

A Wet Air Purifier

Technical field of this Invention

This utility model involves an air purification device, particularly, a type of watering air refresher.

Background this Invention

As urban economy grows quickly and population expands at an enormous pace, environmental pollution becomes more and more serious and air quality deteriorates rapidly, resulting in extreme hazard to people's health. Meanwhile, as the standard of living of people becomes more affluent, greater awareness and emphasis are then placed on the aspect of health. Everybody hopes to breathe fresh and purer air.

Purpose of this Invention

The purpose of this utility model is to fulfill the said demand, and provide a type of watering air refresher, which can effectively remove the hazardous substances in the indoor air, thus producing abundance of healthier fresh air.

Technical solution of this invention

To achieve the said purpose, this utility model adopts the technical solution as follows: a type of watering air refresher, which comprises of an open-mouth container for holding liquid; an insulation net mounted at the open mouth of the container, which has a hole with protruding edge; a support, which is installed on the protruding edge of the insulation net, and has a mounting hole for shaded pole motor; a shaded pole motor mounted in the mounting hole, whose rotating shaft is connected with an impeller and a centrifugal guard board; a siphon, connected below the centrifugal guard board through a tube whose mouth has at least one jag; and a shield on the support, which has an air hole.

This utility model uses the siphon and centrifugal principles. Through the siphon and the centrifugal guard board driven by the highly rotating shaded pole motor, a water film forms in the open-mouth container, and outside air enters the container through the clearance between the support and the insulation net, while such hazardous substances as dust, foul smells and bacteria in the air are absorbed into the water. The purified air rises with the highly rotating impeller, and is discharged through the air hole in the shield. If pure botanical essence, which maintains the function of healthcare, is added into the water, the resulting purified air discharged will further enhance the function of healthcare.

Description of the Figures

Figure 1 is the dimensional structure of the utility model;
Figure 2 is the structural decomposition of the utility model;
Figure 3 is the dimensional structural of the said lamp holder of the utility model.

The following is the further description of the utility model through the attached figures and embodiment.

Description of Preferred Embodiment of the Invention

As Figures 1, 2 and 3 show, the said watering air refresher of this utility model is mainly composed of open-mouth container 1, insulation net 2, support 3, shaded pole motor 4, impeller 41, centrifugal guard board 42, siphon 5 and shield 6. The open-mouth container 1 may hold water or water plus vegetable essence; insulation net 2 has three legs 22, through which the insulation net 2 is mounted at the mouth of the container 1; the lower part of the support 3 extends to form a guard board 33, and is mounted on the circular protruding edge 211 of the insulation net 2, through which a clearance 67 forms between the support 3 and the insulation net 2; the shaded pole motor is fastened in the mounting hole 31 of the support 3, and its rotating shaft is connected with the impeller 41 and the centrifugal guard board 42; the siphon 5 is clamped below the centrifugal guard board 42 and extends into the container 1 through the hole 21 of the insulation net 2, and there is a jag 51 on the mouth of the tube through which the siphon 5 is connected with the centrifugal guard board; the shield 6 is on the guard board 33 of the support 3, and has an air hole 61 in it.

When this utility model works, the shaded pole motor 4 runs to drive the siphon 5 for blending, and the liquid in the container 1 reaches the centrifugal guard board 42 through the siphon 5. As the centrifugal guard board 42 rotates at a high speed, the liquid sprays out of the jag 51 and a water film forms in the container 1. Outside air enters the container 1 through the clearance 67 and the insulation net 2. Hazardous substances in the air will be absorbed by the water film, while purified air rises with the highly rotating impeller 41 and is discharged out of the air hole 61 in the shield 6.

The shaded pole motor 4 described in this case is equipped with a lamp holder 32, which enables this utility model to be used for lighting. In addition, the interior wall of the shield 6 is coated with photo catalyst, which further purifies the air under the action of light beams. Also, the lamp holder 32 may be equipped with a circular UV light tube for sterilization.

Claims

1. A type of watering air refresher, comprising of:

An open-mouth container (1) for holding liquid;

An insulation net (2), which is mounted at the mouth of the container (1), and has a hole (21) with protruding edge (211);

A support (3), which is on the protruding edge (211) of the insulation net (2) and has a mounting hole (31) for the shaded pole motor;

A shaded pole motor (4), mounted in the hole (31) of the support (3); its rotating shaft is connected with an impeller (41) and a centrifugal guard board (42);

A siphon (5) connected below the centrifugal guard board (42) through a tube whose mouth has at least one jag (51); and

A shield (6) on the support (3), which has an air hole (61)

2. The watering air refresher described in Claim 1 features a lamp holder (32) mounted on the shaded pole motor (4).
3. The watering air refresher described in Claim 1 features a siphon (5) clamped below the centrifugal guard board (42).
4. The watering air refresher described in Claim 1 features three legs (22) on the insulation net (2), which is mounted through the legs (22) at the mouth of the container (1).
5. The watering air refresher described in Claim 2 features photo catalyst coated on the interior wall of the shield (6).
6. The watering air refresher described in Claim 2 features a circular UV light tube on the lamp holder.
7. The watering air refresher described in Claim 1 features water or water plus vegetable essence.