VAPORIZER FOR VAPORIZING AN ACTIVE INGREDIENT

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application claims priority from and is a continuation-in-part of US Patent Application 14/662,607 to Raichman, filed March 19, 2015, entitled "Vaporizer for vaporizing an active ingredient."

The above-referenced application is incorporated herein by reference.

FIELD OF EMBODIMENTS OF THE INVENTION

Some applications of the present invention generally relate to medical apparatus. Specifically, some applications of the present invention relate to vaporizers for the delivery of an active ingredient to a subject.

BACKGROUND

Medical use of cannabis and its constituent cannabinoids, such as tetrahydrocannabinol (THC) and cannabidiol (CBD), has a long history. In modern times, cannabis is used by patients suffering from AIDS, or undergoing chemotherapy treatment, in order to relieve nausea and vomiting associated with their conditions. Cannabis is also used in a medicinal manner in order to provide pain relief, to treat muscle spasticity, and to stimulate appetite.

Medicinal cannabis can be administered using a variety of methods, including vaporizing or smoking dried buds, eating extracts, taking capsules or using oral sprays. The legality of medical use of cannabis varies internationally. However, even in countries in which the medical use of cannabis is legal, the provision of cannabis to such users is highly regulated, and it is the case that in almost all Western countries, recreational use of cannabis is illegal.

SUMMARY

According to an example, the present disclosure refers to a capsule, comprising: a first conductive mesh; a second conductive mesh; and a housing portion sandwiched between the first conductive mesh and the second conductive mesh, the housing portion

defining a cavity with a curved section.

According to an aspect, the present disclosure refers to a capsule (42) for housing a material (82) that includes at least one active ingredient to be vaporized on heating of the capsule (42), the capsule (42) comprising:

a first metallic mesh (84);

a second metallic mesh (84);

a central portion (86) wherein the first metallic mesh (84) and the second metallic mesh (84) are coupled to the central portion (86), the central portion (86) defining a hole for housing the material (82) therein, the first metallic mesh (84) and the second metallic mesh (84) configured to receive a current from one or more electrodes to heat the first metallic mesh (84) and the second metallic mesh (84) by resistive heating;

a first spacing element (90) coupled to an outside of the first metallic mesh (84); and

a second spacing element (90) coupled to an outside of the second metallic mesh (84).

In accordance with some applications of the present invention, a vaporizer is used to vaporize the active ingredient of a material, such as a plant material, by heating the material. For example, the vaporizer may be used to vaporize the constituent cannabinoids of cannabis (e.g., tetrahydrocannabinol (THC) and/or cannabidiol (CBD)). Alternatively

CLAIMS

1. A capsule (42) for housing a material (82) that includes at least one active ingredient to be vaporized on heating of the capsule (42), the capsule (42) comprising:

a first metallic mesh (84);

a second metallic mesh (84);

a central portion (86) wherein the first metallic mesh (84) and the second metallic mesh (84) are coupled to the central portion (86), the central portion (86) defining a hole for housing the material (82) therein, the first metallic mesh (84) and the second metallic mesh (84) configured to receive a current from one or more electrodes to heat the first metallic mesh (84) and the second metallic mesh (84) by resistive heating;

a first spacing element (90) coupled to an outside of the first metallic mesh (84); and

a second spacing element (90) coupled to an outside of the second metallic mesh (84).

2. The capsule (42) of claim 1, wherein the first metallic mesh (84) and the second metallic mesh (84) define openings from 15 to 80 microns.

3. The capsule (42) of claim 1, wherein the central portion (86) has an annular form.

4. The capsule (42) of claim 1, wherein a periphery of at least the first metallic mesh (84) or the second metallic mesh (84) is aligned with a periphery of the central portion (86).

5. The capsule (42) of claim 1, wherein the first metallic mesh (84), the second metallic mesh (84), and the central portion (86) are circular and stacked such that the capsule (42) has a disk shape.

6. The capsule (42) of claim 1, wherein the first metallic mesh (84), the second metallic mesh (84), and the central portion (86) are dimensioned and stacked such that the capsule (42) has at least two linear sides and a curved side connecting the two linear sides.

7. The capsule (42) of claim 1, wherein the hole of the central portion (86) is a through hole.

8. The capsule (42) of claim 1, wherein the material (82) is a plant material.

9. The capsule (42) of claim 9, wherein the plant material includes tobacco.

10. The capsule (42) of claim 1, further comprising:

a first adhesive (88) between the first metallic mesh (84) and the central portion (86); and

a second adhesive (88) between the second metallic mesh (84) and the central portion (86).

11. The capsule (42) of claim 1, wherein the first metallic mesh (84), the second metallic mesh (84), and the central portion (86) are between the first spacing element (90) and the second spacing element (90).