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## EUROPEAN PATENT APPLICATION

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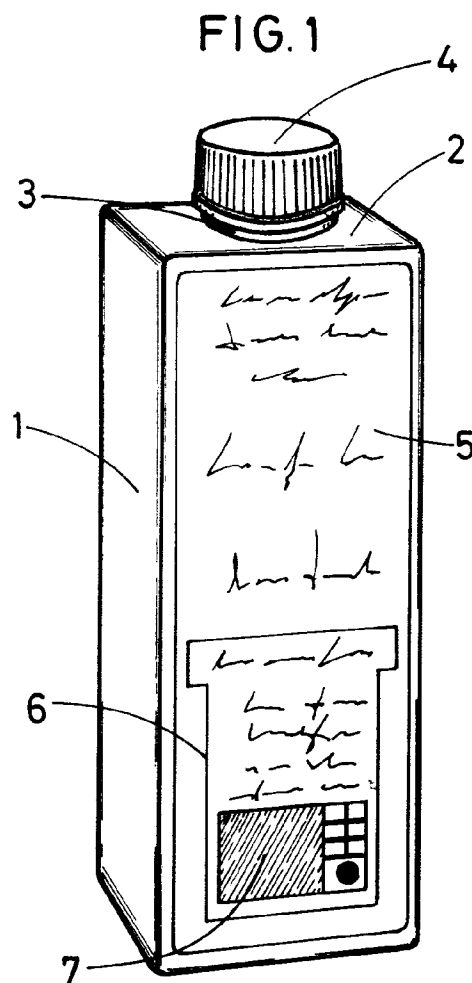
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### (54) Depilatory wax case with a heat indicator

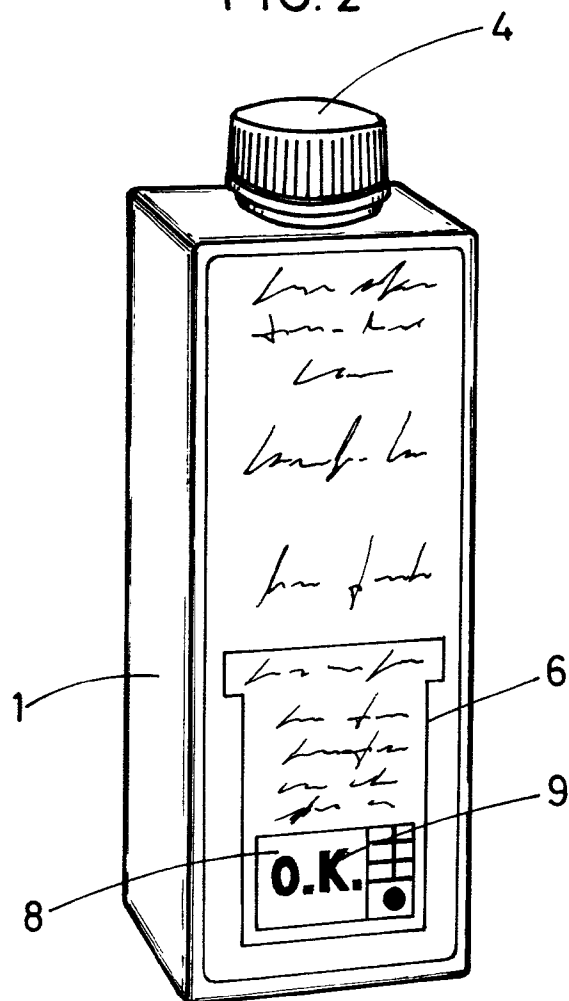
(57) The case (1) has a heat sensor on its outside, comprising thermal ink (7) which disappears upon a certain temperature being reached, uncovering a go-ahead printing (9).

The invention is applicable in depilatory wax containing cases and allows the optimum fluid state of the wax to be applied onto the skin to be viewed at a glance.



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FIG. 2



## Description

### FIELD OF THE INVENTION

The present Patent of Invention relates to a depilatory wax case that, in addition to the function for which it was designed, affords a number of advantages discussed below and others that are inherent in its organisation and construction.

### BACKGROUND OF THE INVENTION

Cases are known to exist in the state of the art for containing a quantity of depilatory wax to be supplied through specific distribution means associated to such cases.

State-of-the-art cases are marketed in several sizes depending on their intended use.

The case subject of the present invention is of the kind having a capacity equivalent to that of a small bottle, and is shaped as a straight rectangular prism, its top base being provided with a neck or throttle with a screw-thread for the provision of a cap or closure which can be removed and replaced, at the time of use, by a wax distribution head.

As usual, the wax with which cases of this kind are filled is kept in solid state at room temperature, and is softened and fluidised when heated up to a sufficient temperature within the case as such. In this condition, the viscous state of the wax allows it to be used for the desired purposes, together with the distribution and application head, thereby to provide a sheet-like layer of uniform thickness that is spread over the skin.

Now, therefore, and in accordance with the foregoing, the said cases also require the cooperation of heating means, through which the fluid state of the wax is achieved.

Said heating means are also found in the state of the art, and some such means comprise enclosures structured to house the cases aforesaid to which the heat generated is transferred.

The state of the art includes Spanish Patent of Invention number 9501499 which relates to improvements to depilatory wax heating apparatus, which improvements comprise the provision of a chamber designed to house a plurality of small bottle-like cases, such as the case subject of the present registration, which contain depilatory wax in solid state at room temperature. Said chamber has means for heating the wax cases, which means allow a melting temperature to be reached to render the wax suitable to be applied onto the skin.

The heating means with which the apparatus subject of the said Patent of Invention is equipped act for time-intervals selected by a clock-timer and, once the melting temperature has been reached, second PTC type heat-controlling means are switched on to enable the temperature reached through the first heating

means to be stabilised.

In spite of the clear improvements derived from the apparatus protected under Patent of Invention number 9501499, as compared with the prior art, it has however been noted that a professional user handling said heating apparatus finds it difficult to accurately and simply detect the ideal temperature for using the wax contained in the group of cases located within the heating chamber, for such apparatus has no specific means indicating the user the temperature in each of the cases, above all bearing in mind that cases are very often moved in and out of the heating chamber or oven of the apparatus in the industrial field, where services are provided almost continuously.

### SUMMARY OF THE INVENTION

The present Patent of invention has been devised in order to obtain a case designed to be heated in apparatus or ovens of the kind mentioned in Patent of Invention number 9501499, which cases have been equipped with a heat indicator which is activated when an ideal temperature degree for the wax to be applied is reached.

The indicator is located on the outside of the case and undergoes a substantial change in its morphology which may be readily seen visually by an observer, who is thus able to know the exact degree of the wax to be applied, an ideal temperature being deemed to be 45° Celsius.

The present Patent of Invention offers the advantages described hereinbefore and others that will follow easily from the embodiment of a depilatory wax case that is described hereinafter in further detail for an easier understanding of the characteristics set out above, concurrently referring to a number of details, to which end drawings are attached to the present specification which represent a practical embodiment of the present invention, merely as an example that is not intended to limit the same.

### BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

Figure 1 is a perspective view of a case having the heat indicator with the wax at room temperature, i.e. in the solid state of the wax, which means that the indicator is not activated, thus indicating that the wax is not in a condition to be used.

Figure 2 illustrates a perspective similar to the above in which the indicator applied on the outside of the case has had its morphology altered by the temperature reached by the wax, which indicates that the wax is in an optimum fluid condition to be applied onto the skin.

## DESCRIPTION OF A PREFERRED EMBODIMENT OF THE INVENTION

With reference to the figures, the embodiment shows a case -1- shaped as a straight rectangular prism, provided at its base -2- with a neck -3- which leads into the interior, and externally provided with a screwthread to retain a cap -4-.

One of the face-sides of the case -1- has a conventional label -5- with advertising printings, such as brands and characteristics of the packed product, a surface -6- being reserved to provide the heat indicator subject of the invention, which essentially comprises a printing -9-, which forms a contrast on its surface -8-, which is kept concealed by a layer of opaque solution, specifically thermal ink -7- which is diluted when an ideal temperature is reached, until it disappears, leaving said printing -9- in sight, which printing consists of an international approval or authorisation expression, such as the acronym O.K. or others.

The type of opaque solution is a mixture of thermal inks that react upon the temperature being raised, losing their colour and becoming transparent. In the case of wax for sensitive skins, the temperature at which it reacts to become transparent is 45° Celsius, and in the case of wax for normal skin the temperature is 54° Celsius.

The temperature degrees at which the inks react may be changed by changing the ink percentages to obtain the desired function.

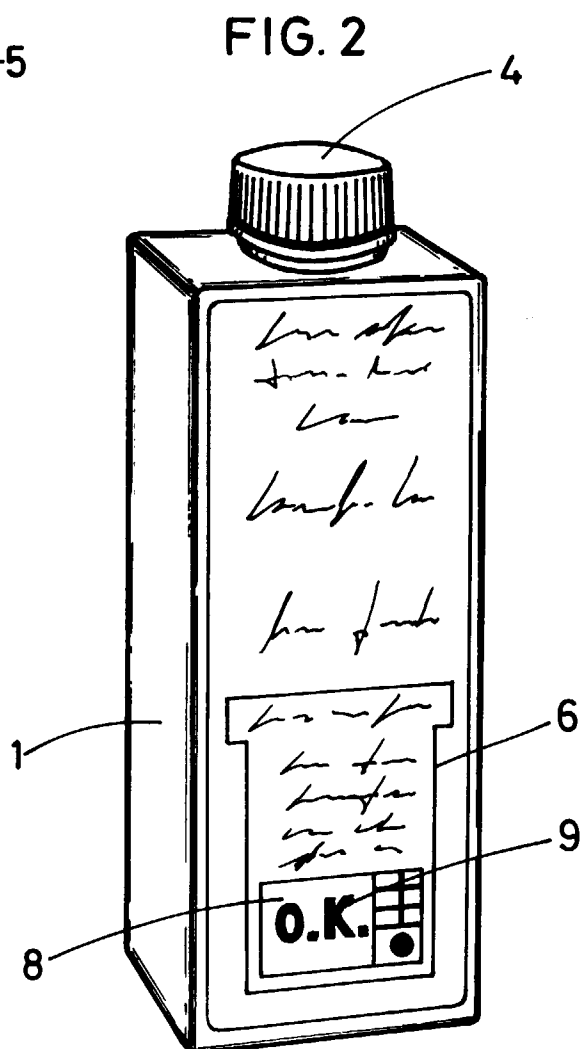
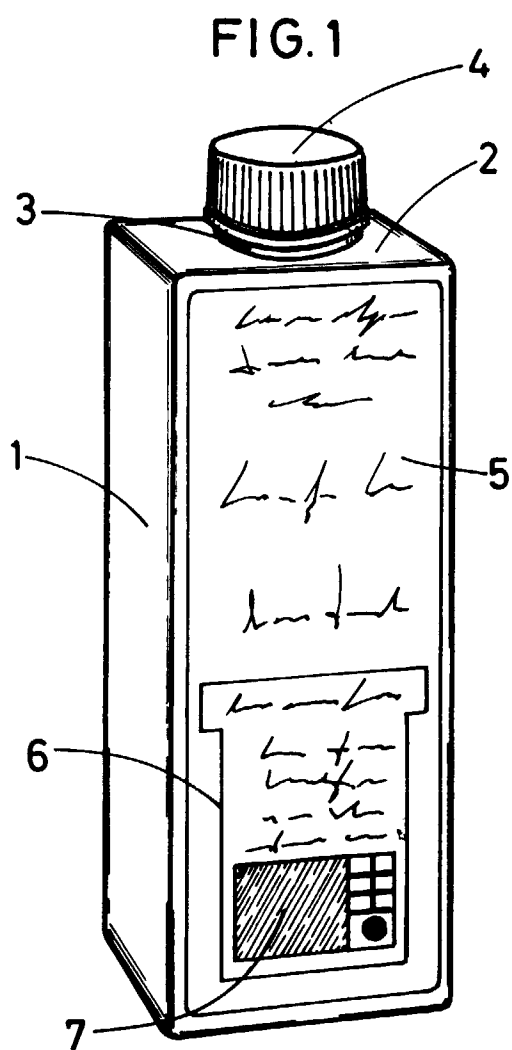
The components of said solution are: pigments of an animal origin, polymeric resins, light initiators and wax.

## Claims

1. A depilatory wax case with a heat indicator, of the kind comprising a capacity equivalent to that of a small bottle and being shaped as a straight rectangular prism, provided with a label extending on one of its faces, essentially characterised in that said label has a surface reserved for a printing which comprises an acronym standing for an approval or go-ahead expression, which acronym is kept concealed from and invisible to an observer due to the presence of an opaque layer-like solution, comprising thermal ink which is diluted and disappears at a precise temperature of the packed wax and which represents an optimum fluid state of the wax for it to be applied onto the skin, the said expression becoming visible to the observer as a graphic element so indicating.
2. A depilatory wax case with a heat indicator, as in claim 1, **characterised** in that the opaque solution is composed of pigments of animal origin, polymeric resins, light initiators and wax, and reacts upon the

temperature being raised to lose colour and become transparent.

3. A depilatory wax case with a heat indicator, as in claim 1, **characterised** in that the reaction temperature of the opaque solution lies between 45° and 54° Celsius, which are the temperatures at which the depilatory wax is applied.





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## EUROPEAN SEARCH REPORT

Application Number  
EP 97 50 0107.4

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.6)
A	GB 2 113 994 A (INVERNESS INTERNATIONAL) * figures 1-6 *	1	A45D26/00
A	US 1 676 536 A (FERKEL) * the whole document *	1	
A	EP 0 241 247 A (RAYCHEM CORPORATION) * the whole document *	1	
A	US 3 002 385 A (WAHL) * the whole document *	1	
A	US 4 333 339 A (MC NEELY) * the whole document *	1	
A	US 4 686 071 A (ROSENZWEIG) * the whole document *	1	
A	US 4 268 413 A (DABISCH) * the whole document *	1	
A	US 5 400 610 A (MACEDO) * the whole document *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.6) A45D G01K
A	US 3 665 938 A (PEDERSEN)		
A	US 4 161 557 A (SUZUKI)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 30 September 1997	Examiner Sigwalt, C
CATEGORY OF CITED DOCUMENTS 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			

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