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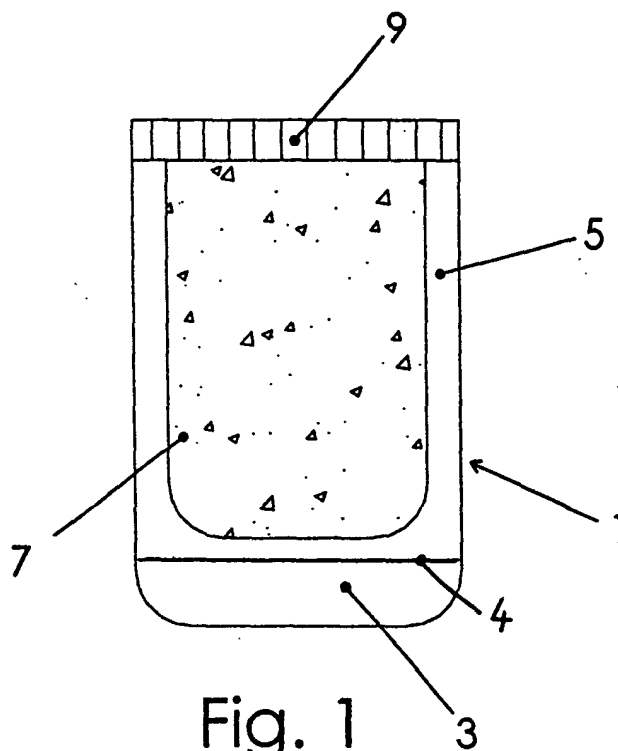
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(54) **Self-heating container for body care products, particularly muds, algae and epilatory products**

(57) A self-heating container (1) is disclosed that can be used with body care products, particularly muds, algae and depilatory products, and that comprises: a support body with a base (3) and elongated side walls (5) separated by a partitioning element (4) and internally

hollow to contain therein two substances that generate heat when they are mutually put in contact by breaking the partitioning element (4) and are subjected to an exothermic reaction through a brusque and strong agitation; a recess (7) to contain the body care products; and closure means (9) for the recess (7).



**Fig. 1**

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## Description

**[0001]** The present invention refers to a self-heating container for body care products, particularly muds, algae and depilatory products.

**[0002]** In order to apply and use body care products, such as muds, algae and depilatory products, it is nowadays necessary to provide for a series of long and cumbersome operations, that consist in pouring the product into a suitable container, heating it at the operating temperature and smearing it on the chosen body areas. If these products are not heated, in fact, the user is uncomfortable in having in contact with his/her body muds, algae, etc. that are at a lower temperature than the body temperature. These operations therefore require the user to be equipped with apparatus such as the heating container, the heating device, one or more spatulas or brushes to smear the product and possible vessels to collect the product before smearing it.

**[0003]** In the foodstuff field only, self-heating or self-cooling containers are known, in order respectively to heat and cool liquids contained therein, such as for example coffee, tea or chocolate.

**[0004]** Object of the present invention is solving the above prior-art problems, by providing a self-heating container that is of a simple and compact design and of a reduced cost, that allows doing without all previous cumbersome operations to prepare and use body care products.

**[0005]** A further object of the present invention is providing a container as mentioned above that is equipped with a few accessories that can be easily installed, that allows doing without all apparatus that were used beforehand.

**[0006]** The above and other objects and advantages of the invention, as will appear from the following description, are obtained by a self-heating container as claimed in Claim 1. Preferred embodiments and non-trivial variations of the present invention are claimed in the dependent Claims.

**[0007]** The present invention will be better described by some preferred embodiments thereof, given as a non-limiting example, with reference to the enclosed drawings, in which:

- Figure 1 is a side sectional view of an embodiment of the container according to the present invention in a closed position;
- Figure 2 is a sectional view similar to Fig. 1 with the container in an opening position and equipped with a smearing brush; and
- Figure 3 is a sectional view similar to Fig. 1 with the container in an opening position and equipped with an applying spatula.

**[0008]** With reference to the Figures, a preferred embodiment of the self-heating container of the present invention is shown and described. It will be immediately

obvious that numerous variations and modifications (for example related to shape, sizes, various colours and parts with equivalent functionalities) could be made to the disclosed container, without departing from the scope of the invention as appears in the enclosed Claims.

**[0009]** The self-heating container 1 of the present invention finds its characteristic use with body care products, particularly muds, algae and depilatory products. It comprises, first of all, a support body equipped with a base 3 and elongated side walls 5: the base 3 and the elongated side walls 5 are internally hollow in order to contain therein substances that are adapted to generate heat. The base 3 and the walls 5 are separated by a thin partitioning element 4, that keeps the above-mentioned substances separated, so that they do not generate heat when it is still not necessary. Such partitioning element 4 is very thin and is adapted to be broken, for example, through a simple pressure of the fingers on the bottom of the base 3 (or through other equivalent means): when the partitioning element 4 is broken, the substances contained in base 3 and walls 5 are mutually put in contact and, by agitating the container 1, they generate an exothermic reaction that produces the necessary heat for heating the product contained in the container 1.

**[0010]** The container 1 is preferably of a cylindrical shape, but it can obviously be realised in any shape (box, parallelepiped, oval, etc.) adapted for its purposes and that preferably provides an external pleasant and attractive appearance, given the nature of the product to be contained.

**[0011]** The substances contained in base 3 and walls 5 are of a known type and, as a characteristic, must be adapted, as already stated, to generate heat when they are subjected to an exothermal reaction through a brusque and strong agitation: the most commonly used substances are water in the walls 5 and granulated sodium chloride in the base 3.

**[0012]** The container 1 further comprises a recess 7 contained inside the elongated side walls 5 and that rests above the base 3: such recess 7 is adapted to contain the above-mentioned body care products.

**[0013]** Finally, closure means 9 are provided and are applied onto the container 1 in order to close the recess 7: these means are generally a common cover 9 that is applied to the container through screwing, or by snapping it or in other suitable ways.

**[0014]** In order to make the final use easier, the container 1 further comprises brush means 11 (Fig. 2) adapted to be connected to the container 1 in place of the closure means 9 (that is once having heated the product and having unscrewed the cover 9) in order to apply the body care products once having heated them. Also in this case, the brush 11 can be joined to the container 1 by screwing or by snapping it, or in other suitable ways, depending on how the cover 9 is realised.

**[0015]** As a further operating alternative, the container 1 further comprises spatula means 13 (Fig. 3) adapt-

ed to be connected to the container 1 in place of the closure means 9 (that is once having heated the product and having unscrewed the cover 9) in order to apply the body care products once having heated them. Also in this case, the spatula 13 can be joined to the container 1 by screwing or by snapping it, or in other suitable ways, depending on how the cover 9 is realised.

[0016] The operation of the container 1 according to the present invention will now be described.

[0017] The user, once having purchased the container 1 with the product, before applying it, presses the bottom of the base 3 in order to break the partitioning element 4 and mutually put in contact the substances contained in the base 3 and the walls 5. The user then brusquely and strongly agitates the container 1 generating, in the heating substances in contact, the exothermal reaction that allows them to emanate heat and to smoothly heat the product, since one of the substances (usually a fluid one) is also located inside the walls 5. Once having reached the operating temperature (that can be established by the manufacturer according to the type of cosmetic product to be heated by equipping the container 1 with respective suitable substances adapted to reach different temperatures), the user unscrews or releases away the cover 9 and in its place he applies (always by screwing or snapping) the brush 11 or the spatula 13 or any other tool adapted for such purpose. After that, the product is ready to be applied onto the affected body areas, through simple smearing operations at the most suitable temperature for its application.

brush means (11) adapted to be connected to said container (1) in place of said closure means (9) in order to apply said body care products once having heated them.

3. Self-heating container (1) according to Claim 1, **characterised in that** it further comprises spatula means (13) adapted to be connected to said container (1) in place of said closure means (9) in order to apply said body care products once having heated them.
4. Self-heating container (1) according to Claim 2 or 3, **characterised in that** said closure means (9), said brush means (11) and said spatula means (13) are of the type adapted to be inserted by screwing.
5. Self-heating container (1) according to Claim 2 or 3, **characterised in that** said closure means (9), said brush means (11) and said spatula means (13) are of the type adapted to be snappingly inserted.
6. Self-heating container (1) according to Claim 1, **characterised in that** said heating substances are composed of water in the walls (5) and of granulated sodium chloride in the base (3).

## Claims

1. Self-heating container (1) **characterised in that** it is adapted to be used with body care products, particularly muds, algae and depilatory products; and further **characterised in that** it comprises:
  - a support body equipped with a base (3) and elongated side walls (5), said base (3) and said elongated side walls (5) being internally hollow and being separated by a partitioning element (4), said base (3) and said walls (5) being adapted to contain therein heating substances, said substances being adapted to generate heat when they are mutually put in contact by breaking said partitioning element (4) and when they are subjected to an exothermic reaction through a brusque and strong agitation;
  - a recess (7) contained inside said elongated side walls (5) and above said base (3), said recess (7) being adapted to contain said body care products; and
  - closure means (9) for said recess (7).
2. Self-heating container (1) according to Claim 1, **characterised in that** it further comprises

