ATOMIZATION CORE AND ATOMIZATION DEVICE USING LIQUID STORAGE COTTON

FIELD

[0001] The present invention relates to the technical field of atomization, and particularly relates to an atomization core and an atomization device using liquid storage cotton.

BACKGROUND

[0002] Existing liquid storage cotton-type atomizers use liquid storage cotton as a carrier of atomized liquid, which effectively solves the problem of liquid leakage. However, atomization cores using liquid storage cotton have low liquid transfer efficiency due to the lack of liquid pressure. In addition, since a good taste of atomized liquid relies on a high atomization temperature, the liquid transfer efficiency should be high during atomization, and liquid in the liquid storage cotton will be consumed when cigarette liquid is consumed by the atomization core, and then the air pressure will be increased, resulting in an air pressure difference between the inside and outside of a liquid chamber of the atomizer. Because the air pressure in the outside is higher than the air pressure in the liquid chamber, air will enter the liquid chamber from the outside through pores of the liquid transfer material to keep the air pressure balance, and due to the fact that part of the pores of the liquid transfer material are occupied by air, the liquid transfer material cannot transfer liquid sufficiently or uniformly, and the liquid transfer rate of the liquid transfer material is decreased.

SUMMARY

[0003] The technical problem to be settled by the invention is to provide an atomization core, and further provide an atomization device using liquid storage cotton.

[0004] The technical solution that the present invention adopts to resolve the technical problem is to develop an atomization core which comprises a tubular mounting bracket. A heating atomization assembly is arranged in the mounting bracket.

[0005] A longitudinal liquid inlet is formed in the mounting bracket, the liquid inlet penetrates through inner and outer surfaces of the mounting bracket and extends in a height direction of the mounting bracket, and an air guide hole is formed above the liquid inlet.

[0006] The heating atomization assembly comprises columnar liquid transfer cotton and a heating element, an axial through-hole of the liquid transfer cotton forms an air guide passage, an outer circumferential surface of the liquid transfer cotton forms a liquid absorption surface, an inner circumferential surface of the liquid transfer cotton forms an atomization surface, and the heating element is inlaid in or attached to the atomization surface.

[0007] The liquid transfer cotton blocks the liquid inlet, and the air guide hole is unblocked entirely or partially.

[0008] Preferably, multiple said air guide holes are arranged at intervals.

[0009] Preferably, the air guide hole is connected to the liquid inlet.

[0010] Preferably, the air guide hole is one or more of an elongated hole, a circular hole and a square hole.

[0011] Preferably, a height of the liquid transfer cotton is greater than that of the liquid inlet.

[0012] Preferably, the heating element comprises a heating body and electrode leads conductively connected to the heating body.

[0013] The heating body is a columnar structure, and comprises conductive parts arranged at two ends and a heating part connected to the conductive parts, and each of the electrode leads has an end connected to a corresponding one of the conductive parts and an end extending downward.

[0014] Preferably, the atomization core further comprises a fixed seat received in an opening in a lower side of the mounting bracket.

[0015] The fixed seat is a columnar structure and is provided with an air inlet penetrating through opposite surfaces of the fixed seat in an axial direction, and locating slots for allowing the electrode leads to penetrate through are formed in a circumferential surface of the fixed seat.

[0016] The present invention further provides an atomization device using liquid storage cotton, comprising a housing and a mouthpiece connected to an upper end of the housing.

[0017] An atomization assembly is arranged in the housing. The atomization assembly comprises the atomization core. The atomization device using liquid storage cotton further comprises a power supply module connected to the atomization core to supply power to the atomization core.

[0018] Preferably, the atomization assembly comprises a hollow shell, a first sealing element received in an opening in an upper end of the shell, and a second sealing element received in an opening in a lower end of the shell. The atomization core is arranged in the shell, and the electrode leads of the atomization core penetrate through the second sealing element to be electrically connected to the power supply module.

[0019] A liquid chamber is defined by an inner circumferential surface of the shell, an outer circumferential surface of the mounting bracket of the atomization core, a lower surface of the first sealing element, and an upper surface of the second sealing element, and the atomization assembly further comprises liquid storage cotton arranged in the liquid chamber.

[0020] Preferably, the first sealing element comprises a first main part, a first through-hole is formed in a centre of the first main part, an air guide tube extends downward from a periphery of the first through-hole, and the air guide tube is connected to an upper end of the mounting bracket.

[0021] A mounting groove is formed in an upper end of the first main part, and the atomization assembly further comprises condensing absorbent cotton arranged in the mounting groove.

[0022] Preferably, the mouthpiece comprises a connection part arranged at an upper end of the housing and a mouthpiece part arranged on the connection part, an air outlet is formed in the mouthpiece part, an air guide part extends downward from a periphery of the air outlet and opposite to the first through-hole, and a bottom end of the air guide part abuts against an upper surface of the condensing absorbent cotton.

[0023] Preferably, the second sealing element comprises a second main part, a second through-hole is formed in a centre of the second main part, a receiving slot is formed in the second main part, and the fixed seat of the atomization core is mounted in the receiving slot.

[0024] Preferably, the power supply module comprises a hollow shell, and a lower end of the second main part is received in an opening in an upper end of the shell.

[0025] The power supply module further comprises a base received in an opening in a lower end of the shell, a mounting space is defined by an inner circumference of the shell, a lower surface of the second main part and an upper surface of the base, the power supply module further comprises a battery arranged in the mounting space, and a preset gap is reserved between an outer circumference of the battery and an inner circumference of the shell to form an air passage.

[0026] Preferably, an air inlet passage is formed in the base, and an airflow sensor switch connected to the battery is arranged in the air inlet passage.

[0027] Preferably, an air inlet through-hole is formed in a bottom wall of the housing and is in communication with the air inlet passage.

[0028] The invention has the following beneficial effects: the air hole is formed in the mounting bracket of the atomization core, and in use, air can enter the liquid chamber or the liquid storage cotton from the outside through the air guide hole, such that pores of the liquid transfer cotton are effectively prevented from being occupied by air, and the liquid transfer cotton can transfer liquid more sufficiently and uniformly, thus improving the taste of liquid atomized by the atomization device using liquid storage cotton and prolonging the service life of the atomization device using liquid storage cotton.

[0029] The implementation of the invention has the following beneficial effects: the atomization device using liquid storage cotton comprises the atomization core, the air hole is formed in the mounting bracket of the atomization core, and in use, air can enter the liquid chamber or the liquid storage cotton from the outside through the air guide hole, such that pores of the liquid transfer cotton are effectively prevented from being occupied by air, and the liquid transfer cotton can transfer liquid more sufficiently and uniformly, thus improving the taste of liquid atomized by the atomization device using liquid storage cotton and prolonging the service life of the atomization device using liquid storage cotton.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] The invention will be further described below in conjunction with accompanying drawings and embodiments. In the drawings:

[0031] FIG. 1 is a schematic structural view of an atomization device using liquid storage cotton according to the invention;

[0032] FIG. 2 is an exploded view of the atomization device using liquid storage cotton according to the invention;

[0033] FIG. 3 is a sectional view of the atomization device using liquid storage cotton according to the invention;

[0034] FIG. 4 is a schematic structural view of a first sealing element according to the invention;

[0035] FIG. 5 is a schematic structural view of a second sealing element according to the invention;

[0036] FIG. 6 is a schematic structural view of a base according to the invention;

[0037] FIG. 7 is a schematic structural view of an atomization core according to the invention;

[0038] FIG. 8 is an exploded view of the atomization core in FIG. 7;

[0039] FIG. 9 is a sectional view of the atomization core in FIG. 7;

[0040] FIG. 10 is a schematic structural view of a mounting bracket according to another embodiment of the invention;

[0041] FIG. 11 is a schematic structural view of the mounting bracket according to another embodiment of the invention;

[0042] FIG. 12 is a schematic structural view of a heating body according to the invention;

[0043] FIG. 13 is a schematic structural view of the heating body according to another embodiment of the invention;

[0044] FIG. 14 is a schematic structural view of the heating body according to another embodiment of the invention.

DESCRIPTION OF THE EMBODIMENTS

[0045] To gain a better understanding of the technical features, purposes and effects of the invention, specific implementations of the invention will be described in detail with reference to the accompanying drawings. In the following description, it should be noted that terms such as "front", "back", "upper", "lower", "left", "right", "lengthwise", "crosswise", "vertical", "horizontal", "top", "bottom", "inner", "outer", "head" and "tail" are used to indicate directional or positional relations based on the accompanying drawings or indicate that devices or elements referred to are configured and operated in a specific direction merely for the purpose of facilitating the description of the technical solutions of the invention, do not indicate that the devices or elements referred to must be in a specific direction, , and thus should not be construed as limitations of the invention.

[0046] It should also be noted that, unless otherwise expressly stated and defined, terms such as "mount", "link", "connect", "fix" and "arrange" should be broadly understood. For example, "connect" may refer to fixed connection, detachable connection or integrated connection; or, mechanical connection or electrical connection; or, direct connection or indirect connection through an intermediate medium; or, internal connection or interaction of two elements. When one element is referred to as being located "above" or "below" the other element, it may be "directly" or "indirectly" located on the other element, or there is one or more intermediate elements between these two elements. Terms such as "first", "second" and "third" are merely for the purpose of facilitating the description of the technical solutions of the invention, and should not be construed as indicating or implying relative importance or implicitly indicating the number of technical features referred to. Thus, when a feature is defined by "first", "second" or "third", it may explicitly or implicitly indicate the inclusion of one or more said feature. Those ordinarily skilled in the art can appreciate the specific meanings of these terms in the invention as the case may be.

[0047] As shown in FIG. 1-FIG. 3, the present invention provides an atomization device using liquid storage cotton, which comprises a housing 1 and a mouthpiece 2 connected to an upper end of the housing 1.

[0048] An atomization assembly 3 is arranged in the housing 1. The atomization assembly 3 comprises an atomization core 34, and the atomization device using liquid storage cotton further comprises a power supply module 4 connected to the atomization core 34 to supply power to the atomization core 34.

[0049] In this embodiment, the housing 1 is a columnar structure, for example, a cylindrical structure, and may comprise a circumferential wall 11 and a bottom wall 12 arranged at the bottom of the circumferential wall 11, that is, the housing 1 is a columnar structure with an opening. An air inlet through-hole 122 is formed in the bottom wall 12. Preferably, the housing 1 may be made from a hard insulating material such as phenolic plastic, polyurethane plastic, epoxy plastic, unsaturated polyester plastic, furan plastic, organic silicon resin, allyl resin, or modified resin of the organic silicon resin or the allyl resin. Of course, the housing 1 may also be made from a tubular metal such as by electroplating the surface of stainless steel, copper, iron, aluminium or aluminium alloy. It can be understood that the material of the housing 1 may be selected according to actual demands, and the invention has no specific limitation in this aspect.

[0050] In this embodiment, the atomization assembly 3 comprises a hollow shell 31, a first sealing element 32 received in an opening in an upper end of the shell 31, and a second sealing element 33 received in an opening in a lower end of the shell 31, wherein the atomization core 34 is arranged in the shell 31.

[0051] In this embodiment, the shell 31 is a columnar structure, for example, a cylindrical structure. Preferably, the shell 31 may be made from a hard insulating material such as phenolic plastic, polyurethane plastic, epoxy plastic, unsaturated polyester plastic, furan plastic, organic silicon resin, allyl resin, or modified resin of the organic silicon resin or the allyl resin. Of course, the shell 31 may also be made from a tubular metal such as by electroplating the surface of stainless steel, copper, iron, aluminium or aluminium alloy. Preferably, the shell 31 is made from food-grade plastic PCTG.

[0052] In this embodiment, a liquid chamber is defined by an inner circumferential surface of the shell 31, an outer circumferential surface of a mounting bracket 341 of the atomization core 34, a lower surface of the first sealing element 32, and an upper surface of the second sealing

element 33. The atomization assembly 3 further comprises liquid storage cotton 35 arranged in the liquid chamber.

[0053] Referring also to FIG. 4 and FIG. 7, in this embodiment, the first sealing element 32 comprises a first main part 321, and the first main part 321 may be in interference fit with an upper end of the shell 31; and preferably, a protrusion is arranged on part of an outer circumference of the first main part 321, and the protrusion abuts against an inner circumference of the shell 31 to improve the airtightness. Further, a first through-hole 3211 is formed in the centre of the first main part 321, an air guide tube 322 extends downward from the periphery of the first through-hole 3211, and the air guide tube 322 is connected to an upper end of the mounting bracket 341 , for example, the air guide tube 322 may be in interference fit with the mounting bracket 341 or the bottom of the air guide tube 322 is pressed and received in a cavity in the upper end of the mounting bracket 341.

[0054] Preferably, a mounting groove 3212 is formed in an upper end of the first main part 321, and the atomization assembly 3 further comprises condensing absorbent cotton 36 arranged in the mounting groove 3212. It can be understood that the mounting groove 3212 is concavely formed in an upper surface of the first main part 321 and in communication with the first through-hole 3211. The condensing absorbent cotton 36 is a columnar structure, for example, a cylindrical structure, an air hole is formed in the centre of the condensing absorbent cotton 36, and the air hole is in communication with the first through-hole 3211.

[0055] As shown in FIG. 3, further, the mouthpiece 2 comprises a connection part 21 arranged at the upper end of the housing 1 and a mouthpiece part 22 arranged on the connection part 21, an air outlet 221 is formed in the mouthpiece part 22, an air guide part 222 opposite to the first through-hole 3211 extends downward from the periphery of the air outlet 221, and a bottom end of the air guide part 222 abuts against an upper surface of the condensing absorbent cotton 36. In this embodiment, the connection part 21 may be fixed to the upper end of the housing 1 by interference fit, snap connection or threaded connection with the upper end of the housing 1. The mouthpiece part 22 is approximately a columnar structure, and the bottom end of the air guide part 222 abuts against the upper surface of the condensing absorbent cotton 36 to prevent the condensing absorbent cotton 36 from moving.

[0056] Further, as shown in FIG. 4, the second sealing element 33 comprises a second main part 331, and the second main part 331 may be in interference fit with a lower end of the shell 31; and preferably, a protrusion is arranged on part of an outer circumference of the second main part 331, and the protrusion abuts against an inner circumference of the shell 31 to improve the airtightness. A second through-hole 3311 is formed in the centre of the second main part 331 and is used for guiding air.

[0057] As shown in FIG-7-FIG. 9, the invention provides an atomization core 34, which comprises a tubular mounting bracket 341, and a heating atomization assembly 342 is arranged in the mounting bracket 341.

[0058] A longitudinal liquid inlet 3411 is formed in the mounting bracket 341, the liquid inlet 3411 penetrates through inner and outer surfaces of the mounting bracket 341 and extends in a height direction of the mounting bracket 341, and an air guide hole 3412 is formed above the liquid inlet 3411. The heating atomization assembly 342 comprises columnar liquid transfer cotton 3421 and a heating element 3422, an axial through-hole of the liquid transfer cotton 3421 forms an air guide passage, an outer circumferential surface of the liquid transfer cotton 3421 forms a liquid absorption surface, an inner circumferential surface of the liquid transfer cotton 3421 forms an atomization surface, and the heating element 3422 is inlaid in or attached to the atomization surface.

[0059] Wherein, the liquid transfer cotton 3421 blocks the liquid inlet 3411, and the air guide hole 3412 is unblocked entirely or partially.

[0060] For example, a top end of the liquid transfer cotton 3421 in the height direction may be lower than a bottom end of the air guide hole 3412 in the height direction; or, the top end of the liquid transfer cotton 3421 in the height direction may be flush with the bottom end of the air guide hole 3412 in the height direction; or, the top end of the liquid transfer cotton 3421 in the height direction may cover part of the air guide hole 3412. It can be understood that the liquid transfer cotton 3421 may not block or cover the air guide hole 3412, or the liquid transfer cotton 3421 partially blocks or covers the air guide hole 3412.

[0061] In this embodiment, the mounting bracket 341 is a hollow tubular structure, for example, a cylindrical structure. Preferably, the mounting bracket 341 may be made from a hard insulating material such as phenolic plastic, polyurethane plastic, epoxy plastic, unsaturated polyester plastic, furan plastic, organic silicon resin, allyl resin, or modified resin of the organic silicon resin or the allyl resin. Of course, the mounting bracket 341 may also be made from a tubular metal such as by electroplating the surface of stainless steel, copper, iron, aluminium or aluminium alloy. It can be understood that the material of the mounting bracket 341 may be selected according to actual demands, and the invention has no specific limitation in this aspect.

[0062] Preferably, the wall thickness of the mounting bracket 341 is less than or equal to 0.4 mm. In this way, the situation where a void area is formed at the liquid inlet 3411 due to an excessive thickness of the mounting bracket 341 and compromises the liquid transfer effect is avoided. Preferably, the wall thickness of the mounting bracket 341 may be 0.2 mm.

[0063] In this embodiment, multiple liquid inlets 3411, such as three, four or five, may be arranged at intervals in a circumferential direction, the size and number of the liquid inlets 3411 may be set as needed, and the invention has no limitation in this aspect. Preferably, the height of the liquid transfer cotton 3421 is greater than that of the liquid inlet 3411, such that the liquid transfer cotton 3421 covers or blocks the whole liquid inlet 3411.

[0064] In this embodiment, multiple air guide holes 3412 are arranged at intervals. For example, multiple air guide holes 3412 may be arranged on the same horizontal plane at intervals or multiple air guide holes 3412 may be arranged at intervals in the height direction. The air guide holes 3412 may be arranged regularly or in a staggered manner.

[0065] As shown in FIG. 11, preferably, the air guide hole 3412 may be connected to the liquid inlet 3411. When assembled, the liquid transfer cotton 3421 is assembled on the mounting bracket 341 to block the liquid inlet 3411 completely, and part of the air guide hole 3412 is unblocked for ventilation.

[0066] Preferably, the air guide hole 3412 is one or more of an elongated hole, a circular hole and a square hole. For example, the air guide hole 3412 may be an elongated hole; or, as shown in FIG. 10, the air guide hole 3412 may be a circular hole, such that air can be guided out of the

mounting bracket 341 more smoothly; or, as shown in FIG. 11, the air guide hole 3412 may be an elongated hole extending in the height direction of the mounting bracket 341, and the elongated hole may be connected to the liquid inlet 3411. It can be understood that the shape, number and position of the air guide hole 3412 may be set according to actual demands, and the invention has no specific limitation in this aspect.

[0067] As shown in FIG. 8-FIG. 9, and FIG. 12, preferably, the heating element 3422 comprises a heating body and electrode leads 34223 conductively connected to the heating body.

[0068] Wherein, the heating body is a columnar structure, and may comprise conductive parts 34221 arranged at two ends and a heating part 34222 connected to the conductive parts 34221, and each of the electrode leads 34223 has an end connected to the corresponding conductive part 34221 and an end extending downward. It can be understood that, as shown in FIG. 12, the heating body may be a C-structure; or, as shown in FIG.13, the heating body may be a helical structure; or, as shown in FIG. 14, the heating body may be a tubular structure. It can be understood that the structure of the heating body can be set as needed, and the invention has no specific limitation in this aspect.

[0069] Further, the atomization core 34 further comprises a fixed seat 343 received in an opening in a lower side of the mounting bracket 341.

[0070] Wherein, the fixed seat 343 is a columnar structure and is provided with an air inlet 3431 penetrating through opposite surfaces of the fixed seat 343 in an axial direction, and locating slots 3432 allowing the electrode leads 34223 to pass through are formed in a circumferential surface of the fixed seat 343. Multiple locating slots 3432 may be arranged at intervals in the circumferential direction, and an oblique guide surface may be formed on a side, facing the heating body, of the locating slot 3432. Preferably, a receiving slot 3312 is formed in the second main part 331, and the fixed seat 343 is mounted in the receiving slot 3312. Preferably, the electrode leads 34223 penetrate through the second sealing element 33 to be electrically connected to the power supply module 4.

[0071] It can be understood that an air guide hole 3412 is formed in the mounting bracket 341 of the atomization core 34, and in use, air can enter the liquid chamber or the liquid storage

cotton 35 from the outside through the air guide hole 3412, and pores of the liquid transfer cotton 3421 are effectively prevented from being occupied by air, such that the liquid transfer cotton 3421 can transfer liquid more sufficiently and uniformly, thus improving the taste of liquid atomized by the atomization device using liquid storage cotton and prolonging the service life of the atomization device using liquid storage cotton.

[0072] As shown in FIG. 2, FIG. 3, FIG. 5 and FIG. 6, the power supply module 4 comprises a hollow shell 41, and a lower end of the second main part 331 is received in an opening in an upper end of the shell 41. In this embodiment, the second main part 331 is approximately a cylindrical structure, a limiting protrusion is arranged on a circumferential surface of the second main part 331, a portion, located above the limiting protrusion, of the second main body part 331, is mounted at a lower end of the shell 31, and a portion, located below the limiting protrusion, of the second main part 331 is mounted at an upper end of the shell 41.

[0073] Further, the power supply module 4 further comprises a base 42 received in an opening in a lower end of the shell 41, a mounting space is defined by an inner circumference of the shell 41, a lower surface of the second main part 331 and an upper surface of the base 42, the power supply module 4 further comprises a battery 43 arranged in the mounting space, and a preset gap is reserved between an outer circumference of the battery 43 and an inner circumference of the shell 41 to form an air passage. Preferably, a retaining wall 332 extends downward form the periphery of the second main part 331, and the retaining wall 332 abuts against an upper circumference of the battery 43 to limit the battery 43, such that the power supply module 4 is kept away from the atomization assembly 3 by a certain space.

[0074] In this embodiment, the base 42 may comprise a bottom plate 421 and a ring part 422 extending upward from the periphery of the bottom plate 421, a plurality of support parts 423 are arranged on an upper surface of the bottom plate 421 at intervals, and the support parts 423 and the ring part 422 work together to support the bottom of the battery 43.

[0075] Further, an air inlet passage 424 is formed in the base 42, and an airflow sensor switch 44 connected to the battery 43 is arranged in the air inlet passage 424. The air inlet passage 424 may penetrate through upper and lower surfaces of the bottom plate 421, a groove 425 is concavely formed in an inner wall of the air inlet passage 424, and the airflow sensor switch 44

is arranged in the groove 425. Further, the support parts 423 are arranged away from the air inlet passage 424. When users smoke through the mouthpiece 2, the air pressure in the atomization device using liquid storage cotton changes, the airflow sensor switch 44 is turned on to form a circuit between the battery 43 and the heating element 3422, the atomization core 34 starts to generate heat to atomize atomizing liquid on the liquid transfer cotton 3421, and steam obtained after atomization is mixed with air to form an aerosol mixture, which is then inhaled into the mouth of users.

[0076] Further, a protrusive part extending downward is arranged at the bottom of the base 42, the middle of the bottom wall 12 of the housing 1 protrudes upward to form a support protrusion 121, the protrusive part abuts against the support protrusion 121, an air inlet through-hole 122 is formed in the bottom wall 12 of the housing 1, and the air inlet through-hole 122 is connected to the air inlet passage 424. Preferably, the air inlet through-hole 122 may be arranged on the support protrusion 121 or arranged on two sides of the support protrusion 121. In this embodiment, the first sealing element 32, the second sealing element 33 and the base 42 may be made from silicone.

[0077] It can be understood that the atomization device using liquid storage cotton further comprises the atomization core 34, the air guide hole 3412 is formed in the mounting bracket 341 of the atomization core 34, and in use, air can enter the liquid chamber or the liquid storage cotton 35 from the outside through the air guide hole 3412, such that pores of the liquid transfer cotton 3421 are effectively prevented from being occupied by air, and the liquid transfer cotton 3421 can transfer liquid more sufficiently and uniformly, thus improving the taste of liquid atomized by the atomization device using liquid storage cotton and prolonging the service life of the atomization device using liquid storage cotton.

[0078] It can be understood that the above embodiments are merely preferred ones of the invention, and 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 modifications and improvements without departing from the concept of the invention, and all these combinations, modifications and improvements should also within the protection scope of

the invention. Therefore, all equivalent transformations and modifications made according to the claims of the invention should be included in the scope of the claims of the invention.

What is claimed is:

1. An atomization core, comprising a tubular mounting bracket (341), a heating atomization assembly (342) being arranged in the mounting bracket (341);

wherein a longitudinal liquid inlet (3411) is formed in the mounting bracket (341), the liquid inlet (3411) penetrates through inner and outer surfaces of the mounting bracket (341) and extends in a height direction of the mounting bracket (341), and an air guide hole (3412) is formed above the liquid inlet (3411);

wherein the heating atomization assembly (342) comprises columnar liquid transfer cotton (3421) and a heating element (3422), an axial through-hole of the liquid transfer cotton (3421) forms an air guide passage, an outer circumferential surface of the liquid transfer cotton (3421) forms a liquid absorption surface, an inner circumferential surface of the liquid transfer cotton (3421) forms an atomization surface, and the heating element (3422) is inlaid in or attached to the atomization surface; and

wherein the liquid transfer cotton (3421) blocks the liquid inlet (3411), and the air guide hole (3412) is unblocked entirely or partially.

2. The atomization core according to Claim 1, wherein multiple said air guide holes (3412) are arranged at intervals.

3. The atomization core according to Claim 1, wherein the air guide hole (3412) is connected to the liquid inlet (3411).

4. The atomization core according to Claim 1, wherein the air guide hole (3412) is one or more of an elongated hole, a circular hole and a square hole.

5. The atomization core according to Claim 1, wherein a height of the liquid transfer cotton (3421) is greater than that of the liquid inlet (3411).

6. The atomization core according to Claim 1, wherein the heating element (3422) comprises a heating body and electrode leads (34223) conductively connected to the heating body;

the heating body is a columnar structure, and comprises conductive parts (34221) arranged at two ends and a heating part (34222) connected to the conductive parts (34221), and each of the

electrode leads (34223) has an end connected to a corresponding one of the conductive parts (34221) and an end extending downward.

7. The atomization core according to Claim 6, wherein the atomization core further comprises a fixed seat (343) received in an opening in a lower side of the mounting bracket (341); and

the fixed seat (343) is a columnar structure and is provided with an air inlet (3431) penetrating through opposite surfaces of the fixed seat (343) in an axial direction, and locating slots (3432) for allowing the electrode leads (34223) to penetrate through are formed in a circumferential surface of the fixed seat (343).

8. An atomization device using liquid storage cotton, characterized by comprising a housing (1) and a mouthpiece (2) connected to an upper end of the housing (1);

wherein an atomization assembly (3) is arranged in the housing (1), the atomization assembly (3) comprises the atomization core according to any one of Claims 1-7, and the atomization device using liquid storage cotton further comprises a power supply module (4) connected to the atomization core to supply power to the atomization core.

9. The atomization device using liquid storage cotton according to Claim 8, wherein the atomization assembly (3) comprises a hollow shell (31), a first sealing element (32) received in an opening in an upper end of the shell (31), and a second sealing element (33) received in an opening in a lower end of the shell (31); the atomization core is arranged in the shell (31), and the electrode leads (34223) of the atomization core penetrate through the second sealing element (33) to be electrically connected to the power supply module (4);

a liquid chamber is defined by an inner circumferential surface of the shell (31), an outer circumferential surface of the mounting bracket (341) of the atomization core, a lower surface of the first sealing element (32), and an upper surface of the second sealing element (33), and the atomization assembly (3) further comprises liquid storage cotton (35) arranged in the liquid chamber.

10. The atomization device using liquid storage cotton according to Claim 9, wherein the first sealing element (32) comprises a first main part (321), a first through-hole (3211) is formed in a centre of the first main part (321), an air guide tube (322) extends downward from a periphery of

the first through-hole (3211), and the air guide tube (322) is connected to an upper end of the mounting bracket (341);

a mounting groove (3212) is formed in an upper end of the first main part (321), and the atomization assembly (3) further comprises condensing absorbent cotton (36) arranged in the mounting groove (3212).

11. The atomization device using liquid storage cotton according to Claim 10, wherein the mouthpiece (2) comprises a connection part (21) arranged at an upper end of the housing (1) and a mouthpiece part (22) arranged on the connection part (21), an air outlet (221) is formed in the mouthpiece part (22), an air guide part (222) opposite to the first through-hole (3211) extends downward from a periphery of the air outlet (221), and a bottom end of the air guide part (222) abuts against an upper surface of the condensing absorbent cotton (36).

12. The atomization device using liquid storage cotton according to Claim 9, wherein the second sealing element (33) comprises a second main part (331), a second through-hole (3311) is formed in a centre of the second main part (331), a receiving slot (3312) is formed in the second main part (331), and the fixed seat (343) of the atomization core is mounted in the receiving slot (3312).

13. The atomization device using liquid storage cotton according to Claim 12, wherein the power supply module (4) comprises a hollow shell (41), and a lower end of the second main part (331) is received in an opening in an upper end of the shell (41);

the power supply module (4) further comprises a base (42) received in an opening in a lower end of the shell (41), a mounting space is defined by an inner circumference of the shell (41), a lower surface of the second main part (331) and an upper surface of the base (42), the power supply module (4) further comprises a battery (43) arranged in the mounting space, and a preset gap is reserved between an outer circumference of the battery (43) and an inner circumference of the shell (41) to form an air passage.

14. The atomization device using liquid storage cotton according to Claim 13, wherein an air inlet passage (424) is formed in the base (42), and an airflow sensor switch (44) connected to the battery (43) is arranged in the air inlet passage (424).

15. The atomization device using liquid storage cotton according to Claim 14, wherein an air inlet through-hole (122) is formed in a bottom wall of the housing (1) and is connected to the air inlet passage (424).