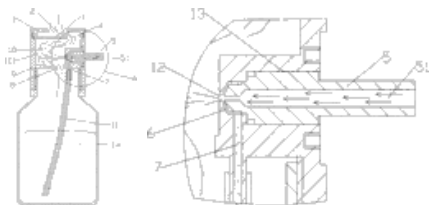


Images (2)



Classifications

■ **B05B7/0012** Apparatus for achieving spraying before discharge from the apparatus

Landscapes

Disinfection, Sterilisation Or Deodorisation Of Air

Show more

Claims (2)

Hide Dependent ^

1. the atomizer of be used to atomize essence or essential oil, comprise the atomizer body, it is characterized in that: be provided with first cavity and second cavity in the described atomizer body, the first cavity top wall is provided with the atomization gas outlet, on the first cavity underside wall, also be provided with the backflow through hole, the top of first cavity is provided with baffle plate, be provided with between baffle plate and the top wall at interval, constitute top chamber between baffle plate and the top wall, constitute lower chamber between the underside wall of the baffle plate and first cavity, be provided with through hole between top chamber and the lower chamber, the sidewall of lower chamber is provided with an air-flow spray orifice, lower chamber is communicated with the bottom of second cavity by the air-flow spray orifice, in second cavity, be fixed with an air-flow shower nozzle, be provided with between the underside wall of the air-flow shower nozzle and second cavity at interval, constitute atomization chamber between the underside wall of the air-flow shower nozzle and second cavity, also be provided with fluid pipeline on the atomizer body, fluid pipeline is communicated with atomization chamber.

2. the atomizer of be used to atomize essence or essential oil according to claim 1, it is characterized in that: described atomizer body is made of body and lid, body is the rotary body of an aluminum material, on body, be provided with upper chamber and lower chambers, be provided with intercommunicating pore between upper chamber and the lower chambers, the inwall of lower chambers is provided with internal thread, baffle plate is fixed on the top of upper chamber by lid, one side of baffle plate and the side of upper chamber are left at interval, also be provided with a rotation chamber on the body, the axis of rotation chamber and the axis normal of upper chamber, be provided with a pipeline near the rotation cavity bottom in body, pipeline opening is connected with a sebific duct, and described air-flow shower nozzle is the rotary body of a copper material, be provided with coaxial airflow line in the air-flow shower nozzle, the outer side surface at the top of air-flow shower nozzle is provided with step.

Description

translated from Chinese

A nebulizer for nebulizing essence or essential oil

technical field

The utility model relates to the technical field of atomizers, in particular to an atomizer for atomizing essence or essential oil. the

Background technique

At present, people pay more and more attention to the environment of public places such as hotels, shopping malls, airports, etc. Especially in the hot summer, people especially look forward to a kind of fresh and natural air, hoping that the cool fragrance can bring a refreshing feeling to this summer. Feel. For this reason, people often take the following measures in these places: 1. Mainly adopt heating method, use heating rod to vaporize essence and essential oil; 2. Adopt air two-fluid atomization technology; 3. Small essential oil atomizer, such as China The patent application number is 200510132555.2. the

There are following shortcoming correspondingly in these prior art:

1. Heating with an electric heating handle, the essence and essential oil will have a certain difference from the original taste during the heating process, and some essences and essential oils will produce harmful gases after being heated to a certain temperature. Places with relatively high safety and fragrance requirements cannot meet their requirements. The particles produced by the heating method are uneven and large, which are very easy to adhere to the air-conditioning pipes and other objects; for a long time, the air-conditioning filter will be blocked. the
2. Air two-fluid atomization, the range of atomized particles is large, generally uneven between 1-50 microns. Large particles are easy to adhere to air-conditioning pipes and other objects, and will block the air-conditioning filter for a long time. the
3. For the Chinese patent application No. 200510132555.2, the structure of this device is complicated, and generally only 50 square meters of space can be scented, so the area of fragrance expansion of this device is limited. the

Contents of the invention

The purpose of this utility model is to provide an atomizer for atomizing essence or essential oil, which is a cold atomization method, does not need heating, effectively maintains the natural fragrance of essence and essential oil, and the atomized particles are finer and more uniform. The fragrance is more uniform and the fragrance area is large. the

The purpose of this utility model is achieved through the following technical solutions. the

An atomizer for atomizing essence or essential oil, comprising an atomizer body, characterized in that: the atomizer body is provided with a first cavity and a second cavity, and the top wall of the first cavity An atomized gas outlet is provided, and a return flow hole is also provided on the bottom wall of the first cavity. A baffle is provided on the upper part of the first cavity, and an interval is provided between the baffle and the top wall. The top chamber is formed between the baffle plate and the bottom wall of the first cavity to form a lower chamber, a through hole is provided between the top chamber and the lower chamber, and an air flow nozzle is provided on the side wall of the lower chamber. The lower chamber communicates with the bottom of the second cavity through the airflow nozzle, and an airflow nozzle is fixed in the second cavity, and an interval is provided between the airflow nozzle and the bottom wall of the second cavity, and the airflow nozzle and the second cavity An atomization cavity is formed between the bottom wall and a liquid pipeline is arranged on the atomizer body, and the liquid pipeline communicates with the atomization cavity. the

The atomizer body is composed of a body and a cover. The body is a rotating body of aluminum material. The body is provided with an upper chamber and a lower chamber, and a communication hole is provided between the upper chamber and the lower chamber. The inner wall of the lower chamber is provided with internal threads, and the baffle is fixed on the upper part of the upper chamber through the cover body. There is a gap between one side of the baffle and the side of the upper chamber. There is also a rotating chamber on the body. The axis of the chamber is perpendicular to the axis of the upper chamber. There is a pipeline on the body near the bottom of the rotating chamber. The mouth of the pipeline is connected with a rubber hose. The air flow duct is provided with a step on the outer wall surface of the top of the air flow nozzle. the

Compared with the prior art, the utility model has the following advantages:

1. The cold atomization method is adopted, no heating is required, and the natural fragrance of essence and essential oil is maintained. the
2. The particles are finer and more uniform, and it is easier to gasify after contact with the air, and the fragrance is more uniform. the
3. The atomizing core is made of copper, and the others are made of aluminum, so that the air pressure can be higher, the effect of liquid atomization is better, and the amount of atomization is larger. the

In a word, the product described in the utility model can atomize high-viscosity liquids such as essence and essential oil into particles below microns. The finer the atomized particles, the more uniform the smell. When the atomized particles are ultra-fine mist, they will not stick Attaches to pipes and strainers. the

Description of drawings

Fig. 1 is the structural representation of the atomizer used for atomizing essence or essential oil of the utility model;

FIG. 2 is an enlarged schematic view of point A in FIG. 1 . the

Detailed ways

The atomizer for atomizing essence or essential oil of the present invention will be described in further detail below in conjunction with the accompanying drawings. the

As shown in Figure 1-2, the atomizer of the utility model for atomizing essence or essential oil includes an atomizer body, and a first cavity and a second cavity 13 are arranged in the atomizer body, and the first cavity An atomizing gas outlet 2 is provided on the top wall of the body, and a return flow hole 8 is also provided on the bottom wall of the first cavity. A baffle 3 is provided on the upper part of the first cavity, and a gap is provided between the baffle and the top wall. A top chamber is formed between the baffle plate and the top wall, a lower chamber 10 is formed between the baffle plate and the bottom wall of the first cavity, a through hole 4 is provided between the top chamber and the lower chamber 10, and the lower chamber The side wall of 10 is provided with an air flow nozzle 12, and the lower chamber 10 communicates with the bottom of the second cavity 13 through the air flow nozzle 12, and an air flow nozzle 5 is fixed in the second cavity 13, and the air flow nozzle 5 is connected to the second cavity. The bottom wall of the cavity 13 is provided with an interval, the atomization chamber 6 is formed between the air flow nozzle 5 and the bottom wall of the second cavity, and a liquid pipeline 7 is also provided on the atomizer body, and the liquid pipeline 7 is connected with the atomizer. Cavity 6 communicates. the

The body of the atomizer is composed of a body 9 and a cover 1. The body 9 is a rotating body made of aluminum material. An upper chamber and a lower chamber are arranged on the body 9. There is a communication between the upper chamber and the lower chamber. The hole is the return flow hole 8 on the bottom wall of the first chamber, and the inner wall of the lower chamber is provided with an internal thread for fixing the whole atomizer on the essence or essential oil bottle 14. There is the aforementioned atomizing gas outlet 2. the

The baffle 3 is fixed on the upper part of the upper chamber through the cover body 1, and there is a gap between one side of the baffle 3 and the side of the upper chamber, thereby forming an upward air outlet, that is, between the aforementioned top chamber and the lower chamber set via 4,

Also be provided with a rotating chamber on the body 9, be the aforementioned second chamber 13, the axis of the rotating chamber is perpendicular to the axis of the upper chamber, a pipeline is provided on the body near the bottom of the rotating chamber, and the pipe mouth is connected with a Rubber hose 11 is connected,

The air flow nozzle 5 is a rotating body made of copper material. The air flow nozzle 5 is provided with a coaxial air flow duct 51 , and a step is provided on the outer wall surface of the top of the air flow nozzle. The number of steps is set according to needs, so as to achieve the formation of the atomization chamber 6 and the sealing of the corresponding joints. the

The atomizer is installed on the central diffuser and aroma distribution system. the

The atomization process of the atomizer is as follows: the air inlet on the side of the atomizer, that is, the inlet of the airflow pipe 51, is connected to the air pump. When the air pump is working, the airflow is blown out through the pipe. Use the siphon principle to suck the liquid into the atomizing chamber 6, so that the liquid and the gas are fully mixed, and the high-speed gas-liquid mixture is sprayed out through the air flow port, hitting the inner wall 101 of the lower chamber 10, and atomizing the liquid into micron-sized fine particles. The smallest particles will float in the air, float out through the through hole 4 and the atomizing gas outlet 2 through the updraft, and exchange heat with the air and convert into gas. The smaller the particle, the easier it is to convert to gas. Other larger particles are reclaimed through the lower chamber 10 and returned to the essence and essential oil in the bottle by the reflux hole 8. Because most of the essence and essential oil are oily substances, their viscosity is very high, if the atomized particles are too large, the particles will adhere to other objects, and through the structure of the utility model, the perfume mist can be controlled below 3 microns, So that the effect of liquid atomization is better and the amount of atomization is larger. the

Cited By (16)

Publication number	Priority date	Publication date	Assignee	Title
CN102764715A *	2012-08-13	2012-11-07	济南赛成电子科技有限公司	Essential oil atomization device
CN103055342A *	2013-01-15	2013-04-24	杨若	Siphoning type essential oil atomization aromatherapy equipment
WO2015139641A1 *	2014-03-21	2015-09-24	毛宗泽	Small-sized essential oil atomization device
CN105343921A *	2014-08-21	2016-02-24	梁红燕	Aromatherapy atomizer
CN105344539A *	2014-08-21	2016-02-24	梁红燕	Aroma atomizing device
CN105485874A *	2014-09-16	2016-04-13	上海百芬环境科技有限公司	Fragrance diffuser adapted to air-conditioning air outlet
CN105477669A *	2014-09-16	2016-04-13	上海百芬环境科技有限公司	Inner-mixing aroma-diffusing instrument
CN105797887A *	2016-05-27	2016-07-27	广州丹绮环保科技有限公司	Atomizing nozzle and atomizing equipment comprising same
CN107537706A *	2017-08-25	2018-01-05	江苏露水河人造板有限公司	A kind of spray valve and spraying system
CN109641226A *	2018-08-01	2019-04-16	璞真生活有限公司	Essential oil spill type atomizer
US11000618B2	2018-03-29	2021-05-11	Puzhen Life Co., Limited	Essential oil atomizer
US11097032B2 *	2018-12-12	2021-08-24	Guangzhou Zhihuagu Intellectual Property Service Co., Ltd.	Scent diffusion device
US11123757B2	2018-03-29	2021-09-21	Puzhen Life Co., Limited	Essential oil atomizer
US11213602B2	2018-03-29	2022-01-04	Puzhen Life Co., Limited	Multi-oil diffuser
US11224674B2	2018-03-29	2022-01-18	Puzhen Life Co., Limited	Essential oil atomizer

US11511294B2	2018-11-02	2022-11-29	Puzhen Life Co., Limited	Essential oil atomizer
Family To Family Citations				

* Cited by examiner, † Cited by third party, ‡ Family to family citation

Similar Documents

Publication	Publication Date	Title
CN201832737U	2011-05-18	Atomizer for atomizing essence or essential oil
CN203916959U	2014-11-05	A kind of small-sized essential oil atomising device
CN205947119U	2017-02-15	Electronic cigarette atomizer
CN204072868U	2015-01-07	Expand fragrant instrument
CN204072864U	2015-01-07	Expand fragrant equipment
CN203249351U	2013-10-23	An Aromatherapy Humidifier
CN105797887A	2016-07-27	Atomizing nozzle and atomizing equipment comprising same
CN111790560B	2022-01-25	Atomization system
CN205729844U	2016-11-30	A kind of essential oil atomisation device
CN106016303A	2016-10-12	High-viscosity organic waste liquid atomizing device
CN103567099B	2016-06-29	A kind of thick liquid nozzle component and there is the spray gun of this nozzle component
CN110552399B	2024-09-24	Misting hand washing machine
CN204074327U	2015-01-07	Atomization core
CN203001508U	2013-06-19	A nebulizer for nebulizing essence or essential oil
CN201091674Y	2008-07-30	A beauty humidifier
CN101569457B	2011-08-17	Perfume atomizer
CN208770586U	2019-04-23	The micro- mist clarifier of integral type nanometer
CN202566814U	2012-12-05	Perfume diffusing instrument
CN207693490U	2018-08-07	Atomising device and sanitary bath equipment

CN202823728U	2013-03-27	Single-line microjet atomizer
CN208626279U	2019-03-22	A kind of anion fumigating machine that diffusion effect is good
CN207899630U	2018-09-25	A kind of protrusion flow-disturbing atomising device
CN205460032U	2016-08-17	Atomizing device of plant liquid deodorizer
CN108421656A	2018-08-21	A nano-fog generating device
CN207287828U	2018-05-01	A kind of twin fluid atomization core

Priority And Related Applications

Priority Applications (1)

Application	Priority date	Filing date	Title
CN2010202819325U	2010-08-04	2010-08-04	Atomizer for atomizing essence or essential oil

Applications Claiming Priority (1)

Application	Filing date	Title
CN2010202819325U	2010-08-04	Atomizer for atomizing essence or essential oil

Legal Events

Date	Code	Title	Description
2011-05-18	C14	Grant of patent or utility model	
2011-05-18	GR01	Patent grant	
2017-06-30	TR01	Transfer of patent right	<p>Effective date of registration: 20170609</p> <p>Address after: 511495 Guangdong province Panyu District Village Street Gaosha Industrial Zone C5 Guangzhou city building four layer</p> <p>Patentee after: Guangzhou gallop Electric Machinery Co., Ltd.</p> <p>Address before: 331600, No. 30, Wenfeng East Road, Wenfeng Town, Jishui County, Jiangxi, Ji'an</p> <p>Patentee before: Gao Xiaoyang</p>

2017-06-30	TR01	Transfer of patent right	
2017-08-29	DD01	Delivery of document by public notice	Addressee: Gao Xiaoyang Document name: Notification of Passing Examination on Formalities
2017-08-29	DD01	Delivery of document by public notice	
2020-08-28	CX01	Expiry of patent term	Granted publication date: 20110518
2020-08-28	CX01	Expiry of patent term	