

rotation, said spreading section and a zone of said supply hole being coaxial, said inlet being radial to the air flow across said first nozzle;

a third nozzle formed downstream of said supply hole at an intersection of said supply hole with said inlet, said first and third nozzles both being in contact with said inlet and spread apart from each other, said first and third nozzles being formed by sharp edges and axially aligned, said outlet nozzle being a conical jet having fine particles in a center thereof and large particles around a periphery thereof, said expansion chamber receiving the large particles emitted by said jet such that the large particles flow by gravity toward a bottom of said expansion chamber, said hollow body being positioned between said reservoir and said expansion chamber, said hollow body having a transversal partition, said transversal partition carrying said nozzle head; and

an evacuation means for passing a residual flow of liquid toward said reservoir, said evacuation means extending through said transversal partition, said evacuation means having a lower end located below a minimum level of the liquid in said reservoir, said evacuation means comprising at least one tube engaged within a hole formed in said transversal partition, said partition and said tube separating in airtight relationship to an interior volume of said reservoir and said expansion chamber in an area above a maximum level of the liquid in said reservoir.

4. A nebulization device comprising:

a hollow body having a base;

a nebulization nozzle head mounted on said base, said nozzle head having an open chamber for mixing and fractionating, said open chamber having an outlet nozzle and a first nozzle opposite to said outlet nozzle, a supply hole formed behind said first nozzle, said nozzle head having an inlet formed therein in communication with said first nozzle;

a source of compressed gas connected by a supply conduit to said supply hole;

a reservoir containing a liquid to be nebulized, said reservoir mounted under said hollow body, said nozzle head having said outlet nozzle in communication with an expansion chamber formed in said hollow body

coaxial with said open chamber, the liquid being sucked into said open chamber, the liquid being sucked into said open chamber by a partial vacuum created by a gas flow from said first nozzle to said outlet nozzle, the liquid being fractionated and mixed with the gas flow by turbulence in said open chamber, said open chamber having a spreading section in front of said first nozzle, said spreading section having a surface of rotation, said spreading section and a zone of said supply hole being coaxial said inlet being radial to the air flow across said first nozzle;

a third nozzle formed downstream of said supply hole at an intersection of said supply hole with said inlet, said first and third nozzles both being in contact with said inlet and spread apart from each other, said first and third nozzles being formed by sharp edges and axially aligned, said outlet nozzle being a conical jet having fine particles in a center thereof and large particles around a periphery thereof, said expansion chamber receiving the large particles emitted by said jet such that the large particles flow by gravity toward a bottom of said expansion chamber, said body having a partition in a lower part thereof, said source of compressed gas comprising a rigid cannula in communication with said supply hole, said rigid cannula extending through an axial hole formed in said partition, said cannula extending through the base of said reservoir into said reservoir along a direction of movement of said hollow body, said cannula slidable in a bore formed in a wall of a base of said reservoir, said cannula connected to a flexible conduit exterior of said reservoir, said flexible conduit connected to said source of compressed air;

a pump means having an opening for pumping out the liquid from a liquid reserve, said pump means connected by a conduit to the liquid reserve, said pump means having a delivery opening connected by another conduit to said reservoir; and

an electric motor means connected to said pump means for actuating said pump means, said electric motor means having two sensors exterior of said reservoir, said two sensors spaced from each other, said two sensors positioned along a path of an activation contact by said cannula.

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