CLAIMS

What is claimed is:

1. An atomization device, comprising a shell (3), an atomizing core (10) and electrodes (5), characterized in that a liquid storage cavity (35), an air inlet passage (34) and an air outlet passage (33) are disposed in the shell (3), the atomizing core (10) comprises a heating unit (2), and a liquid transfer unit (1) which is used for absorbing and transferring liquid and is made of a porous material, the liquid transfer unit (1) comprises an air guide part (12), and a base (11) which is connected to and surrounds the air guide part (12), a gap between the air guide part (12) and the base (11) forms an air flow chamber (17), the liquid transfer unit (1) is provided with an air inlet (15) in communication with the air flow chamber (17), an air outlet (16) in communication with the air flow chamber (17), and a liquid inlet part (14) to be in contact with the liquid, the heating unit (2) comprises a heating part (21) which generates heat when energized, and electrical connection parts (22) which are connected to the heating part (21) for transmitting power to the heating part (21), the heating part (21) is disposed on an inner wall of the air flow chamber (17) and is in contact with the liquid transfer unit (1), the electrical connection parts (22) extend out of the air flow chamber (17), and the electrodes (5) are disposed on the shell (3), and each of the electrodes (5) has an end electrically connected to a corresponding one of the electrical connection parts (22) and an opposite end for being electrically connected to an external circuit;

wherein the liquid storage cavity (35) leads to the liquid inlet part (14) of the liquid transfer unit (1), the air inlet passage (34) is communicated with the air inlet (15), and the air outlet passage (33) is communicated with the air outlet (16), such that when the liquid inlet part (14) of the liquid transfer unit (1) contacts the liquid, the liquid is transferred by the liquid transfer unit (1) onto the heating part (21) and is heated to generate smoke, and an external air flow sequentially passes through the air inlet passage (34), the air inlet (15), the air flow chamber (17), the air outlet (16) and the air outlet passage (33) to take the smoke out of the atomization device;

wherein the shell (3) comprises a shell body (31) and a pedestal (32), one end of the shell body (31) is open and the pedestal (32) is disposed at the open end of the shell body (31);

wherein the air inlet (15) is formed in a lower side of the liquid transfer unit (1), the liquid transfer unit (1) comprises a support part (13) which is connected to the base (11) and/or the air guide part (12), protrudes downwards and is used for elevating the air inlet (15); and

wherein the support part (13) downwards presses against the pedestal (32) to space the air inlet (15) apart from the pedestal (32).

2. The atomization device according to Claim 1, characterized in that the air flow chamber (17) is a ring space, or a ring space with angles.

3. The atomization device according to Claim 2, characterized in that the atomization device comprises a sealing element (4) disposed in the shell (3), at least one side of the air flow chamber (17) is open outwards, the sealing element (4) seals the open side of the air flow chamber (17) of the liquid transfer unit (1), and an air outlet connector (41) is disposed at a position, corresponding to the air outlet (16) of the liquid transfer unit (1), of the sealing element (4) and is connected to the air outlet passage (33) of the shell (3), thereby achieving communication and seal between the air outlet passage (33) and the air outlet (16).

4. The atomization device according to Claim 3, characterized in that along an axis surrounded by the air flow chamber (17), two sides of the air flow chamber (17) are open, a receiving cavity (43) is formed in the sealing element (4), the atomizing core (10) is disposed in the receiving cavity (43), and a wall of the receiving cavity (43) covers and seals the open side of the air flow chamber (17) of the liquid transfer unit (1).

5. The atomization device according to Claim 4, characterized in that the receiving cavity (43) of the sealing element (4) is open downwards, the atomizing core (10) is placed in the receiving cavity (43) through the opening of the receiving cavity (43);

wherein the liquid storage cavity (35) and the air outlet passage (33) are disposed in the shell body (31), the air inlet passage (34) is disposed in the pedestal (32), and the sealing element (4) and the atomizing core (10) are disposed in the shell body (31); and

wherein the pedestal (32) is connected to a lower side of the sealing element (4), such that the air inlet (15) is sealed with respect to the air inlet passage (34).

6. The atomization device according to Claim 5, characterized in that electrode connection holes (42) are formed in a side, facing the pedestal (32), of the sealing element (4), the electrical connection parts (22) of the heating unit (2) are bent into the electrode connection holes (42), and one end of each said electrode (5) is inserted through the pedestal (32) and into a corresponding one of the electrode connection holes (42) to be in contact and electrical connection with a corresponding one of the electrical connection parts (22).

7. The atomization device according to Claim 2, characterized in that the base (11) comprises a first part (111) and a second part (112), the first part (111) and the second part (112) surround two sides of the air guide part (12) respectively, and one end of the first part (111) and one end of the second part are joined together and are connected to the air guide part (12).

8. The atomization device according to Claim 7, characterized in that in the air flow chamber (17), the heating part (21) is disposed on the base (11), and the liquid inlet part (14) is disposed on an outer side of the base (11).

9. The atomization device according to Claim 8, characterized in that the air inlet part (14) is a liquid inlet recess formed in the outer side of the base (11).

10. The atomization device according to Claim 7, characterized in that in the air flow chamber (17), the heating part (21) is disposed on the air guide part (12).

11. The atomization device according to Claim 10, characterized in that the liquid inlet part (14) is a liquid inlet recess formed in an outer side of the air guide part (12).

12. The atomization device according to Claim 7, characterized in that the air inlet (15) is formed in a joint of the base (11) and the air guide part (12).

13. The atomization device according to Claim 7, characterized in that the other end of the first part (111) and the other end of the second part (112) cooperatively define the air outlet (16).

14. The atomization device according to Claim 7, characterized in that the liquid storage cavity (35) and the air outlet passage (33) are disposed in the shell body (31), the air inlet passage (34) is disposed in the pedestal (32), and the atomizing core (10) is disposed in the shell body (31).