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(54) **ELECTRONIC CIGARETTE**

(57) An electronic cigarette is provided and includes a mouthpiece (1), a mouthpiece connector (2), a glass liquid pipe (3), a connecting rod (4) and a vaporizing element (5); the vaporizing element includes a heating body (51) and a liquid-guiding medium (52) covering an outer side of the heating body; the connecting rod is passed through the glass liquid pipe, a mounting groove (41) is disposed at a lower end of the connecting rod, and an upper end of the connecting rod is screwed with the mouthpiece connector; the connecting rod is made of ceramic material and is hollow inside; an inner wall of the mounting groove has a plurality of liquid-guiding holes (42) formed thereon that are capable of guiding e-liquid to the liquid guiding medium; and the mouthpiece and the mouthpiece connector screwed together. The connecting rod is made of ceramic material, and the screw member connecting the connecting rod and the mouthpiece connector is also made of ceramic material, thereby preventing contaminations to e-liquid from metal materials, and keeping e-liquid pure.

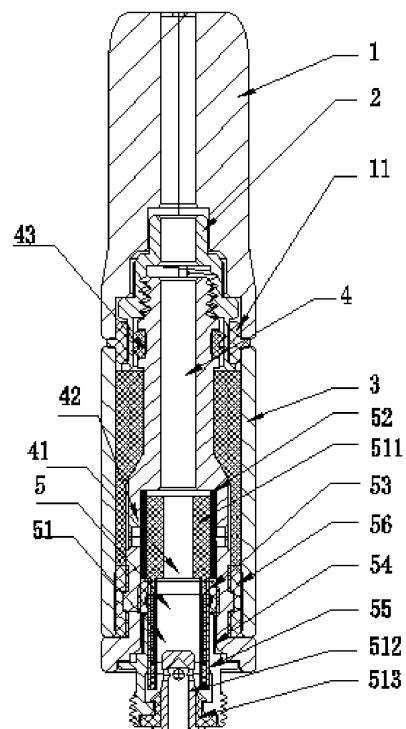


Fig. 1

Description

FIELD OF THE INVENTION

[0001] The present invention relates to the field of electronics cigarette, and more particularly to a novel electronic cigarette.

BACKGROUND OF THE INVENTION

[0002] Conventionally, while an electronic cigarette is in use, media such as metal materials will be in contact with e-liquid, and that the e-liquid would likely be contaminated thereby affecting the taste of the e-liquid.

SUMMARY OF THE INVENTION

[0003] The technical problem to be solved by the present invention is to provide a novel electronic cigarette to overcome the drawbacks of existing arts.

[0004] The technical solution adopted by the present invention to solve such technical problem includes:

[0005] To build an electronic cigarette that includes a mouthpiece, a mouthpiece connector, a glass liquid pipe, a connecting rod and a vaporizing element; the vaporizing element includes a heating body and a liquid-guiding medium covering an outer side of the heating body; the connecting rod is passed through the glass liquid pipe, a mounting groove is disposed at a lower end of the connecting rod, and an upper end of the connecting rod is screwed with the mouthpiece connector; the connecting rod is made of ceramic material and is hollow inside; an inner wall of the mounting groove has a plurality of liquid-guiding holes formed thereon that are capable of guiding e-liquid to the liquid guiding medium; and the mouthpiece and the mouthpiece connector are screwed together.

[0006] The electronic cigarette according to the present invention, in which a heating element of the heating body is a heating wire, and a lower end of the heating wire and the liquid-guiding medium has a heating wire silicone pad.

[0007] The electronic cigarette according to the present invention, in which a screw member is disposed underneath the heating wire silicone pad.

[0008] The electronic cigarette according to the present invention, in which the heating body further includes an electrode disposed at a lower end of the mounting groove, and an insulating coil enclosing the electrode.

[0009] The electronic cigarette according to the present invention, in which the liquid-guiding medium is a non-woven fabric.

[0010] The electronic cigarette according to the present invention, in which a heat-resisting insulating tube covering the electrode is disposed underneath the heating wire silicone pad.

[0011] The electronic cigarette according to the present invention, in which a glass sealant silicone is disposed at where the upper end of the screw member

is in contact with the glass liquid pipe.

[0012] The electronic cigarette according to the present invention, in which a first sealant is disposed at where the connecting rod is connected with the mouthpiece connector.

[0013] The electronic cigarette according to the present invention, in which a second sealant is disposed at where the mouthpiece is connected with the mouthpiece connector.

[0014] The main advantage of the present invention is that because the connecting rod is made of ceramic material, and the screw member connecting the connecting rod and the mouthpiece connector is also made of ceramic material, contaminations to e-liquid from metal materials can be prevented, and thereby keeping e-liquid pure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] In order to more clearly illustrate the embodiments of the present invention or the technical solutions, the present invention will be further described below with the accompanying drawings and examples. The drawings in the following description are only a part of the exemplary embodiments of the present invention. Those of ordinary skill in the art can also obtain other drawings based on these drawings without additional efforts.

[0016] Fig.1 is a cross-sectional view illustrating an electronic cigarette according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0017] In order to emphasize the purpose, technical solution, and benefits of the present invention, the embodiments illustrated below will be described clear and completely with the technical solution adopted. It would be obvious that the described embodiments are only part, not all, of the possible embodiments under the present invention. All other embodiments obtained by a person of ordinary skill in the art based on the embodiments of the present invention without any additional effort shall be included within the scope of the present claimed invention.

[0018] A preferable embodiment of the present invention is shown in Fig. 1 and includes a mouthpiece 1, a mouthpiece connector 2, a glass liquid pipe 3, a connecting rod 4, and a vaporizing element 5; the vaporizing element 5 includes a heating body 51, and a liquid-guiding medium 52 covering an outer side of the heating body 51; the connecting rod 4 is passed through the glass liquid pipe 3, a mounting groove 41 is disposed at a lower end of the connecting rod 4, and an upper end of the connecting rod 4 is screwed with the mouthpiece connector 2; the connecting rod 4 is made of ceramic and is hollow inside; an inner wall of the mounting groove 41 has a plurality of liquid-guiding holes 42 formed thereon that

are capable of guiding e-liquid to the liquid guiding medium 52; the mouthpiece 1 and the mouthpiece connector 2 are screwed together. By guiding the e-liquid through the liquid-guiding holes 42 to the liquid-guiding medium 52, and finally guiding the e-liquid to the heating body 51 by the liquid-guiding medium 52, contacts between the e-liquid and other structures can be avoided, thereby preventing contamination and ensuring the taste of e-liquid.

[0019] As shown in Fig. 1, the heating element of the heating body 51 is a heating wire 511, and a heating wire silicone pad 53 is disposed at a lower end of the liquid-guiding medium 52 and the heating wire 511, in which the heating wire 511 and the liquid-guiding medium 52 are fixed together.

[0020] As shown in Fig. 1, a screw member 54 is disposed underneath the heating wire silicone pad 53, and the heating wire silicone pad 53 is fixed by the screw member 54.

[0021] As shown in Fig. 1, the heating body 51 further includes an electrode 512 disposed at a lower end of the mounting groove 41, and an insulating coil 513 enclosing the electrode. While the electrode 512 is electrified, the heating wire 511 will heat up and thereby vaporizing e-liquid.

[0022] As shown in Fig. 1, the liquid-guiding medium 52 is a non-woven fabric having a number of micropores, and easy to replace. The liquid-guiding medium 52 does not contaminate the e-liquid.

[0023] As shown in Fig. 1, a heat-resisting insulating tube 55 covering the electrode is disposed underneath the heating wire silicone pad 53, so that the electrode can be protected therewith.

[0024] As shown in Fig. 1, a glass sealant silicone 56 is disposed at where the upper end of the screw member 54 is in contact with the glass liquid pipe 3, so as to prevent liquid leakage.

[0025] As shown in Fig. 1, a first sealant 43 is disposed at where the connecting rod 4 is connected with the mouthpiece connector 2 so as to prevent liquid leakage.

[0026] As shown in Fig. 1, a second sealant 11 is disposed at where the mouthpiece 1 is connected with the mouthpiece connector 2 in order to prevent liquid leakage.

[0027] It is to be understood that those skilled in the art can make improvements or changes based on the above description, and all such improvements and changes are intended to be included within the scope of the claimed invention.

liquid pipe, a mounting groove disposed at a lower end of the connecting rod, and an upper end of the connecting rod screwed with the mouthpiece connector; the connecting rod made of ceramic material and being hollow inside; an inner wall of the mounting groove having a plurality of liquid-guiding holes formed thereon capable of guiding e-liquid to the liquid guiding medium; and the mouthpiece and the mouthpiece connector screwed together.

2. The electronic cigarette as claimed in claim 1, wherein a heating element of the heating body is a heating wire, and a lower end of the heating wire and the liquid-guiding medium has a heating wire silicone pad.
3. The electronic cigarette as claimed in claim 2, wherein a screw member is disposed underneath the heating wire silicone pad.
4. The electronic cigarette as claimed in claim 2, wherein the heating body further comprises an electrode disposed at a lower end of the mounting groove, and an insulating coil enclosing the electrode.
5. The electronic cigarette as claimed in claim 1, wherein the liquid-guiding medium is a non-woven fabric.
6. The electronic cigarette as claimed in claim 4, wherein a heat-resisting insulating tube covering the electrode is disposed underneath the heating wire silicone pad.
7. The electronic cigarette as claimed in claim 3, wherein a glass sealant silicone is disposed at where the upper end of the screw member is in contact with the glass liquid pipe.
8. The electronic cigarette as claimed in claim 1, wherein a first sealant is disposed at where the connecting rod is connected with the mouthpiece connector.
9. The electronic cigarette as claimed in claim 1, wherein a second sealant is disposed at where the mouthpiece is connected with the mouthpiece connector.

Claims

1. An electronic cigarette, comprising a mouthpiece, a mouthpiece connector, a glass liquid pipe, a connecting rod and a vaporizing element; the vaporizing element comprising a heating body and a liquid-guiding medium covering an outer side of the heating body; the connecting rod passing through the glass

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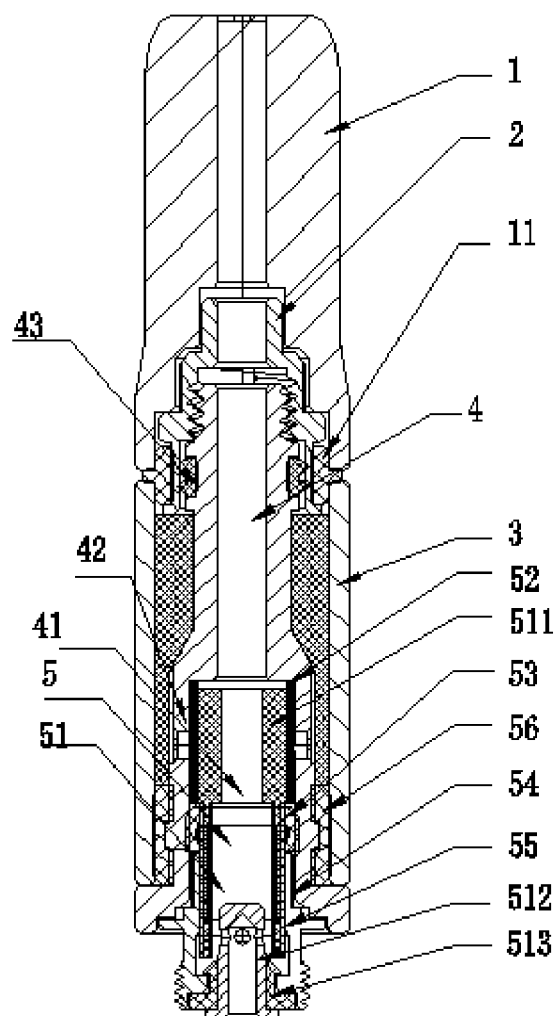


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 19 16 8340

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A	* paragraph [0038] - paragraph [0063]; figures 1-8 *	2-4,6,7	
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A	* page 10, line 11 - page 18, line 2; figures 1-10 *	2-4,6,7	
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 July 2019	Examiner Klintebäck, Daniel
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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EPO FORM P0459

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