

12 **EUROPEAN PATENT APPLICATION**

21 Application number: **89202694.9**

51 Int. Cl.<sup>5</sup>: **C11D 13/16 , C11D 13/14**

22 Date of filing: **25.10.89**

30 Priority: **28.10.88 NL 8802654**

43 Date of publication of application:  
**02.05.90 Bulletin 90/18**

64 Designated Contracting States:  
**AT BE CH DE ES FR GB GR IT LI LU NL SE**

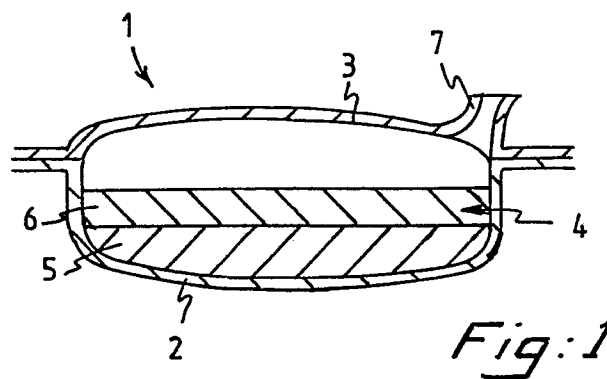
71 Applicant: **Van Buuren, Cornelis**  
**Vlielandseweg 73**  
**NL-2641 KA Pijnacker(NL)**

72 Inventor: **Van Buuren, Cornelis**  
**Vlielandseweg 73**  
**NL-2641 KA Pijnacker(NL)**

74 Representative: **Morel, Christiaan F., Dr.Ir.**  
**MORELPATENT Laarstraat 3**  
**NL-8166 GR Emst (Epe)(NL)**

54 **Method for the production of tablets of soap.**

57 A method for the production of tablets of soap, said tablets of soap being made up of several layers of soap, in a mould (1). This mould comprises two or more parts (2, 3) with a filling aperture (7). The mould (1) is filled with a soap which is liquid above a specific temperature which is above 40 degrees Celsius, and which is solid below a temperature which lies below the afore-mentioned specific temperature; before the parts (2, 3) are combined to form the mould (1), one or more parts of the mould (1) are filled with a layer of soap at a temperature at which the soap is liquid. This soap layer is then cooled to a temperature, following which the mould is closed and the remaining space is filled up with a soap whose temperature is above the melting point of said soap, each soap filling having a desired composition. The preference is an object (7), such as an illustration, a free gift article, a logo or the like, is placed on the last layer of soap formed, after one or more layers is placed in one of the mould parts and cooled to a desired temperature, and before the mould parts are combined and the remaining space filled up with soap.



### Method for the production of tablets of soap.

The invention relates to a method for the production of a tablet of soap, said tablets of soap being made up of several layers of soap. Tablets of soap which are used for cleansing, for example, the skin are generally known. In general, these tablets are made by pressing them in a mould. It is also known to cast the tablets of soap, in which case the soap must be liquid at a temperature which lies above the temperature at which said tablets of soap are to be used.

The aim of the invention is a method for the production of tablets of soap, in which a tablet of soap is made up of layers of soap, in which each layer can be of a different colour.

This aim is achieved according to the invention by that in a mould, comprising two or more parts which when combined form a mould with a filling aperture, said filling aperture being used to permit the filling of the remaining space in the mould with a soap which is liquid above a specific temperature which is above 40 degrees Celsius, and which is solid below a temperature which lies below the above-mentioned specific temperature, while before the parts of the mould are combined one or more parts of the mould are filled with a soap at a temperature at which it is liquid, this soap layer is then cooled to a temperature which lies below the above-mentioned specific temperature, following which the mould is closed and the remaining space is filled up with a soap whose temperature lies above the melting point of said soap, each soap filling having a desired composition. This process means that tablets of soap which are made up of several layers, and in which each layer can be of a different desired colour, can be produced. This can greatly enhance the external appearance of the tablet of soap, most certainly if the tablet of soap is packed in a transparant piece of packaging material such as cellophane or transparant plastic.

A special effect is obtained if another possible process is used. This other possible process is that after one or more layers are placed in one of the mould parts and cooled to a desired temperature, and before the mould parts are combined, an object such as an illustration, free gift article, logo or the like, is placed on the last layer of soap formed. According to this process, small objects can be placed in the soap during the production process. This placing of small objects in the soap is all the more appealing since soaps which are virtually translucent or transparant can now be produced, with the result that these objects are visible from the outside of the soap, and they therefore differ from known tablets of soap which do not have the property of being transparant.

The invention will be explained in greater detail with reference to the drawing. In the drawing:

Fig. 1 shows a cross-section of a mould in which a tablet of soap is moulded in layers according to the process of the invention;

Fig. 2 is a cross-section of a tablet of soap according to the invention, containing an object.

Fig. 1 shows a mould 1, comprising two parts 2 and 3, in which a tablet of soap 4 is moulded. A layer of soap 5 was first poured into the part 2 of the mould 1 and, after this layer 5 had cooled to the extent that this soap layer 5 was no longer liquid, a new layer 6 of the same type of composition as that of the first layer was poured in. Such a first layer 5 will then not be able to heat up so far that it becomes completely liquid again, due to the fact that it takes quite a large amount of energy to convert a substance from the solid phase to the liquid phase; on the other hand, if the temperature difference between the two layers is not too great when the new layer is poured in, the two layers will adhere well, because the surface layer against which the new soap layer is poured will then melt slightly, especially since a soap of approximately the same composition, in which, for example, only the colour is always changed by adding a different dye, is used for all layers. In the end, the last layer can be applied by closing the mould and filling up the mould through the filling aperture 7.

Fig. 2 shows a cross-section through a tablet of soap, in which the tablet of soap comprises a number of layers and contains an object 8. This object is inserted by placing it on a layer after the latter has cooled down sufficiently, and subsequently applying the other layers of soap. This placing of logos or other small objects in a tablet of soap is now very attractive because soaps which are virtually transparent can now be made, which means that these objects are very easy to see from the outside.

### Claims

1. A method for the production of tablets of soap, said tablets of soap being made up of several layers of soap, characterized in that in a mould (1), comprising two or more parts (2, 3) which when combined form a mould (1) with a filling aperture (7), said filling aperture (7) being used to permit filling of the remaining space in the mould (1) with a soap which is liquid above a specific temperature which is above 40 degrees Celsius, and which is solid below a temperature which lies below the above-mentioned specific temperature, while be-

fore the parts (2, 3) are combined to form the mould (1), one or more parts of the mould (1) are filled with a layer of soap at a temperature at which the soap is liquid, this soap layer is then cooled to a temperature which lies below the above-mentioned specific temperature, following which the mould is closed and the remaining space is filled up with a soap whose temperature is above the melting point of said soap, each soap filling having a desired composition.

5

10

2. A method according to claim 1, characterized in that one or more parts are successively filled with several layers of soap, each layer of soap of a desired composition, and in that each new layer of soap is applied at a temperature which lies above the above-mentioned specific temperature, and only after the layer of soap on which the new layer is poured has cooled down so far that this cooled-down layer is at a temperature below the above-mentioned specific temperature of said soap layer.

15

20

3. A method according to one of claims 1 or 2, characterized in that after one or more layers is placed in one of the mould parts and cooled to a desired temperature, and before the mould parts are combined, an object (7), such as an illustration, a free gift article, a logo or the like, is placed on the last layer of soap formed.

25

30

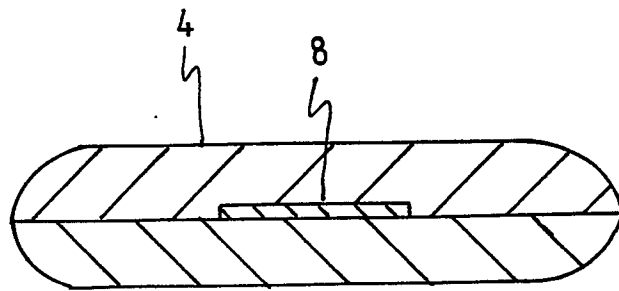
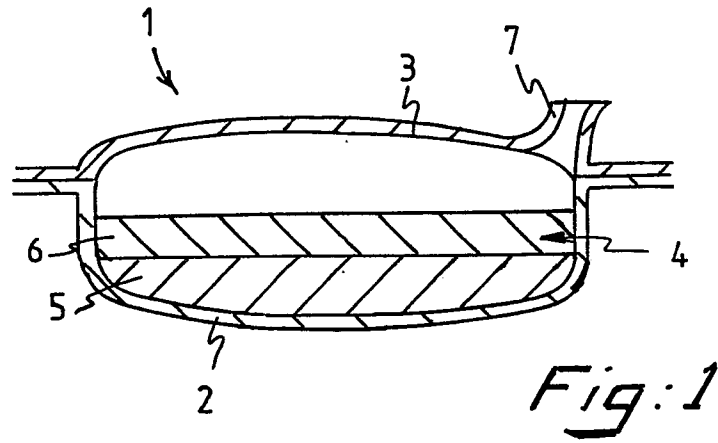
35

40

45

50

55





EP 89 20 2694

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	EP-A-141444 (CALSTOCK CORP.) * claims 1, 4, 7 * ---	1	C11D13/16 C11D13/14
A	FR-A-2527220 (POLA CHEMICAL IND. ET SANWA CHEMICAL IND.) * claims 1, 2 * -----	1, 3	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			C11D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 JANUARY 1990	Examiner PFANNENSTEIN H.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			