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## **EUROPEAN PATENT APPLICATION**

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## 54 Depilation apparatus.

The invention relates to a depilation apparatus of the type with which liquid wax is applied to the skin, which wax is removed together with the hairs after solidification, the apparatus comprising a housing (1) with a reservoir (2) for holding the wax (3), which reservoir is in connection with an outlet opening (4) in a wall of the housing, the apparatus being provided with a rotatable distributor roller (5) near the outlet opening for applying the liquid wax to the skin, while the surface of the distributor roller (5) is provided with parallel grooves (10) which run substantially in axial direction. The grooves in the distributor roller (5) are undulate with the object of obtaining a stronger wax layer. Preferably, the grooves (10) are provided substantially in a triangular wave shape.

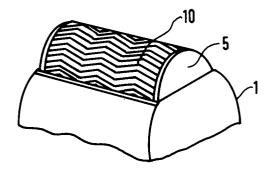


FIG 2

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The invention relates to a depilation apparatus of the type with which liquid wax is applied to the skin, which wax is removed together with the hairs after solidification, the apparatus comprising a housing with a reservoir for holding the wax, which reservoir is in connection with an outlet opening in a wall of the housing, the apparatus being provided with a rotatable distributor roller near the outlet opening for applying the liquid wax to the skin, while the surface of the distributor roller is provided with parallel grooves which run substantially in axial direction.

Such a depilation apparatus is known from US-4,773,784.

In this known depilation apparatus, the distributor roller is cylindrical and a number of axial grooves are provided in its circumference for a better distribution of the liquid wax. After the wax has been applied to the skin, a cloth or foil is to be pressed against the skin. After the wax has sufficiently cooled down and has hardened so as to be united with the cloth, the cloth with the layer of wax with the hairs implanted therein may be removed. The cloth is necessary because the wax layer provided by this method is not strong enough to be removed without a cloth.

The invention has for its object to improve a depilation apparatus as described in the opening paragraph in such a manner that the said cloth for the removal of the wax layer is not necessary.

The depilation apparatus according to the invention is for this purpose characterized in that the grooves in the distributor roller are undulate.

Not only is it possible with such a distributor roller to provide a thicker and more even wax layer, but the wax layer also has ridges in the direction in which the wax layer is provided. The advantage of this is that the wax layer is reinforced to such an extent that it can be removed without additional aids after sufficient cooling-down.

A preferred embodiment of the depilation apparatus is characterized in that the grooves in the distributor roller are undulated substantially in a triangular shape. Such a profile reminiscent of a tractor tyre provides very effective reinforcement ridges in the wax layer.

The invention will now be explained in more detail with reference to an embodiment shown in a drawing, in which

Fig. 1 is a cross-section of a depilation apparatus according to the invention, and

Fig. 2 is an elevation of the distributor roller with undulate grooves as used in the depilation apparatus of Fig. 1.

The depilation apparatus is built up from a housing 1, comprising a reservoir 2 for holding a wax block 3, an outlet opening 4 for the liquid wax, and a rotatable distributor roller 5 situated in the

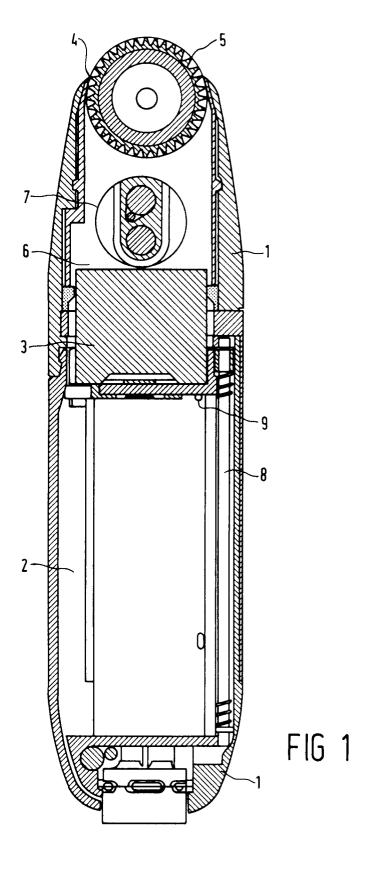
outlet opening. Furthermore, a heater element 7, against which the wax block to be melted rests, is present in the housing between the end 6 of the reservoir 2 and the distributor roller 5. The wax block is held against the heater element by resilient pressure means 8, 9. When the heater element is switched on, the wax block melts only at its side facing the heater element, and the liquid wax flows towards the distributor roller 5.

According to the invention, undulate grooves 10 are provided in the surface of the distributor roller 5, which grooves run substantially in axial direction. The liquid wax enters the grooves and a wax layer of even thickness is applied to the skin during the movement of the roller over the skin. Owing to the undulate pattern of the grooves on the distributor roller, ridges are created in the direction in which the wax is provided. These ridges reinforce the wax layer to such an extent that it can be pulled off without further aids in the direction in which it was applied after sufficient cooling down. Experiments have demonstrated that the ridges created reinforce the wax layer very effectively when a triangular wave pattern is provided on the surface of the distributor roller.

## Claims

- 1. A depilation apparatus of the type with which liquid wax is applied to the skin, which wax is removed together with the hairs after solidification, the apparatus comprising a housing (1) with a reservoir (2) for holding the wax (3), which reservoir is in connection with an outlet opening (4) in a wall of the housing, the apparatus being provided with a rotatable distributor roller (5) near the outlet opening for applying the liquid wax to the skin, while the surface of the distributor roller is provided with parallel grooves (10) which run substantially in axial direction, characterized in that the grooves (10) in the distributor roller are undulate
- A depilation apparatus as claimed in Claim 1, characterized in that the grooves (10) in the distributor roller (5) are undulated substantially in a triangular shape.

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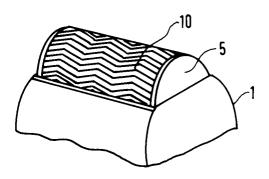


FIG 2



## **EUROPEAN SEARCH REPORT**

EP 92 20 0325

ategory	Citation of document with indicati of relevant passages	on, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
(	EP-A-0 385 881 (SOCIETE DE ( ALPES) * column 5, line 58 - column *		1,2	A45D26/00
	US-A-3 103 689 (BORISOF)  * column 4, line 6 - line 4: 10,11,18,19 *	7; figures	1	
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
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	The present search report has been dra	awn up for all claims		
Place of search Date of completion of the search			Examiner	
	THE HAGUE	14 MAY 1992	RIEG	EL R.E.
X : part Y : part	CATEGORY OF CITED DOCUMENTS icularly relevant if taken alone cularly relevant if combined with another ment of the same category nological background	T : theory or princ E : earlier patent é after the filing D : document cite L : document cited	iple underlying the ocument, but publi date in the application	shed on, or