

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

FUMA INTERNATIONAL LLC, an
Ohio limited liability company,

Plaintiff,

v.

R.J. REYNOLDS VAPOR COMPANY,
a North Carolina corporation,

Defendant.

Civil Action No. 19-260

DEMAND FOR JURY TRIAL

COMPLAINT FOR PATENT INFRINGEMENT

For its Complaint against Defendant R.J. Reynolds Vapor Company (“Reynolds Vapor,” “R.J. Reynolds,” or “Defendant”), Plaintiff Fuma International LLC (“Fuma”) alleges as follows:

JURISDICTION AND VENUE

1. This is a civil action for patent infringement arising under Title 35 of the United States Code, and in particular 35 U.S.C. §§ 271, 282, 283, 284, and 285.
2. This Court has subject matter jurisdiction over this patent infringement action under 28 U.S.C. §§ 1331 and 1338(a).

3. This Court has personal jurisdiction over Defendant because it is incorporated in and resides in North Carolina and this judicial district, solicits and conducts business in North Carolina, including the provision of goods, derives revenue from goods sold in North Carolina and within this judicial district, and has committed acts of infringement in this judicial district, including, but not limited to, offering to sell and selling the accused products in this judicial district.

4. Venue lies in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and (c), and 1400(b).

THE PLAINTIFF

5. Plaintiff Fuma is a company organized and existing under the laws of the state of Ohio, with its principal place of business at 879 S. Progress Drive, Medina, Ohio 44256. Fuma is in the business of developing and selling innovative products, including electronic cigarettes.



Fuma's Office, Progress Building, Medina Ohio

6. Fuma was founded in 2009 by Greg Conley, his wife, Rebecca Conley, and their friend Daniel Hillenbrandt to develop and commercialize certain of the concepts described in U.S. Patent No. 9,532,604 (“the ’604 Patent,” Ex. A).



Dan Hillenbrandt, Rebecca Conley, and Greg Conley

7. Prior to conceiving the inventions described in the '604 Patent, Mr. Conley worked as a technician and engineer for over 15 years and was employed by Rockwell International and ABB (Asea Brown Boveri), Inc., among others, in technical areas such as industrial control systems, robotics, process control, software development, computer design, and wireless technologies, among others.

8. Prior to forming Fuma, Mr. Conley formed Tri-C Technologies LLC under which he provided engineering and technical services as a consultant.

9. In April of 2009, and still operating under Tri-C Technologies LLC entity, Mr. Conley, Mrs. Conley, and Mr. Hillenbrandt became a distributor in Ohio of e-cigarette devices sold by a company called Smoke Anywhere USA, Inc., a.k.a. "Smoke 51." Those e-cigarette devices are shown in the Wikipedia page that is listed on the first page of the '604 Patent under the heading "OTHER PUBLICATIONS." Tri-C Technologies LLC terminated its relationship with Smoke Anywhere USA, Inc. and ceased distribution of the products later that same year.

10. Recognizing that the e-cigarette devices Tri-C Technologies LLC had been distributing under the agreement with Smoke Anywhere USA, Inc. were deficient in numerous ways, Mr. Conley thought of new designs for an e-cigarette device. Mr. Conley enlisted Dan Hillenbrandt, whose background is in precision manufacturing, to help in developing the new e-cigarette designs. Together with Rebecca Conley, they formed Fuma in July of 2009 to further develop and commercialize the concepts described in the '604 Patent.

11. Mr. Conley and Mr. Hillenbrandt filed Provisional Patent Applications on July 27, 2009 (Provisional Application No. 61/271,819) and July

31, 2009 (Provisional Application No. 61/273,097) in the United States Patent Office that describe some of their concepts for a new e-cigarette design.

12. Mr. Conley and Mr. Hillenbrandt followed up their provisional patent applications with a Regular Patent Application that they filed in the United States Patent Office on July 27, 2010 (Application No. 12/843,917) and that claimed priority to their Provisional Patent Applications.

13. According to U.S. Patent Office Procedures, the contents of Fuma's provisional applications filed in 2009 and the Regular Patent Application Fuma filed in on July 27, 2010 remained restricted from public access and confidential until the first publication in the '604 Patent family by the U.S. Patent Office on Aug. 29, 2013. (Publication No. US 2013/0220315 A1).

14. The '604 Patent resulted and issued from the Provisional and Regular patent applications that Mr. Conley and Mr. Hillenbrandt filed in July 2009 and July 2010, as shown under the heading "Related U.S. Application Data" on the first page of the '604 Patent.

15. During 2009, Mr. Conley and Mr. Hillenbrandt worked to develop their concepts for a new e-cigarette device. Mr. Conley and Mr. Hillenbrandt had prototypes of their new e-cigarette device manufactured by a supplier, Trans-

Power International Co., Ltd. (“Trans-Power”), in China under conditions of confidentiality.

16. Fuma introduced its new e-cigarette device to the marketplace in August 12-14, 2009 at the Tri-State Tobacco and Candy Convention held at the Belterra Casino Resort and Spa in Belterra, Indiana. At the convention, Mr. Conley, for the first time, displayed final prototypes of the Fuma e-cigarette.

17. By no later than September 17, 2009, Mr. Conley and Mr. Hillenbrandt received in the United States commercial versions of their new e-cigarette that embodied the ’604 patented design and that had been manufactured by their supplier, Trans-Power, in accordance with design instructions and fabrication details provided by Mr. Conley. (*See*, Ex. B, Trans-Power Invoice dated September 17, 2009.).

18. In September 2009, Fuma began offering for sale and selling their new product in the United States.

19. No later than November 2009, Fuma sold and delivered to customers in the United States their e-cigarette devices (“Fuma e-cigarette”) made in accordance with the ’604 Patent. (*See* Ex. C, Invoice from Fuma to Great Midwest Tobacco, Evandale, Ohio dated November 5, 2009; Ex. D, Invoice from Fuma to Adco Distributing, Canton, Ohio dated November 20, 2009).

20. The Fuma e-cigarette is covered by and incorporates the invention defined by the claims of the '604 Patent that are asserted in this case, specifically claims 4, 6, 12, 14, 16, and 18. The Fuma e-cigarette constitutes and establishes an actual reduction to practice, in the United States, of the invention covered by at least claims 4, 6, 12, 14, 16, and 18 of the '604 Patent no later than September of 2009.

21. The devices that Fuma had manufactured and delivered to its facility in Medina, Ohio in September 2009 meet all the elements of at least claims 1, 2, 4, 6, 12, 14, 16, and 18 of the '604 Patent.

22. Fuma's new e-cigarette devices were met with immediate success in the market. Fuma's sales went from approximately \$50,000 in the last quarter of 2009, to \$772,524 in 2010, to \$2,919,916 in 2011.

23. Fuma's success with its e-cigarette was recognized by R.J. Reynolds.

THE DEFENDANT

24. Defendant Reynolds Vapor is a corporation organized and existing under the laws of the State of North Carolina, having its principal place of business at 401 North Main Street, Winston-Salem, North Carolina 27101. Reynolds Vapor is doing business in this judicial district related to the claims asserted in this Complaint.

R.J. Reynolds Failed to Design an Alternative Smoking Device

25. R.J. Reynolds and numerous other tobacco companies have been attempting for decades to successfully commercialize an e-cigarette to replace standard burn-type cigarettes. An article in “Vapor Digest” October/November 2014, Pgs. 16-17 (Ex. E) includes the graphic depicted below, which shows a time line for some of the failed attempts by the tobacco companies to design a commercially successful e-cigarette.



26. R.J. Reynolds launched its Premier “alternative smoking device” in 1988. R.J. Reynolds reportedly spent \$800 million in development and launch of

the Premier device. (Ex. F, Nova, “Safer Cigarettes: A History,” Oct. 2, 2001 (available at <http://www.pbs.org/wgbh/nova/body/safer-cigarettes-history.html>)). R.J. Reynolds withdrew that product from the United States market the following year in 1989. (*Id.*).

27. R.J. Reynolds launched its Eclipse “alternative smoking device” in 1994. That product was not successful and was subsequently withdrawn from the market in the United States.

28. R.J. Reynolds continued to pursue their unsuccessful, alternative designs for an e-cigarette even after launching the products accused of infringement in this Complaint that copied the Fuma e-cigarette, but those pursuits continued to fail. For example, R.J. Reynolds introduced a revised version of the Eclipse e-cigarette, marketed as the Revo device, around 2015, and that product was likewise not successful and was withdrawn from the market in the United States. (Ex. G, Winston-Salem Journal, “Reynolds pursues another restart with revamped heat-not-burn cigarette Eclipse,” Oct. 29, 2017).

R.J. Reynolds Solicited Information from Fuma About its E-Cigarette

29. Within a year of Fuma’s launch of its new e-cigarette device, R.J. Reynolds’s Vice President of Strategic Innovations, Denny Potter, engaged Greg Conley in detailed discussions regarding Fuma’s e-cigarette technology. (Ex. H,

June 15, 2010 Email from D. Potter, V.P. of Strategic Innovations at R.J.

Reynolds, to G. Conley, President and Founder of Fuma).

30. In his June 15, 2010 e-mail, Mr. Potter told Mr. Conley that: “. . . part of my role in the RJRTC [RJ Reynolds Tobacco Company] organization is to search out and investigate promising new technologies and product opportunities.”

(Ex. H, June 15, 2010 Email from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and Founder of Fuma).

31. In his June 15, 2010 e-mail, Mr. Potter also solicited samples of Fuma’s new e-cigarette device. (Ex. H, June 15, 2010 Email from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and Founder of Fuma).

32. In his June 15, 2010 e-mail, Mr. Potter said that once he reviewed the sample Fuma e-cigarette devices and any additional information provided by Mr. Conley, he would determine whether it would be in the interest of both parties to have “. . . a Confidentiality Agreement in place to facilitate further discussion.” (Ex. H, June 15, 2010 Email from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and Founder of Fuma).

33. On or around June 22, 2010, about one week after speaking with Mr. Potter by phone and receiving Mr. Potter’s June 15, 2010 e-mail, Mr. Conley sent

Mr. Potter samples of Fuma's new e-cigarette device. (Ex. I, June 22, 2010 Letter from G. Conley, President and Founder of Fuma to D. Potter, V.P. of Strategic Innovations at R.J. Reynolds).

34. The sample devices provided by Mr. Conley to Mr. Potter and R.J. Reynolds embodied the invention defined by at least claims 1, 2, 4, 6, 12, 14, 16, and 18 of the '604 Patent.

35. In his June 22, 2010 letter, Mr. Conley told Mr. Potter that Fuma was "very encouraged" by their original conversation and that "[w]e [Fuma] have everything in place today to help catapult RJRT into this market space saving time and money as your partner" (Ex. I, June 22, 2010 Letter from G. Conley, President and Founder of Fuma to D. Potter, V.P. of Strategic Innovations at R.J. Reynolds).

36. On June 29, 2010, Mr. Potter emailed Mr. Conley acknowledging receipt of the Fuma e-cigarette, noting that he "[h]ad a good day walking the Fuma product and materials around [R.J. Reynolds]." (Ex. J, June 29, 2010 E-Mail from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and Founder of Fuma).

37. Mr. Potter told Mr. Conley that R.J. Reynolds "would like to proceed to the next step of entering into a confidentiality agreement to further our

discussions.” (Ex. J, June 29, 2010 E-Mail from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and Founder of Fuma).

38. Mr. Potter also told Mr. Conley that Mr. Potter’s “[i]nnovation accountabilities support all of the RAI [Reynolds America Inc.] operating companies,” and was not limited to R.J. Reynolds Tobacco Co. (Ex. J, June 29, 2010 E-Mail from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and Founder of Fuma).

39. On or around July 8, 2010, Fuma and R.J. Reynolds entered into a Confidentiality Agreement that covered use of the information being provided by Fuma regarding the design and operation of its new e-cigarette device.

40. By e-mail on July 16, 2010, Dan Hillenbrandt of Fuma sent Mr. Potter of R.J. Reynolds an outline of the business relationship that Fuma envisioned with R.J. Reynolds regarding Fuma’s new e-cigarette device, noting that Fuma “spent the last year and half [sic] designing and patenting the product” (Ex. K, July 16, 2010 E-mail from D. Hillenbrandt, co-founder of Fuma, to D. Potter, Vice President of Strategic Innovations at R.J. Reynolds).

41. Mr. Potter invited Fuma to meet with R.J. Reynolds to discuss Fuma’s new e-cigarette device, its structure and operation, and a potential joint venture with R.J. Reynolds.

42. On or around July 28, 2010, Mr. Conley and his associate, William Steiger, traveled to R.J. Reynolds's facilities in Winston-Salem, North Carolina and met with Mr. Potter and numerous R.J. Reynolds employees. A picture of Mr. Conley in front of R.J. Reynolds's offices the day of the meeting is shown below.



43. Mr. Conley's meeting at R.J. Reynolds on or around July 28, 2010 lasted two-to-three hours. During the meeting, R.J. Reynolds focused its questions on the functionality of the sample Fuma e-cigarette devices that Mr. Conley had previously sent to Mr. Potter. R.J. Reynolds asked Mr. Conley to explain the design and principles of operation for Fuma's new e-cigarette device, which Mr. Conley did.

44. During the meeting at R.J. Reynolds on or around July 28, 2010, R.J. Reynolds asked Mr. Conley to divulge his then-pending patent application on the

Fuma e-cigarette. That patent application was, at the time, confidential and non-public.

45. R.J. Reynolds ended the meeting when Mr. Conley respectfully declined to disclose his then-pending patent application to R.J. Reynolds absent a more specific commitment from R.J. Reynolds regarding a business relationship with Fuma.

46. Shortly after their meeting, R.J. Reynolds, through Mr. Potter, informed Mr. Conley at Fuma that R.J. Reynolds's "interest in Fuma is focused on applicability of your product technology platform to our own innovation efforts." (Ex. L, Correspondence from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and CEO of Fuma).

47. Despite R.J. Reynolds's acknowledgement that their interest in Fuma was focused on Fuma's "product technology platform," R.J. Reynolds declined to pursue a business relationship or seek a license to Fuma's "product technology platform." (Ex. L, Correspondence from D. Potter, V.P. of Strategic Innovations at R.J. Reynolds, to G. Conley, President and CEO of Fuma).

48. After declining a business relationship with Fuma, R.J. Reynolds copied Fuma's e-cigarette device and released a competing product. In 2012, R.J. Reynolds released its infringing VUSE Solo device to stores in Virginia and North

Carolina. (Ex. M, Winston-Salem Journal, R.J. Reynolds expanding e-cigarettes to Colorado Market, June 6, 2013).

49. Stephanie Cordisco, President of R.J. Reynolds Vapor Co., said that the VUSE Solo was a “game-changing product in the e-cigarette category.” (Ex. M, Winston-Salem Journal, R.J. Reynolds expanding e-cigarettes to Colorado Market, June 6, 2013).

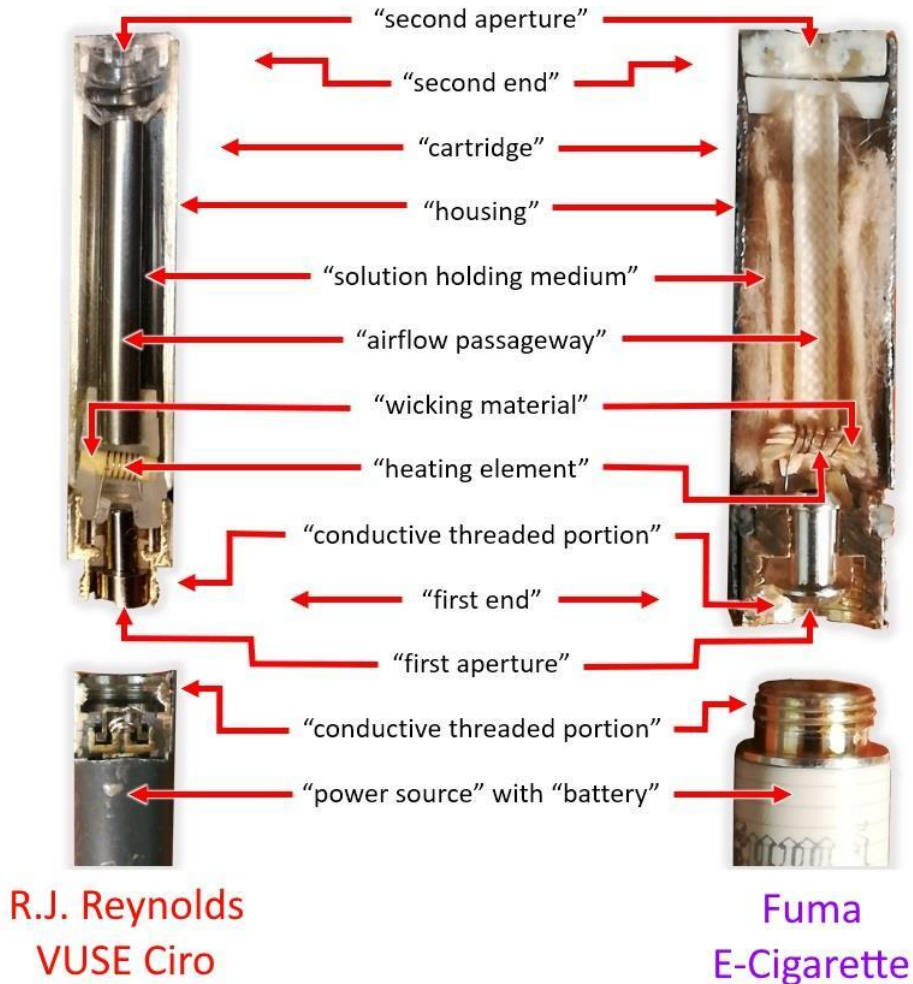
50. That initial release of the VUSE Solo device was followed by a release of the device in Colorado in 2013, and then a nationwide rollout of the VUSE Solo device in 2014. (Ex. N, Richmond-Times Dispatch, Vuse overwhelming e-cig competition, June 1, 2015 (noting that “Reynolds appeared late to the e-cig market . . .”)).

51. The VUSE Solo device infringes at least claims 4, 6, 12, 14, 16, and 18 of Fuma’s ’604 Patent that issued in January of 2017, as demonstrated later in this Complaint by a detailed comparison of that device to those patent claims.

52. R.J. Reynolds introduced its VUSE Ciro e-cigarette in 2017. The R.J. Reynolds VUSE Ciro e-cigarette device also infringes claims 4, 6, 12, 14, 16, and 18 of Fuma’s ’604 Patent, as demonstrated later in this Complaint.

53. The VUSE Solo and VUSE Ciro are substantial copies of the structure of the Fuma e-cigarette samples that were provided to R.J. Reynolds in 2010.

Pictured below is one of the devices that Fuma had manufactured and delivered to its facility in Medina, Ohio in September 2009 compared side-by-side with the VUSE Ciro and labeled to identify features of the asserted '604 Patent claims.



54. Because Fuma's patent application was still pending in the U.S. Patent Office and because the '604 Patent did not issue until 2017, Fuma was hamstrung

to challenge these copycat products. Fuma suffered irreparable and significant harm by the unauthorized use of its e-cigarette design in these competitive products.

R.J. Reynolds's Patent Applications Rejected Based on Fuma E-Cigarette

55. R.J. Reynolds embarked on a design program that resulted in its VUSE Solo and VUSE Ciro devices only after obtaining and analyzing samples of Fuma's new e-cigarette device in 2010, and after meeting with and questioning Mr. Conley regarding the Fuma e-cigarette.

56. R.J. Reynolds filed numerous patent applications on e-cigarettes as part of its VUSE design program. The U.S. Patent Office rejected nine of R.J. Reynolds U.S. patent applications—and three international applications—based on published patent applications from the Fuma '604 Patent family. (*See* Ex. O, Index of Rejected R.J. Reynolds Patents).

THE PATENT IN SUIT

57. On January 3, 2017, the U.S. Patent Office duly and legally issued United States Patent No. 9,532,604 (“the '604 Patent”) entitled “Electronic Vaporizer.” Fuma holds all substantial rights, title, and interest to the '604 Patent. A true and correct copy of the '604 Patent is attached as Exhibit A.

INFRINGEMENT OF U.S. PATENT NO. 9,532,604

58. Fuma hereby realleges each allegation set forth in the paragraphs above as though fully set forth herein.

59. Upon information and belief, Defendant has had knowledge of the '604 Patent and of Plaintiff's rights therein.

60. Upon information and belief, Defendant had actual knowledge of the '604 Patent soon after issuance based on the repeated citation to, and rejections of R.J. Reynolds patents, by publications and issued patents in the '604 Patent family. (*See* Ex. O, Index of Rejected R.J. Reynolds Patents).

61. Upon information and belief, Defendant had actual knowledge, or should have had actual knowledge, of the '604 Patent soon after issuance based on the fact that Fuma told R.J. Reynolds that Fuma had a patent pending on its e-cigarette and the fact that R.J. Reynolds requested copies of the patent applications covering the Fuma e-cigarette. (*See, e.g.*, Ex. K, July 16, 2010 E-mail from D. Hillenbrandt, co-founder of Fuma, to D. Potter, Vice President of Strategic Innovations at R.J. Reynolds)

62. Upon information and belief, Defendant had both actual and constructive knowledge of the '604 Patent soon after issuance based on Fuma's marking of its products with the '604 Patent number.

63. Defendant has had actual knowledge that its activities constitute infringement of '604 Patent no later than the filing of this Complaint.

64. Defendant has directly infringed the '604 Patent in violation of at least 35 U.S.C. § 271(a) by, itself and/or through its agents, unlawfully and wrongfully making, using, importing, offering to sell, and/or selling vaporizing device products embodying one or more of the inventions claimed in the '604 Patent, within, from and/or into the United States without permission or license from Plaintiff, and will continue to do so unless enjoined by this Court.

65. Examples of vaporizing device products that directly infringe the '604 Patent include, but are not limited to, (1) VUSE Solo and (2) the VUSE Ciro.

66. The images of the VUSE Solo and VUSE Ciro products set forth herein accurately show the features of those products.

67. The VUSE Solo and VUSE Ciro products infringe the '604 patent literally and/or under the doctrine of equivalents.

68. The VUSE Solo infringes at least claims 4, 6, 12, 14, 16, and 18 of the '604 Patent, and the VUSE Ciro infringes at least claims 4, 6, 12, 14, 16, and 18 of the '604 Patent.

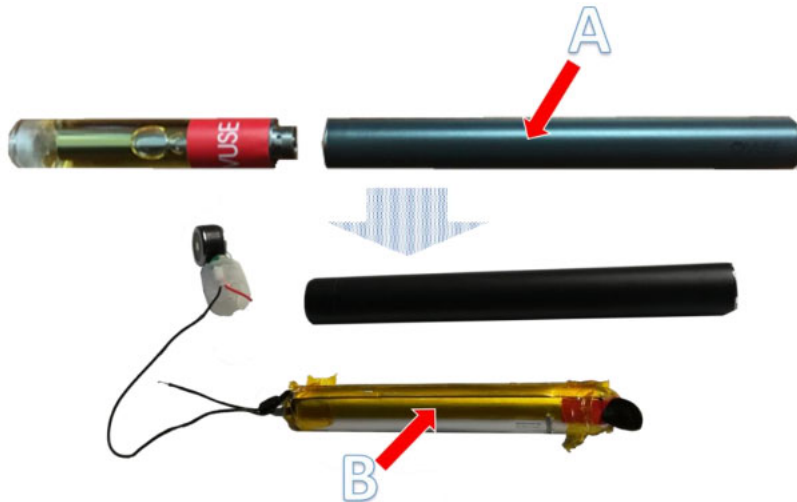
Direct Infringement: VUSE Ciro

69. Claim 1 of the '604 Patent reads as follows:

1. An apparatus comprising:
 - a power source,
 - wherein the power source includes a battery,
 - wherein the power source includes an electrically conductive threaded portion; and
 - a cartridge having a housing that comprises an interior,
 - wherein the housing includes a first end and a second end that is opposite the first end, wherein the housing includes a first aperture on the first end and a second aperture on the second end,
 - 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,
 - wherein the airflow passageway is configured to allow art airflow through the cartridge from the first aperture to the second aperture of the housing,
 - wherein the first end of the housing includes an electrically conductive threaded portion that is adapted to mechanically and electrically couple to the electrically conductive threaded portion of the power source,
 - wherein the housing includes a solution holding medium comprising a solution located in the interior of the housing,
 - wherein the solution holding medium surrounds the airflow passageway in the interior of the housing and intermediate of the first end and the second end,
 - wherein the housing includes a heating element located in the interior of the housing,
 - wherein the heating element is electrically configured to vaporize at least a portion of the solution for oral provision to an individual in the airflow from the second aperture responsive to electrical power received from the battery through the electrically conductive threaded portions of the cartridge and power source.

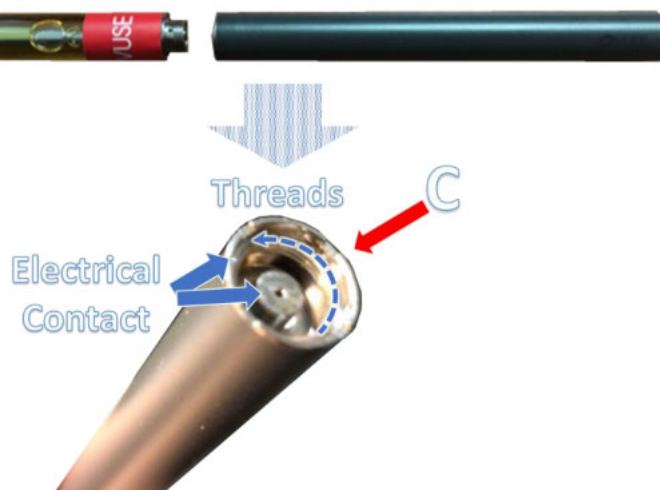
70. As shown in the figures set forth in paragraphs 71 through 81, the VUSE Ciro meets every limitation recited in Claim 1 of the '604 Patent.

71. The VUSE Ciro includes “a power source [A], wherein the power source [A] includes a battery [B]” as recited in Claim 1 of the ’604 Patent.



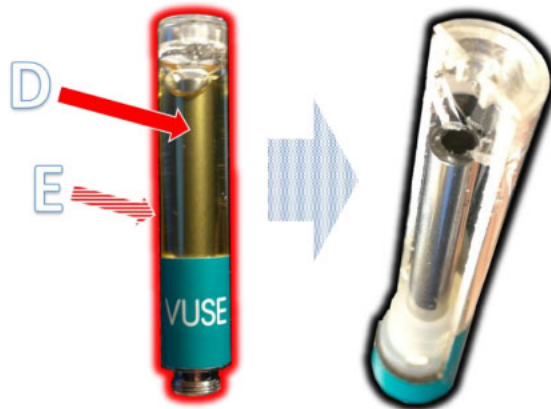
VUSE CIRO FIGURE 1.A.

72. The VUSE Ciro’s power source “includes an electrically conductive threaded portion [C]” as recited in Claim 1 of the ’604 Patent.



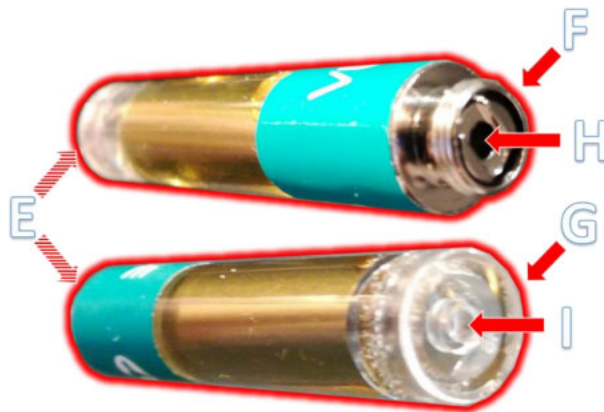
VUSE CIRO FIGURE 1.B.

73. The VUSE Ciro includes “a cartridge [D] having a housing [E] that comprises an interior” as recited in Claim 1 of the ’604 Patent.



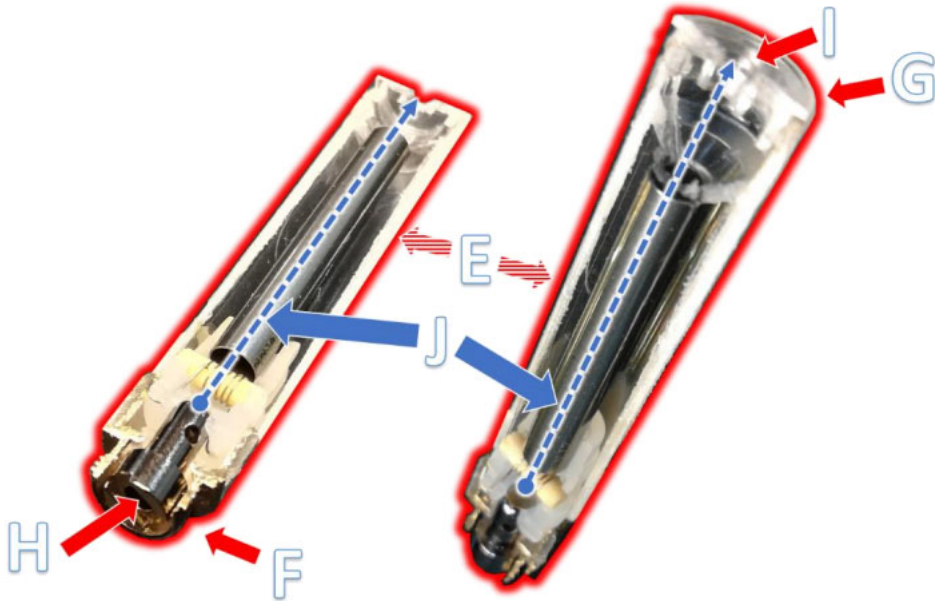
VUSE CIRO FIGURE 1.C.

74. The VUSE Ciro’s housing “includes a first end [F] and a second end [G] that is opposite the first end [F], wherein the housing [E] includes a first aperture [H] on the first end [F] and a second aperture [I] on the second end [G]” as recited in Claim 1 of the ’604 Patent.



VUSE CIRO FIGURE 1.D.

75. The VUSE Ciro's housing "includes an airflow passageway [J] that extends centrally and axially with respect to the housing [E] intermediate of the first aperture [H] on the first end [F] of the housing and the second aperture [I] on the second end [G] of the housing" as recited in Claim 1 of the '604 Patent.



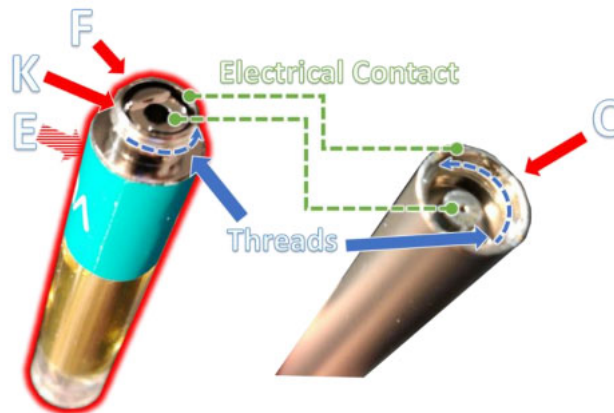
VUSE CIRO FIGURE 1.E.

76. The VUSE Ciro's "airflow passageway [J] is configured to allow art [sic] airflow through the cartridge [D] from the first aperture [H] to the second aperture [I] of the housing [E]" as recited in Claim 1 of the '604 Patent.



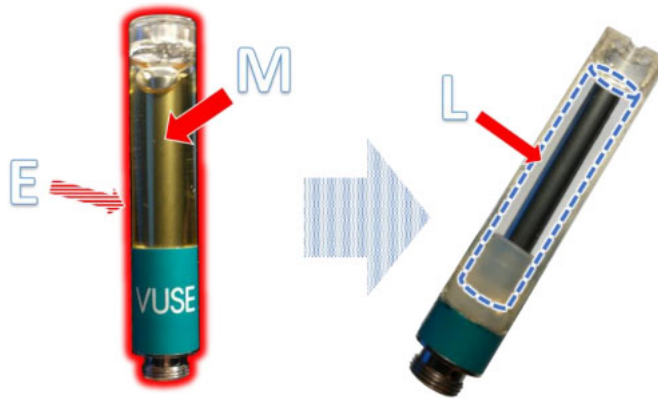
VUSE CIRO FIGURE 1.F.

77. The VUSE Ciro has a housing “wherein the first end [F] of the housing [E] includes an electrically conductive threaded portion [K] that is adapted to mechanically and electrically couple to the electrically conductive threaded portion of the power source [C]” as recited in Claim 1 of the ’604 Patent.



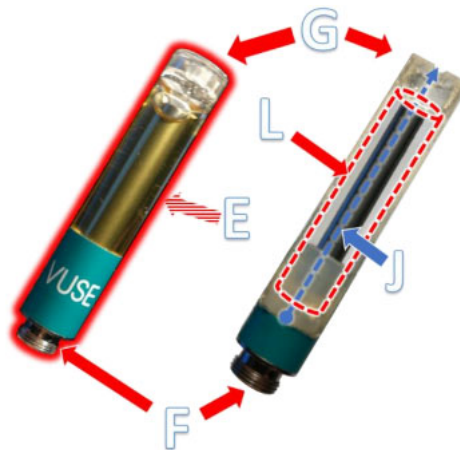
VUSE CIRO FIGURE 1.G.

78. The VUSE Ciro's housing "includes a solution holding medium [L] comprising a solution [M] located in the interior of the housing [E]" as recited in Claim 1 of the '604 Patent.



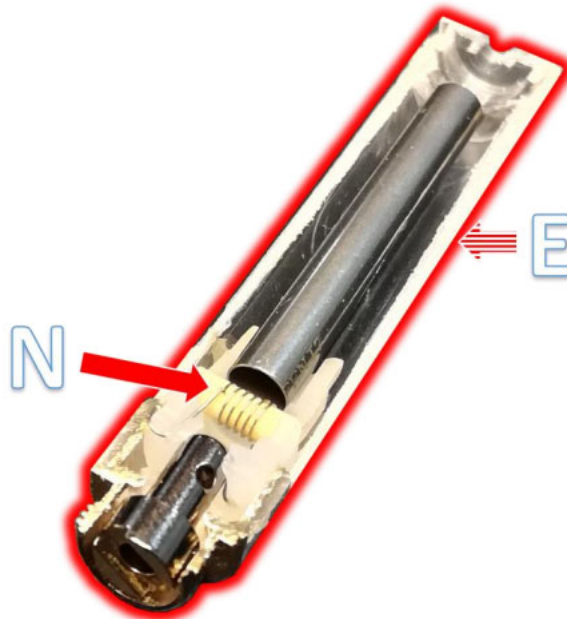
VUSE CIRO FIGURE 1.H.

79. The VUSE Ciro's "solution holding medium [L] surrounds the airflow passageway [J] in the interior of the housing [E] and intermediate of the first end [F] and the second end [G]" as recited in Claim 1 of the '604 Patent.



VUSE CIRO FIGURE 1.I.

80. The VUSE Ciro's housing "includes a heating element [N] located in the interior of the housing [E]" as recited in Claim 1 of the '604 Patent.



VUSE CIRO FIGURE 1.J.

81. The VUSE Ciro's "heating element [N] is electrically configured to vaporize at least a portion of the solution for oral provision to an individual in the airflow from the second aperture [I] responsive to electrical power received from the battery [B] through the electrically conductive threaded portions of the cartridge [K] and power source [C]" as recited in Claim 1 of the '604 Patent.



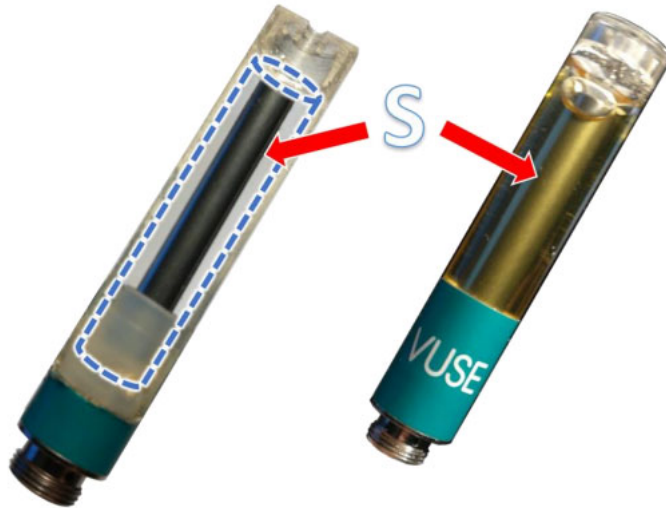
VUSE CIRO FIGURE 1.K.

82. Claim 2 of the '604 Patent reads as follows:

2. The apparatus according to claim 1, wherein the solution holding medium includes at least one of an absorbent material, a chamber, a reservoir, a capsule, or any combination thereof.

83. As shown in the figures set forth in the following paragraph, the VUSE Ciro meets every limitation recited in Claim 2 of the '604 Patent.

84. The VUSE Ciro's "solution holding medium includes at least one of an absorbent material, a chamber, a reservoir [S], a capsule, or any combination thereof" as recited in Claim 2 of the '604 Patent.



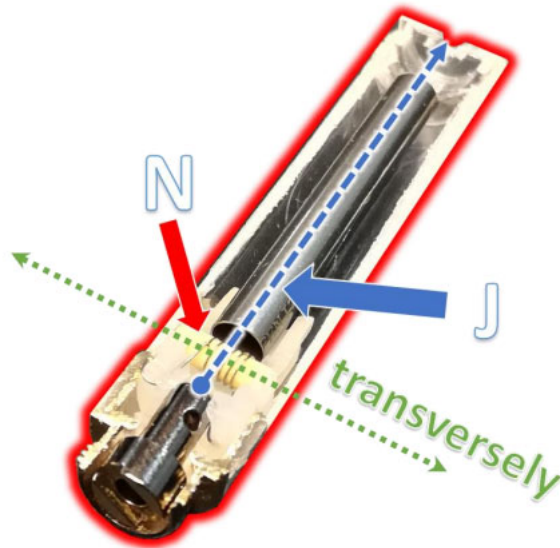
VUSE CIRO FIGURE 2

85. Claim 4 of the '604 Patent reads as follows:

4. The apparatus according to claim 1, wherein the heating element extends transversely across the airflow passageway, whereby airflow through the passageway passes on both transverse sides of the element.

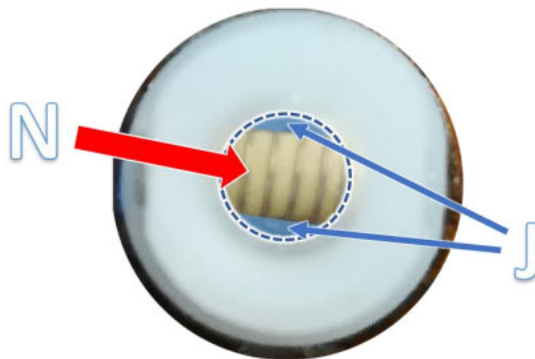
86. As shown in the figures set forth in paragraphs 87 through 88, the VUSE Ciro meets every limitation recited in Claim 4 of the '604 Patent.

87. The VUSE Ciro's "heating element [N] extends transversely across the airflow passageway [J]" as recited in Claim 4 of the '604 Patent.



VUSE CIRO FIGURE 4.A.

88. In the VUSE Ciro, “airflow through the passageway [J] passes on both transverse sides of the element [N]” as recited in Claim 4 of the ’604 Patent.



Top-down view of
heating element

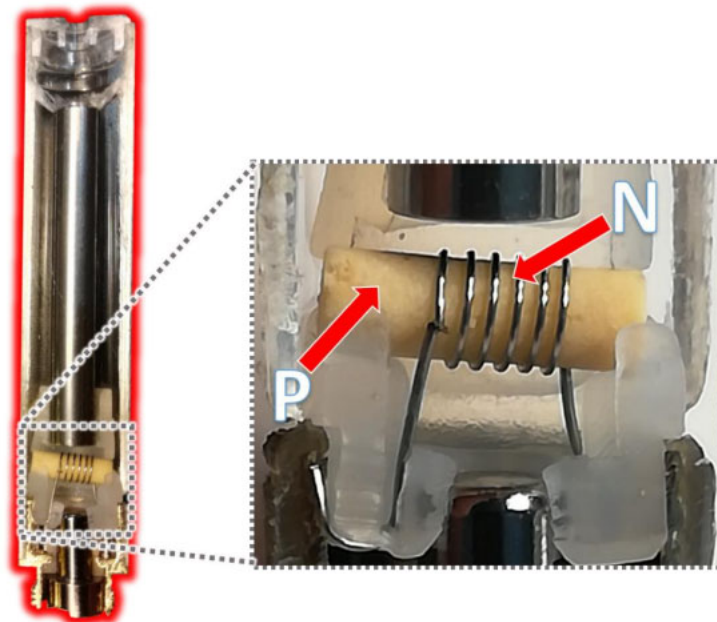
VUSE CIRO FIGURE 4.B.

89. Claim 6 of the '604 Patent reads as follows:

6. The apparatus according to claim 2, wherein the heating element comprises a wicking material to attract the solution from the solution holding medium to the heating element.

90. As shown in the figures set forth in the following paragraph, the VUSE Ciro meets every limitation recited in Claim 6 of the '604 Patent.

91. The VUSE Ciro's "heating element [N] comprises a wicking material [P] to attract the solution from the solution holding medium to the heating element [N]" as recited in Claim 6 of the '604 Patent.



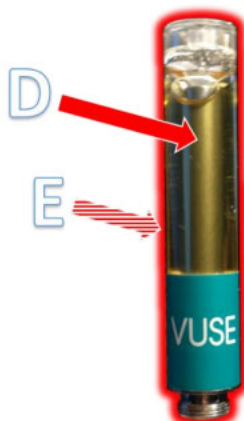
VUSE CIRO FIGURE 6

92. Claim 12 of the '604 Patent reads as follows:

12. An apparatus comprising:
electronic cigarette cartridge, wherein the electronic cigarette cartridge includes a housing,
wherein the housing is constructed of a non-metallic material, wherein the housing includes:
an interior;
a first end;
a second end that is opposite the first end;
a heating element located in the interior of the housing;
an airflow passageway that extends intermediate of the first end and the second end axially through the interior of the housing along a central longitudinal axis of the housing, wherein the airflow passageway enables airflow from the first end to the second end;
a solution holding medium located in the interior of the housing, wherein the medium extends in surrounding relation of the heating element and the airflow passageway, wherein the medium includes a liquid solution, wherein the medium includes at least one of an absorbent material, a chamber, a reservoir, a capsule, or any combination thereof,
wherein the first end of the housing includes an electrically conductive threaded portion that is configured to mechanically and electrically couple to a further electrically conductive threaded portion in operative connection with a power source, wherein the heating element is configured to vaporize at least a portion of the solution for oral delivery from the second end of the housing upon receiving current from the power source through the electrically conductive threaded portion of the cartridge.

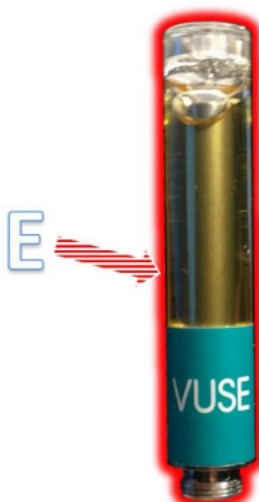
93. As shown in the figures set forth in paragraphs 94 through 105, the VUSE Ciro meets every limitation recited in Claim 12 of the '604 Patent.

94. The VUSE Ciro has an “electronic cigarette cartridge [D], wherein the electronic cigarette cartridge [D] includes a housing [E]” as recited in Claim 12 of the '604 Patent.



VUSE CIRO FIGURE 12.A.

95. The VUSE Ciro's "housing [E] is constructed of a non-metallic material" as recited in Claim 12 of the '604 Patent.



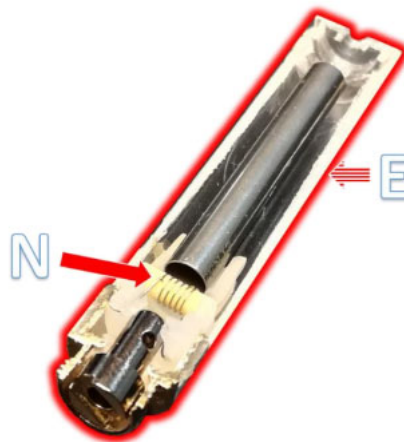
VUSE CIRO FIGURE 12.B.

96. The VUSE Ciro's "housing [E] includes: an interior; a first end [F]; a second end [G] that is opposite the first end [F]" as recited in Claim 12 of the '604 Patent.



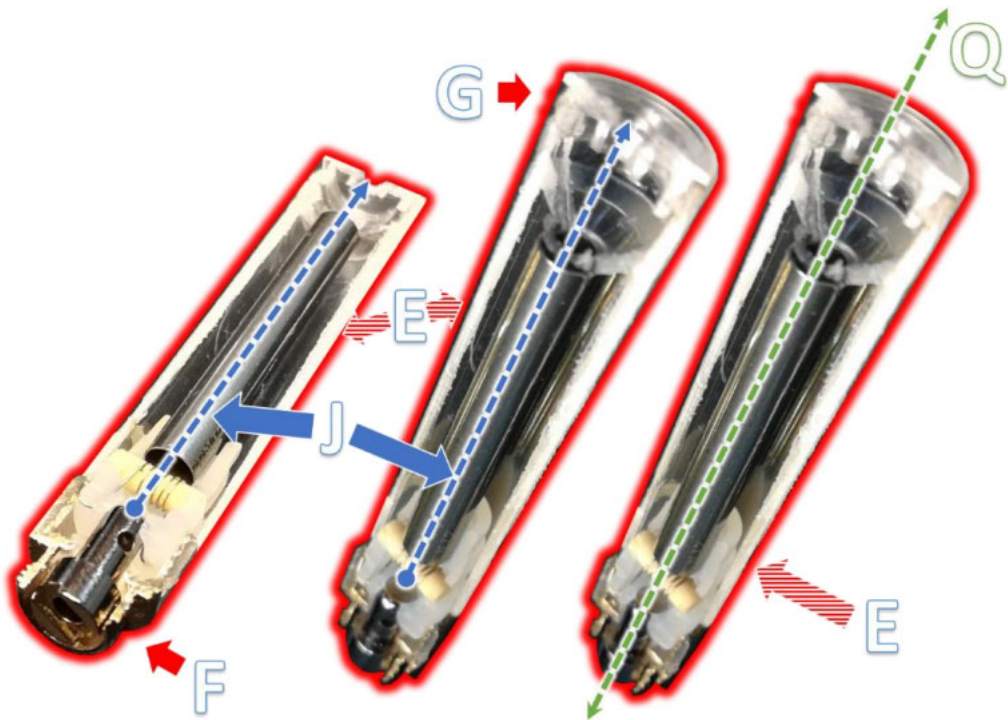
VUSE CIRO FIGURE 12.C

97. The VUSE Ciro has "a heating element [N] located in the interior of the housing [E]" as recited in Claim 12 of the '604 Patent.



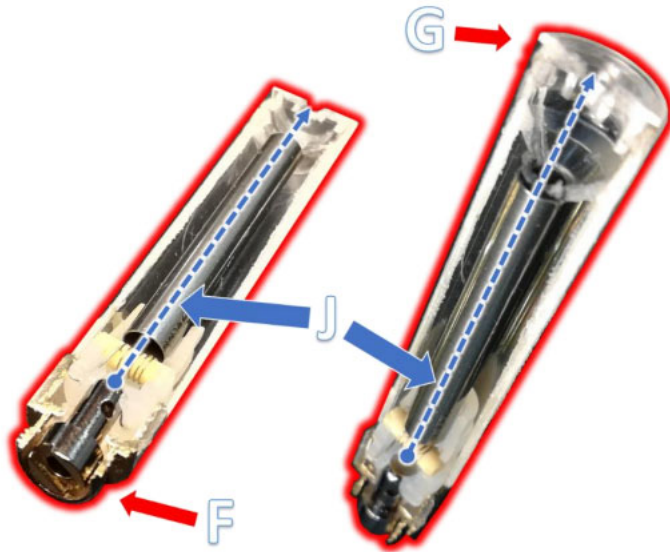
VUSE CIRO FIGURE 12.D.

98. The VUSE Ciro has “an airflow passageway [J] that extends intermediate of the first end [F] and the second end [G] axially through the interior of the housing [E] along a central longitudinal axis [Q] of the housing [E]” as recited in Claim 12 of the ’604 Patent.



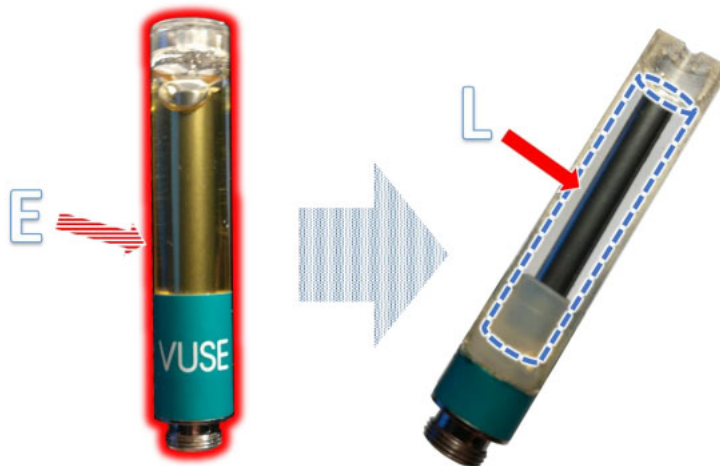
VUSE CIRO FIGURE 12.E.

99. The VUSE Ciro’s “airflow passageway [J] enables airflow from the first end [F] to the second end [G]” as recited in Claim 12 of the ’604 Patent.



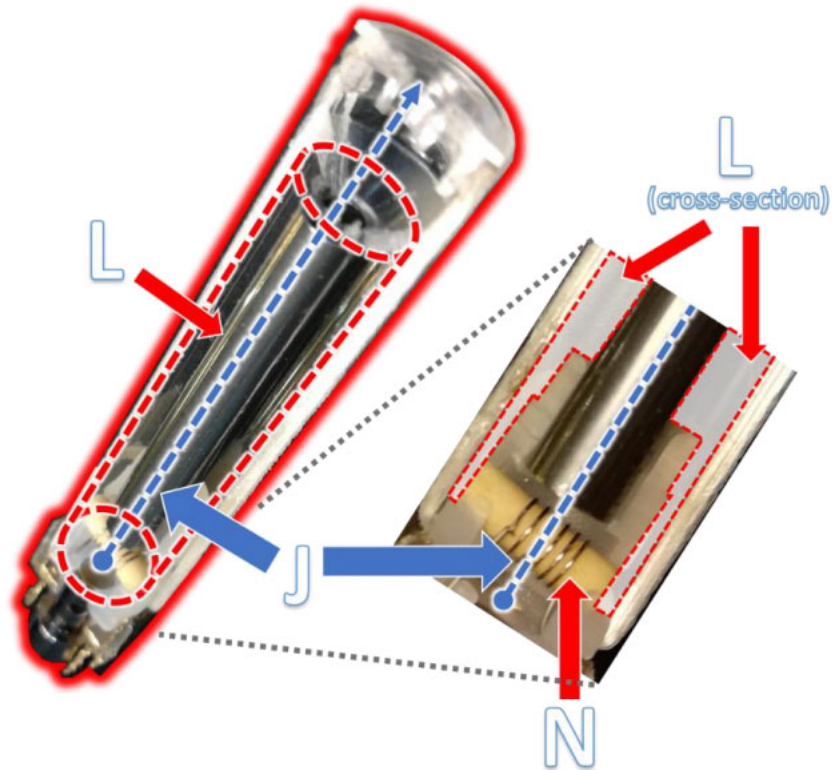
VUSE CIRO FIGURE 12.F.

100. The VUSE Ciro has “a solution holding medium [L] located in the interior of the housing [E]” as recited in Claim 12 of the '604 Patent.



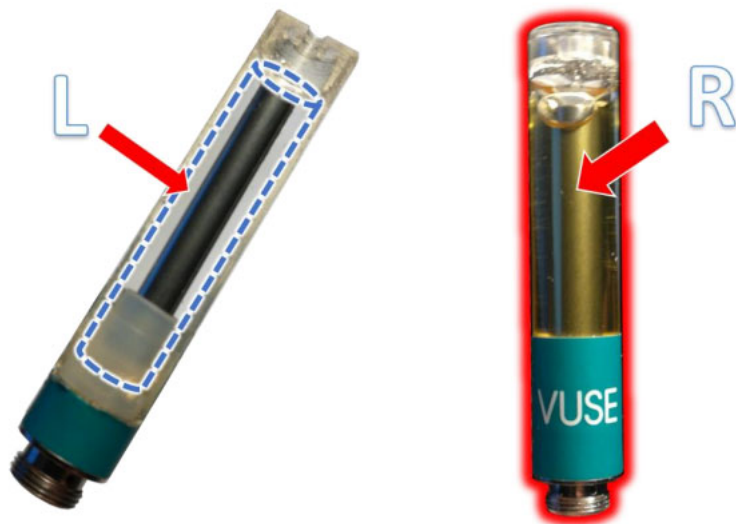
VUSE CIRO FIGURE 12.G.

101. The VUSE Ciro's solution holding "medium [L] extends in surrounding relation of the heating element [N] and the airflow passageway [J]" as recited in Claim 12 of the '604 Patent.



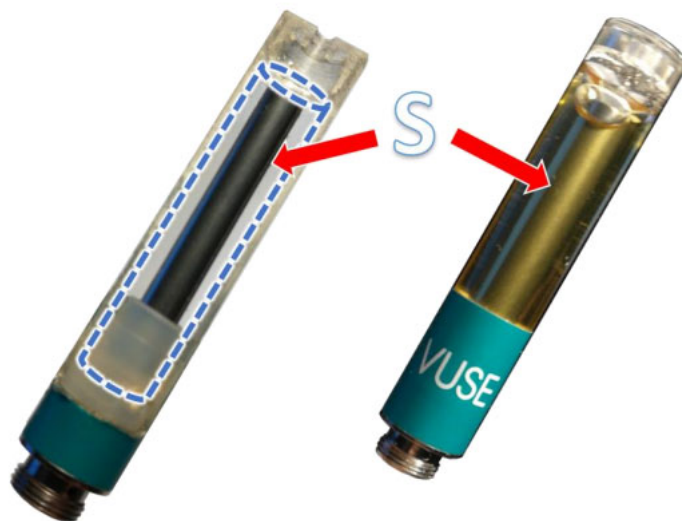
VUSE CIRO FIGURE 12.H.

102. The VUSE Ciro's solution holding "medium [L] includes a liquid solution [R]" as recited in Claim 12 of the '604 Patent.



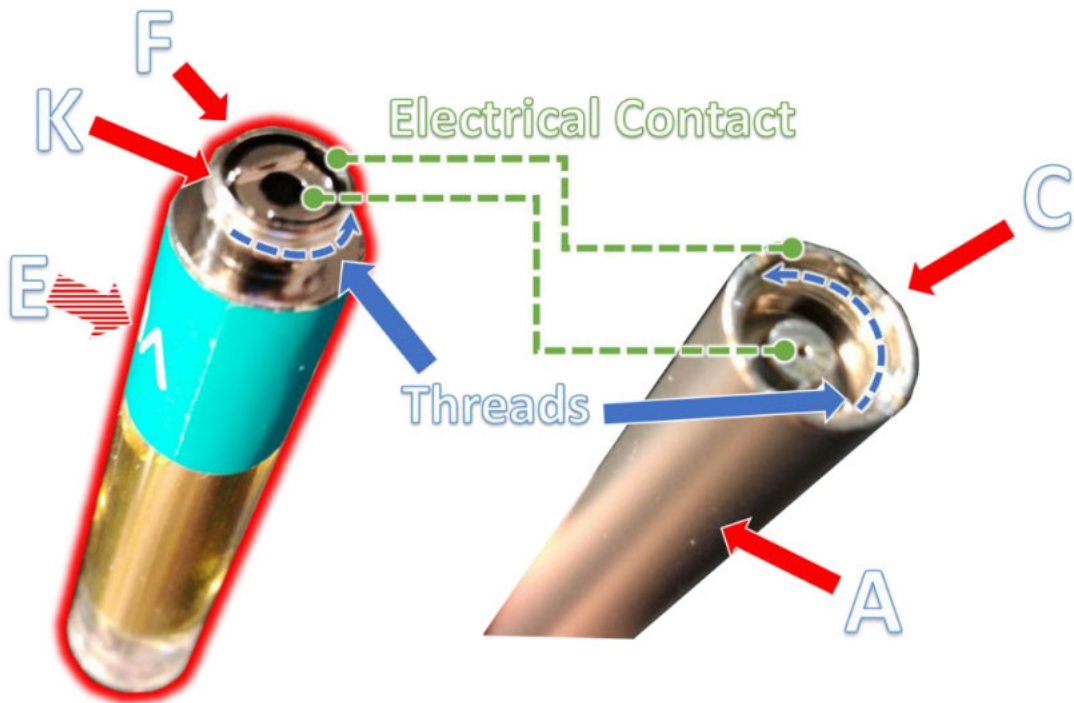
VUSE CIRO FIGURE 12.I.

103. The VUSE Ciro’s solution holding “medium [L] includes at least one of an absorbent material, a chamber, a reservoir [S], a capsule, or any combination thereof” as recited in Claim 12 of the ’604 Patent.



VUSE CIRO FIGURE 12.J.

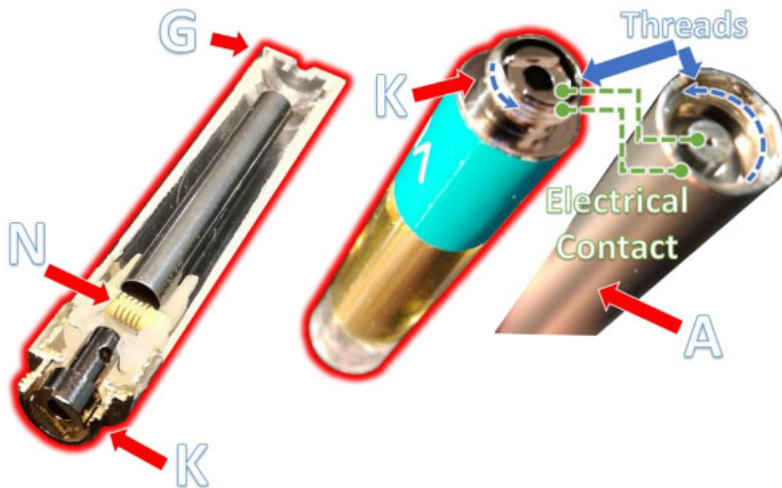
104. The VUSE Ciro's "first end [F] of the housing [E] includes an electrically conductive threaded portion [K] that is configured to mechanically and electrically couple to a further electrically conductive threaded portion [C] in operative connection with a power source [A]" as recited in Claim 12 of the '604 Patent.



VUSE CIRO FIGURE 12.K.

105. The VUSE Ciro's "heating element [N] is configured to vaporize at least a portion of the solution for oral delivery from the second end [G] of the housing upon receiving current from the power source [A] through the electrically

conductive threaded portion of the cartridge [K]” as recited in Claim 12 of the ’604 Patent.



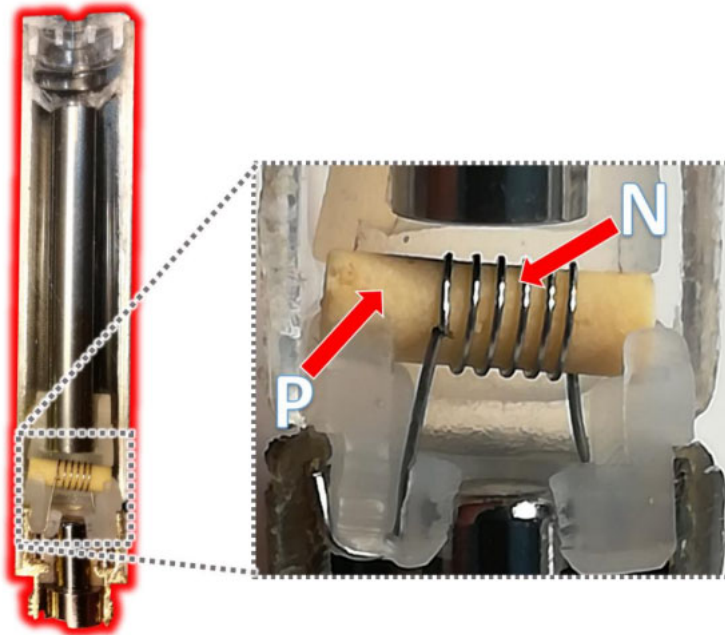
VUSE CIRO FIGURE 12.L.

106. Claim 14 of the ’604 Patent reads as follows:

14. The apparatus according to claim 12, wherein the heating element comprises a wicking material that is configured to attract the solution from the solution holding medium.

107. As shown in the figures set forth in the following paragraph, the VUSE Ciro meets every limitation recited in Claim 14 of the ’604 Patent.

108. The VUSE Ciro’s “heating element [N] comprises a wicking material [P] that is configured to attract the solution from the solution holding medium” as recited in Claim 14 of the ’604 Patent.



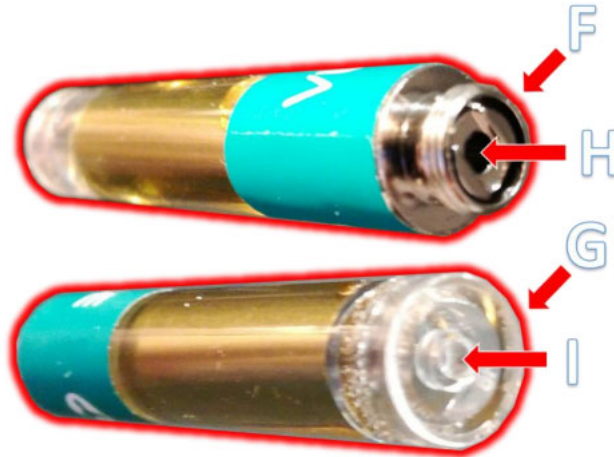
VUSE CIRO FIGURE 14

109. Claim 16 of the '604 Patent reads as follows:

16. The apparatus according to claim 12, wherein the first end comprises a centrally located first aperture and the second end comprises a centrally located second aperture, wherein the airflow passageway extends between the first aperture and the second aperture axially through the interior of the housing, and wherein at least a portion of the heating element extends in the airflow passageway, and wherein no portion of the solution holding medium intersects the central longitudinal axis.

110. As shown in the figures set forth in paragraphs 111 through 114, the VUSE Ciro meets every limitation recited in Claim 16 of the '604 Patent.

111. The VUSE Ciro's "first end [F] comprises a centrally located first aperture [H] and the second end [G] comprises a centrally located second aperture [I]" as recited in Claim 16 of the '604 Patent.



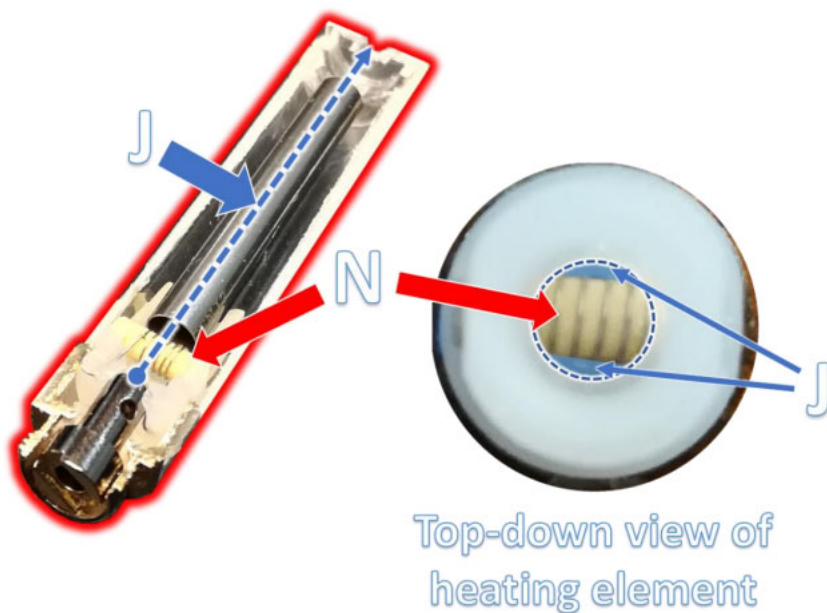
VUSE CIRO FIGURE 16.A.

112. The VUSE Ciro's "airflow passageway [J] extends between the first aperture [H] and the second aperture [I] axially through the interior of the housing [E]" as recited in Claim 16 of the '604 Patent.



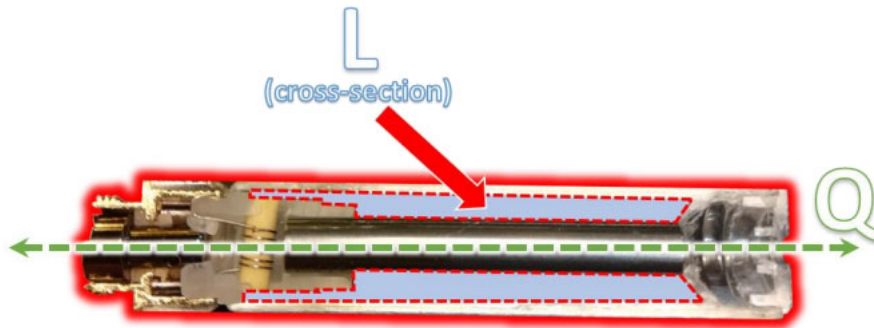
VUSE CIRO FIGURE 16.B.

113. In the VUSE Ciro, “at least a portion of the heating element [N] extends in the airflow passageway [J]” as recited in Claim 16 of the ’604 Patent.



VUSE CIRO FIGURE 16.C.

114. In the VUSE Ciro, “no portion of the solution holding medium [L] intersects the central longitudinal axis [Q]” as recited in Claim 16 of the ’604 Patent.



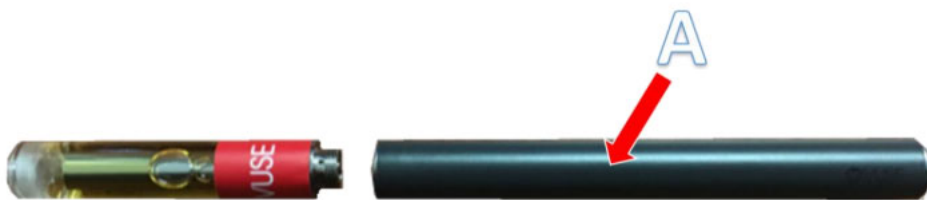
VUSE CIRO FIGURE 16.D.

115. Claim 18 of the ’604 Patent reads as follows:

18. The apparatus according to claim 12, further comprising the power source.

116. As shown in the figures set forth in the following paragraph, the VUSE Ciro meets every limitation recited in Claim 18 of the ’604 Patent.

117. The VUSE Ciro further comprises “the power source [A]” as recited in Claim 18 of the ’604 Patent.

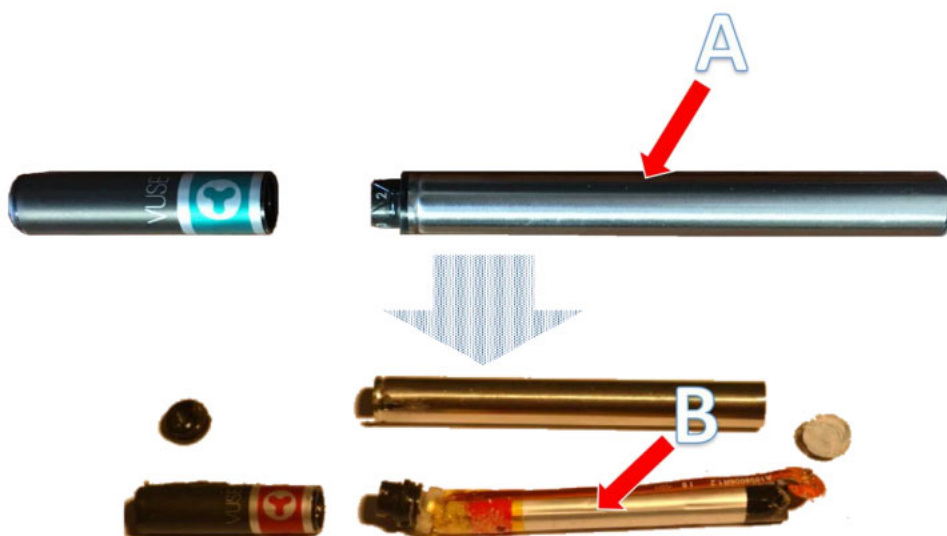


VUSE CIRO FIGURE 18

Direct Infringement: VUSE Solo

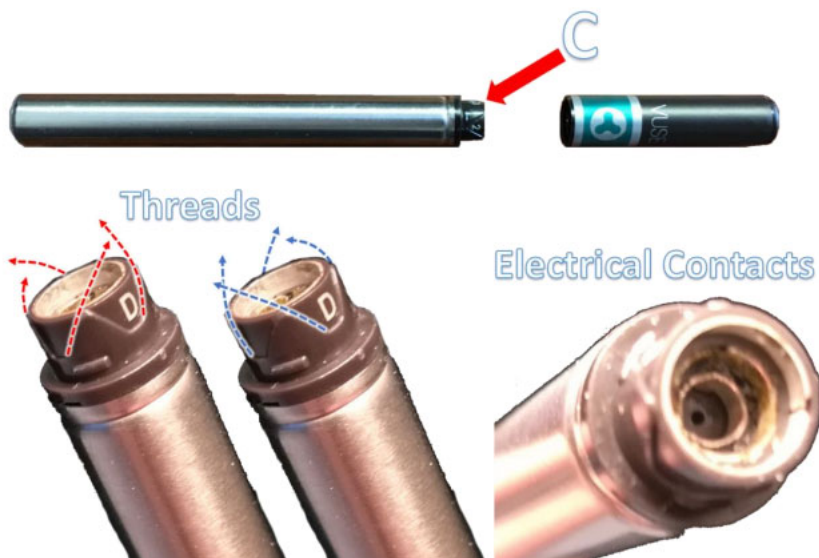
118. As shown in the figures set forth in paragraphs 119 through 129, the VUSE Solo meets every limitation recited in Claim 1 of the '604 Patent.

119. The VUSE Solo includes “a power source [A], wherein the power source [A] includes a battery [B]” as recited in Claim 1 of the '604 Patent.



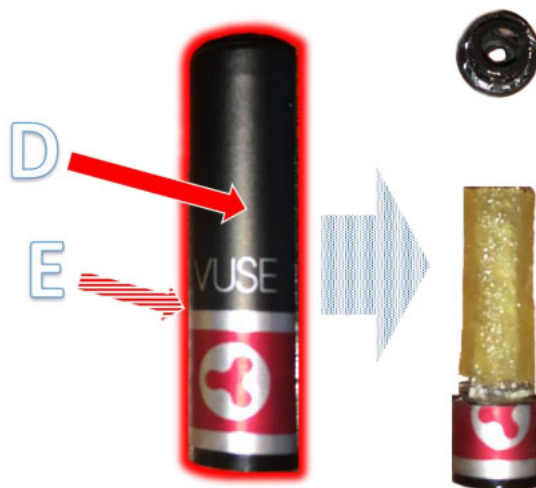
VUSE SOLO FIGURE 1.A.

120. The VUSE Solo’s power source “includes an electrically conductive threaded portion [C]” as recited in Claim 1 of the '604 Patent.



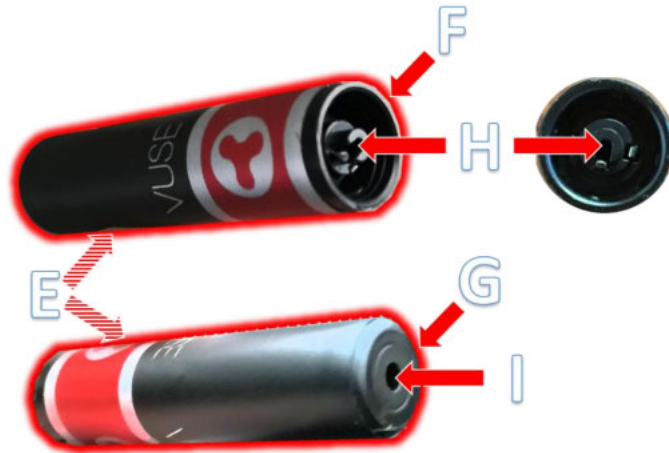
VUSE SOLO FIGURE 1.B.

121. The VUSE Solo includes “a cartridge [D] having a housing [E] that comprises an interior” as recited in Claim 1 of the ’604 Patent.



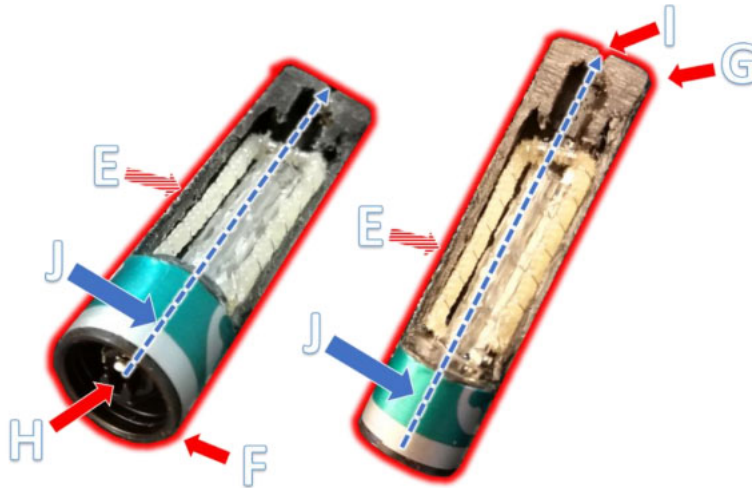
VUSE SOLO FIGURE 1.C.

122. The VUSE Solo's housing "includes a first end [F] and a second end [G] that is opposite the first end [F], wherein the housing [E] includes a first aperture [H] on the first end [F] and a second aperture [I] on the second end [G]" as recited in Claim 1 of the '604 Patent.



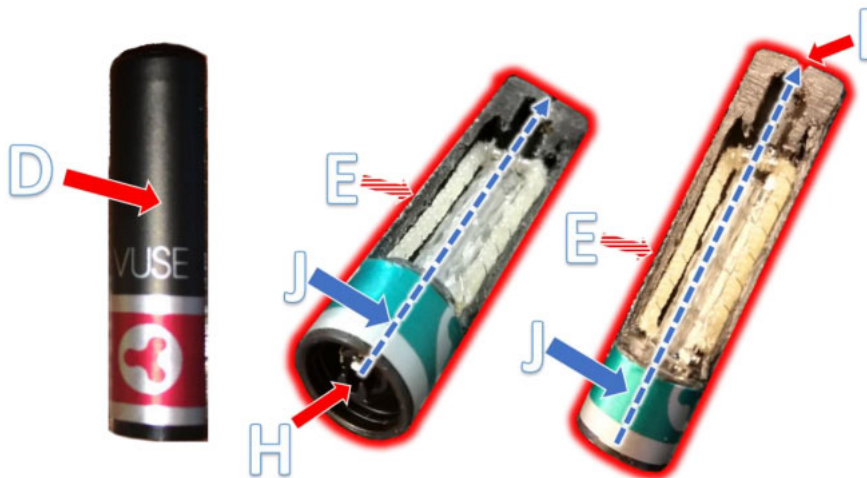
VUSE SOLO FIGURE 1.D.

123. The VUSE Solo's housing "includes an airflow passageway [J] that extends centrally and axially with respect to the housing [E] intermediate of the first aperture [H] on the first end [F] of the housing and the second aperture [I] on the second end [G] of the housing" as recited in Claim 1 of the '604 Patent.



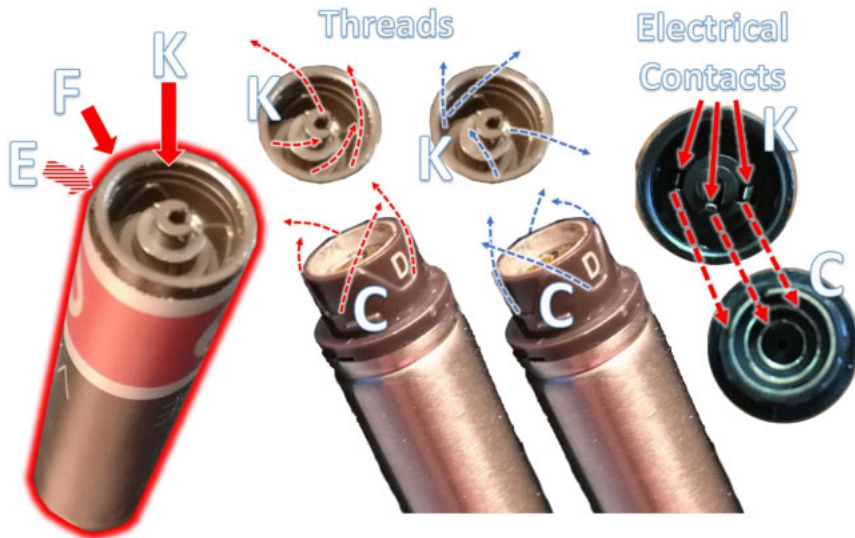
VUSE SOLO FIGURE 1.E.

124. The VUSE Solo’s “airflow passageway [J] is configured to allow art [sic] airflow through the cartridge [D] from the first aperture [H] to the second aperture [I] of the housing [E]” as recited in Claim 1 of the ’604 Patent.



VUSE SOLO FIGURE 1.F.

125. The VUSE Solo has a housing “wherein the first end [F] of the housing [E] includes an electrically conductive threaded portion [K] that is adapted to mechanically and electrically couple to the electrically conductive threaded portion of the power source [C]” as recited in Claim 1 of the ’604 Patent.



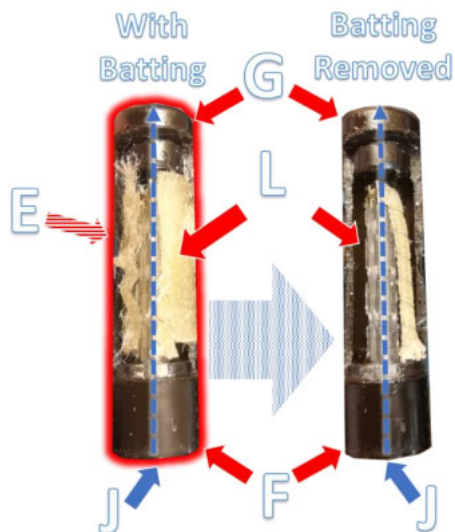
VUSE SOLO FIGURE 1.G.

126. The VUSE Solo’s housing “includes a solution holding medium [L] comprising a solution [M] located in the interior of the housing [E]” as recited in Claim 1 of the ’604 Patent. In the VUSE Solo device, the solution holding medium [L] is the batting material that holds the solution and any portion of the chamber in which liquid solution resides.



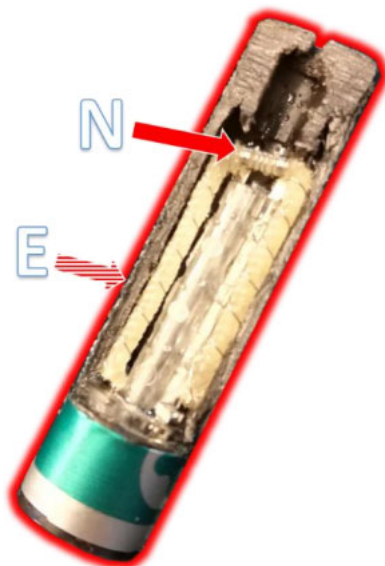
VUSE SOLO FIGURE 1.H.

127. The VUSE Solo’s “solution holding medium [L] surrounds the airflow passageway [J] in the interior of the housing [E] and intermediate of the first end [F] and the second end [G]” as recited in Claim 1 of the ’604 Patent.



VUSE SOLO FIGURE 1.I.

128. The VUSE Solo’s housing “includes a heating element [N] located in the interior of the housing [E]” as recited in Claim 1 of the ’604 Patent.



VUSE SOLO FIGURE 1.J.

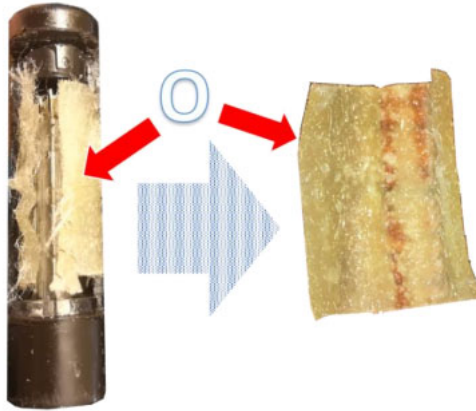
129. The VUSE Solo’s “heating element [N] is electrically configured to vaporize at least a portion of the solution for oral provision to an individual in the airflow from the second aperture [I] responsive to electrical power received from the battery [B] through the electrically conductive threaded portions of the cartridge [K] and power source [C]” as recited in Claim 1 of the ’604 Patent.



VUSE SOLO FIGURE 1.K.

130. As shown in the figures set forth in the following paragraph, the VUSE Solo meets every limitation recited in Claim 2 of the ’604 Patent.

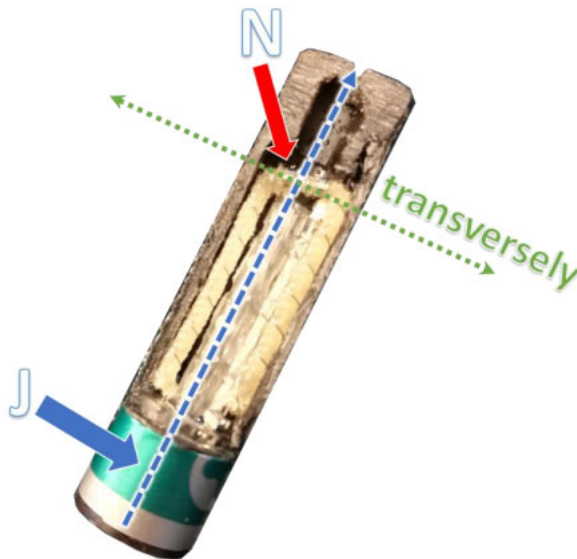
131. The VUSE Solo’s “solution holding medium includes at least one of an absorbent material [O], a chamber, a reservoir, a capsule, or any combination thereof” as recited in Claim 2 of the ’604 Patent.



VUSE SOLO FIGURE 2

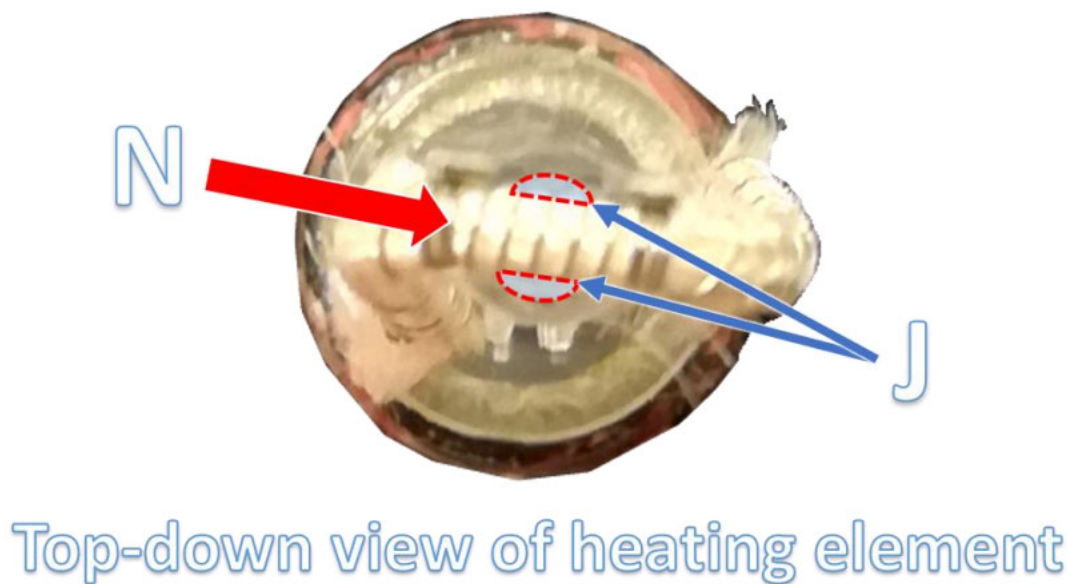
132. As shown in the figures set forth in paragraphs 133 through 134, the VUSE Solo meets every limitation recited in Claim 4 of the '604 Patent.

133. The VUSE Solo's "heating element [N] extends transversely across the airflow passageway [J]" as recited in Claim 4 of the '604 Patent.



VUSE SOLO FIGURE 4.A.

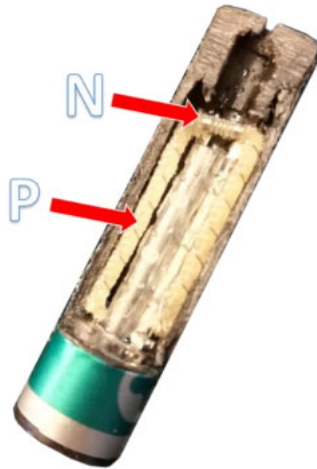
134. In the VUSE Solo, “airflow through the passageway [J] passes on both transverse sides of the element [N]” as recited in Claim 4 of the ’604 Patent.



VUSE SOLO FIGURE 4.B.

135. As shown in the figures set forth in the following paragraph, the VUSE Solo meets every limitation recited in Claim 6 of the ’604 Patent.

136. The VUSE Solo’s “heating element [N] comprises a wicking material [P] to attract the solution from the solution holding medium to the heating element [N]” as recited in Claim 6 of the ’604 Patent.



VUSE SOLO FIGURE 6

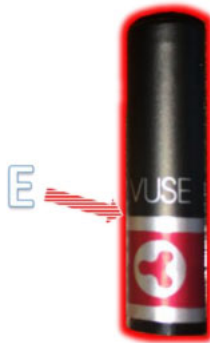
137. As shown in the figures set forth in paragraphs 138 through 149, the VUSE Solo meets every limitation recited in Claim 12 of the '604 Patent.

138. The VUSE Solo has an “electronic cigarette cartridge [D], wherein the electronic cigarette cartridge [D] includes a housing [E]” as recited in Claim 12 of the '604 Patent.



VUSE SOLO FIGURE 12.A.

139. The VUSE Solo's "housing [E] is constructed of a non-metallic material" as recited in Claim 12 of the '604 Patent.



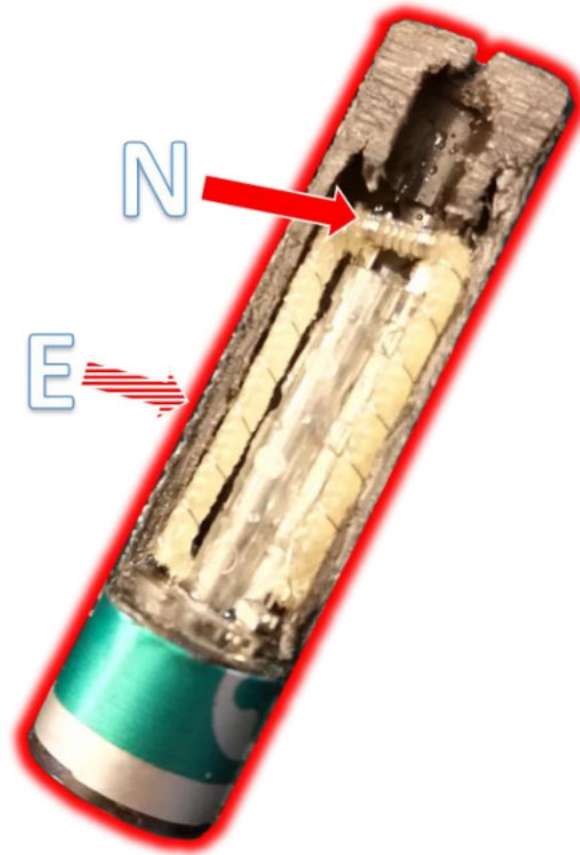
VUSE SOLO FIGURE 12.B.

140. The VUSE Solo's "housing [E] includes: an interior; a first end [F]; a second end [G] that is opposite the first end [F]" as recited in Claim 12 of the '604 Patent.



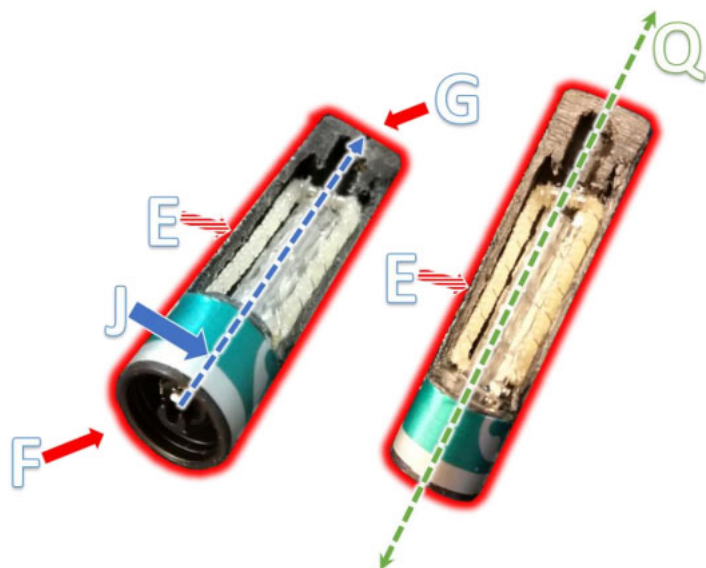
VUSE SOLO FIGURE 12.C.

141. The VUSE Solo has “a heating element [N] located in the interior of the housing [E]” as recited in Claim 12 of the ’604 Patent.



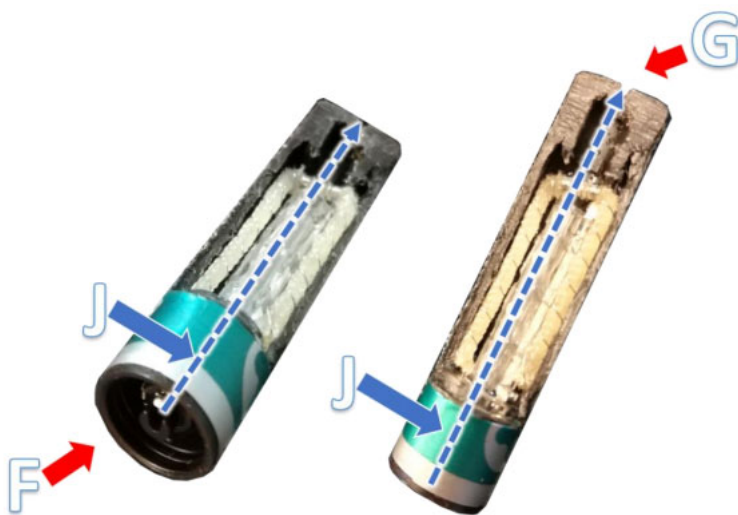
VUSE SOLO FIGURE 12.D.

142. The VUSE Solo has “an airflow passageway [J] that extends intermediate of the first end [F] and the second end [G] axially through the interior of the housing [E] along a central longitudinal axis [Q] of the housing [E]” as recited in Claim 12 of the ’604 Patent.



VUSE SOLO FIGURE 12.E.

143. The VUSE Solo’s “airflow passageway [J] enables airflow from the first end [F] to the second end [G]” as recited in Claim 12 of the ’604 Patent.



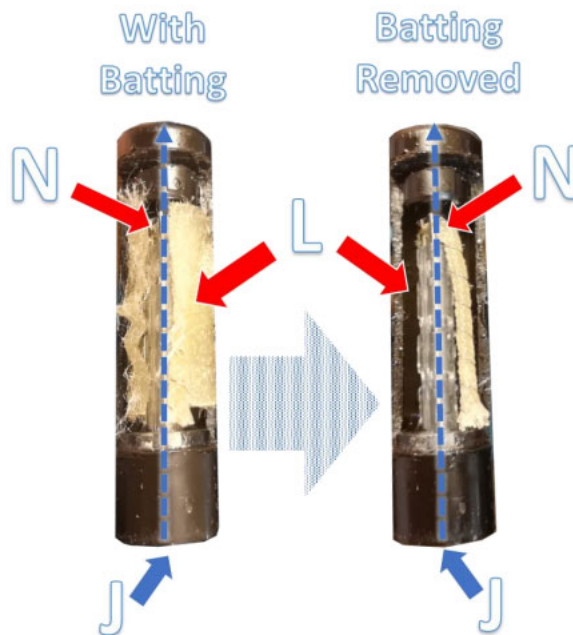
VUSE SOLO FIGURE 12.F.

144. The VUSE Solo has “a solution holding medium [L] located in the interior of the housing [E]” as recited in Claim 12 of the ’604 Patent. In the VUSE Solo device, the solution holding medium [L] is the batting material that holds the solution and any portion of the chamber in which liquid solution resides.



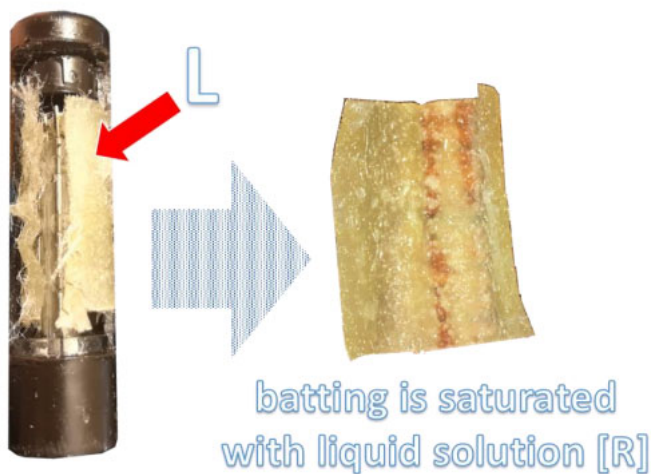
VUSE SOLO FIGURE 12.G.

145. The VUSE Solo’s solution holding “medium [L] extends in surrounding relation of the heating element [N] and the airflow passageway [J]” as recited in Claim 12 of the ’604 Patent.



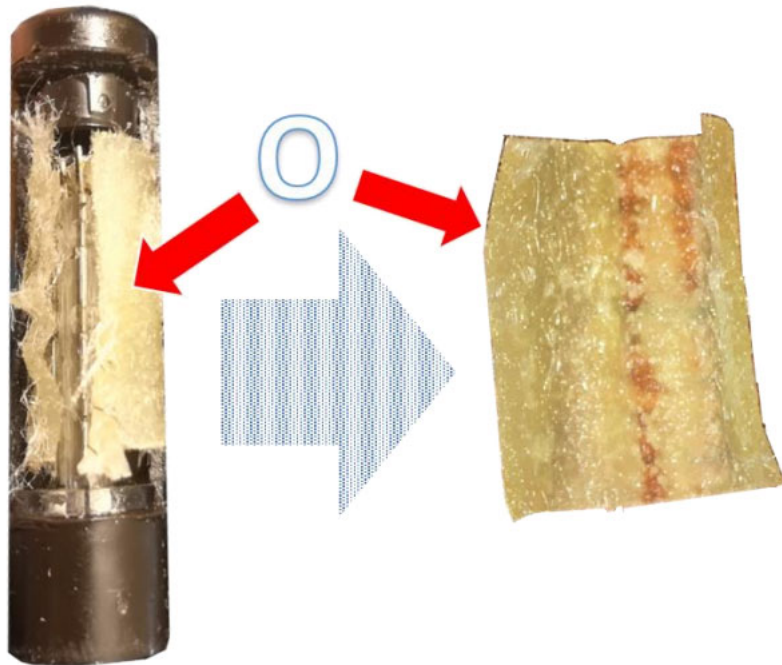
VUSE SOLO FIGURE 12.H.

146. The VUSE Solo's solution holding "medium [L] includes a liquid solution [R]" as recited in Claim 12 of the '604 Patent.



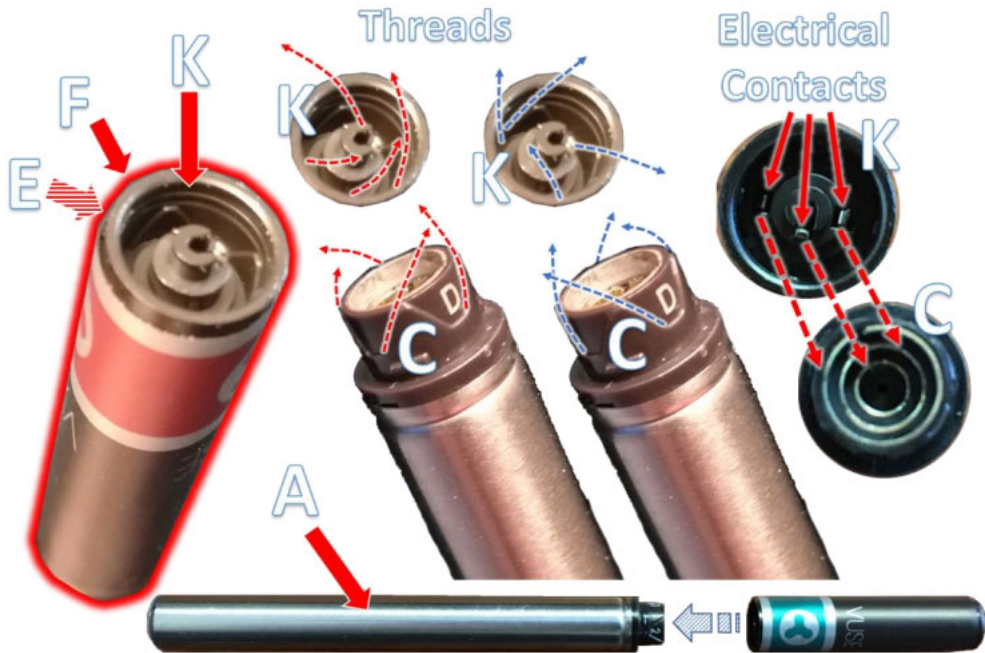
VUSE SOLO FIGURE 12.I.

147. The VUSE Solo’s solution holding “medium includes at least one of an absorbent material [O], a chamber, a reservoir, a capsule, or any combination thereof” as recited in Claim 12 of the ’604 Patent.



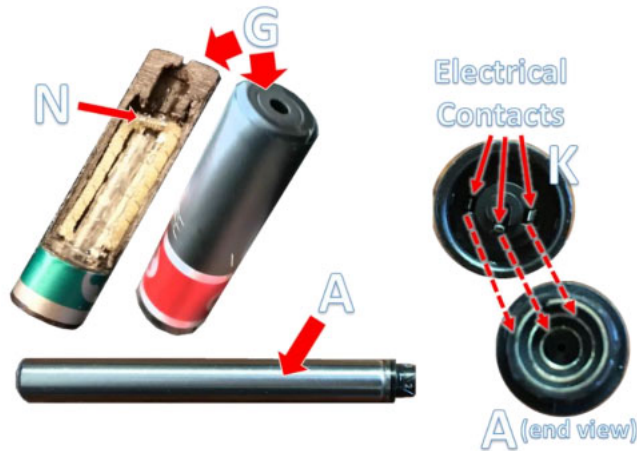
VUSE SOLO FIGURE 12.J.

148. The VUSE Solo’s “first end [F] of the housing [E] includes an electrically conductive threaded portion [K] that is configured to mechanically and electrically couple to a further electrically conductive threaded portion [C] in operative connection with a power source [A]” as recited in Claim 12 of the ’604 Patent.



VUSE SOLO FIGURE 12.K.

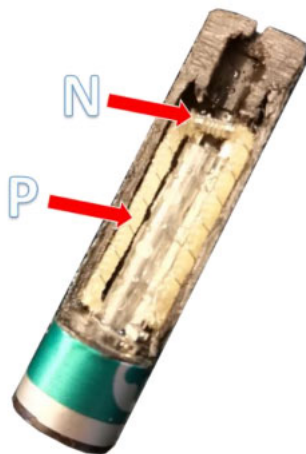
149. The VUSE Solo’s “heating element [N] is configured to vaporize at least a portion of the solution for oral delivery from the second end [G] of the housing upon receiving current from the power source [A] through the electrically conductive threaded portion of the cartridge [K]” as recited in Claim 12 of the ’604 Patent.



VUSE SOLO FIGURE 12.L.

150. As shown in the figures set forth in the following paragraph, the VUSE Solo meets every limitation recited in Claim 14 of the '604 Patent.

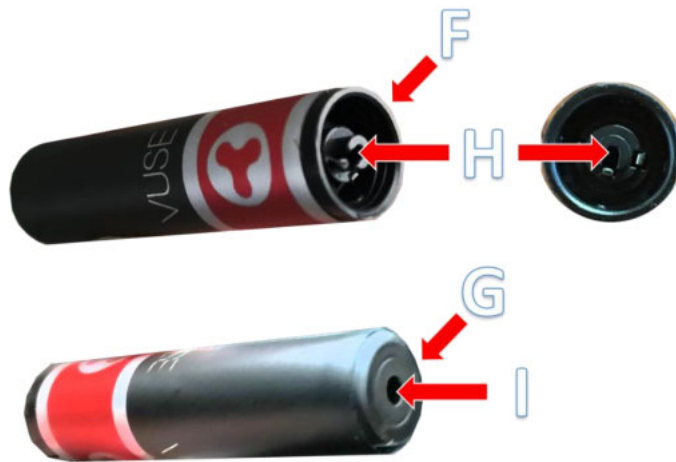
151. The VUSE Solo's "heating element [N] comprises a wicking material [P] that is configured to attract the solution from the solution holding medium" as recited in Claim 14 of the '604 Patent.



VUSE SOLO FIGURE 14

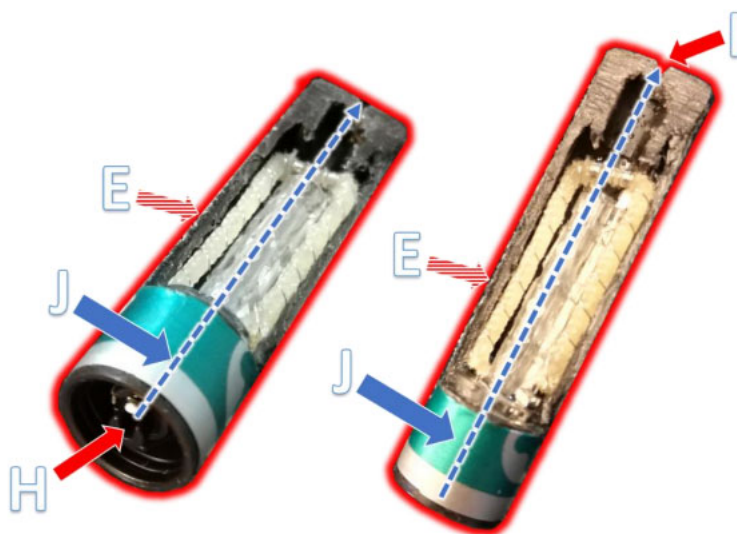
152. As shown in the figures set forth in paragraphs 153 through 156, the VUSE Solo meets every limitation recited in Claim 16 of the '604 Patent.

153. The VUSE Solo's "first end [F] comprises a centrally located first aperture [H] and the second end [G] comprises a centrally located second aperture [I]" as recited in Claim 16 of the '604 Patent.



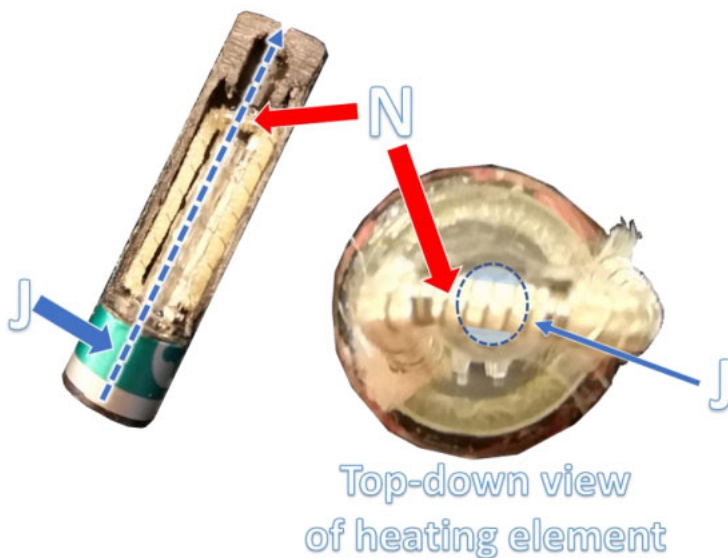
VUSE SOLO FIGURE 16.A.

154. The VUSE Solo's "airflow passageway [J] extends between the first aperture [H] and the second aperture [I] axially through the interior of the housing [E]" as recited in Claim 16 of the '604 Patent.



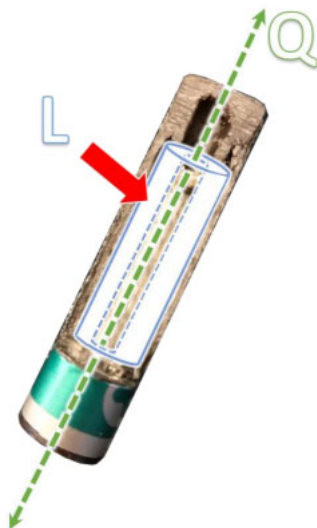
VUSE SOLO FIGURE 16.B.

155. In the VUSE Solo, “at least a portion of the heating element [N] extends in the airflow passageway [J]” as recited in Claim 16 of the ’604 Patent.



VUSE SOLO FIGURE 16.C.

156. In the VUSE Solo, “no portion of the solution holding medium [L] intersects the central longitudinal axis [Q]” as recited in Claim 16 of the ’604 Patent.



VUSE SOLO FIGURE 16.D.

157. As shown in the figures set forth in the following paragraph, the VUSE Solo meets every limitation recited in Claim 18 of the ’604 Patent.

158. The VUSE Solo further comprises “the power source [A]” as recited in Claim 18 of the ’604 Patent.



VUSE SOLO FIGURE 18

Indirect Infringement

159. Defendant has also contributorily infringed the '604 Patent in violation of 35 U.S.C. § 271(c) by, itself and/or through its agents, contributing to the direct infringement of the '604 Patent by its customers by making, using, importing, offering to sell, and/or selling vaporizing device components that constitute a material part of the asserted claims of the '604 Patent and that have no substantial non-infringing use, which, when used by its customers as instructed by Defendant, result in direct infringement of the asserted claims of the '604 Patent by its customers, in this judicial district and within, from, and/or into the United States, without permission or license from Fuma, and will continue to do so unless enjoined by this Court.

160. Examples of vaporizing device components that constitute a material part of the invention of the asserted claims of the '604 Patent, have no substantial non-infringing uses, and contribute to the direct infringement of the asserted claims of the '604 Patent include, but are not limited to, the (1) VUSE Solo Cartridges, (2) VUSE Solo Power Units, (3) VUSE Ciro Cartridges, (4) VUSE Ciro Power Units, and component parts thereof.

161. Upon information and belief, having knowledge of the '604 Patent, Defendant is aware that the purchase and use of the VUSE Solo and VUSE Ciro,

and components of the VUSE Solo and VUSE Ciro products by Defendant's customers results in direct infringement of the '604 Patent.

162. Defendant instructs users on how to use the VUSE Solo and VUSE Ciro products and components of the VUSE Solo and VUSE Ciro products. (*See, e.g.,* Ex. P, Frequently Asked Product Related Questions, <https://vusevapor.com/faqs> (last visited February 18, 2019) [hereinafter "VUSE FAQs"]]).

163. Defendant instructs users to purchase and use replacement VUSE Solo and VUSE Ciro cartridges when they are depleted. (*See id.* ("How will I know when it is time to change the Vuse Ciro cartridge?"; "How will I know when it is time to change the Vuse Solo cartridge?"; "Why is my Vuse Solo PowerUnit flashing white?")).

164. Defendant instructs users to purchase and use a replacement VUSE Solo Power Unit and/or VUSE Ciro Power Unit. (*See id.* ("What happens if my Vuse Solo PowerUnit won't charge?"; "What happens if my Vuse Ciro power unit won't charge?")).

165. Defendant instructs users and designs its products such that the VUSE Solo Cartridges cannot be used with any other power unit other than the VUSE Solo Power Unit. (*See, e.g., Id.* ("Can I use Vuse Solo cartridges with a power unit

other than the Vuse Solo PowerUnit? No. Vuse Solo cartridges are intended only for use with Vuse Solo PowerUnits.”)).

166. Defendant has admitted that the VUSE Solo Cartridges can only be used with VUSE Solo Power Units.

1 46. In response to paragraph 46, Reynolds admits that the website
2 www.vusevapor.com explains that the “VUSE Digital Vapor Cigarettes include
3 proprietary encryption technology that does not permit any other e-cigarette to be
4 used with VUSE Cartridges,” and thus the VUSE Cartridges are only compatible
5 with VUSE power units. Reynolds denies the remaining allegations of paragraph
6 46.

Fontem v. R.J. Reynolds Vapor Co., 16-cv-1255 (M.D.N.C.), Dkt. No. 27 at 5. (*See Id.* at ¶¶ 93, 131, 163, et al.).

167. Likewise, Defendant instructs users that the VUSE Ciro Cartridges cannot be used with any other power unit other than the VUSE Ciro Power Unit. (*See, e.g.*, VUSE FAQs (“Can I use Vuse Ciro cartridges with a power unit other than a Vuse Ciro PowerUnit? No. Vuse Ciro cartridges are intended only for use with Vuse Ciro power units.”)).

168. The VUSE Solo and VUSE Ciro Cartridges contributorily infringe the ’604 Patent because they meet every element of the asserted claims except those requiring a power source. The VUSE Solo and VUSE Ciro Cartridges can only be used with their corresponding VUSE Solo Power Unit or VUSE Ciro Power Unit,

and the VUSE Solo and VUSE Ciro Cartridges, when used with their corresponding power units, meet every limitation of the asserted claims. Thus, the VUSE Solo and VUSE Ciro Cartridges have no substantial non-infringing use and contribute to the direct infringement of the '604 Patent.

169. The VUSE Solo and VUSE Ciro Power Unit contributorily infringe the '604 Patent because they meet those elements of the asserted claims requiring a power source. The VUSE Solo and VUSE Ciro Power Unit can only be used with VUSE Solo and VUSE Ciro Cartridges, respectively, and the VUSE Solo and VUSE Ciro Power Units when used with the VUSE Solo and VUSE Ciro Cartridges meet every limitation of the asserted claims. Thus, the VUSE Solo and VUSE Ciro Power Units have no substantial non-infringing use and contribute to the direct infringement of the '604 Patent.

170. As such, Defendant knows that the VUSE Solo and VUSE Ciro products and components of the VUSE Solo and VUSE Ciro, including, but not limited to, the VUSE Solo Cartridge, VUSE Solo Power Unit, the VUSE Ciro Cartridge, and VUSE Ciro Power Unit, when sold separately, have no substantial non-infringing uses other than to provide users with the ability to assemble and use a vaporizing device that directly infringes the '604 Patent, and, therefore, that they are especially made or adapted for use in direct infringement of the '604 Patent.

171. The VUSE Solo Cartridge and VUSE Solo Power Unit together are components of a single assembly or parts of a complete machine that together constitute a functional unit. As such, Fuma is entitled to damages for sales of the VUSE Solo Cartridge and the VUSE Solo Power Unit, whether sold separately or together, either as direct infringement, indirect infringement, or as convoyed sales.

172. The VUSE Ciro Cartridge and VUSE Ciro Power Unit together are components of a single assembly or parts of a complete machine that together constitute a functional unit. As such, Fuma is entitled to damages for sales of the VUSE Ciro Cartridge and the VUSE Ciro Power Unit, whether sold separately or together, either as direct infringement, indirect infringement, or as convoyed sales.

173. As a direct and proximate result of the infringing acts of Defendant, Plaintiff has suffered, and is entitled to, monetary damages that adequately compensate Fuma for Defendant's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

174. From the issuance of the '604 Patent, Fuma has properly marked all of its relevant product packaging with the '604 Patent number and has met all requirements of 35 U.S.C. § 287, and Fuma's monetary damages are therefore not limited by 35 U.S.C. § 287.

175. Defendant's continuing infringement has inflicted and, unless restrained by this Court, will continue to inflict irreparable harm upon Plaintiff, such as reduction of Plaintiff's proper market share and deprivation of Plaintiff's rights to exclude others. Plaintiff has no adequate remedy at law. Plaintiff is entitled to injunctive relief enjoining Defendant from engaging in further acts of infringement.

WILLFUL INFRINGEMENT

176. Fuma hereby realleges each allegation set forth in the paragraphs above as though fully set forth herein.

177. As set forth above, R.J. Reynolds, as early as 2010, met with and received confidential information from Fuma regarding the design of the Fuma e-cigarette, and thereafter proceeded to design and sell a copy of Fuma's e-cigarette without authorization, despite being told that Fuma was patenting the design of its e-cigarette. Additionally, R.J. Reynolds knew or should have known, through the U.S. Patent Office's repeated citation of Fuma's '604 Patent family in rejecting R.J. Reynolds patent applications, that its VUSE Solo and VUSE Ciro products infringed the asserted claims of the '604 Patent.

178. In view of Defendant's knowledge of the '604 Patent, Defendant has proceeded to infringe the '604 Patent despite a high probability that its actions

constituted infringement of valid claims of the '604 Patent. Thus, Defendant's infringement of the '604 Patent is willful and deliberate. That egregious infringement behavior entitles Plaintiff to increased damages under 35 U.S.C. § 284, and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

PRAYER FOR RELIEF

WHEREFORE, Fuma prays for the following relief:

179. A judgment that Reynolds Vapor directly and/or indirectly infringes the '604 Patent;

180. A permanent injunction preventing Reynolds Vapor and its respective officers, directors, agents, servants, employees, attorneys, licensees, successors, and assigns, and those in active concert or participation with any of them, from engaging in infringing activities with respect to the '604 Patent;

181. A judgment that Defendant's infringement has been willful;

182. A ruling that this case is exceptional under 35 U.S.C. § 285;

183. A judgment and order requiring Reynolds Vapor to pay Fuma damages under 35 U.S.C. § 284, including supplemental damages for any continuing post-verdict infringement up until entry of judgment, with an

accounting, as needed, as well as treble damages for willful infringement under 35 U.S.C. §285;

184. A judgment and order requiring Reynolds Vapor to pay Fuma's costs of this action (including all disbursements);

185. A judgment and order requiring Reynolds Vapor to pay pre-judgment and post-judgment interest on damages awarded; and

186. Such other and further relief as the Court may deem just and proper.

Dated: March 6, 2019

/s/ William K. Davis

William K. Davis

N.C. Bar No. 1117

/s/ Kevin G. Williams

Kevin G. Williams

N.C. Bar No. 25760

BELL, DAVIS & PITT, P.A.

100 North Cherry St., Suite 600

Winston-Salem, NC 27120-1029

Telephone: (336) 722-3700

Facsimile: (336) 722-8153

wdavis@belldavispitt.com

kwilliams@belldavispitt.com

Christopher P. Sullivan*

ROBINS KAPLAN LLP

800 Boylston Street

Suite 2500

Boston, MA 02199

Telephone: (617) 267-2300

Facsimile: (617) 267-8288

csullivan@robinskaplan.com

**Special Appearance Under Local Rule*

83.1(d) in process

Dirk D. Thomas*
DIRK D. THOMAS PLLC
1775 Eye Street NW, Suite 1150
Washington, DC 20006
Telephone: (202) 587-5690
Facsimile: (202) 587-5610
dirk.thomas@dthomasllc.com
**Special Appearance Under Local Rule
83.1(d) in process*

Brandon M. Jordan*
THE LAW FIRM OF BRANDON M.
JORDAN PLLC
2800 Eisenhower Ave., Suite 220
Alexandria, VA 22314
Telephone: (703) 493-0231
Facsimile: (703) 832-4806
brandon@brandonjordan.net
**Special Appearance Under Local Rule
83.1(d) in process*

Counsel for Plaintiff *FUMA
INTERNATIONAL, LLC*

DEMAND FOR JURY TRIAL

Plaintiff Fuma International LLC hereby demands a trial by jury on all issues triable by a jury.

Dated: March 6, 2019

/s/ William K. Davis

William K. Davis

N.C. Bar No. 1117

/s/ Kevin G. Williams

Kevin G. Williams

N.C. Bar No. 25760

BELL, DAVIS & PITT, P.A.

100 North Cherry St., Suite 600

Winston-Salem, NC 27120-1029

Telephone: (336) 722-3700

Facsimile: (336) 722-8153

wdavis@belldavispitt.com

kwilliams@belldavispitt.com

Christopher P. Sullivan*

ROBINS KAPLAN LLP

800 Boylston Street

Suite 2500

Boston, MA 02199

Telephone: (617) 267-2300

Facsimile: (617) 267-8288

csullivan@robinskaplan.com

**Special Appearance Under Local Rule*

83.1(d) in process

Dirk D. Thomas*

DIRK D. THOMAS PLLC

1775 Eye Street NW, Suite 1150

Washington, DC 20006

Telephone: (202) 587-5690

Facsimile: (202) 587-5610

dirk.thomas@dthomasllc.com
**Special Appearance Under Local Rule
83.1(d) in process*

Brandon M. Jordan*
THE LAW FIRM OF BRANDON M.
JORDAN PLLC
2800 Eisenhower Ave., Suite 220
Alexandria, VA 22314
Telephone: (703) 493-0231
Facsimile: (703) 832-4806
brandon@brandonjordan.net
**Special Appearance Under Local Rule
83.1(d) in process*

Counsel for Plaintiff *FUMA
INTERNATIONAL, LLC*