

SPECIAL NEGATIVE PRESSURE MASSAGE DEVICE FOR WOMEN AND MASSAGE STRUCTURE THEREOF

Technical Field

5 The technical field relates to a massage device, and more particularly relates to a female-specific massage device and a massage structure thereof.

Description of Related Art

10 The major difference between men and women resides on sexual characteristics, that is, the difference in sexual organs between men and women. Men have sex organs such as penis and scrotum, and women have sex organs such as uterus and vagina. In other words, men and women have obviously different sexual organs, so that venereal diseases of the two are also different.

15 As to women, the most common diseases are related to irregular menstruation, leucorrhea, lochia, vaginal infection and inflammation, and these diseases are often ashamed for women to seek medical treatment, and thus delaying the best time for treatment. Some other women are willing to seek medical treatment, but doctors can only prescribe medicine for a patient based on the patient's self-report. However, when the patient takes the medicine for treatment, the medicine only provides a slow and curable effect at best and
20 cannot achieve a rapid treatment effect. As a result, the curative effect may not be as good as expected.

 In view of the aforementioned drawbacks, the inventor proposes this disclosure based on his expert knowledge and elaborate researches to overcome the drawbacks of the related art.

SUMMARY OF THE DISCLOSURE

It is a primary objective of this disclosure to provide a female-specific massage device and massage structure thereof, which provide a massage to the reproductive organ, and provide a massage to the acupuncture points around the reproductive organ.

5 To achieve the aforementioned objective, this disclosure discloses a female-specific massage device including a female-specific massage structure, a negative pressure meter and a communicating tube. The female-specific massage structure includes a cup body and a sheath ring, and the cup body has a cavity, and two ends of the cup body are formed with an open end and a closed end respectively, and the open end has a cup rim, and the closed end
10 has a connection hole communicating to the cavity. The sheath ring is adapted to sheathe the cup rim and includes a ring body, and the ring body has an abutting surface on a side of the ring body away from the cup body, and the abutting surface is a concave curved surface. The negative pressure meter has a negative pressure suction hole, and two ends of the communicating tube are connected to the connection hole and the negative pressure suction
15 hole of the cup body respectively.

To achieve the aforementioned objective, this disclosure discloses a female-specific negative pressure massage structure including a cup body and a sheath ring. The cup body has a cavity, and two ends of the cup body are formed with an open end and a closed end respectively, and the open end has a cup rim, and the closed end has a connection hole
20 communicating to the cavity. The sheath ring is adapted to sheathe the cup rim and includes a ring body, and the ring body has an abutting surface on a side of the ring body away from the cup body, and the abutting surface is a concave curved surface. The negative pressure meter has a negative pressure suction hole, and two ends of the communicating tube are connected to the connection hole and the negative pressure suction hole of the cup body
25 respectively.

This disclosure has the following effects. The soft material of the sheath ring may

reduce the pressing force exerted on the vulva in vacuum negative pressure. The design of the massage column and massage bumps provides users the options of using the massage device according to their own needs and somatosensation. With the installation of the vibration generator, the users' acupuncture points may also be massaged during the negative
5 pressure massage to provide a better physiotherapy effect. The massage device may be used at home to avoid the inconvenience and embarrassment caused by the frequent hospital visits for the treatment. The device of this disclosure brings tremendous convenience to the users and also has the advantages of small volume, easy-to-carry feature, and compact size.

10 BRIEF DESCRIPTION OF THE DRAWINGS

The technical characteristics of the disclosure believed to be novel are set forth with particularity in the appended claims. The disclosure itself, however, may be best understood by reference to the following detailed description of the disclosure, which describes a number of exemplary embodiments of the disclosure, taken in conjunction with the accompanying
15 drawings, in which:

FIG. 1 is a perspective view of a female-specific massage structure of this disclosure;

FIG. 2 is another perspective view of a female-specific massage structure of this disclosure;

FIG. 3 is a bottom view of a sheath ring of this disclosure;

20 FIG. 4 is a perspective view of a sheath ring of this disclosure;

FIG. 5 is a cross-sectional view of a female-specific massage structure of this disclosure;

FIG. 6 is a perspective view of a female-specific massage device of this disclosure; and

FIG. 7 is a schematic view showing a using status of a female-specific massage structure of this disclosure.

List of Reference Numerals:

- 1: female-specific massage structure;
- 10: cup body;
- 11: cavity;
- 5 12: opening end;
- 13: closed end;
- 14: cup rim;
- 15: connection hole;
- 16: plug orifice;
- 10 17: electrical connection hole;
- 20: sheath ring;
- 21: ring body;
- 211: abutting surface;
- 22: fixing portion;
- 15 221: inner ring;
- 222: massage column;
- 223: massage bump;
- 224: magnet buried;
- 225: outer ring;
- 20 226: embedded groove;
- 23: anti-slip member;
- 231: rib;
- 30: vibration generator;
- 31: first electrical connection port;
- 25 A: silver ion antibacterial powder;
- B: silicone;

5: negative pressure meter;

51: host;

52: negative pressure suction hole;

53: second electrical connection port;

5 7: communicating tube;

9: conductive wire.

DETAILED DESCRIPTION

The technical contents of this disclosure will become apparent with the detailed
10 description of embodiments accompanied with the illustration of related drawings as follows.
It is intended that the embodiments and drawings disclosed herein are to be considered
illustrative rather than restrictive.

With reference to FIGS. 1 to 5 for a female-specific massage structure 1 of this
disclosure, the female-specific massage structure 1 includes a cup body 10 and a sheath ring
15 20.

The cup body 10 is a component made of a material including but not limited to metal,
plastic, and glass. The cup body 10 is substantially in a cylindrical shape and has a cavity 11
formed inside the cup body 10, and two ends of the cup body 10 are formed with an open end
12 and a closed end 13 respectively, and the open end 12 has a cup rim 14, and the closed end
20 13 has a connection hole 15 communicating to the cavity 11. In addition, a plunger hole 16
and an electrical connection hole 17 are formed on a side of the connection hole 15 of the cup
body 10. The plunger hole 16 communicates with the cavity 11 and is provided for
installing a pressure relief member 40.

The sheath ring 20 sheathes the cup rim 14 and includes a ring body 21 and a fixing
25 portion 22 extended outwardly from the ring body 21, and the fixing portion 22 sheathes the
cup rim 14. The ring body 21 is substantially in an elliptical shape and an abutting surface

211 is disposed on a side of the ring body 21 away from the cup body 10. The abutting surface 211 is a concave curved surface.

In an embodiment, the fixing portion 22 includes an inner ring 221 and an outer ring 225 extended outwardly from the inner ring 221 and formed at an outer periphery of the inner ring 211, and an embedded groove 226 is formed between the outer side of the inner ring 221 and the inner side of the outer ring 225, and the cup rim 14 is plugged and connected to the embedded groove 226 correspondingly. The upper middle part of the inner ring 221 has a massage column 222, and the bottom surface of the inner ring 221 has a plurality of massage bumps 223 spaced apart from one another, and a magnet 224 is buried into each of the massage bumps 223.

In an embodiment, the sheath ring 20 is a component made of a soft plastic material with a hardness (Shore Hardness) falling within a range of about 10 HA to about 100 HA. In this way, the ring body 21 of the sheath ring 20 may be attached closely to the surface of the users' skin to reduce the discomfort caused by the pulling of the skin when the cup rim 14 is attached directly to the skin. If the hardness is less than 10 HA, the texture of the sheath ring 20 may be too soft and lack of support. If the hardness is greater than 100 HA, the texture of the sheath ring 20 may be too hard, thereby causing discomfort at the contact position.

In an embodiment, the sheath ring 20 is formed by mixing a silver ion antibacterial powder A with a silicone B. Specifically, the sheath ring 20 is composed of about 0.5 wt% to about 5 wt% of silver ion antibacterial powder A mixed with about 95 wt% to about 99.5 wt% of silicone B. In this way, the sheath ring 20 has the antibacterial effect. If the weight percent of the silver ion antibacterial powder A is less than 0.5 wt%, the antibacterial effect may be insufficient. If the weight percent of the silver ion antibacterial powder A is greater than 5 wt%, the cost may be too high.

In an embodiment, the sheath ring 20 further includes an anti-slip member 23 extended from the fixing portion 22 in a direction away from the ring body 21, and an outer surface of

the anti-slip member 23 has a plurality of ribs 231 which are not only convenient to grasp during use, but also increase the friction force with the cup body 10, thereby making the combination of the sheath ring 20 with the cup body 10 more stably and firmly.

In an embodiment of this disclosure, the female-specific massage structure 1 further includes a vibration generator 30 having a first electrical connection port 31 passing through the corresponding electrical connection hole 17 to fix the vibration generator 30 in the cavity 11 of cup body 10.

In FIG. 6, this disclosure further provides a female-specific massage device including a female-specific massage structure 1, a negative pressure meter 5 and a communicating tube 7. The negative pressure meter 5 has a host 51, and the host 51 includes a negative pressure suction hole 52, a second electrical connection port 53, an adjusting button, a display unit, an indicating light and other related devices. Two ends of the communicating tube 7 are connected to a connection hole 15 and a negative pressure suction hole 52 of the cup body 10 respectively. In addition, the female-specific massage device of this disclosure further includes a conductive wire 9 with two ends connected to the first electrical connection port 31 and the second electrical connection port 53 respectively.

In FIG. 7, the female-specific massage device of this disclosure is mainly used for a negative pressure massage of female private areas. When using, the female-specific massage structure 1 is placed in an area from the user's clitoris to the entire vulva, and the negative pressure meter 5 is used to provide alternate suction and relief for a negative pressure massage or a negative pressure relief massage. The ring body 21 of the sheath ring 20 abuts against the user's pubic bone, and the soft texture of the sheath ring 20 may reduce the pressing pressure exerted on the user's pubic bone during the negative pressure massage to improve the overall comfort of use, and the operation of the massage column 222, the massage bumps 223, the magnets 224 and the vibration generator 30 may perform the negative pressure massage while strengthening the blood circulation and flow in the user's

genitals.

In summation of the description above, the female-specific massage device and massage structure of this disclosure may achieve the expected effects and overcome the drawbacks of the related art. While this disclosure has been described by means of specific embodiments,
5 numerous modifications and variations could be made thereto by those skilled in the art without departing from the scope and spirit of this disclosure set forth in the claims.

WHAT IS CLAIMED IS

1. A female-specific massage structure, comprising:

a cup body, comprising a cavity, an open end and a closed end disposed on two ends thereof, a cup rim disposed on the open end, and a connection hole defined on the closed end communicating to the cavity; and

a sheath ring, adapted to sheathe the cup rim, comprising a ring body, and ring body comprising an abutting surface disposed on a side thereof away from the cup body, wherein the abutting surface is a concave curved surface.

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2. The female-specific massage structure according to claim 1, wherein the sheath ring further comprises a fixing portion extended outwardly from the ring body and adapted to sheathe the cup rim.

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3. The female-specific massage structure according to claim 2, wherein the fixing portion comprises an inner ring and an outer ring extended outwardly from the inner ring and disposed at an outer periphery of the inner ring, an embedded groove is disposed between the inner ring and the outer ring, and the cup rim is plugged to and coupled to the embedded groove.

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4. The female-specific massage structure according to claim 3, wherein the inner ring comprises a massage column disposed on an upper part thereof.

5. The female-specific massage structure according to claim 3, wherein the inner ring comprises a plurality of massage bumps disposed on a lower part thereof, and the massage bumps are spaced apart from one another.

6. The female-specific massage structure according to claim 5, wherein each of the massage bumps comprises a magnet buried therein.

5 7. The female-specific massage structure according to claim 2, wherein the sheath ring further comprises an anti-slip member extended from the fixing portion in a direction away from the ring body.

8. The female-specific massage structure according to claim 7, wherein the anti-slip
10 member comprises a plurality of ribs disposed on an outer surface thereof.

9. The female-specific massage structure according to claim 1, further comprising: a vibration generator, and the cup body comprising an electrical connection hole, and the vibration generator comprising a first electrical connection port passing through the electrical
15 connection hole to fix the vibration generator in the cavity.

10. The female-specific massage structure according to claim 1, further comprising: a pressure relief member, and the cup body comprising a plunger hole communicating with the cavity, and the pressure relief member installed in the plunger hole.

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11. The female-specific massage structure according to claim 1, wherein the sheath ring comprises a Shore hardness within a range of about 10 HA to about 100 HA.

12. The female-specific massage structure according to claim 1, wherein the sheath ring
25 comprises a mixture of a silver ion antibacterial powder and a silicone.

13. The female-specific massage structure according to claim 12, wherein the silver ion antibacterial powder is about 0.5 wt% to about 5 wt% and the silicone is about 95 wt% to about 99.5 wt%.

5 14. A female-specific massage device, comprising:

 a female-specific massage structure, further comprising a cup body and a sheath ring, and the cup body comprising a cavity, an open end and a closed end disposed on two ends of the cup body, a cup rim disposed on the open end, and a connection hole defined on the closed end communicating to the cavity, and the sheath ring adapted to sheathe the cup rim and comprising a ring body, and an abutting surface disposed on a side of the ring body away from the cup body, wherein the abutting surface is a concave curved surface;

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 a negative pressure meter, comprising a negative pressure suction hole; and

 a communicating tube, two ends thereof coupled to the connection hole of the cup body and the negative pressure suction hole respectively.

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 15. The female-specific massage structure according to claim 14, further comprising: a conductive wire, and the vibration generator comprising a first electrical connection port, and the negative pressure meter further comprising a second electrical connection port, and two ends of the conductive wire electrically coupled to the first electrical connection port and the second electrical connection port respectively.

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