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Electronic atomization device and atomizer thereof

Abstract

An electronic atomizing device and an atomizer thereof are provided. The atomizer includes a liquid storage assembly and an atomizing assembly. The liquid storage assembly forms a liquid storage cavity therein and an accommodating cavity in communication with the liquid storage cavity, the accommodating cavity includes a first opening formed on a surface of the liquid storage assembly. The atomizing assembly is detachably embedded in the liquid storage assembly via the first opening and the atomizing assembly is accommodated in the accommodating cavity in an interference fit manner via at least one sealing member.

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Background/Summary

CROSS-REFERENCE TO RELATED APPLICATIONS

(1) This application is a U.S. National Stage of PCT/CN2020/121010 filed on Oct. 15, 2020, which claims priority to Chinese Patent Application No. 2019109962743, filed on Oct. 18, 2019, the entire contents of each of which are incorporated herein by reference in its entirety for all purposes.

TECHNICAL FIELD

(2) The present disclosure relates to atomizers, in particular to an electronic atomizing device and an atomizer thereof.

BACKGROUND

(3) During the use of electronic atomizing devices in the fields of medical treatment or electronic cigarettes, as the use time increases, the atomizing core is prone to age, and it is easy to result in defects such as low atomizing efficiency or the generation of some harmful substances. Accordingly, an electronic atomizing device with a replaceable atomizing core has been developed in the industry to deal with this defect. The replaceable atomizing core assembly in the related art generally includes a fixing tube for accommodating and fixing the internal heating assembly and a connecting tube located outside the fixing tube. The fixing tube is generally fixed into the connecting tube by riveting. The connecting tube is provided with a thread and other structures on the outside thereof for connecting and fixing with the liquid storage assembly. This method solves the aforementioned defects to a certain extent, but the atomizing core assembly in this solution often requires twisting operations during assembly and disassembly, which is inconvenient to operate and increases the difficulty of structural design.

SUMMARY

(4) An electronic atomizing device and an atomizer thereof are provided according to various embodiments of the present disclosure.

(5) An atomizer includes a liquid storage assembly and an atomizing assembly. The liquid storage assembly forms a liquid storage cavity therein and an accommodating cavity in communication

with the liquid storage cavity, the accommodating cavity includes a first opening formed on a surface of the liquid storage assembly. The atomizing assembly is detachably embedded in the liquid storage assembly via the first opening and the atomizing assembly is accommodated in the accommodating cavity in an interference fit manner via at least one sealing member.
(6) In some embodiments, the liquid storage assembly includes at least one first liquid inlet communicating the accommodating cavity and the liquid storage cavity, the liquid storage cavity is in fluid communication with the atomizing assembly via the at least one first liquid inlet.
(7) In some embodiments, the liquid storage assembly includes an air inlet channel extending from top to bottom, and the air inlet channel has an air outlet of at a lower portion thereof in communication with the accommodating cavity.
(8) In some embodiments, the liquid storage assembly includes an air outlet channel in communication with the top end of the accommodating cavity.
(9) In some embodiments, the at least one sealing member includes a first sealing member and a second sealing member located between an inner surface of the accommodating cavity and an outer surface of the atomizing assembly, the first sealing member and the second sealing member are located on a upper side and a lower side of the at least one first liquid inlet, respectively.
(10) In some embodiments, the atomizing assembly includes a base and an atomizing core assembly disposed on the base, and the atomizing core assembly has at least one second liquid inlet located between the first sealing member and the second sealing member, and the at least one second liquid inlet is in fluid communication with the at least one first liquid inlet.
(11) In some embodiments, the base includes a first electrode connector and a second electrode connector that are insulated from each other, the atomizing core assembly includes a third electrode connector and a fourth electrode connector that are insulated from each other, the third electrode connector and the fourth electrode connector are in electrical contact with the first electrode connector and the second electrode connector, respectively.
(12) In some embodiments, the base includes a seat and a fastening bracket connected to the seat, the fastening bracket has a second opening on a side thereof, and the atomizing core assembly is laterally mounted between the fastening bracket and the seat via the second opening.
(13) In some embodiments, the seat is located in the first opening, the at least one sealing member further includes a third sealing member sleeved on a periphery of the seat.
(14) In some embodiments, the seat has a disc shape, and has an accommodating groove circumferentially formed on an outer wall thereof and adjacent to a top surface thereof, the third sealing member is accommodated in the accommodating groove.
(15) In some embodiments, a gripping groove is formed on the seat for pulling the atomizing assembly out of the liquid storage assembly, and an avoiding groove is provided at an edge of the first opening corresponding to the gripping groove.
(16) In some embodiments, the seat and the fastening bracket are electrically conductive, and the base further includes a conductive column extended through the seat and insulated from the seat; the seat and the fastening bracket form the first electrode connector, and the conductive column forms the second electrode connector.
(17) In some embodiments, a first insulating member is located between the seat and the conductive column, the seat has a central through hole to receive the first insulating member.
(18) In some embodiments, the conductive column comprises an embedded portion located at a lower portion thereof and a conductive portion connected to the embedded portion and protruding from the top surface of the seat.
(19) In some embodiments, the fastening bracket includes a blocking wall extending laterally, and the atomizing core assembly includes a flange abutting against with the blocking wall.
(20) In some embodiments, the atomizing core assembly includes a conductive housing configured to form the third electrode connector and a conductive cylinder configured to form the fourth electrode connector; the conductive cylinder is provided in the conductive housing and insulated

from the conductive housing, and the at least one second liquid inlet is formed on the conductive housing.
(21) In some embodiments, the atomizing core assembly includes a fixing cylinder, a liquid absorbing member provided in the fixing cylinder, and a heating member provided in a central through hole of the liquid absorbing member.
(22) An electronic atomizing device is further provided, which includes the aforementioned atomizer.
(23) In some embodiments, the electronic atomizing device further includes a battery device, the atomizer is detachably mounted on the battery device, the battery device is configured to supply power to the atomizer.
(24) In some embodiments, a receiving groove is formed on the top of the battery device, and the atomizer is detachably received in the receiving groove and is electrically connected to the battery device.
(25) These and other objects, advantages, purposes, and features will become apparent upon review of the following detailed description in conjunction with the drawings.

Description

BRIEF DESCRIPTION OF THE DRAWINGS
(1) A further understanding of the nature and advantages of particular embodiments may be realized by reference to the remaining portions of the specification and the drawings, in which like reference numerals are used to refer to similar components. In some instances, a sub-label is associated with a reference numeral to denote one of multiple similar components. When reference is made to a reference numeral without specification to an existing sub-label, it is intended to refer to all such multiple similar components.
(2) FIG. **1** is a perspective view of an electronic atomizing device according to some embodiments;
(3) FIG. **2** is an exploded, perspective view of the electronic atomizing device shown in FIG. **1**;
(4) FIG. **3** is an exploded. perspective view of the atomizer shown in FIG. **2**;
(5) FIG. **4** is a perspective view of the atomizer shown in FIG. **2**, but viewed from another aspect;
(6) FIG. **5** is similar to FIG. **3**, but viewed from another aspect;
(7) FIG. **6** is a longitudinal sectional view of the atomizer shown in FIG. **2**;
(8) FIG. **7** is an exploded sectional view of the atomizer shown in FIG. **6**;
(9) FIG. **8** is an exploded, perspective view of the atomizing assembly shown in FIG. **3**;
(10) FIG. **9** is an exploded sectional view of the atomizing assembly shown in FIG. **3**.
DETAILED DESCRIPTION OF THE EMBODIMENTS
(11) Exemplary embodiments will be described hereafter with reference to the drawings to clearly and fully illustrate the technical solutions of the present disclosure. All other embodiments obtained by a person of ordinary skill in the art based on the embodiments in the present disclosure without creative efforts are within the scope of the present disclosure.
(12) It should be understood that the terms “front”, “rear”, “left”, “right”, “upper”, “lower”, “first”, “second” and other terms are only for the convenience of describing the technical solutions of the present disclosure, rather than indicating that the device or element referred to must have special differences, so it cannot be understood as a limitation of the present disclosure. When an element is considered to be “connected” to another element, it can be directly connected to another element or indirectly connected to another element with a mediating element. Unless defined otherwise, all technical and scientific terms used herein have the same meaning as commonly understood by people who are skill in the art to which the present disclosure belongs. The terms used herein in the specification of the present disclosure is only for the purpose of describing specific embodiments, and is not intended to limit the present disclosure.

(13) FIGS. **1** and **2** show an electronic atomizing device **1** according to some embodiments of the present disclosure. The electronic atomizing device **1** can be applied to heat and atomize liquid medium, such as tobacco liquid and liquid medicine. The electronic atomizing device **1** may include a battery device **10** and an atomizer **20** detachably mounted on the battery device **10**. The battery device **10** is configured to supply power to the atomizer **20** and to control on/off of the atomizer **20**. The atomizer **20** is configured to accommodate, heat, and atomize the liquid medium, and deliver the generated atomizing gas to a user. In some embodiments, a receiving groove **11** is formed on the top of the battery device **10**, and the atomizer **20** is detachably received in the receiving groove **11** and is electrically connected to the battery device **10**.
(14) Referring to FIGS. **3** to **5** together, in some embodiments, the atomizer **20** may include a substantially rectangular liquid storage assembly **21** and an atomizing assembly **22** detachably mounted in the liquid storage assembly **21**. The liquid storage assembly **21** is mainly configured to store liquid medium. The atomizing assembly **22** is mainly configured to heat and atomize the liquid medium in the liquid storage assembly **21**. In some embodiments, the atomizing assembly **22** can be inserted into the liquid storage assembly **21** in an interference fit manner, such that the atomizing assembly **22** is not easy to fall out of the liquid storage assembly **21**, while maintaining a good sealing performance. This is even more effective in some cases that the atomizing assembly **22** does not have a cylinder shape.
(15) In some embodiments, the atomizer **20** may further include a liquid injection device **23** and a mouthpiece assembly **24**. The liquid injection device **23** is embedded on a top of the liquid storage assembly **21** and in communication with the liquid storage cavity **210** to facilitate liquid injection into a liquid storage cavity **210** of the liquid storage assembly **21**. The mouthpiece assembly **24** is mounted on the top of the liquid storage assembly **21** and in communication with an air outlet channel **213** of the liquid storage assembly **21**.
(16) Referring to FIG. **6** and FIG. **7** together, in some embodiments, the liquid storage assembly **21** may include the liquid storage cavity **210**, an accommodating cavity **211** that is in fluid communication with the liquid storage cavity **210**, an air inlet channel **212** in communication with a lower end of the accommodating cavity **211**, and the air outlet channel **213** in communication with an upper end of the accommodating cavity **211**. The liquid storage cavity **210** is configured to store liquid medium. In some embodiments, the accommodating cavity **211** may have a cylinder shape, and the atomizing assembly **22** with a cylinder shape can be detachably inserted in the accommodating cavity **211**. The accommodating cavity **211** has a first opening **2114** formed on a lower surface of the liquid storage assembly **21**. The accommodating cavity **211** extends vertically upward from the first opening **2114** into the liquid storage cavity **210**, and the accommodating cavity **211** and the liquid storage cavity **210** are communicated with each other via a plurality of first liquid inlets **2110** that are uniformly formed around the accommodating cavity **211**. The air inlet channel **212** extends from an air inlet **2121** on the mouthpiece assembly **24** to a lower portion of the liquid storage assembly **21**, and the air inlet channel **212** is in communication with a lower portion of the accommodating cavity **211** via an air outlet **2122**, such that air from outside can enter the liquid storage assembly **21** from the air inlet **2121**, then flow downward and enter the atomizing assembly **22** from the air outlet **2122**. The air outlet channel **213** is located right above the accommodating cavity **211** and in communication with a passage of the mouthpiece assembly **24**, such that the atomized gas generated by the atomizing assembly **22** can be inhaled by the user from the mouthpiece assembly **24**.
(17) In some embodiments, the accommodating cavity **211** is provided with a first sealing member **2111** and a second sealing member **2112**. The first sealing member **2111** and the second sealing member **2112** may be both O-rings, which are arranged at an upper side and a lower side of the first liquid inlet **2110**, respectively. This configuration, on the one hand, allows the atomizing assembly **22** to be inserted into the accommodating cavity **211** in an interference fit manner, and on the other hand, the liquid medium can also be prevented from leaking during the process of entering the

atomizing assembly **22** via the first liquid inlet **2110**. The air outlet **2122** of the air inlet channel **212** is located below the second sealing member **2112**, so as to isolate the air inlet channel **212** from the first liquid inlets **2110**.

(18) As shown in FIGS. **8** and **9**, the atomizing assembly **22** is detachably embedded in the liquid storage assembly **21** via the first opening **2114**. In some embodiments, the atomizing assembly **22** may include a base **221** and an atomizing core assembly **222** disposed on the base **221**, such that the base **221** can be reused by replacing the atomizing core assembly **222**. In some embodiments, the atomizing core assembly **222** is laterally mounted on the base **221** from one side of the base **221**. The atomizing core assembly **222** has at least one second liquid inlet **2225***b* located between the first sealing member **2111** and the second sealing member **2112**. The at least one second liquid inlet **2225***b* is in one-to one correspondence and in fluid communication with the at least one first liquid inlet **2110**.

(19) In some embodiments, the base **221** may include a conductive seat **2211** located in the first opening **2114**, a conductive column **2212** extending through the seat **2211** and insulated from the seat **2211**, and a fastening bracket **2213** integrally formed on the top of the seat **2211**. The seat **2211** and the fastening bracket **2213** are used as the first electrode connector of the atomizing assembly **22**, which is electrically connected to one of the positive electrode and the negative electrode of the battery device **10**. The conductive column **2212** are used as the second electrode connector of the atomizing assembly **22**, which is electrically connected to the other one of the positive electrode and the negative electrode of the battery device **10**. The fastening bracket **2213** is configured to hold the atomizing core assembly **222** and electrically connect the atomizing core assembly **222** with the seat **2211**. In some embodiments, a first insulating member **2214** is located between the seat **2211** and the conductive column **2212** to achieve an insulation. At the same time, the elastic characteristic of the first insulating member **2214** allows the conductive column **2212** to have a certain axial displacement after being subjected to an external force, so as to facilitate the mounting of the atomizing core assembly **222**.

(20) In some embodiments, the seat **2211** may have a disc shape, and have a central through hole **2211***a* to receive the first insulating member **2214**. A gripping groove **2211***b* is formed on an outer surface of the seat **2211** in a circumferential direction adjacent to the bottom surface. The gripping groove **2211***b* is introduced for the user to conveniently grip the atomizing assembly **22** by fingers and pull the atomizing assembly **22** out of the liquid storage assembly **21**. Correspondingly, an avoiding groove **2113** is provided at an edge of the first opening **2114** corresponding to the gripping groove **2211***b*, so as to facilitate user's operation. An accommodating groove **2211***c* is formed on the outer surface of the seat **2211** in a circumferential direction adjacent to a top surface. The accommodating groove **2211***c* is configured to accommodate a third sealing member **2215**. On the one hand, the third sealing member **2215** can increase the friction force between a side surface of the atomizing assembly **22** and an inner surface of the accommodating cavity **211**, and on the other hand, the third sealing member **2215** can prevent liquid from leaking through the gap between the side surface of the atomizing assembly **22** and the inner surface of the accommodating cavity **211**. In the illustrated embodiment, the atomizing assembly **22** and the liquid storage assembly **21** are fitted together via three spaced apart sealing members **2111**, **2112**, **2215** which are located on an upper portion, a middle portion, and a lower portion respectively, thus the connection is very stable.

(21) In some embodiments, the conductive column **2212** may include a solid cylindrical embedded portion **2212***a* located at a lower portion thereof and a cylindrical conductive portion **2212***b* connected to the embedded portion **2212** and protruding from the top surface of the seat **2211**. The conductive portion **2212***b* is provided with a plurality of air inlet holes **2212***c* at a sidewall thereof, such that a central through hole of the conductive portion **2212***b* can be in communication with an outside environment. The cylindrical conductive portion **2212***b* has a head portion with a larger diameter, and an upper edge of the head portion is also provided with a chamfered first guiding portion **2212***d* to facilitate the mounting of the atomizing core assembly **222** to the base **221**.

(22) In some embodiments, the fastening bracket **2213** may be C-shaped with an opening, and the atomizing core assembly **222** can be mounted in the fastening bracket **2213** from the opening thereof. The fastening bracket **2213** may include a C-shaped connecting wall **2213***a* connected to the seat **2211**, a C-shaped fixing wall **2213***b* connected to an upper side of the connecting wall **2213***a*, and a plane C-shaped blocking wall **2213***c* connected to an upper side of the C-shaped fixing wall **2213***b* and turned horizontally inward. A plurality of air holes **2213***d* can be formed on the connecting wall **2213***a* to facilitate the air to flow smoothly. The blocking wall **2213***c* is configured to position the atomizing core assembly **222** in an axial direction, and the blocking wall **2213***c* may also be provided with a second guiding portion **2213***e* at a lower surface of the end thereof adjacent to an opening of the fastening bracket **2213**, such that the atomizing core assembly **222** can be easily latched into the fastening bracket **2213** from a lateral direction.
(23) As shown in FIGS. **8** and **9**, in some embodiments, the atomizing core assembly **222** may include a conductive fixing cylinder **2221**, a cylindrical liquid absorbing member **2222** provided in the fixing cylinder **2221**, a heating member **2223** provided in a central through hole of the liquid absorbing member **2222**, a liquid filtering member **2224** surrounding the fixing cylinder **2221**, a cylindrical conductive housing **2225** surrounding the liquid filtering member **2224** and being electrically connected to the fixing cylinder **2221**, a second insulating member **2226** mounted at a lower end of the fixing cylinder **2221**, and a conductive cylinder **2227** extending through the second insulating member **2226**. The central through hole of the liquid absorbing member **2222** defines an atomizing cavity **2222***a*, and the conductive cylinder **2227** is in communication with the atomizing cavity **2222***a*. A third guiding portion **2227***a* is formed on an outer edge of the lower end of the conductive cylinder **2227** to cooperate with the first guiding portion **2212***d* of the conductive column **2212** to facilitate the mounting of the atomizing core assembly **222**. In some embodiments, the liquid absorbing member **2222** can be made of cotton. The heating member **2223** may be a heating wire or a heating mesh.
(24) The heating member **2223** includes two terminals (not shown) which are electrically connected to the fixing cylinder **2221** and the conductive cylinder **2227**, respectively. The fixing cylinder **2221** and the conductive cylinder **2227** are electrically connected to the seat **2211** and the conductive column **2212**, respectively, and then are electrically connected to the positive electrode and the negative electrode of the battery device **20**, respectively. In the illustrated embodiment, the fixing cylinder **2221** and the conductive cylinder **2227** are configured as a third electrode connector and a fourth electrode connector of the atomizing assembly **22**. The liquid filtering member **2224** is configured to prevent excessive liquid flowing into the liquid absorbing member **2222**, which results in insufficient atomizing.
(25) The plurality of second liquid inlets **2225***b* are formed on the conductive housing **2225**. In some embodiments, the fixing cylinder **2221** includes a third liquid inlet **2221***a* corresponding to the second liquid inlets **2225***b*, such that the liquid from the liquid filtering member **2224** can reach the liquid suction member **2222** via the third liquid inlet **2221***a*. In some embodiments, the conductive housing **2225** may include an annular flange **2225***a* formed on an outer surface of the conductive housing **2225** adjacent to a lower end thereof. The flange **2225***a* can abut against the blocking wall **2213***c* of the fastening bracket **2213**, so as to achieve a longitudinal positioning of the atomizing core assembly **222**.
(26) When assembling the atomizing assembly **22**, a lower end of the atomizing core assembly **222** is firstly aligned with the lateral opening of the fastening bracket **2213** of the base **221**, so that the flange **2225***a* of the conductive housing **2225** corresponds to a second guiding portion **2213***e* of the blocking wall **2213***c* of the fastening bracket **2213**, and the third guiding portion **2227***a* of the conductive cylinder **2227** corresponds to the first guiding portion **2212***d* of the conductive column **2212**. In the embodiment, both the first insulating member **2214** and the second insulating member **2226** are made of soft material. Then, the soft first insulating member **2214** and second insulating member **2226** are slightly elastically deformed by applying a lateral pressure, such that the

conductive cylinder **2227** and the conductive column **2212** move away from each other, and the lower end of the atomizing core assembly **222** can be completely pushed into the fastening bracket **2213**. When the atomizing assembly **22** is assembled, the conductive cylinder **2227** is in contact with the conductive column **2212**, and the flange **2225***a* of the conductive housing **2225** abuts tightly against the blocking wall **2213***c* of the fastening bracket **2213**. When the atomizing assembly **22** needs to be disassembled, an opposite lateral force is applied to overcome the friction force between the atomizing core assembly **222** and the base **221** to complete the disassembly.

(27) Referring to FIG. **6** again, when the atomizing assembly **22** is to be assembled on the liquid storage assembly **21**, the atomizing assembly **22** can be inserted into the accommodating cavity **211** from the first opening **2114** by an external force. At that time, the first sealing member **2111** and the second sealing member **2112** are engaged with the outer surface of the conductive housing **2225** in an interference fit manner, respectively. Since the first sealing member **2111** and the second sealing member **2112** are located on the upper side and the lower side of the second liquid inlet **2225***b*, the liquid storage cavity **210** can be in fluid communication with the accommodating cavity **211** via the second liquid inlets **2225***b*. The third sealing member **2215** is engaged with an inner sidewall of the accommodating cavity **211** adjacent to the first opening **2114** in an interference fit manner, and the third sealing member **2215** is located below the air outlet **2122**, such that the air inlet channel **212** can be in communication with the air inlet hole **2212***c* of the conductive column **2212**. The atomizing cavity **2222***a* of the atomizing core assembly **222** is in communication with the air outlet channel **213** of the liquid storage assembly **21**, thereby completing the assembly of the atomizer **20** (the arrow in FIG. **6** shows the airflow direction). In some embodiments, after the atomizing assembly **22** is assembled to the liquid storage assembly **21**, a bottom surface of the atomizing assembly **22** and the bottom surface of the liquid storage assembly **21** are coplanar, such that the atomizer **20** has a smooth bottom surface and a more compact structure.

(28) While the disclosed subject matter has been described with reference to illustrative embodiments, this description is not intended to be construed in a limiting sense. Various modifications of the illustrative embodiments, as well as other embodiments of the subject matter, which are apparent to persons skilled in the art to which the disclosed subject matter pertains are deemed to lie within the scope of the disclosed subject matter.

Claims

1. An atomizer, comprising: a liquid storage assembly forming a liquid storage cavity therein and an accommodating cavity in communication with the liquid storage cavity, the accommodating cavity comprising a first opening formed on a surface of the liquid storage assembly, the liquid storage assembly comprising an air outlet channel in communication with a top end of the accommodating cavity; and an atomizing assembly detachably embedded in the liquid storage assembly along an axis direction of the air outlet channel via the first opening, and the atomizing assembly being accommodated in the accommodating cavity in an interference fit manner via at least one sealing member, wherein the liquid storage assembly comprises at least one first liquid inlet communicating the accommodating cavity and the liquid storage cavity, the liquid storage cavity is in fluid communication with the atomizing assembly via the at least one first liquid inlet; wherein the at least one sealing member comprises a first sealing member and a second sealing member located along the axis direction between an inner surface of the accommodating cavity and an outer surface of the atomizing assembly when the atomizing assembly is detachably embedded in the liquid storage assembly with the at least one liquid inlet positioned between and spaced from the first sealing member and the second sealing member.

2. The atomizer according to claim 1, wherein the liquid storage assembly comprises an air inlet channel extending from top to bottom, and the air inlet channel has an air outlet at a lower portion thereof in communication with the accommodating cavity.

3. The atomizer according to claim 2, wherein the liquid storage assembly comprises an air outlet channel in communication with a top end of the accommodating cavity.
4. The atomizer according to claim 1, wherein the atomizing assembly comprises a fixing cylinder, a liquid absorbing member provided in the fixing cylinder, and a heating member provided in a central through hole of the liquid absorbing member.
5. The atomizer according to claim 1, wherein the atomizing assembly comprises a base and an atomizing core assembly disposed on the base, the atomizing core assembly has at least one second liquid inlet located between the first sealing member and the second sealing member.
6. The atomizer according to claim 5, wherein the base comprises a first electrode connector and a second electrode connector that are insulated from each other, the atomizing core assembly comprises a third electrode connector and a fourth electrode connector that are insulated from each other, the third electrode connector and the fourth electrode connector are in electrical contact with the first electrode connector and the second electrode connector, respectively.
7. The atomizer according to claim 6, wherein the base comprises a seat and a fastening bracket connected to the seat, and the fastening bracket has a second opening on a side thereof, and the atomizing core assembly is laterally mounted between the fastening bracket and the seat via the second opening.
8. The atomizer of claim 7, wherein the seat is located in the first opening, the at least one sealing member further comprises a third sealing member sleeved on a periphery of the seat.
9. The atomizer of claim 8, wherein the seat has a disc shape and has an accommodating groove circumferentially formed on an outer wall thereof and adjacent to a top surface thereof, the third sealing member is accommodated in the accommodating groove.
10. The atomizer according to claim 9, wherein a gripping groove is formed on the seat for pulling the atomizing assembly out of the liquid storage assembly, and an avoiding groove is provided at an edge of the first opening corresponding to the gripping groove.
11. The atomizer according to claim 10, wherein the atomizing core assembly comprises a conductive housing configured to form the third electrode connector and a conductive cylinder configured to form the fourth electrode connector; the conductive cylinder is provided in the conductive housing and insulated from the conductive housing, and the at least one second liquid inlet is formed on the conductive housing.
12. The atomizer according to claim 7, wherein the seat and the fastening bracket are electrically conductive, and the base further comprises a conductive column extending through the seat and insulated from the seat; the seat and the fastening bracket form the first electrode connector, and the conductive column forms the second electrode connector.
13. The atomizer according to claim 12, wherein a first insulating member is located between the seat and the conductive column, the seat has a central through hole to receive the first insulating member.
14. The atomizer according to claim 13, wherein the conductive column comprises an embedded portion located at a lower portion thereof and a conductive portion connected to the embedded portion and protruding from the top surface of the seat.
15. The atomizer according to claim 13, wherein the fastening bracket comprises a blocking wall extending laterally, and the atomizing core assembly comprises a flange abutting against the blocking wall.
16. An electronic atomizing device comprising the atomizer according to claim 1.
17. The electronic atomizing device according to claim 16, further comprising a battery device, the atomizer being detachably mounted on the battery device, the battery device being configured to supply power to the atomizer.
18. The electronic atomizing device according to claim 17, wherein a receiving groove is formed on the top of the battery device, and the atomizer is detachably received in the receiving groove and is electrically connected to the battery device.