhibit A is set forth below.

(a) Independent claim 21

Preamble: an apparatus (see Fig. 2 of Exhibit A showing an electronic cigarette).

Recitation 1: a power source,

wherein the power source including a battery (see Fig. 2 of Exhibit A showing the white battery of the electronic cigarette),

wherein the power source includes an electrically conductive portion (see Fig. 2 of Exhibit A showing the electrical conductive threaded portion on the white battery of the electronic cigarette).

Recitation 2: a cartridge having a housing that comprises an interior (see Fig. 2 of Exhibit A showing a yellow cartridge of the electronic cigarette),

wherein the housing includes a first end and a second end that is opposite the first end (see Figs. 6, 7, and 15 of Exhibit A showing the first end and the second end of the yellow cartridge),

wherein the housing includes a first aperture on the first end and a second aperture on the second end (see Fig. 15 of Exhibit A showing a first aperture at the first end of the yellow cartridge and a second aperture at the second end of the yellow cartridge),

wherein the housing includes an airflow passageway that extends centrally and axially with respect to the housing intermediate of the first aperture on the first end of the housing and the second aperture on the second end of the

housing (see Figs. 5-13 and 15-17 of Exhibit A showing the air flow passageway through the yellow cartridge),

wherein the airflow passageway is configured to allow an airflow through the cartridge from the first aperture to the second aperture of the housing (see Figs. 5-13 of Exhibit A showing the air flow passageway through the yellow cartridge),

wherein the first end of the housing includes an electrically conductive portion that is adapted to mechanically and electrically couple to the electrically conductive portion of the power source (see Figs. 2 and 15 of Exhibit A showing the electrical conductive threaded portion of the yellow cartridge for mechanically and electrically coupling with the electrical conductive threaded portion on the white battery),

wherein the housing includes a solution holding medium adapted to hold a solution in the interior of the housing (see Figs. 7-12 of Exhibit A showing the batting material that is a solution holding medium),

wherein the housing includes a heating element located in the interior of the housing (see Figs. 6-14 of Exhibit A showing the heating element coil), wherein the heating element extends transversely across the airflow passageway (see Figs. 6-14 of Exhibit A showing the heating element coil), wherein the airflow through the passageway passes on both transverse sides of the element (see Figs. 6-14 of Exhibit A showing the heating element coil),

wherein the solution holding medium surrounds the airflow passageway and the heating element in the interior of the housing and intermediate of the first end and the second end (see Figs. 7-9 of Exhibit A showing the batting material surrounding the airflow passageway and the heating element),

wherein the heating element is electrically configured to vaporize at least a portion of the solution to be contained in the solution holding medium for oral provision to an individual in an airflow from the second aperture responsive to electrical power received from the battery through the electrically conductive portions of the cartridge and the power source (this corresponds to the purpose of the electronic cigarette of Exhibit A).

(b) Dependent claim 22

Recitation: wherein the heating element is a coil having a maximum diameter, the airflow passageway having a length having a circular cross section having a diameter along a majority of the length, the maximum diameter of the coil being smaller than the diameter of the circular cross section of the length of the airflow passageway (see Figs. 14 and 15 of Exhibit A showing the coil having a maximum diameter being smaller than the diameter of the airflow passageway).

(c) Dependent claim 23

Recitation: wherein the first aperture on the first end is located centrally and axially with respect to the housing (see Figs. 2 and 15 of Exhibit A for the first aperture on the first end being located centrally and axially with respect to the housing), the first aperture having a cross-sectional area measured perpendicular to a central longitudinal axis of the housing, the interior of the airflow passageway between the heating element and the second aperture being no smaller in cross-sectional area than the cross-sectional area of the first aperture (see Figs. 6-10 and 15 of Exhibit A for the interior of the airflow passageway between the heating element and the second aperture being no smaller in cross-sectional area than the cross-sectional area of the first aperture).

(d) Dependent claim 24

Recitation: wherein the first aperture on the first end is smaller than the second aperture on the second end (see Fig. 15 of Exhibit A showing the opposite ends of the cartridge).

(e) Dependent claim 25

Recitation: wherein the solution holding medium includes at least one of an absorbent material and a reservoir (see Figs. 5, 7, 8, 11 and 12 of Exhibit A showing the absorbent material inside a reservoir of the cartridge).

(f) Dependent claim 26

Recitation: further comprising a solution in the solution holding medium, the solution comprising one of propylene glycol and nicotine (the solution holding medium of Figs. 6 and 12 of Exhibit A held a solution comprising propylene glycol and nicotine).

(g) Dependent claim 27

Recitation: wherein the airflow passageway has a uniform cross-sectional area measured perpendicular to a central longitudinal axis of the housing between the heating element and the second aperture (see Figs. 6-10 and 15 of Exhibit A for the airflow passageway having a uniform cross-sectional area between the heating element and the second aperture).

(h) Independent claim 28

Preamble: a cartridge configured to mechanically and electrically couple to a power source of an electronic vaporizer (see Fig. 2 of Exhibit A showing a yellow cartridge of the electronic cigarette).

Recitation 1: a housing having an interior (see Figs. 2, 3, and 11 of Exhibit A showing a yellow cartridge of the electronic cigarette and the interior thereof) and a solution holding medium reservoir adapted to hold a solution (see Figs. 7-12 of Exhibit A showing the batting material that is a solution holding medium), the housing having a first end and a second end that is opposite the first end, the housing having a first aperture on the first end and a second aperture on the second end (see Figs. 1, 6, 7, and 15 of Exhibit A showing a first aperture at the first end of the yellow cartridge and a second aperture at the second end of the yellow cartridge), the first end of the housing having an electrically conductive portion adapted to mechanically and electrically couple to the electrically conductive portion of the power source (see Figs. 2 and 15 of Exhibit A showing the electrical conductive threaded portion on the white battery of the electronic cigarette and the electrical conductive threaded portion of the yellow cartridge for mechanically and electrically coupling with the electrical conductive threaded portion on the white battery);

Recitation 2: an airflow passageway in the interior of the housing extending centrally and axially with respect to the housing intermediate of the first aperture on the first end of the housing and the second aperture on the second end of the housing (see Figs. 5-13 and 15-17 of Exhibit A showing the air flow passageway through the yellow cartridge), the airflow passageway being configured to allow an airflow through the cartridge from the first aperture to the second aperture of the housing (see Figs. 5-13 and 15-17 of Exhibit A showing the air flow passageway through the yellow cartridge); and

Recitation 3: a heating element located in the interior of the housing (see Figs. 6-14 of Exhibit A showing the heating element coil), the heating element being located within and extending transversely across the airflow passageway (see Figs. 6-14 of Exhibit A showing the heating element coil), the airflow through the passageway passing on both transverse sides of the heating element (see Figs. 6-14 of Exhibit A showing the heating element coil), both the heating element and the airflow passageway being surrounded by the solution holding medium reservoir (see Figs. 6-11 of Exhibit A showing the heating element coil), the heating element being electrically configured to vaporize at least a portion of the solution to be contained in the solution holding medium reservoir for oral provision to an individual in an airflow from the second aperture responsive to electrical power received from the battery through the electrically conductive portions of the cartridge and the power source (this corresponds to the purpose of the electronic cigarette of Exhibit A).

(i) Dependent claim 29

Recitation: further in combination with the power source including a battery and the electrically conductive portion, the electrically conductive portion of the power source being mechanically and electrically coupled to the electrically conductive portion of the first end of the housing portion (see Fig. 2 of Exhibit A showing the electrical conductive threaded portion on the white battery of the electronic cigarette).

(j) Dependent claim 30

Recitation: wherein the heating element is a coil having a maximum diameter, the airflow passageway having a length having a circular cross section having a diameter along a majority of the length, the maximum diameter of the coil being smaller than the diameter of the circular cross section of the length of the airflow passageway (see Figs. 14 and 15 of Exhibit A showing the coil having a maximum diameter being smaller than the diameter of the airflow passageway).

(k) Dependent claim 31

Recitation: wherein the first aperture on the first end is located centrally and axially with respect to the housing (see Figs. 2 and 15 of Exhibit A for the first aperture on the first end being located centrally and axially with respect to the housing), the first aperture having a cross-sectional area measured perpendicular to a central longitudinal axis of the housing, the interior of the airflow passageway between the heating element and the second aperture being no smaller in cross-sectional area than the cross-sectional area of the first aperture (see Figs. 6-10 and 15 of Exhibit A for the interior of the airflow passageway between the heating element and the second aperture being no smaller in cross-sectional area than the cross-sectional area of the first aperture).

(l) Dependent claim 32

Recitation: wherein the first aperture on the first end is smaller than the second aperture on the second end (see Fig. 15 of Exhibit A showing the opposite ends of the cartridge).

(m) Dependent claim 33

Recitation: wherein the solution holding medium reservoir includes an absorbent material (see Figs. 5, 7, 8, 11 and 12 of Exhibit A showing the absorbent material inside a reservoir of the cartridge).

(n) Dependent claim 34

Recitation: further comprising a solution in the solution holding medium reservoir, the solution comprising one of propylene glycol and nicotine (the absorbent material of Figs. 6 and 12 of Exhibit A holds a solution comprising propylene glycol and nicotine).

(o) Dependent claim 35

Recitation: wherein the airflow passageway has a uniform cross-sectional area measured perpendicular to a central longitudinal axis of the housing between the heating element and the second aperture (see Figs. 6-10 and 15 of Exhibit A for the airflow passageway having a uniform cross-sectional area between the heating element and the second aperture).

(p) Independent claim 36

Preamble: a cartridge configured to mechanically and electrically couple to a power source of an electronic vaporizer.

Recitation 1: a housing having an interior (see Figs. 2, 3, and 11 of Exhibit A showing a yellow cartridge of the electronic cigarette and the interior thereof) and a solution holding medium adapted to hold a solution in the interior of the housing (see Figs. 7-12 of Exhibit A showing the batting material that is a solution holding medium), the housing having a first end and a second end that is opposite the first end, the housing having a central longitudinal axis extending through the first end and the second end, the housing having a first aperture on the first end and a second aperture on the second end, the first aperture having a cross-sectional area measured perpendicular to the central longitudinal axis of the housing (see Figs. 1, 6, 7, and 15 of Exhibit A showing a first aperture at the first end of the yellow cartridge and a second aperture at the second end of the yellow cartridge), the first end of the housing having an electrically conductive portion adapted to mechanically and electrically couple to an electrically conductive portion of the power source (see Fig. 2 of Exhibit A showing the electrical conductive threaded portion on the white battery of the electronic cigarette and the electrical conductive threaded portion of the yellow cartridge for

mechanically and electrically coupling with the electrical conductive threaded portion on the white battery);

Recitation 2: an airflow passageway in the interior of the housing, the airflow passageway having a length extending centrally and axially with respect to the housing intermediate of the first aperture on the first end of the housing and the second aperture on the second end of the housing, the airflow passageway being configured to allow an airflow through the cartridge from the first aperture to the second aperture of the housing (see Figs. 5-13 and 15-17 of Exhibit A showing the air flow passageway through the yellow cartridge), the airflow passageway having an exterior adjacent to the solution holding medium along a majority of the length of the airflow passageway (see Figs. 7-9 of Exhibit A showing the airflow passageway adjacent and along the batting material), the airflow passageway having an interior having a uniform cross-sectional area measured perpendicular to the central longitudinal axis of the housing and extending continuously along the majority of the length of the airflow passageway (see Figs. 15-17 of Exhibit A showing the configuration of the airflow passageway); and

Recitation 3: a heating element located in the interior of the housing (see Figs. 6-14 of Exhibit A showing the heating element coil) and extending transversely across the airflow passageway (see Figs. 6-14 of Exhibit A showing the heating element coil), the airflow through the passageway passing on both transverse sides of the element (see Figs. 6-14 of Exhibit A showing the heating element coil), a plane perpendicular to the central longitudinal axis of the housing passing through the heating element and the solution holding medium (see Figs. 7-10 of Exhibit A noting that a plane perpendicular to the central longitudinal axis of the housing would pass through both the heating element and the solution holding medium of the assembled cartridge), the airflow passageway having an interior between the heating element and the second aperture no smaller in cross-sectional area than the cross-sectional area of the first aperture (see Figs. 6-10 and 15 of Exhibit A for the interior of the airflow passageway between the heating element and the second aperture being no smaller in cross-

sectional area than the cross-sectional area of the first aperture), the heating element being connected to the electrically conductive portion of the first end of the housing (see Figs. 12-15 showing the heating element electrically connected to the electrical conductive threaded portion of the yellow cartridge), the heating element being electrically configured to vaporize at least a portion of the solution to be contained in the solution holding medium for oral provision to an individual in an airflow from the second aperture responsive to electrical power received from the power source through the electrically conductive portion of the cartridge (this corresponds to the purpose of the electronic cigarette of Exhibit A).

(q) Dependent claim 37

Recitation: further in combination with the power source including a battery and the electrically conductive portion, the electrically conductive portion of the power source being mechanically and electrically coupled to the electrically conductive portion of the first end of the housing portion (see Fig. 2 of Exhibit A showing the electrical conductive threaded portion on the white battery of the electronic cigarette).

(r) Dependent claims 38 and 41

Recitation: wherein the heating element is a coil having a maximum diameter and the uniform cross-sectional area of the airflow passageway is a circle having a diameter, the maximum diameter of the coil being smaller than the diameter of the circle of the uniform cross-sectional area of the airflow passageway (see Figs. 14 and 15 of Exhibit A showing the coil having a maximum diameter being smaller than the diameter of the airflow passageway).

(s) Dependent claims 39 and 42

Recitation: wherein the first aperture on the first end is located centrally and axially with respect to the housing (see Figs. 2 and 15 of Exhibit A for the first aperture on the first end being located centrally and axially with respect to the housing).

(t) Dependent claims 40 and 43

Recitation: wherein the first aperture on the first end is smaller than the second aperture on the second end (see Fig. 15 of Exhibit A showing the opposite ends of the cartridge).

(u) Dependent claim 44

Recitation: wherein the solution holding medium includes at least one of an absorbent material and a reservoir (see Figs. 5, 7, 8, 11 and 12 of Exhibit A showing the absorbent material inside a reservoir of the cartridge).

(v) Dependent claim 45

Recitation: further comprising a solution, wherein the solution comprises one of propylene glycol and nicotine (the solution holding medium of Figs. 7-9 and 12 of Exhibit A includes a solution comprising propylene glycol and nicotine).

(w) Dependent claim 46

Recitation: wherein the heating element is in operative connection with a wicking material, and the wicking material is operative to attract a portion of the solution from the solution holding medium located immediately adjacent opposite ends of the heating element toward the heating element (Figs. 6- 14 of Exhibit A show the wicking material passing through the heating element and being operative to attract a portion of the solution from the solution holding medium located immediately adjacent opposite ends of the heating element toward the heating element).

(x) Dependent claim 47

Recitation: wherein the airflow passageway has a uniform cross-sectional area measured perpendicular to a central longitudinal axis of the housing between the heating element and the second aperture (see Figs. 6-10 and 15 of Exhibit A for the airflow passageway having a uniform cross-sectional area between the heating element and the second aperture).

Application No. 15/377,522
Declaration under 37 C.F.R. § 1.131

6. The product and the componentry thereof shown in Exhibit A and embodied in independent claims 21, 28, and 36 was sold to customers of Fuma International LLC before January 13, 2010, as evidenced by Exhibit B. To illustrate, page 1 of Exhibit B depicts Invoice No. 41 and shows Deluxe Starter Kits and various Cartridges (corresponding to those shown in Figs. 1-17 of Exhibit A) were sold before January 13, 2010, and page 2 of Exhibit B depicts Invoice No. 44 and shows that Deluxe Starter Kits and various Cartridges (corresponding to those shown in Figs. 1-17 of Exhibit A) also were sold before January 13, 2010.

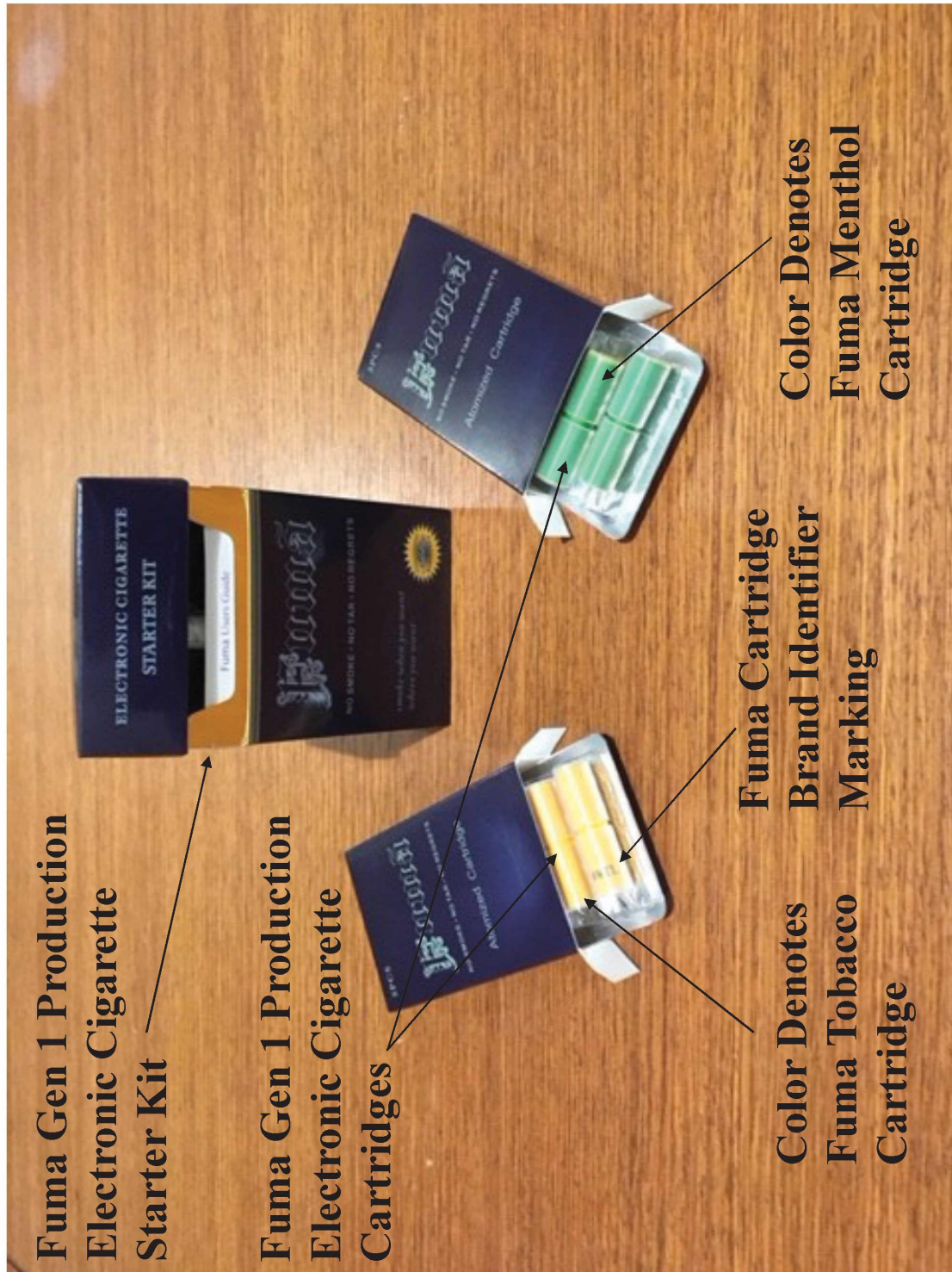
We declare further that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

Dated: 11/02/18

By: Gregory D. Conley
Gregory D. Conley

EXHIBIT A

Figure: 1



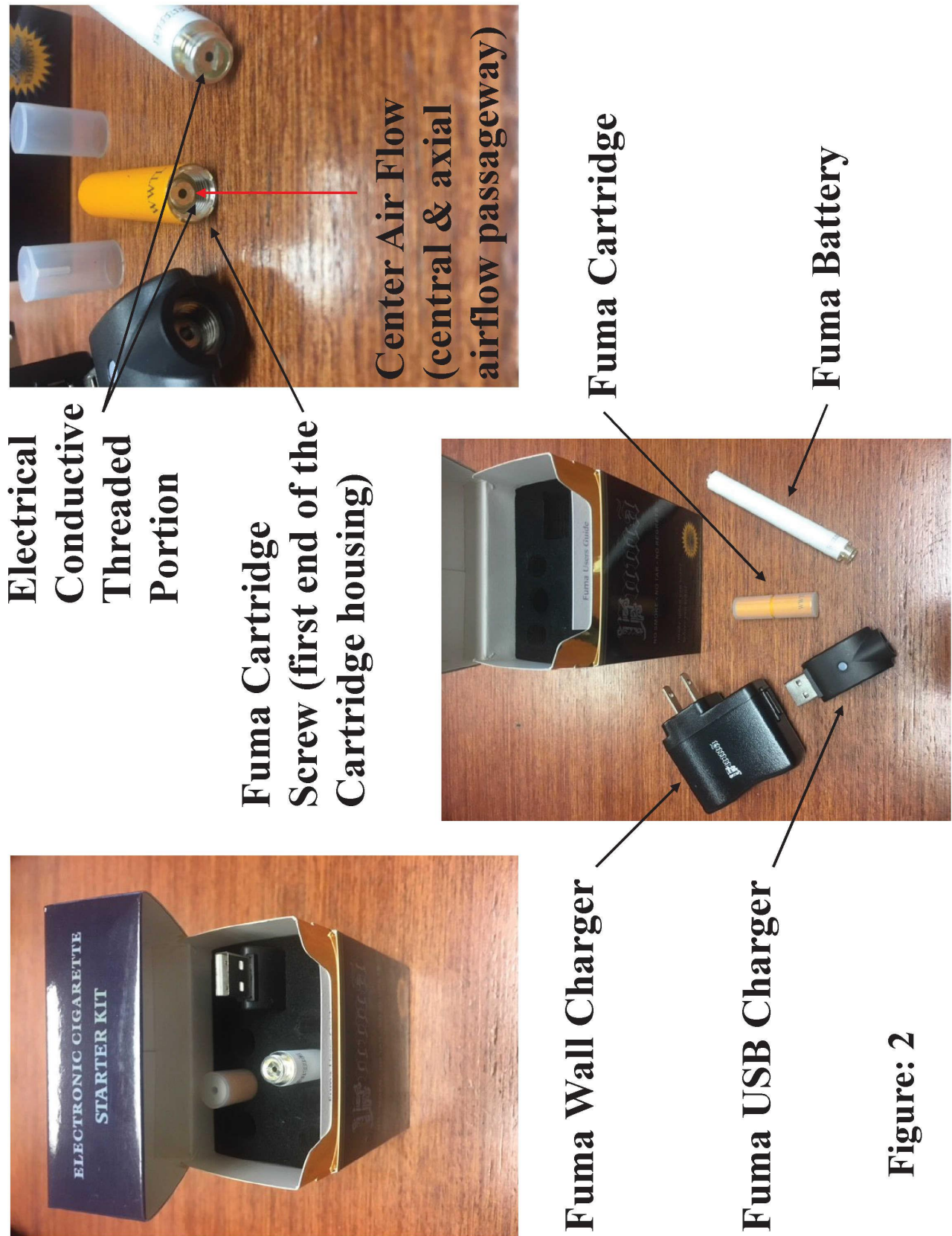


Figure: 3



Figure: 4



Figure: 5





Figure: 7





Figure: 9

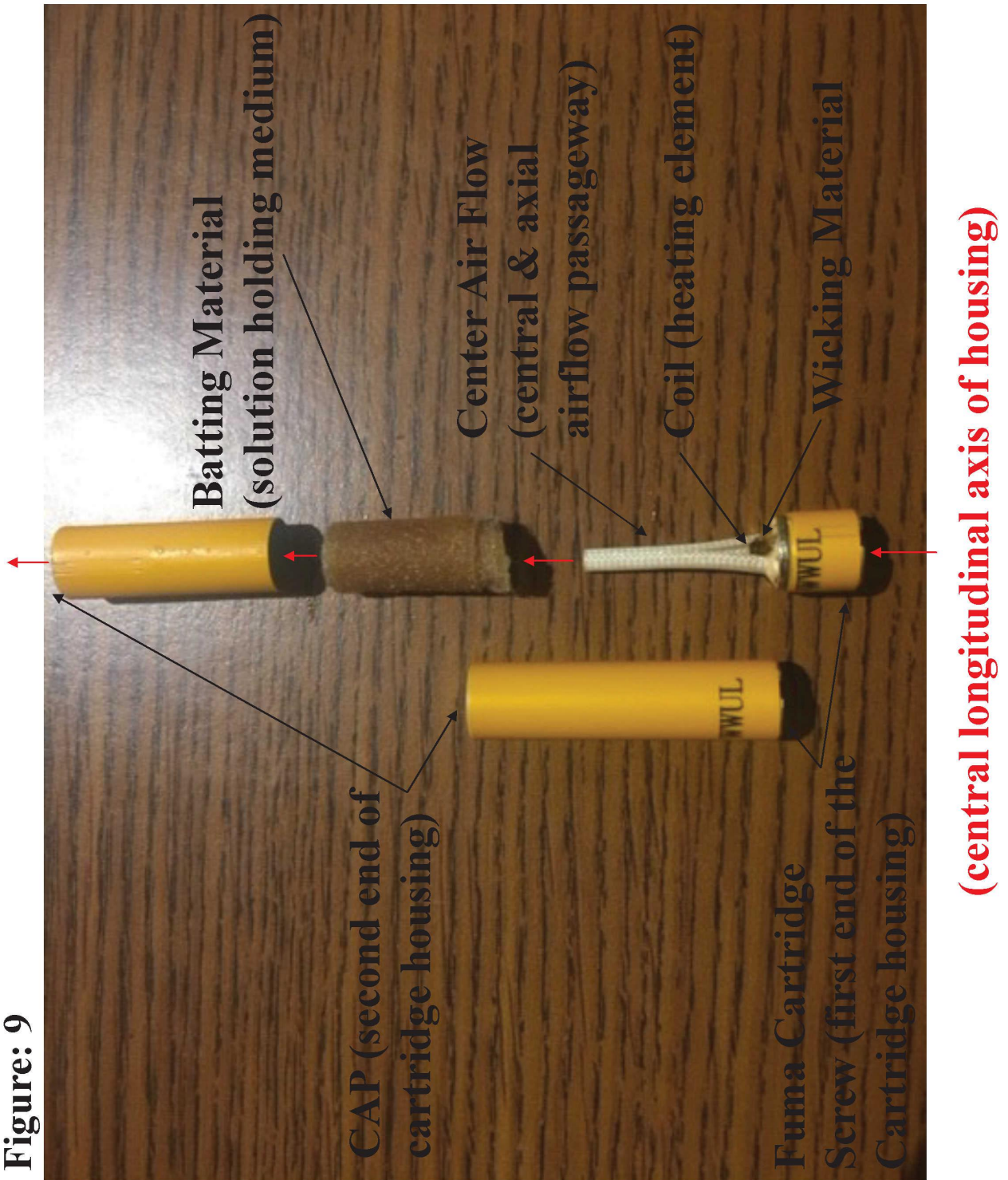


Figure: 10



Figure: 11

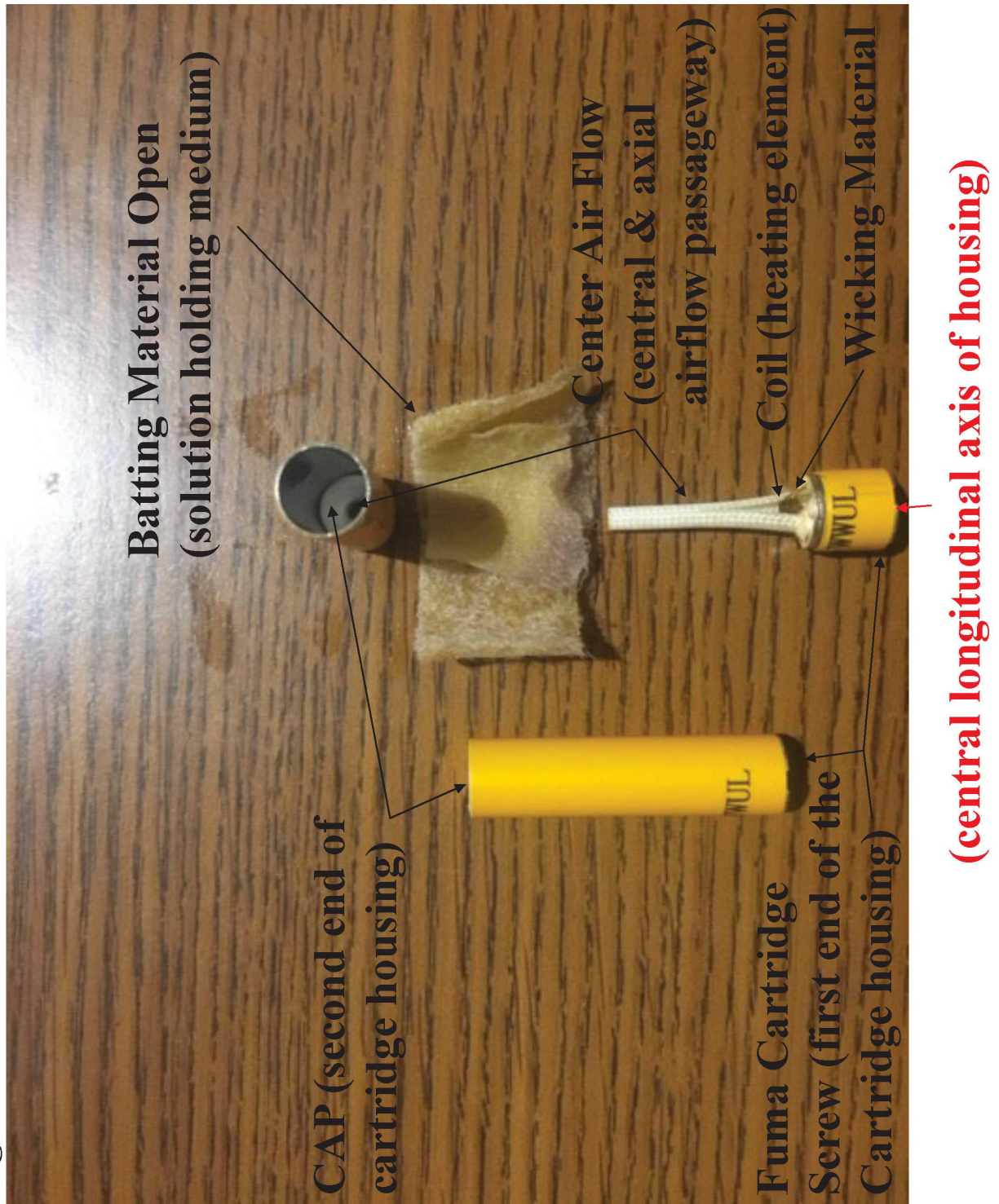


Figure: 12



Figure: 13

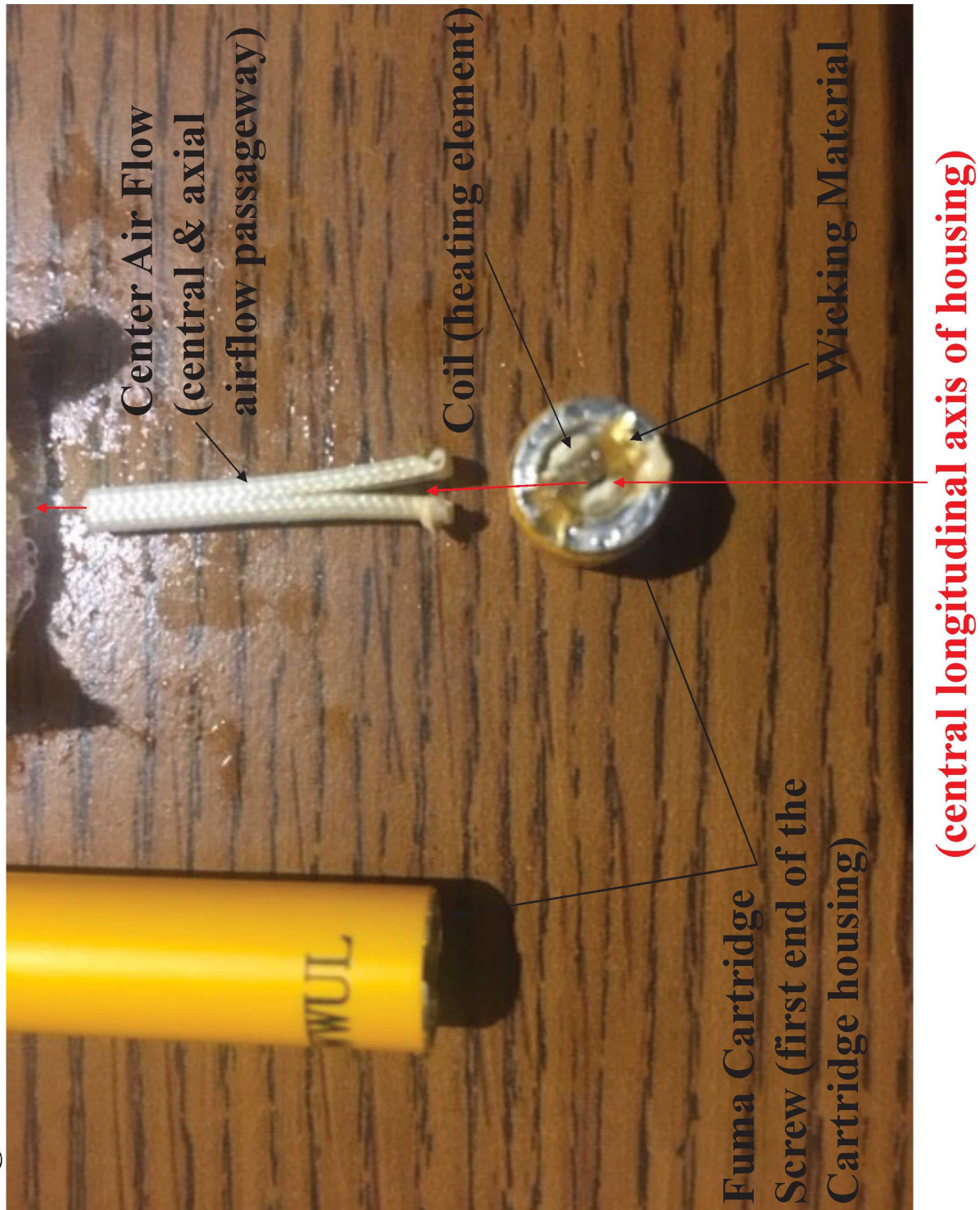


Figure: 14

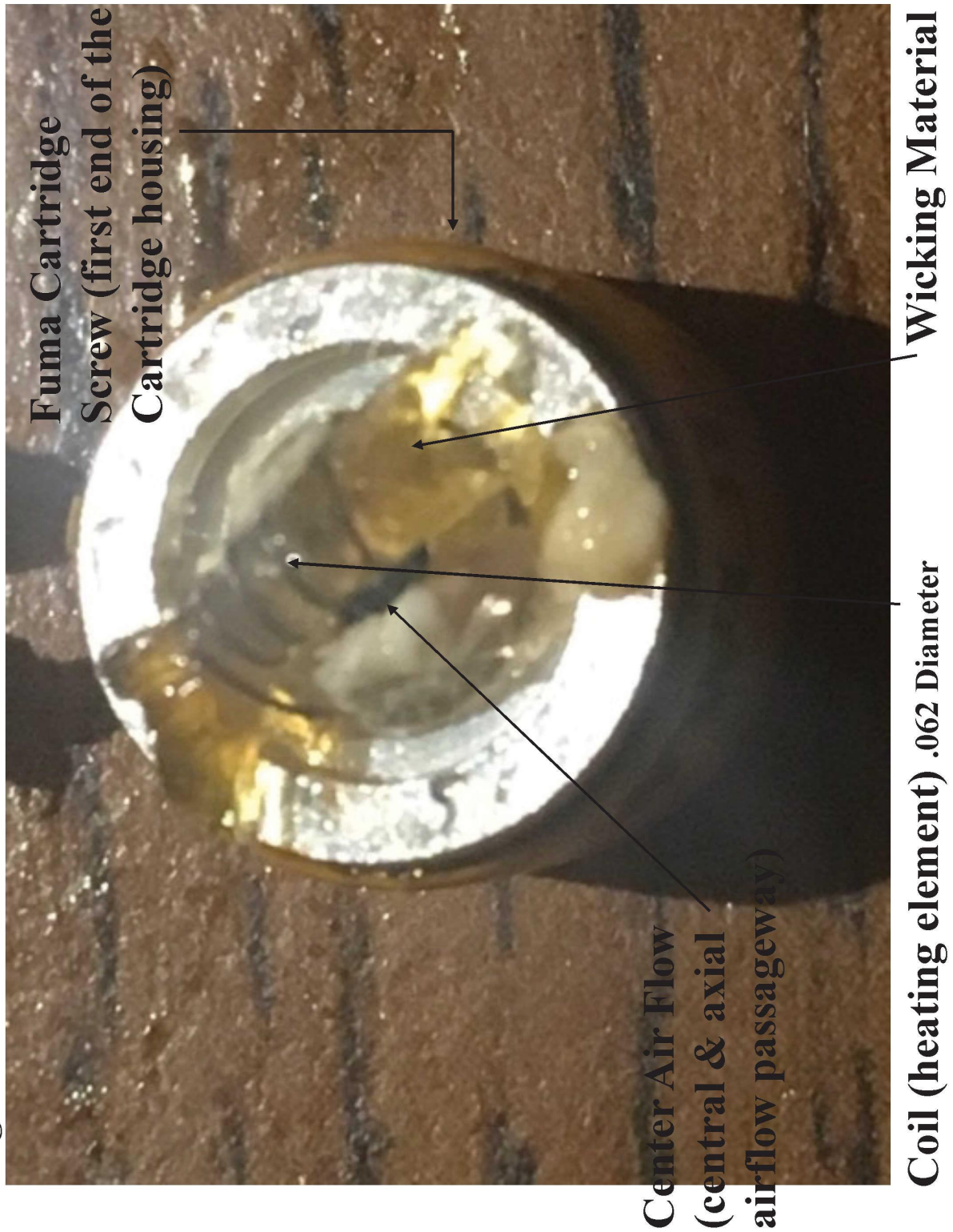


Figure: 15

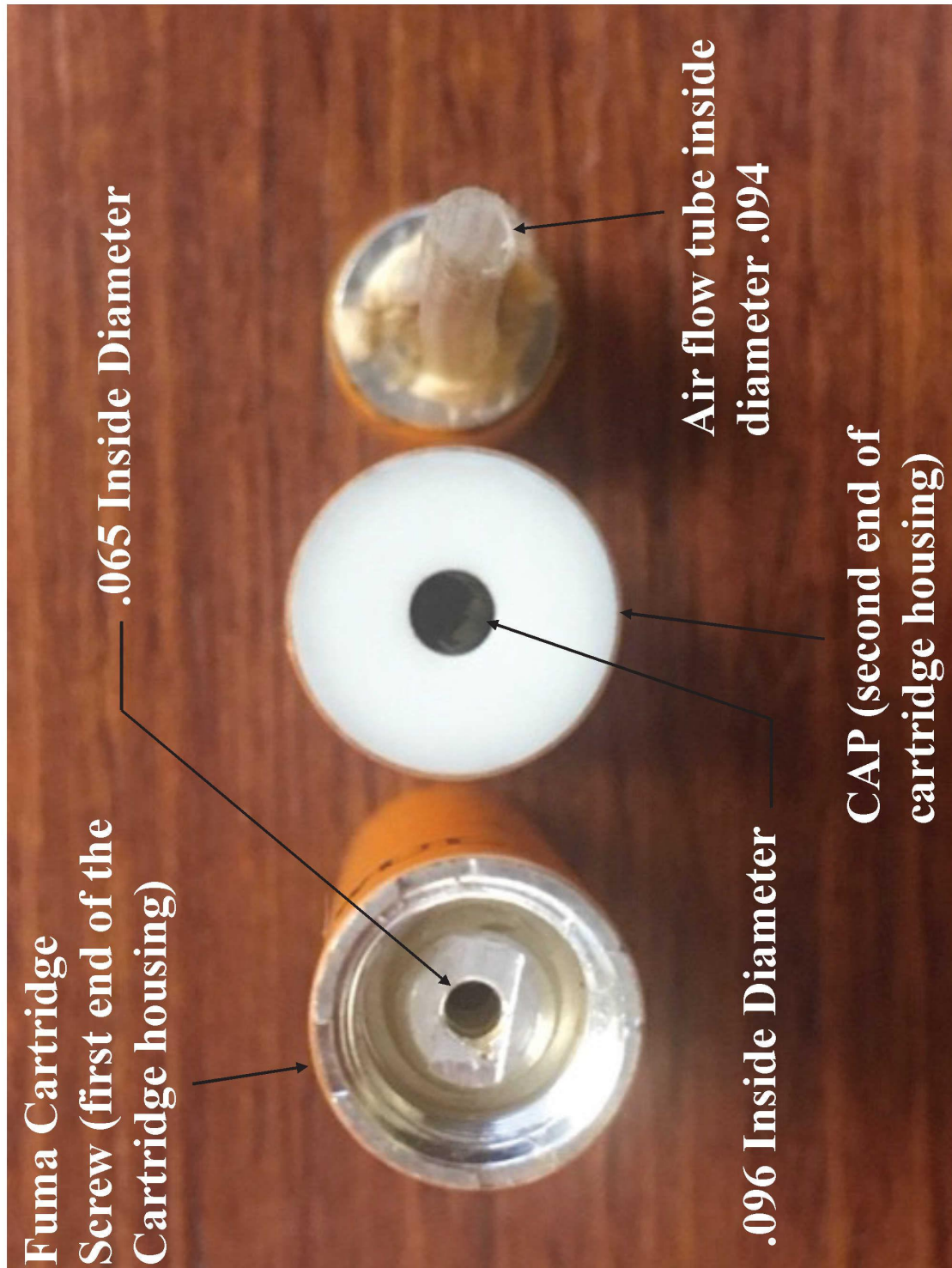




Figure: 16

Measurement from the top of the coil to the top of air flow tube is approximately .798



Figure: 17

Measurement from the top of the air flow tube to the edge of the slit is approximately .414

EXHIBIT B

Fuma International LLC
 879 S. Progress Drive
 Suite D
 Medina, OH 44256

PAID

Invoice

Date	Invoice #
11/20/2009	41

Bill To
Adco Distributing 221 Cherry Ave. NE Canton, Ohio 44702

Ship To

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
adco-2	Due on receipt		11/20/2009			
Quantity	Item Code	Description			Price Each	Amount
2	Deluxe SK WWTL	Deluxe Starter Kit WWTL			18.54	37.08
2	Deluxe SK MCBUL	Deluxe Starter Kit MCBUL			18.54	37.08
3	Cartridges-WWTF	Wild West Tobacco Full Cartridges 5 pack			6.85	20.55
7	Cartridges-WWTL	Wild West Tobacco Lights Cartridges 5 pack			6.85	47.95
6	Cartridges-WWTUL	Wild West Ultra Lights Cartridges 5 pack			6.85	41.10
1	Cartridges-MFF	Menthol Full Freeze Cartridges 5 pack			6.85	6.85
1	Cartridges-MCBUL	Menthol Clean Breeze Ultra Lights Cartridges 5 pack			6.85	6.85
4	X-Car Charger	Car Charger			5.00	20.00
1	X-Travel Charger ...	Travel Charger Carrying Case			19.95	19.95
1	Shipping	Shipping & Handling Charge			0.00	0.00

PAID
12/4/091st bill received
check \$12,009.15

International LLC
S. Progress Drive
Suite D
Medina, OH 44256

PAID

Invoice

Date	Invoice #
11/5/2009	44

Bill To
Great Midwest Tobacco 10825 Medallion Dr. Evendale, Ohio 45241

Ship To

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
GMT-1	Due on receipt		11/30/2009	Fuma Truck		
Quantity	Item Code	Description			Price Each	Amount
313	Deluxe SK WWTL	Deluxe Starter Kit WWTL			18.2619	5,715.97
159	Deluxe SK MCBL	Deluxe Starter Kit MCBL			18.2619	2,903.64
500	Cartridges-WWTF	Wild West Tobacco Full Cartridges 5 pack			6.74725	3,373.63
500	Cartridges-WWTL	Wild West Tobacco Lights Cartridges 5 pack			6.74725	3,373.63
400	Cartridges-WWTUL	Wild West Ultra Lights Cartridges 5 pack			6.74725	2,698.90
400	Cartridges-MFF	Menthol Full Freeze Cartridges 5 pack			6.74725	2,698.90
500	Cartridges-MCBL	Menthol Clean Breeze Lights Cartridges 5 pack			6.74725	3,373.63
Total					\$24,138.30	