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(54) **ELECTRONIC ATOMIZATION DEVICE, SUPPORT ASSEMBLY THEREOF, AND AIR INLET MECHANSIM**

(57) Disclosed are an electronic atomization device, a support assembly and an air inlet mechanism thereof. The air inlet mechanism comprises an air passage (200) and a sound-absorbing structure (217). The air passage is in communication with the atomization cavity (123) of the electronic atomization device to allow outside air to enter the atomization cavity. The sound-absorbing structure is disposed in the air passage. The sound-absorbing structure is disposed in the air passage of the air inlet mechanism, such that noise in the air passage can be reduced, thus improving the inhaling experience of users.

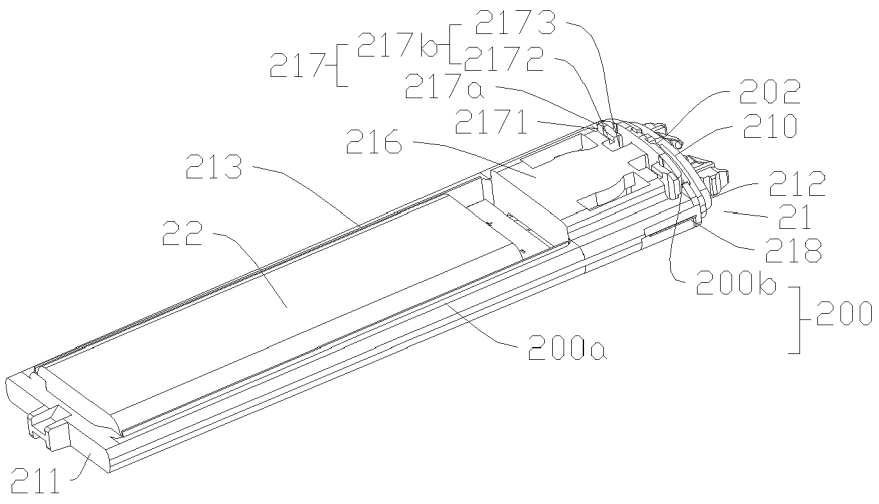


FIG. 6

EP 4 252 567 A1

Description

FIELD

[0001] The invention relates to an atomization device, and more particularly, relates to an electronic atomization device, a support assembly thereof, and an air inlet mechanism.

BACKGROUND

[0002] Disposable electronic atomization devices in the related art are provided with a long and narrow air inlet passage, and air passes through many narrow slits and corners when entering an atomization cavity from the bottom or the side face, so a large amount of vortex and turbulence noise will be produced in this process, bringing unsatisfying inhaling experience to users.

SUMMARY

[0003] The technical issue to be settled by the invention is to provide an improved air inlet mechanism and further provide an improved electronic atomization device and a support assembly thereof.

[0004] The technical solution adopted by the invention to settle the above technical issue is as follows: providing an air inlet mechanism comprising an air passage and a sound-absorbing structure. The air passage is in communication with an atomization cavity of the electronic atomization device to allow outside air to enter the atomization cavity, and the sound-absorbing structure is disposed in the air passage.

[0005] In some embodiments, the air passage comprises a first air inlet passage which is in communication with the outside of the electronic atomization device, and a second air inlet passage which is in communication with the first air inlet passage and bends to be communicated with the atomization cavity. The sound-absorbing structure comprises a first sound-absorbing structure which comprises a first cavity, and the first cavity is disposed between the first air inlet passage and the second air inlet passage and is in communication with the first air inlet passage and the second air inlet passage.

[0006] In some embodiments, the first cavity is arranged lengthwise, and the length direction of the first cavity is perpendicular to the air inlet direction of the first air inlet passage.

[0007] In some embodiments, the second air inlet passage comprises an end provided with a port and the other end provided with an air outlet. The port is in communication with the first cavity, and the cross-sectional area of the first cavity is greater than that of the air outlet. The cross-sectional area of the first cavity is greater than that of the first air inlet passage.

[0008] In some embodiments, the sound-absorbing structure comprises a second sound-absorbing structure which comprises a second cavity and a connecting passage. The second cavity is in communication with the air passage through the connecting passage. A set angle is formed between the connecting passage and the air passage.

[0009] In some embodiments, the air passage comprises a first air inlet passage which is in communication with the outside of the electronic atomization device, and a second air inlet passage which is in communication with the first air inlet passage and bends to be communicated with the atomization cavity. The connecting passage is in communication with the first air inlet passage.

[0010] In some embodiments, the sound-absorbing structure comprises a first sound-absorbing structure communicated with the air passage and a second sound-absorbing structure communicated with the first sound-absorbing structure.

[0011] In some embodiments, the air inlet mechanism further comprises a resonant structure disposed in the first sound-absorbing structure and/or the second sound-absorbing structure.

[0012] In some embodiments, the resonant structure comprises a sheet structure.

[0013] In some embodiments, the support comprises a first end wall and a second end wall which are arranged opposite and spaced from each other.

[0014] The present application further provides a support assembly comprising a support for supporting the power supply component of the electronic atomization device, and the air inlet mechanism of the present application. The air passage and the sound-absorbing structure of the air inlet mechanism are disposed on the support.

[0015] In some embodiments, the sound-absorbing structure comprises a first sound-absorbing structure which comprises a first cavity, and the first cavity is formed in the support.

[0016] In some embodiments, the support comprises a receiving groove for receiving a circuit board of the electronic atomization device; and the receiving groove comprises a bottom wall, and the first cavity is formed in the bottom wall and extends through the bottom wall in the thickness direction of the bottom wall.

[0017] In some embodiments, the sound-absorbing structure comprises a second sound-absorbing structure, the second sound-absorbing structure comprises a second cavity and a connecting passage, and the second cavity is in communication with the air passage through the connecting passage. A set angle is formed between the connecting passage and the air passage.

[0018] In some embodiments, the support comprises a receiving groove for receiving the circuit board of the electronic atomization device; and the receiving groove comprises a bottom wall, and the second cavity is formed in the bottom wall and extends through the bottom wall in the thickness direction of the bottom wall.

[0019] In some embodiments, the air inlet mechanism further comprises a resonant structure disposed in the sound-absorbing structure.

[0020] In some embodiments, the resonant structure comprises a sheet structure. The support comprises a receiving groove for receiving the circuit board of the electronic atomization device, and the receiving groove comprises a bottom wall. The sheet structure extends through the bottom wall.

[0021] In some embodiments, the support comprises a first end wall and a second end wall which are oppositely arranged and spaced apart from each other. The air passage comprises a first air inlet passage extending in a direction from the first end wall to the second end wall and a second air inlet passage disposed on the second end wall. The second air inlet passage is in communication with the first air inlet passage. The sound-absorbing structure is disposed on the inner side of the second end wall.

[0022] In some embodiments, the support further comprises a receiving cavity disposed between the first end wall and the second end wall and configured for receiving the power supply component.

[0023] The present application further provides an electronic atomization device comprising an atomization assembly and a power supply mechanism which is connected to the atomization assembly. The power supply mechanism comprises a shell, and the support assembly of the present application disposed in the shell.

[0024] The shell is provided with an air inlet communicated with the air passage of the support assembly.

[0025] The electronic atomization device, the support assembly thereof, and the air inlet mechanism provided by the present application have the following beneficial effects: the sound-absorbing structure is disposed in the air passage of the air inlet mechanism, such that noise in the air passage can be reduced, thus improving the inhaling experience of users.

BRIEF DESCRIPTION OF THE DRAWINGS

[0026] The invention will be further described below in conjunction with drawings and embodiments. In the drawings:

FIG. 1 is a schematic structural view of an electronic atomization device according to some embodiments of the invention;

FIG. 2 is a longitudinal sectional view of the electronic atomization device in FIG. 1;

FIG. 3 is another longitudinal sectional view of the electronic atomization device in FIG. 1;

FIG. 4 is a schematic structural view of a power supply mechanism of the electronic atomization device in FIG. 1;

FIG. 5 is a partial schematic structural view of the power supply mechanism in FIG. 4;

FIG. 6 is another partial schematic structural view of the power supply mechanism in FIG. 4;

FIG. 7 is a schematic structural view of a support of the power supply mechanism in FIG. 1.

DESCRIPTION OF THE EMBODIMENTS

[0027] For a better understanding of the technical features, purposes and effects of the invention, specific embodiments of the invention will be described in detail below with reference to the accompanying drawings.

[0028] FIG. 1 illustrates an electronic atomization device in accordance with some preferred embodiments of the invention. The electronic atomization device is a disposable electronic atomization device, and may be used for heating and atomizing a liquid atomization medium to generate atomized gas to be inhaled by users. In some embodiments, the electronic atomization device has the advantages of simple structure, low noise in use, and good user experience.

[0029] As shown in FIG. 1 to FIG. 3, the electronic atomization device may comprise an atomizer 10 and a power supply mechanism 20 connected to the atomizer 10. The atomizer 10 may be used for atomizing an atomization medium, and the power supply mechanism 20 may be mechanically and electrically connected to the atomizer 10 and may be used for supplying power to the atomizer 10.

[0030] Further, in some embodiments, the atomizer 10 may comprise a liquid storage unit 11 and an atomization assembly 12. The liquid storage unit 11 may comprise a body 111 and an air tube 112 disposed in the body 111, the air tube 112 may be located on the axis of the body 111, and a gap may be kept between the air tube 112 and the inner wall of the body 111 to form a liquid storage cavity 113. The atomization assembly 12 may be received in the liquid storage unit 11, and is located at one end of the air tube 112 and in the lower end of the liquid storage unit 11. The atomization assembly 12 may comprise an atomization shell 121, a heating structure 122 disposed in the atomization shell 121, and an atomization cavity 123 formed in the atomization shell 121. The heating structure 122 may be used for heating the atomization medium transported from the liquid storage unit 11. The atomization cavity 123 may be used for accommodating the heating structure 122 and providing a space for the heating structure 122 to heat the atomization medium.

[0031] Further, in some embodiments, the power supply mechanism 20 may comprise a support assembly 21, a power supply component 22, a circuit board 23, a pneumatic switch 24 and a shell 25. The support assembly 21 may be used for supporting the power supply component 22, the circuit board 23 and the pneumatic switch 24. The power supply component 22 is detachably mounted on the support assembly 21 and may be used for supplying power to the atomizer 10. In some embodiments, the power supply component 22 may be a battery. The circuit

board 23 may be disposed on the support assembly 21 and may be connected to the power supply component 22. Specifically, in some embodiments, the circuit board 23 may be connected to the power supply component 22 through an electric connector, and the electric connector may be an electrically conductive wire, an electrically conductive metal sheet, or the like. In some embodiments, the pneumatic switch 24 may be disposed on the support assembly 21 and may be used for starting the power supply mechanism 20 to supply power to the atomizer 10 when users inhale. The shell 25 may be tubular, and has one end provided with an opening 251 and the other end provided with an air inlet 252. A receiving space may be formed in the shell 25, and is used for receiving components such as the support assembly 21, the power supply component 22 and so on. The opening 251 may allow the support assembly 21 to be installed therein, and may also allow the atomizer 10 to be partially inserted therein. The air inlet 252 may be communicated with an air passage 200 disposed on the support assembly 21, and is used for allowing outside air to enter the air passage 200.

[0032] As shown in FIG. 4 to FIG. 7, further, in some embodiments, the support assembly 21 may comprise a support 210 and an air inlet mechanism, and the air inlet mechanism may comprise the air passage 200 and a sound-absorbing structure 217. In some embodiments, the support 210 may be used for supporting the power supply component 22 of the electronic atomization device, and specifically, the battery and the circuit board 23 may be installed on the support 210. The air passage 200 may be disposed on the support 210, formed between the support 210 and the shell 25, and communicated with the air inlet 251 and the atomization cavity 123 to allow outside air to enter the atomization cavity 123. The sound-absorbing structure 217 may be disposed on the support 210, located in the air passage 200, and used for reducing noise in the air passage to improve the inhaling experience of users. It can be understood that, in some other embodiments, the sound-absorbing structure 217 is not limited to be disposed on the support 210, and may be disposed at any position of the air passage 200, such as a bottom base or a top base of the atomizer.

[0033] Further, in some embodiments, the support 210 may comprise a first end wall 211, a second end wall 212 and side walls 213. The first end wall 211 and the second end wall 212 may be arranged oppositely and spaced apart from each other. The first end wall 211 may be arranged facing the air inlet 252, and the second end wall 212 may be connected to the atomizer 10. The side walls 213 may be disposed between the first end wall 211 and the second end wall 212. The support 210 may comprise two side walls 213 which are arranged oppositely and spaced from each other, and two ends of each of the two side walls 213 may be connected to the first end wall 211 and the second end wall 212 respectively. In some embodiments, the first end wall 211, the second end wall 212 and the side wall 213 may be formed integrally. Specifically, the first end wall 211, the second end wall 212 and the side wall 213 may be formed integrally through injection moulding. In some embodiments, the support 210 may comprise a receiving cavity 214 and a receiving groove 215, and the first receiving cavity 214 and the receiving groove 215 may be disposed between the first end wall 211 and the second end wall 212 side by side. The receiving cavity 214 may be disposed close to the first end wall 211, and the receiving groove 215 may be disposed close to the second end wall 212. The receiving cavity 214 may be in a hollow configuration and be used for receiving the power supply component 22 therein. The receiving groove 215 may be arranged at one end of the receiving cavity 214, and may be separated from the receiving cavity 214 by a partition wall, such that two independent receiving spaces are formed. The receiving groove 215 may be used for receiving the circuit board 23 and the pneumatic switch 24 therein. In some embodiments, the receiving groove 215 may comprise a bottom wall 216, and the bottom wall 216 may be connected to the second end wall 212 and the side wall 213 to form an integral structure.

[0034] Further, in some embodiments, the air passage 200 may comprise a first air inlet passage 220a and a second air inlet passage 200b. The first air inlet passage 200a may be located on a surface of the side wall 213, and specifically, the first air inlet passage 200a may be formed by a gap between the side wall 213 and the shell 25. The first air inlet passage 200a is arranged lengthwise, and one end of the first air inlet passage 200a may be communicated with the air inlet 252 to be communicated with the outside, such that outside air can enter the atomization cavity 213. In some embodiments, the second air inlet passage 200b may be disposed on the second end wall 212 and located on a side face of the second end wall 212, and extend in a direction towards the joint where the power supply mechanism 20 joins with the atomizer 10. One end of the second air inlet passage 200b may be communicated with the first air inlet passage 200a, and the other end of the second air inlet passage 200b may be communicated with the atomization cavity 213. The second air inlet passage 200b may have bents. In some embodiments, a port 201 is formed in one end of the second air inlet passage 200b, and the sound-absorbing structure 217 may be communicated with the second air inlet passage 200b through the port 200b; and an air outlet 202 is formed in the other end of the second air inlet passage 200b, and the air outlet 202 may be located in the side face of the second end wall 212 and arranged in an orientation towards the joint where the power supply mechanism 20 joins with the atomizer 10.

[0035] Further, in some embodiments, the sound-absorbing structure 217 may comprise a first sound-absorbing structure 217a and a second sound-absorbing structure 217b. The first sound-absorbing structure 217a and the second sound-absorbing structure 217b are communicated, and the first sound-absorbing structure 217a

may be communicated with the air passage 200. Specifically, in some embodiments, the first sound-absorbing structure 217a may be disposed between the first air inlet passage 200a and the second air inlet passage 200b, and is in communication with the first air inlet passage 200a and the second air inlet passage 200b. In some embodiments, the first sound-absorbing structure 217a may form an expansion type muffler, and may be used for reducing airflow noise generated by the air passage 200. The second sound-absorbing structure 217b may form a Helmholtz muffler and may be used for reducing low-frequency noise generated by the air passage during inhaling. It can be understood that, in some other embodiments, the sound-absorbing structure 217 may only comprise the first sound-absorbing structure 217a or the second sound-absorbing structure 217b. In some embodiments, the sound-absorbing structure 217 may be in one-to-one correspondence with the air passage 200, and optionally, two sound-absorbing structures 217 may be adopted and arranged in one-to-one correspondence with two air passages 200.

[0036] Further, in some embodiments, the first sound-absorbing structure 217a may comprise a first cavity 2171 which may be formed in the bottom wall 216 and perforate through the bottom wall 216 in a thickness direction of the bottom wall 216. The first cavity 2171 may be arranged lengthwise, and specifically, the first cavity 2171 may be a kidney-shaped hole. The length direction of the first cavity 2171 may be perpendicular to the air inlet direction of the first air inlet passage 200a. In some embodiments, the first cavity 2171 may be communicated with the port 201. The cross-sectional area of the first cavity 2171 may be greater than that of the air outlet 202. In some embodiments, the cross-sectional area of the first cavity 2171 is greater than that of the first air inlet passage 200a. Through the arrangement of the first cavity 2171, the air passage 200 can suddenly change and expand to decrease the dynamic pressure of the air flow and increase the static pressure of the air flow, such that the air flow is stabilized, reducing the airflow noise generated by the air passage 200. In this embodiment, the number of the first cavity 2171 is one. It can be understood that, in some other embodiments, the first sound-absorbing structure 217a is not limited to comprising one first cavity 2171, and may comprise multiple first cavities 2171, and the multiple first cavities 2171 may be different in size and shape, and are connected to the air passage along paths of different volume, such that different sound-absorbing effects are realized.

[0037] Further, in some embodiments, the second sound-absorbing structure 217b may comprise a second cavity 2172 and a connecting passage 2173. The second cavity 2172 and the first cavity 2171 may be formed in the support 210 side by side in the length direction of the second end wall 212, and may be connected to the inner side of the second end wall 212. Specifically, the second cavity 2172 may be formed in the bottom wall 216 and perforate through the bottom wall 216 in the thickness direction of the bottom wall 216. The second cavity 2172 may be of a square structure. Of course, it can be understood that, in other embodiments, the second cavity 2172 is not limited to the square structure. The second cavity 2172 may be a Helmholtz resonant cavity. The connecting passage 2173 may be disposed on the support 210 and located on the outer side of the bottom wall 216. A set angle may be formed between the connecting passage 2173 and the air inlet direction of the air passage 200, and specifically, the connecting passage 2173 may be perpendicular to the first air inlet passage 200a and communicated with the first air inlet passage 200a. The connecting passage 2173 may be communicated with the first cavity 2171 and the second cavity 2172 so to be communicated with the first air inlet passage 200a, such that the first air inlet passage 200a and the second cavity 2172 are communicated. In this embodiment, the number of the second cavity 2172 may be one. Of course, it can be understood that, in some other embodiments, the second sound-absorbing structure 217b is not limited to comprising one second cavity 2172 and may comprise multiple second cavities 2172, and the multiple second cavities 2171 may be different in size and shape, and are connected to the air passage along paths of different volume, such that different sound-absorbing effects are realized.

[0038] Working principle of the second sound-absorbing structure 217b: when noise waves are transmitted to a junction of the first air inlet passage 200a and the connecting passage 2173, part of the noise waves propagate out along the first air inlet passage 200a, and the other part of the noise waves enter the second cavity 2172 through the connecting passage 2173 and are reflected on a boundary surface of the second cavity 2172 back to the junction of the first air inlet passage 200a and the connecting passage 2173 to intervene with incident sound waves to be counteracted, such that the noise intensity is reduced.

[0039] Sharp noise generated at a specific frequency is eliminated by means of the Helmholtz resonant cavity, and it is measured through equipment that the frequency of high-decibel noise is f0, so the resonant frequency can be controlled to be equal to f0 by means of the Helmholtz resonant cavity to fulfil a resonant sound-absorbing effect. Wherein, the relation between the connecting passage 2173 and the second cavity 2172 is as follows:

$$f_0 = \frac{c}{2\pi}\sqrt{\frac{S}{(l+0.8d)V}}$$

[0040] Wherein, C is the propagation speed of noise waves in air, S is the sectional area of the connecting passage 2173, 1 is the length of the connecting passage 2173, d is the approximate diameter of the connecting passage 2173, and V is the volume of the second cavity 2172 (the Helmholtz resonant cavity).

[0041] Further, in some embodiments, the air inlet mechanism further comprises resonant structures which may be disposed in the first sound-absorbing structure 217a and the second sound-absorbing structure 217b and can consume the energy of noise through resonance to fulfil a noise reduction effect. Of course, it can be understood that, in some other embodiments, the resonant structure may be only disposed in the first sound-absorbing structure 217a or the second sound-absorbing structure 217b. In some embodiments, the resonant structure may be a thin sheet structure 218, and specifically, the sheet structure 218 may perforate through the bottom wall 216 and form an integral structure with the bottom wall 216 through injection moulding, and the sheet structure 218 may be arranged lengthwise to perforate through the first cavity 2171 and the second cavity 2172. Specifically, the sheet structure 218 may be a phosphor-copper sheet. Of course, it can be understood that, in some other embodiments, the sheet structure 218 is not limited to the phosphor-copper sheet and may be a plastic sheet or other metal sheets. Noise in the second cavity 2172 of the atomizer 10 is continuously reflected by the boundary surface of the second cavity 2172 to enable the sheet structure 218 to generate resonance to consume energy of the noise, such that a noise reduction effect is realized.

[0042] For a disposable electronic atomization device, the support 210 and the atomization base are usually integrated and the sound-absorbing structure is arranged to eliminate noise. In a replaceable electronic atomization device, a cavity is arranged between the support 210 and the atomization base to fulfil a sound-absorbing effect. At least one sound-absorbing structure 217 arranged in the air passage 200 can make the sound-absorbing effect better.

[0043] It can be understood that the above embodiments are merely preferred ones of the invention, which are specifically described in detail, but these embodiments should not be construed as limitations of the patent scope of the invention. It should be pointed out that, those ordinarily skilled in the art can freely combine the above technical features and make some transformations and improvements without departing from the concept of the invention, and all these combinations, transformations and improvements belong to the protection scope of the invention. Thus, all equivalent modifications and embellishment made according to the scope of the claims of the invention should fall within the scope of the claims of the invention.

Claims

1. An air inlet mechanism, **characterized by** comprising an air passage (200) and a sound-absorbing structure (217), wherein the air passage (200) is in communication with an atomization cavity (123) of an electronic atomization device to allow outside air to enter the atomization cavity (123), and the sound-absorbing structure (217) is disposed in the air passage (200).

2. The air inlet mechanism according to Claim 1, **characterized in that** the air passage (200) comprises a first air inlet passage (200a) which is in communication with the outside of the electronic atomization device, and a second air inlet passage (200b) which is in communication with the first air inlet passage (200a) and bends to be in communication with the atomization cavity (123); and
the sound-absorbing structure (217) comprises a first sound-absorbing structure (217a) which comprises a first cavity (2171), and the first cavity (2171) is disposed between the first air inlet passage (200a) and the second air inlet passage (200b) and is in communication with the first air inlet passage (200a) and the second air inlet passage (200b).

3. The air inlet mechanism according to Claim 2, **characterized in that** the first cavity (2171) is arranged lengthwise, and the length direction of the first cavity (2171) is perpendicular to the air inlet direction of the first air inlet passage (200a).

4. The air inlet mechanism according to Claim 2, **characterized in that** the second air inlet passage (200b) comprises an end provided with a port (201) and the other end provided with an air outlet (202); the port (201) is in communication with the first cavity (2171), and the cross-sectional area of the first cavity (2171) is greater than that of the air outlet (202); and
the cross-sectional area of the first cavity (2171) is greater than that of the first air inlet passage (200a).

5. The air inlet mechanism according to Claim 1, **characterized in that** the sound-absorbing structure (217) comprises a second sound-absorbing structure (217b) which comprises a second cavity (2172) and a connecting passage (2173), the second cavity (2172) is in communication with the air passage (200) through the connecting passage (2173); and
a set angle is formed between the connecting passage (2173) and the air passage (200).

6. The air inlet mechanism according to Claim 5, **characterized in that** the air passage (200) comprises a first air inlet passage (200a), which is in communication with the outside of the electronic atomization device, and a second air inlet passage (200b), which is in communication with the first air inlet passage (200a) and bends to be in communication with the atomization cavity (123); and
the connecting passage (2173) is in communication with the first air inlet passage (200a).

7. The air inlet mechanism according to Claim 1, **char-**

acterized in that the sound-absorbing structure (217) comprises a first sound-absorbing structure (217a) in communication with the air passage (200) and a second sound-absorbing structure (217b) in communication with the first sound-absorbing structure (217a);
the air inlet mechanism further comprises a resonant structure, wherein the resonant structure is disposed in the first sound-absorbing structure (217a) and/or the second sound-absorbing structure (217b).

8. The air inlet mechanism according to Claim 7, **characterized in that** the resonant structure comprises a sheet structure (218).

9. A support assembly, **characterized by** comprising a support (210) for supporting the power supply component (22) of an electronic atomization device, and the air inlet mechanism according to Claim 1, wherein:
the air passage (200) and the sound-absorbing structure (217) of the air inlet mechanism are disposed on the support (210).

10. The support assembly according to Claim 9, **characterized in that** the sound-absorbing structure (217) comprises a first sound-absorbing structure (217a) which comprises a first cavity (2171), and the first cavity (2171) is formed in the support (210).

11. The support assembly according to Claim 10, **characterized in that** the support (210) comprises a receiving groove (215) for receiving the circuit board (23) of the electronic atomization device; and
the receiving groove (215) comprises a bottom wall (216), and the first cavity (2171) is formed in the bottom wall (216) and extends through the bottom wall (216) in the thickness direction of the bottom wall (216).

12. The support assembly according to Claim 9, **characterized in that** the sound-absorbing structure (217) comprises a second sound-absorbing structure (217b), the second sound-absorbing structure (217b) comprises a second cavity (2172) and a connecting passage (2173), and the second cavity (2172) is in communication with the air passage (200) through the connecting passage (2173); and
a set angle is formed between the connecting passage (2173) and the air passage (200).

13. The support assembly according to Claim 12, **characterized in that** the support (210) comprises a receiving groove (215) for receiving the circuit board (23) of the electronic atomization device; and
the receiving groove (215) comprises a bottom wall (216), and the second cavity (2172) is formed in the bottom wall (216) and extends through the bottom wall (216) in the thickness direction of the bottom wall (216).

14. The support assembly according to Claim 9, **characterized in that** the air inlet mechanism further comprises a resonant structure disposed in the sound-absorbing structure (217).

15. An electronic atomization device, **characterized by** comprising an atomization assembly (12) and a power supply mechanism (20) connected to the atomization assembly (12), wherein the power supply mechanism (20) comprises a shell (25), and the support assembly (21) according to any one of Claims 9-14 disposed in the shell (25).

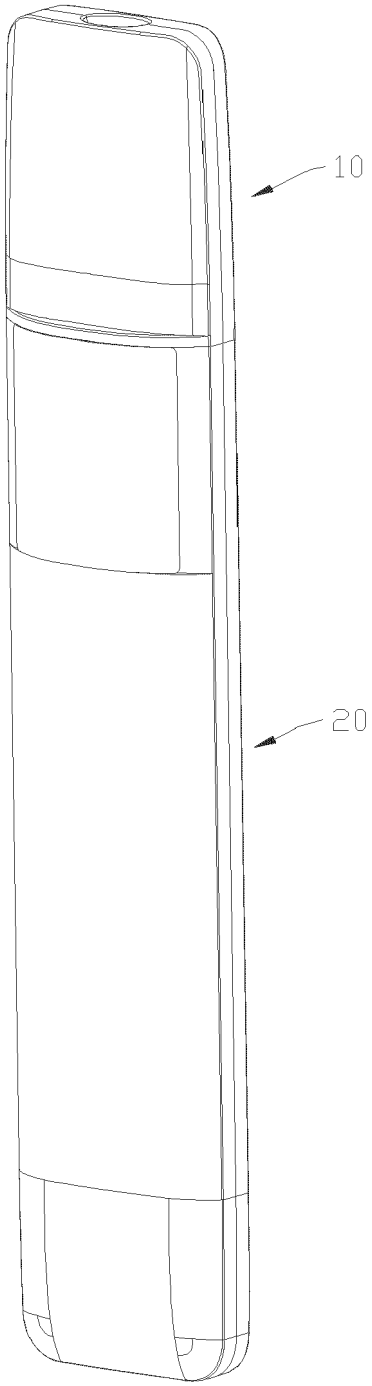


FIG. 1

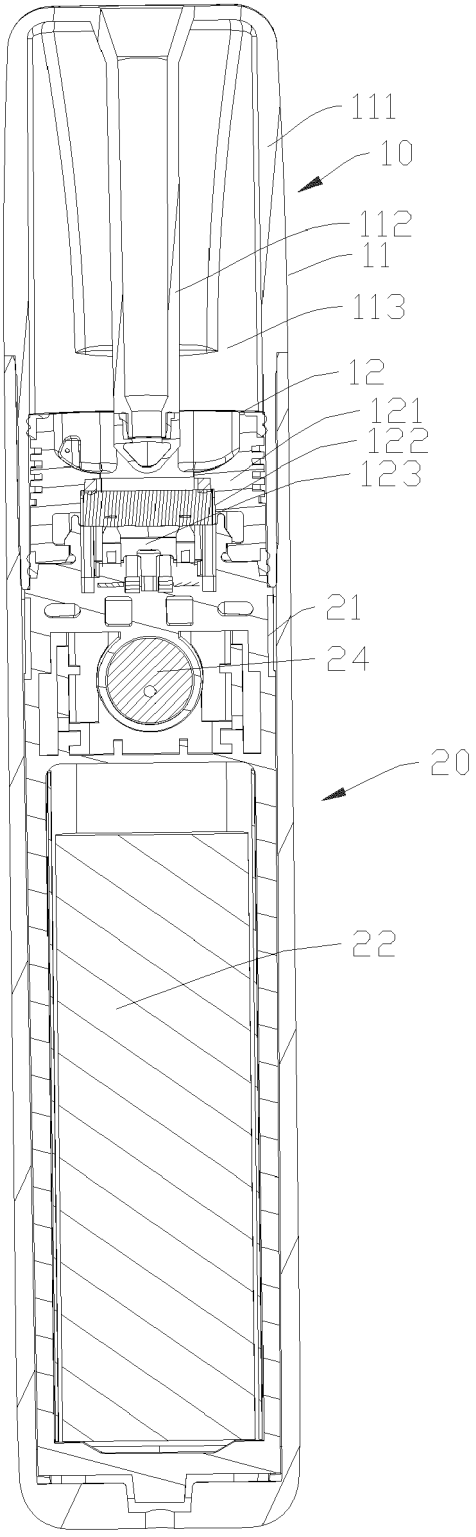


FIG. 2

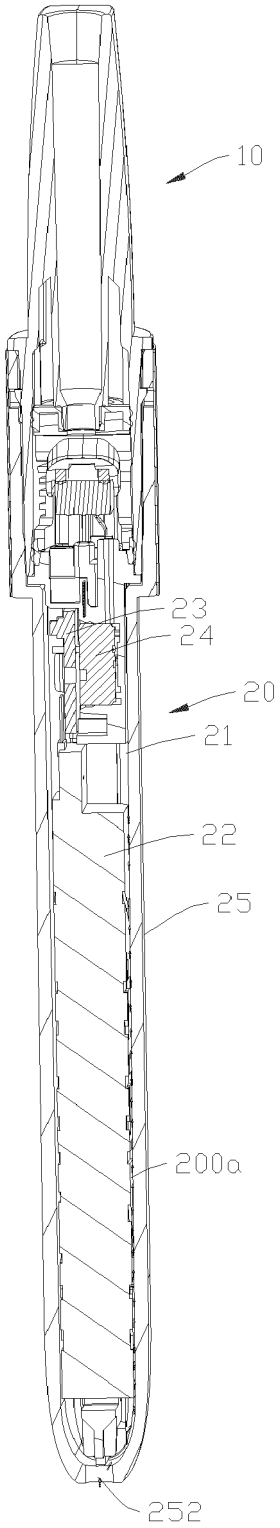


FIG. 3

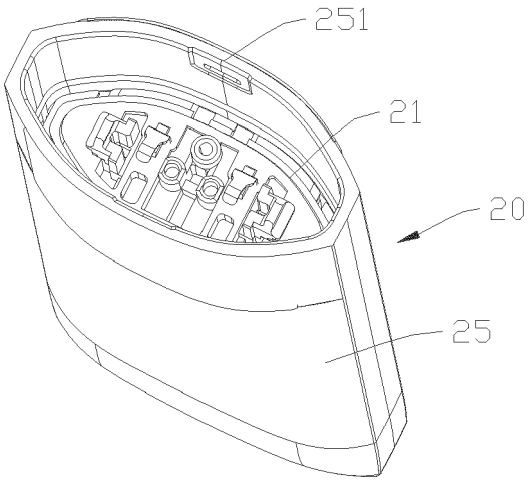


FIG. 4

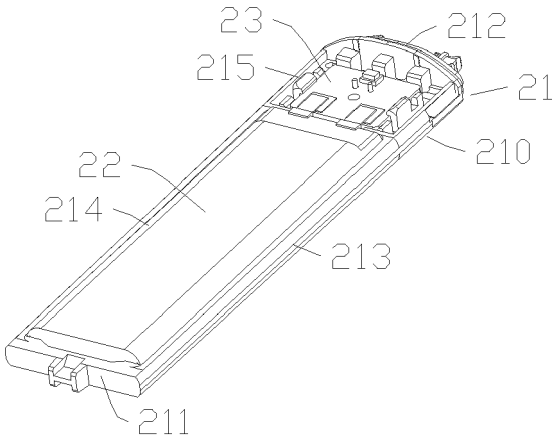
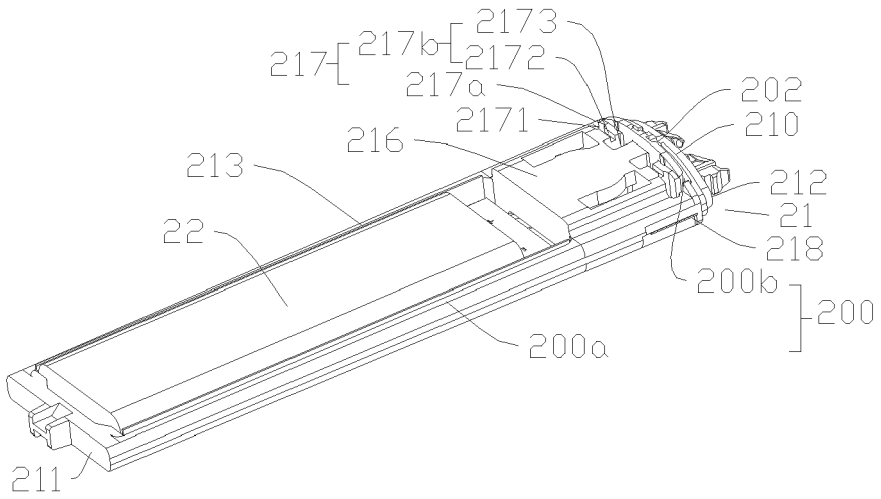


FIG. 5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200a
211

FIG. 6

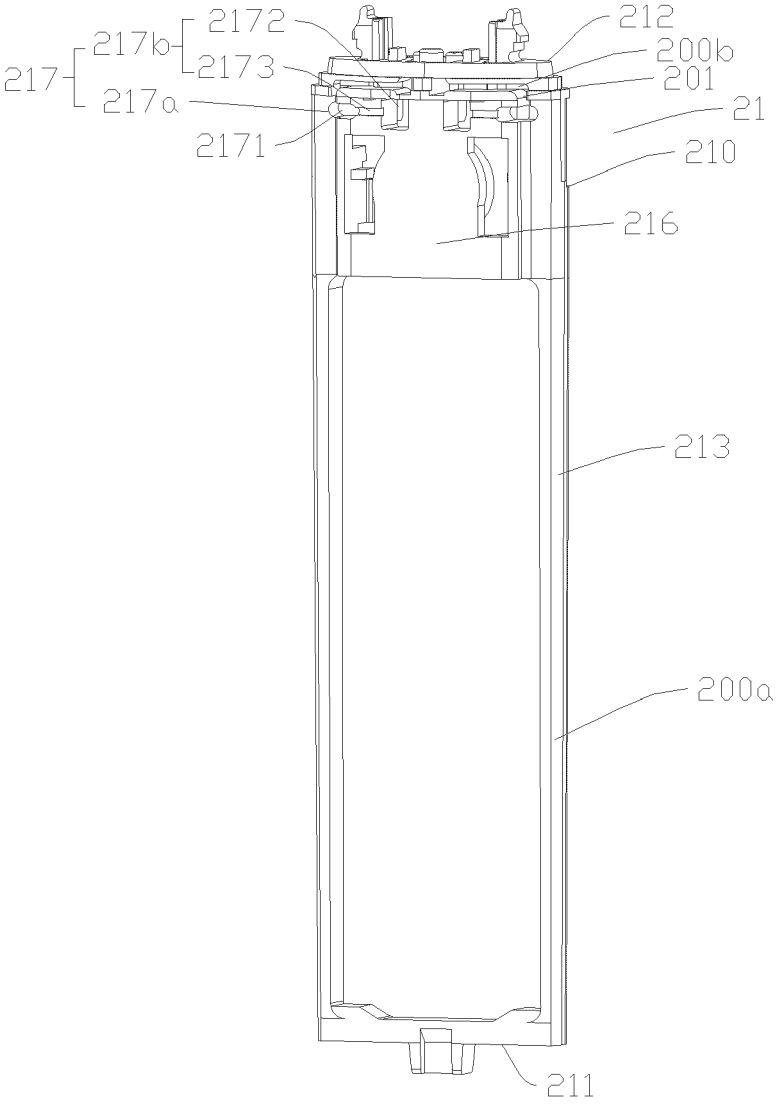
2172
217b
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FIG. 7

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EUROPEAN SEARCH REPORT

Application Number
EP 23 16 4556

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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