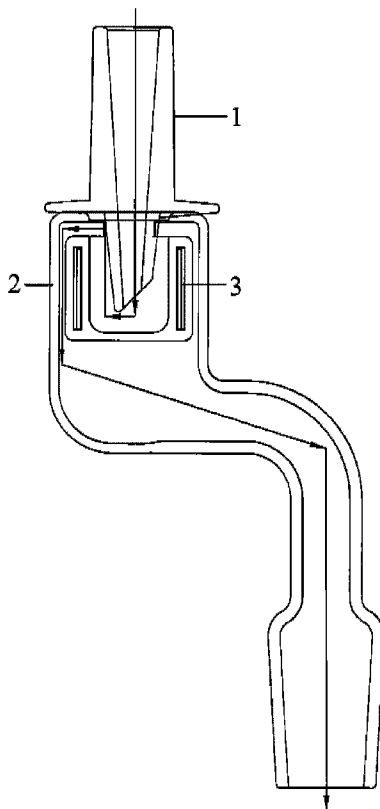




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 (54) Title: HEATING CUP, HIGH FREQUENCY HEATING UNIT, AND HOOKAH



(57) Abrégé/Abstract:

A heating cup, including a heating container configured to be heated by a high frequency heating unit. When in use, the high frequency heating unit is disposed around the heating container; in a power-on state, the heating container is configured to produce heat under the action of the high frequency heating unit to heat a tobacco material and produce smoke.

## ABSTRACT

A heating cup, including a heating container configured to be heated by a high frequency heating unit. When in use, the high frequency heating unit is disposed around the heating container; in a power-on state, the heating container is configured to produce heat under the action of the high frequency heating unit to heat a tobacco material and produce smoke.

## **HEATING CUP, HIGH FREQUENCY HEATING UNIT, AND HOOKAH**

### **BACKGROUND**

[0001] The disclosure relates to a heating cup, a high frequency heating unit, and a hookah.

[0002] A conventional tobacco material heating device comprises a heating cup and a magnetic induction coil fixedly disposed on the heating cup. The heating cup is made of metal or plastics.

### **SUMMARY**

[0003] The disclosure provides a heating cup, comprising a heating container configured to be heated by a high frequency heating unit; when in use, the high frequency heating unit is disposed around the heating container; in a power-on state, the heating container is configured to produce heat under the action of the high frequency heating unit to heat a tobacco material and produce smoke

[0004] In a class of this embodiment, the heating cup further comprises an air inlet nozzle; the air inlet nozzle comprises a first air passage communicating with the heating container.

[0005] In a class of this embodiment, an airflow volume of the air inlet nozzle is changeable through covering a part of the air inlet nozzle with a finger.

[0006] In a class of this embodiment, the air inlet nozzle is made of ceramic material.

[0007] In a class of this embodiment, the heating container is an integrated structure comprising glass inlaid with metal.

[0008] In a class of this embodiment, the heating container comprises a second air passage separated from the metal.

[0009] Also provided is a high frequency heating unit, comprising a magnetic induction coil and a battery, wherein the battery comprises a power panel comprising an LC circuit configured to convert a boosted DC voltage and current into an alternating current; when the alternating current passes through the magnetic induction coil, an alternating magnetic field is generated.

[0010] The high frequency heating unit further comprises a hollow handle and a hollow annular structure; the battery is disposed in the hollow handle, and the magnetic induction coil is disposed in the hollow annular structure.

[0011] A hookah comprises a heating cup and a high frequency heating unit; the high frequency heating unit comprises a magnetic induction coil and a battery; the battery comprises a power panel comprising an LC circuit configured to convert a boosted DC voltage and current into an alternating current; when the alternating current passes through the magnetic induction coil, an alternating magnetic field is generated; when in use, the high frequency heating unit is disposed around the heating container; in a power-on state, the heating container is configured to produce heat under the action of the high frequency heating unit to heat a tobacco material and produce smoke.

[0012] The hookah further comprises a water filter; when in use, the smoke is filtered by the water filter and then inhaled by a user.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. 1 is a sectional view of a heating cup in accordance with one embodiment of the disclosure; and

[0014] FIG. 2 is a schematic diagram of a heating cup in accordance with one embodiment of the disclosure;

[0015] FIG. 3 shows a connection of a heating cup and a water filter in accordance with one embodiment of the disclosure;

[0016] FIG. 4 is a sectional view of a high frequency heating unit in accordance with one embodiment of the disclosure; and

[0017] FIG. 5 shows a connection of a heating cup and a high frequency heating unit in accordance with one embodiment of the disclosure.

#### DETAILED DESCRIPTION

[0018] To further illustrate, embodiments detailing a heating cup and a high frequency heating unit are described below. It should be noted that the following embodiments are intended to describe and not to limit the disclosure.

[0019] Tobacco materials refer to smoke oil, tobacco, tobacco and other materials used to produce smoke.

[0020] The disclosure provides a heating cup in combination with a water filter for use.

[0021] Specifically, as shown in FIGS. 1-2, the heating cup comprises an air inlet nozzle 1, a heating container 2, a metal conductor 3 inlaid in the heating container 2. The air inlet nozzle 1 is disposed on the top of the heating container 2. The metal conductor 3 is inlaid in the heating container 2 and when being heated, the metal conductor exchanges heat with the heating container 2 to heat the tobacco material in the heating container 2. The air inlet nozzle 1 is made of ceramic material, and the heating container 2 is made of glass inlaid metal conductor 3.

[0022] The air inlet nozzle 1 is made of ceramic, quartz, crystal, mica and jade, which is thermally insulated and will not burn the hand in case the hand touches the air inlet nozzle.

[0023] The heating container 2 is entirely a metal or a part of it is a metal, or glass material or ceramic, quartz, crystal, mica, jade material inlaid with a metal.

[0024] As shown in FIG. 3, provided is a water filter used in combination with the heating cup.

[0025] As shown in FIG. 4, provided is a high frequency heating unit used in combination with the heating cup. The high frequency heating unit comprises a magnetic induction coil 501 and a battery 502; the battery 502 comprises a power panel comprising an LC circuit configured to convert a boosted DC voltage and current into an alternating current; when the alternating current passes through the magnetic induction coil, an alternating magnetic field is generated. The high frequency heating unit further comprises a hollow handle 503 and a hollow annular structure; the battery 502 is disposed in the hollow handle, and the magnetic induction coil 501 is disposed in the hollow annular structure.

[0026] As shown in FIG. 5, in use, a user holds the hollow handle 503 of the high frequency heating unit. The high frequency heating unit comprises a heating part 504 corresponding to the metal conductor 3 inlaid in the heating container 2. In a power-on state, the heating container 2 produces heat under the action of the high frequency heating unit to heat a tobacco material and produce smoke. The air enters the heating container 2 via the air inlet nozzle 1 and drives the produced smoke to submerge into the water of the water filter 4 via the second air passage of the heating container 2, where the smoke is filtered, flows to a smoke outlet 101 of the water filter, and is inhaled by a user.

[0027] It will be obvious to those skilled in the art that changes and modifications may be made, and therefore, the aim in the appended claims is to cover all such changes and modifications.

## CLAIMS

1. A heating cup for a hookah, comprising a heating container (2) configured to be heated by a high frequency heating unit; wherein:
  - when in use, the high frequency heating unit is disposed around the heating container (2);
  - in a power-on state, the heating container (2) is configured to produce heat under the action of the high frequency heating unit to heat a tobacco material and produce smoke;
  - the heating container (2) comprises a container housing, a cup-shaped body for receiving the tobacco material, and a metal conductor (3);
  - the cup-shaped body is disposed within the container housing;
  - the metal conductor (3) is inlaid in the cup-shaped body;
  - the cup-shaped body is spatially separated from the container housing, whereby an air-smoke passage is disposed between the container housing and the cup-shaped body for conveying smoke produced in the cup-shaped body; and
  - the metal conductor (3) is insulated from the air-smoke passage.
2. The heating cup of claim 1, further comprising an air inlet nozzle (1); wherein the air inlet nozzle (1) comprises a first air passage communicating with the cup-shaped body of the heating container (2).
3. The heating cup of claim 2, wherein an airflow of the air inlet nozzle (1) is changeable through covering a part of the air inlet nozzle with a finger.
4. The heating cup of claim 3, wherein the air inlet nozzle (1) is made of ceramic material.
5. The heating cup of any one of claims 1-4, wherein the heating container (2) is an integrated structure comprising glass inlaid with metal.

6. A high frequency heating unit for the heating cup of claim 1, comprising a magnetic induction coil and a battery, wherein the battery comprises a power panel comprising an LC circuit configured to convert a boosted DC voltage and current into an alternating current; when the alternating current passes through the magnetic induction coil, an alternating magnetic field is generated.
7. The high frequency heating unit of claim 7, further comprising a hollow handle and a hollow annular structure; the battery is disposed in the hollow handle, and the magnetic induction coil is disposed in the hollow annular structure.
8. A hookah, comprising a heating cup of claim 1 and a high frequency heating unit of claim 6.
9. The hookah of claim 8, further comprising a water filter; wherein when in use, the smoke is filtered by the water filter and then inhaled by a user.



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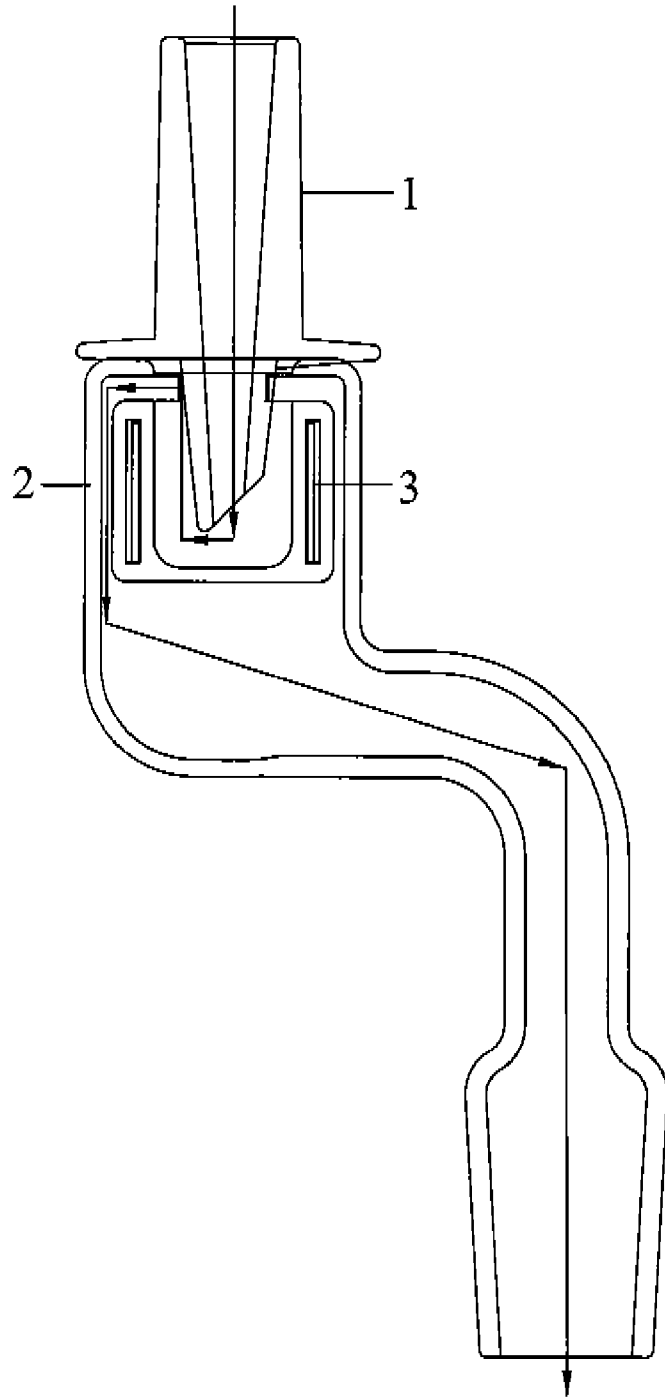


FIG. 1

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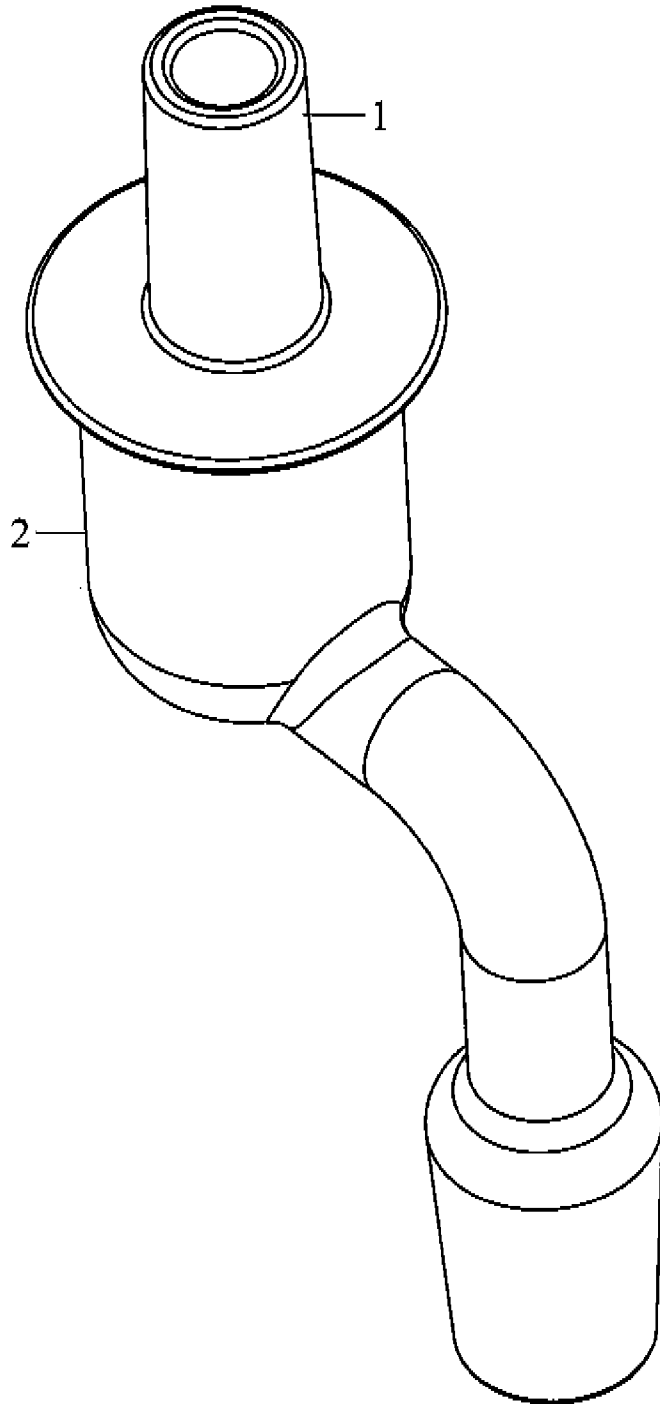


FIG. 2

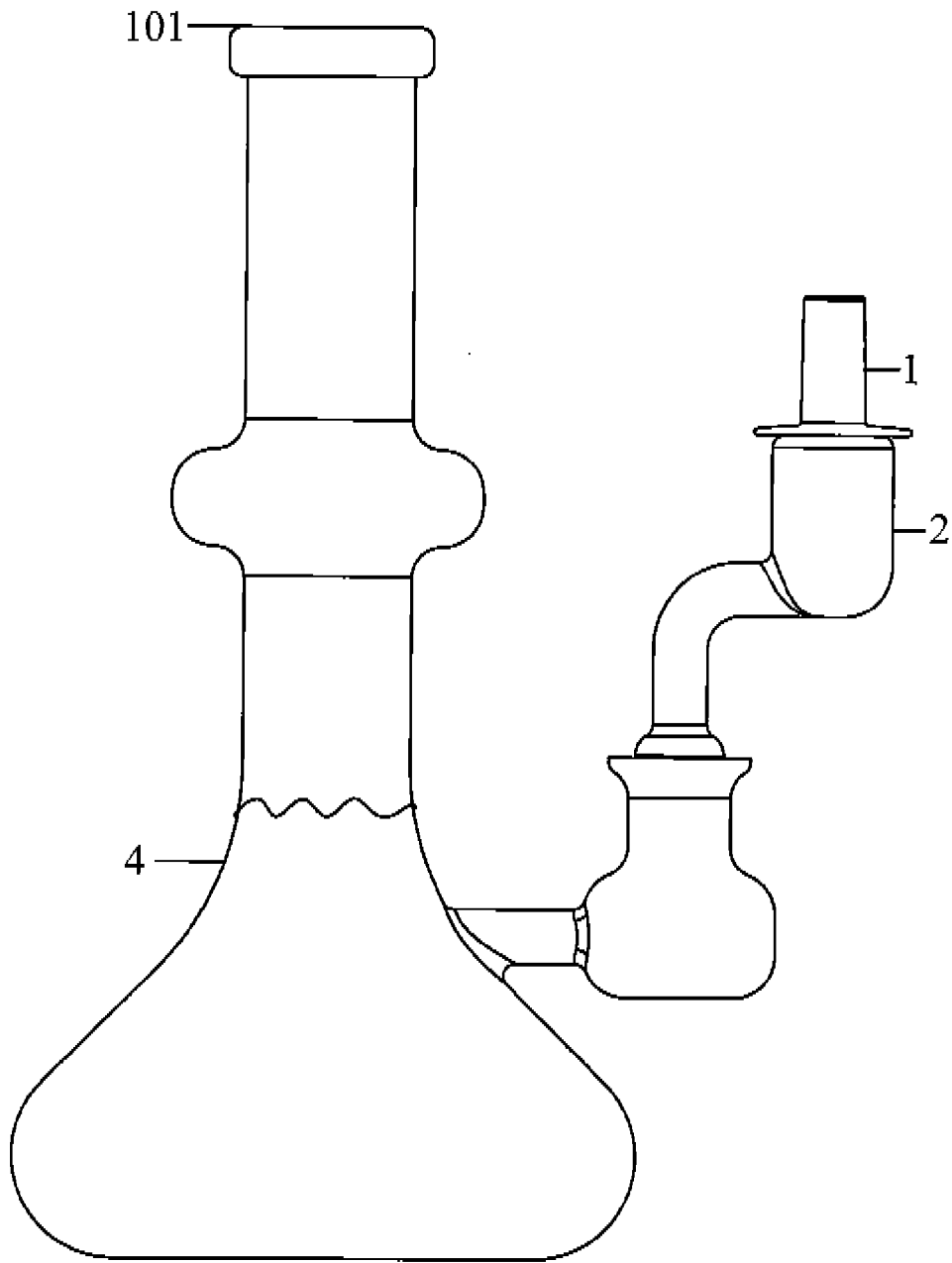


FIG. 3

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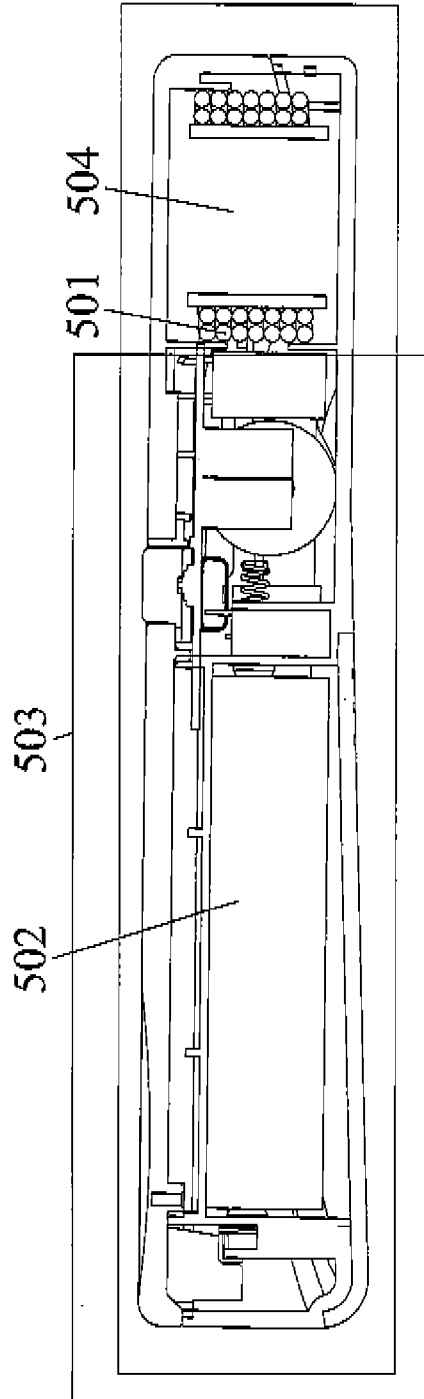


FIG. 4

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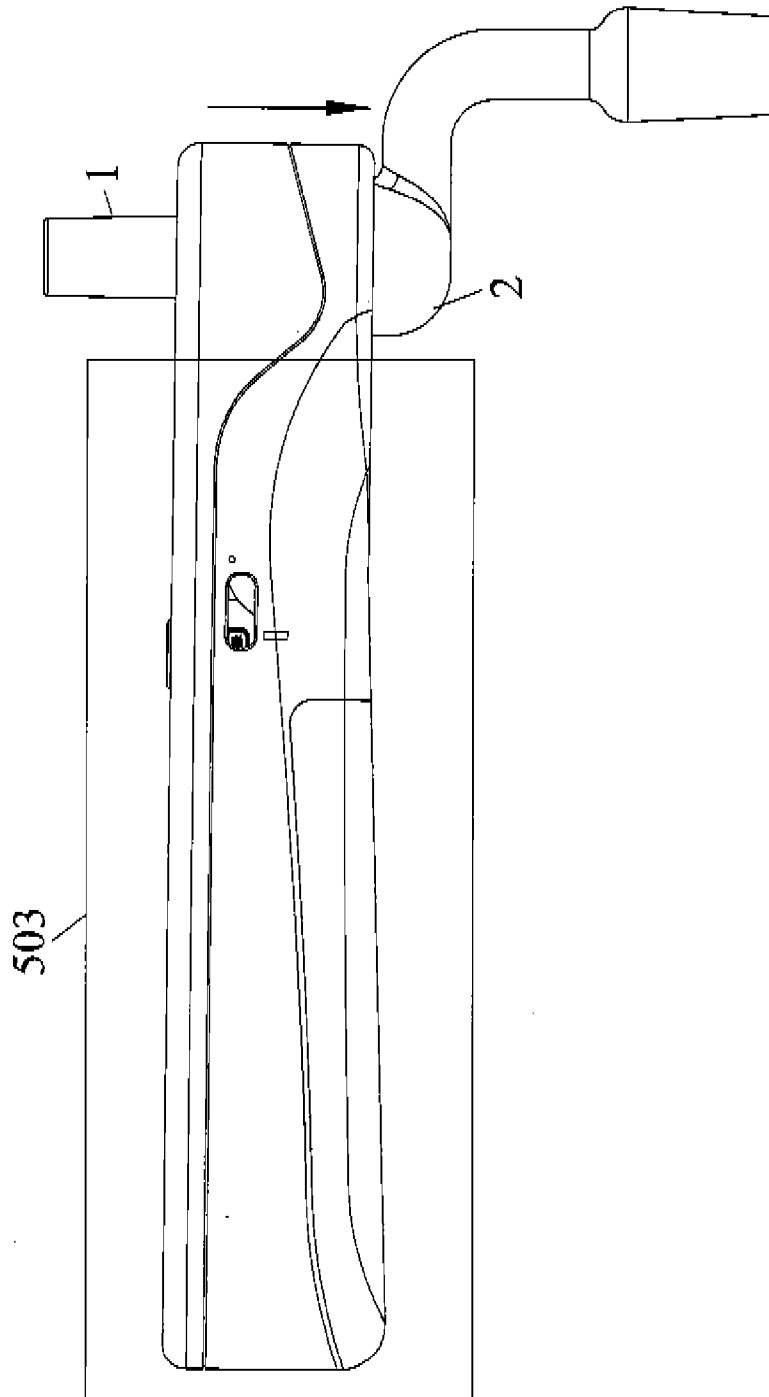


FIG. 5

