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(54) **Hair styling tool**

(57) The present invention relates to a hair styling tool which, in particular, creates volume, movement and texture for hair.

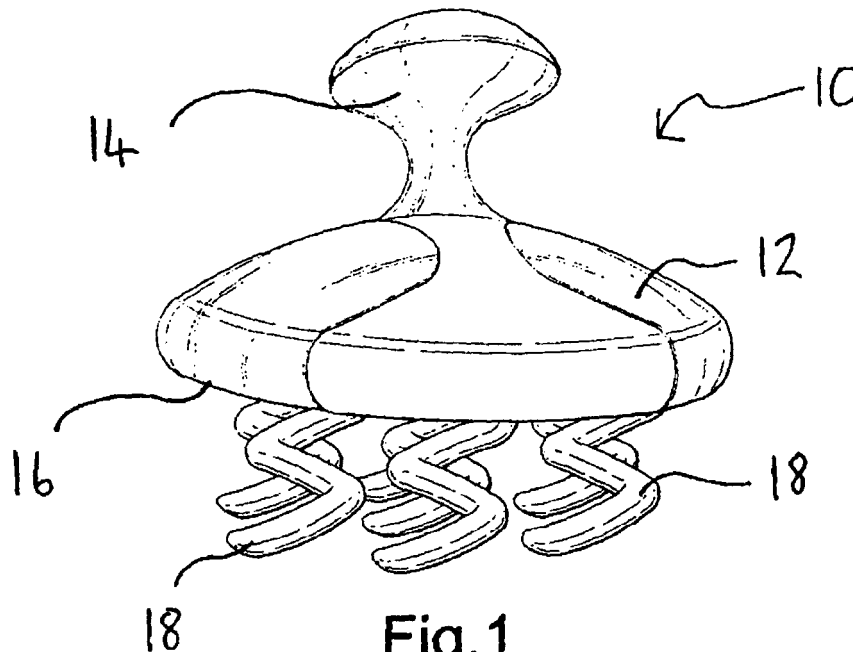


Fig. 1

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to a hair styling tool which, in particular, creates volume, movement and texture for hair.

BACKGROUND OF THE INVENTION

[0002] Hairdressers have long had the problem of styling hair and creating volume, movement and texture. Although numerous techniques and devices exist which may be used by professional hairdressers, few are simple and easy to use. Furthermore, many hair styling tools require an electrical power supply which increases their cost and makes them more difficult to use.

[0003] It is an object of at least one aspect of the present invention to obviate or mitigate at least one or more of the aforementioned problems.

[0004] It is a further object of at least one aspect of the present invention to provide a hair styling tool which creates volume, movement and texture for hair.

SUMMARY OF THE INVENTION

[0005] According to a first aspect of the present invention there is provided a hair styling tool comprising:

at least one spiral member extending from a base of the hair styling tool;

wherein the at least one spiral member has the ability to interact and engage and thereby style hair.

[0006] The hair styling tool may create different hair styling looks i.e. appearances. Hair styling looks are commonly defined in the art with terms such as volume, movement and texture.

[0007] The spiral member may exist in a substantially helical configuration. The spiral member may have an empty inner space (i.e. a central bore) extending through the longitudinal axis of the spiral member. The spiral member may therefore wind itself around an empty central bore.

[0008] Typically, there may be any number of spiral members such as from 1 to 20 or 3 to 10. Preferably, there may be 2, 3, 4, 5, 6 or 7 spiral members. The spiral members may be located in a manner to substantially fully encompass the base of the hair styling tool. The spiral members may be evenly or unevenly spaced from one another depending on the hair styling effect required.

[0009] The pitch (i.e. the crest to crest distance between different turns) of the spiral members may be adapted for different types of hair and for creating different hair styling types with different volume, movement and texture. For example, the pitch may be about 0.5 to 4cms, about 1 to 2 cms and preferably about 1cm. Typically, the pitch is the same for all of the spiral members.

In alternative embodiments, different spiral members in the styling tool may have different pitches depending on the hair styling effect required, thereby creating an uneven and textured effect on hair.

[0010] Conveniently, there may be about 0.5 to 5 turns per centimetre and preferably about 1 turn per centimetre in the spiral member.

[0011] The material forming the spiral members may be about 0.1 to 2 cms or preferably about 0.5 cm in width.

[0012] The width may be constant during the length of the spiral member or may be variable. In alternative embodiments, the width of the spiral members may all be constant or there may be a variety of widths.

[0012] Conveniently, the spiral members may have a cross-section (i.e. diameter) of about 0.1 to 5 cms, about 0.5 to 4 cms, about 1 to 2 cms and preferably about 2 cms. The empty inner space formed by the spiral member may have a cross-section of about 0.2 to 4 cms and preferably about 1 cm. The empty inner space may therefore form a substantially empty cylindrical shape with the spiral member winding itself around the inner space.

[0013] The twist of the spiral members may be all right-handed or all left-handed depending on the hair styling required. In an alternative embodiment, the hair styling tool may comprise a combination of both left and right-handed twisted spiral members.

[0014] The spiral members may have a typical length of about 1 to 20 cms, 2 to 10 cms, about 3 to 7 cms and preferably about 5 cms.

[0015] Different spiral members may be separated by an empty space of about 0.1 to 5 cm, 0.2 to 2 cm or preferably about 0.5 cm.

[0016] The spiral members may have a constant or variable density. For example, in a 5cm² pattern there may be 1 - 20 spiral members, 2 - 8 spiral members or preferably about 4 spiral members. Different densities of spiral members may create different hair styling effects.

[0017] Conveniently, the hair styling tool comprises a handle portion which facilitates the ease of gripping of the tool and enables a user, such as a professional hairdresser, to maximise the turning capacity of the tool.

[0018] Typically, the hair styling tool may be integrally moulded from any suitable plastics material. Preferably, the hair styling tool may be made from a material which has high heat retention properties so that the hair styling tool may retain heat from a proximate hair dryer.

[0019] A suitable material may be any thermosetting or thermoplastic materials such as polystyrene, polypropylene or any suitable resin based material. The hair dryer may be blown into the hair and over the hair styling tool thereby allowing the hair styling tool to heat up and thereby have a greater effect in hair styling by creating volume, movement and texture in the hair. Preferably, the hair styling tool may heat up to about 30°C to 70°C.

[0020] The spiral members may also be detachable from the bottom face of the hair styling tool. The bottom face may comprise a series of snap-fit arrangements in the form of a grid comprising, for example, substantially

horizontal and vertical apertures allowing a plurality and variety of patterns to be selected for the spiral members. Different arrangements of the spiral members may therefore be selected for different types of hair styling required.

[0021] According to a second aspect of the present invention, there is provided a method of styling hair using the hair styling tool according to the first aspect.

[0022] Preferably, the hair styling tool may be used to style hair and create volume, movement and texture in the hair.

[0023] The hair styling tool may be used in combination with an apparatus which applies heat to the hair such as a hair dryer.

[0024] The hair styling tool may heat up to, for example, about 30°C to 70°C which further enhances the styling of the hair.

[0025] In use, the handle of the hair styling tool may be held by a user and is applied in a twisting/rotating manner to the hair. The handle portion of the hair styling tool may be adapted to facilitate the turning capacity of the hair styling tool thereby enabling maximum volume, movement and texture to be applied to the hair. The hand of the user, such as a professional hairdresser, therefore turns the hair styling tool in the hair.

[0026] Using this procedure, hair interacts and may be wound around at least one spiral member extending from the base of the hair styling tool. The hair which interacts with the at least one spiral member and hair which does not interact such as in the empty space inside each spiral member or in the space between different spiral members has a different hair styling effect. The amount of hair which interacts and which does not interact may be adapted to create different hair styling effects. As the hair interacts and engages with the spiral elements, volume, movement and texture may be applied to the hair.

[0027] As the hair styling tool heats up on application of heat from an external source, the effectiveness of the hair styling tool increases. Conveniently, the hair styling tool may be pre-heated.

BRIEF DESCRIPTION OF THE DRAWINGS

[0028] Embodiments of the present invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 is a front view of a hair styling tool according to an embodiment of the present invention;

Figure 2 is a rear view of the hair styling tool shown in Figure 1;

Figure 3 is a top view of the hair styling tool shown in Figures 1 and 2;

Figure 4 is a bottom view of the hair styling tool shown in Figures 1 to 3;

Figure 5 is a side view of the hair styling tool shown in Figure 1 to 4;

Figure 6 is a side view of the other side of the hair styling tool shown in Figures 1 to 5; and

Figure 7 is a perspective view of the hair styling tool shown in Figures 1 to 6.

DETAILED DESCRIPTION

[0029] Referring to Figures 1 to 7, there are representations of a hair styling tool, generally designated 10. The hair styling tool 10 comprises a base portion 12 and a handle portion 14. The base portion 12 comprises a bottom face 16 which is substantially flat.

[0030] As clearly shown in Figures 1 to 4, the bottom face 16 has seven spiral members 18 extending from the bottom face 16 in a substantially perpendicular manner. The spiral members 18 have a substantially helical configuration and have a diameter of about 2 cms and a length of about 5 cms. The spiral members 18 are in a regular pattern and have a separation, from centre to centre, of about 3 cms from one spiral member 18 to another. An empty space of about 0.5 cm exists between the different spiral members 18. The pitch of the spiral members 18 is about 1 cm per turn. An empty inner bore 20 of a diameter of about 1 cm exists inside each spiral member 18.

[0031] The hair styling tool 10 is integrally moulded from suitable plastics material such as polypropylene and polyethylene. The plastics material has the specific physical property of retaining heat applied from an external source such as a hair dryer.

[0032] In use, the hair styling tool 10 is held in one hand by a hairdresser and in the other hand the hairdresser holds a hairdryer which applies heat to both the hair and the hair styling tool 10. During this procedure, the hair styling tool 10 absorbs heat from the hot air being blown from the hairdryer with the result that the hair styling tool 10 heats up to about 30°C to 70°C.

[0033] As the spiral elements 18 are applied and engage with the hair, hot air is blown with the hair dryer over the hair and the hair styling tool 10 and the hair styling tool 10 is rotated by the hairdresser. This styles the hair and has the effect of creating volume, movement and texture. The spiral members may also be detachable into a grid on the bottom face of the hair styling tool allowing the pattern and arrangement of the spiral members to be varied and adapted for different requirements.

Claims

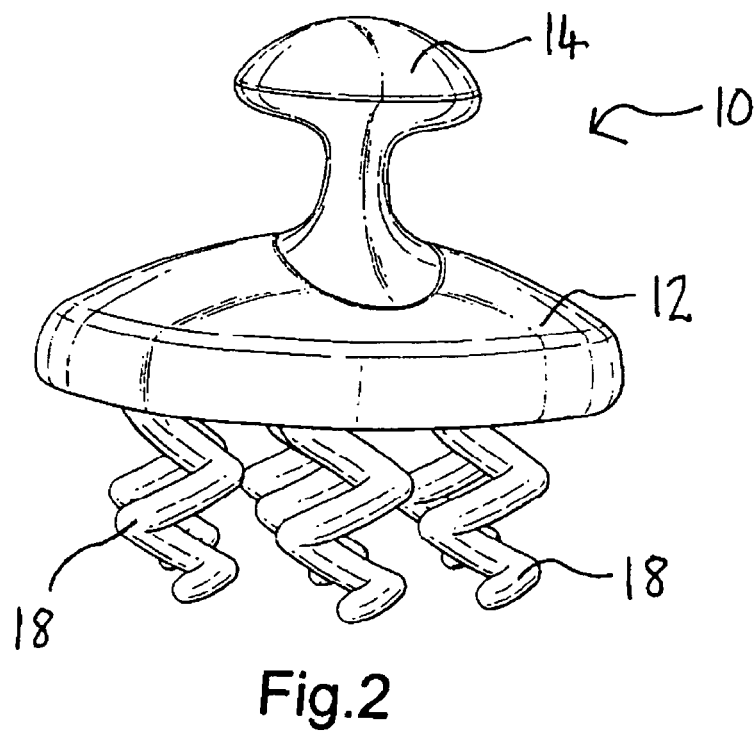
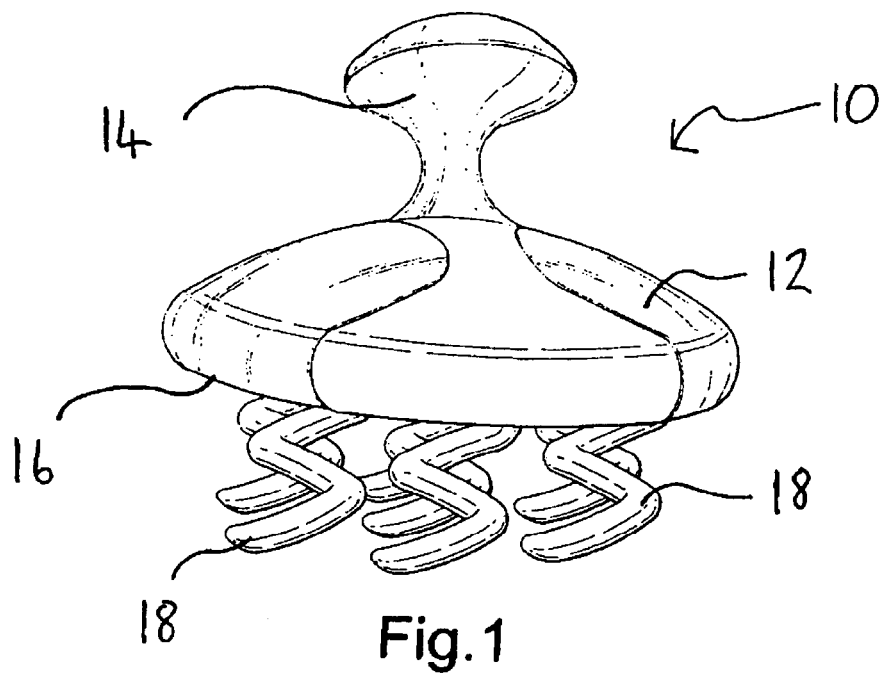
1. A hair styling tool comprising:

at least one spiral member extending from a base of the hair styling tool;

wherein the at least one spiral member has the ability to interact and engage and thereby style hair.

2. A hair styling tool according to claim 1, wherein the spiral member has a helical configuration.

3. A hair styling tool according to any of claims 1 or 2, wherein the spiral member forms an empty inner space.
4. A hair styling tool according to any preceding claim, wherein there is between two to ten spiral members.
5. A hair styling tool according to any preceding claim, wherein there is seven spiral members.
6. A hair styling tool according to any preceding claim, wherein the pitch of the spiral members is adapted for different types of hair and different types of volume, movement and texture.
7. A hair styling tool according to any preceding claim, wherein the spiral members have a cross-section of about 0.5 to 4 cms.
8. A hair styling tool according to any preceding claim, wherein the spiral members have a length of about 1 to 10 cms.
9. A hair styling tool according to any preceding claim, wherein the hair styling tool comprises a handle portion which facilitates the ease of gripping of the tool and enables a user to maximise the turning capacity of the tool.
10. A hair styling tool according to any preceding claim, wherein the hair styling tool is integrally moulded from a plastics material.
11. A hair styling tool according to any preceding claim, wherein the hair styling tool is made from plastics material which has high heat retention properties so that the hair styling tool retains heat from a proximate heat source.
12. A hair styling tool according to any preceding claim, wherein the base comprises a grid, said grid comprising a series of apertures into which the spiral members are engagable within.
13. A hair styling tool according to claim 12, wherein the arrangement of the spiral members in the series of apertures is adaptable for different hair styling effects.
14. A hair styling tool according to any of claims 12 or 13, wherein the spiral members are attachable and detachable from the series of apertures via a snap-fit arrangement.
15. A method of styling hair using a hair styling tool according to any preceding claim.
16. A method of styling hair according to claim 15, where-
- in the hair styling tool is used in combination with a hair dryer.
17. A method of styling hair according to any of claims 15 or 16, wherein the hair styling tool heats up to about 30°C to 70°C which further enhances the styling of the hair.
18. A method of styling hair according to any of claims 15 to 17, wherein the hair styling tool is held by a user and is applied in a turning and twisting manner to the hair.
19. A method of styling hair according to any of claims 15 to 18, wherein a handle portion of the hair styling tool is adapted to facilitate the turning capacity of the hair styling tool enabling maximum volume, movement and texture to be applied.



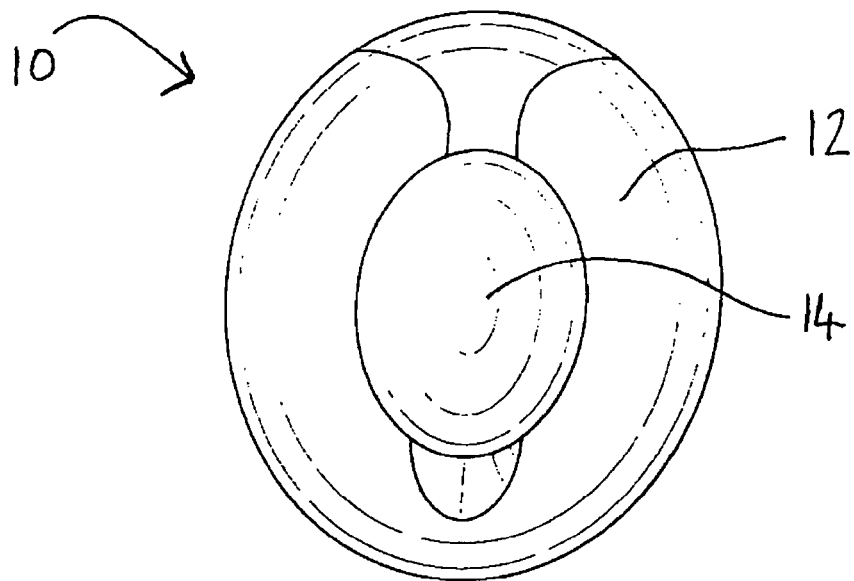


Fig.3

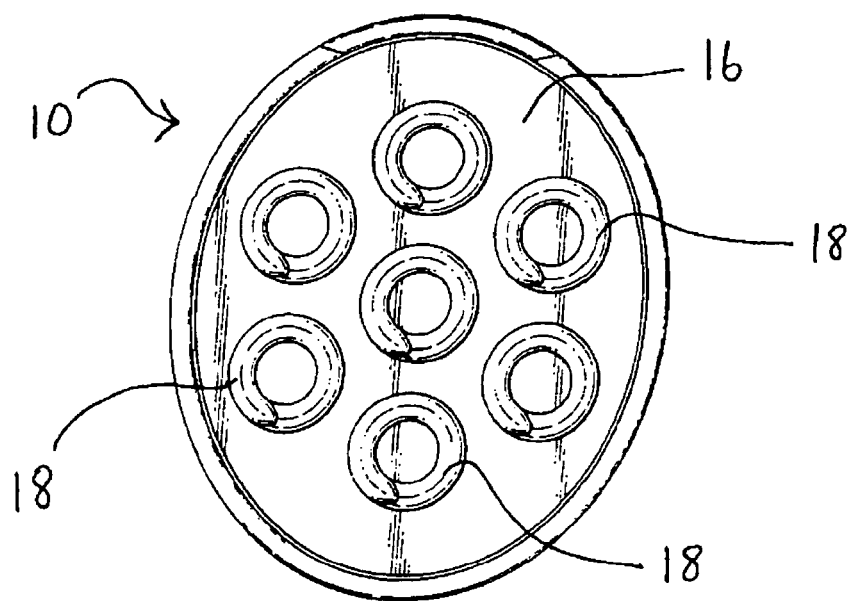


Fig.4

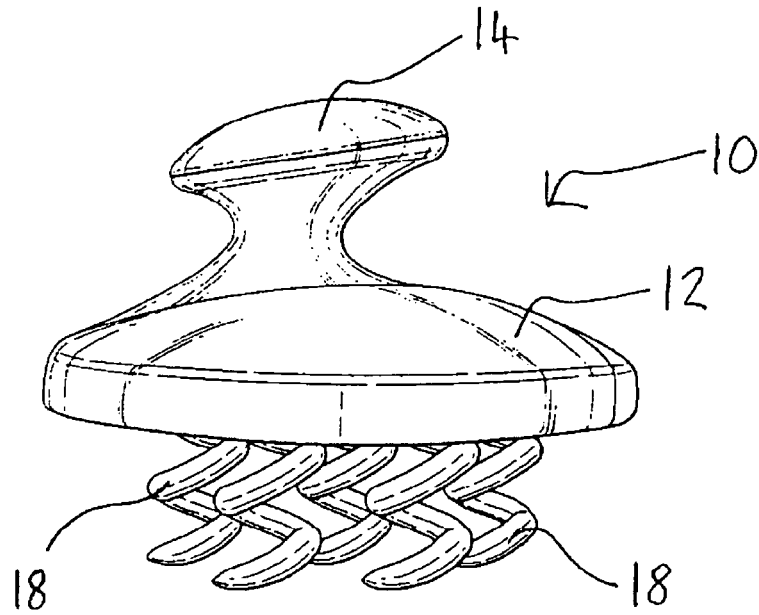


Fig.5

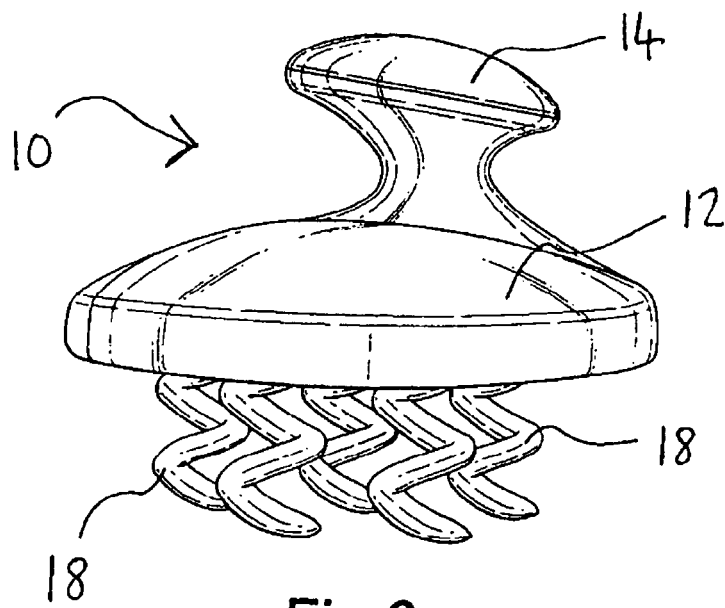


Fig.6

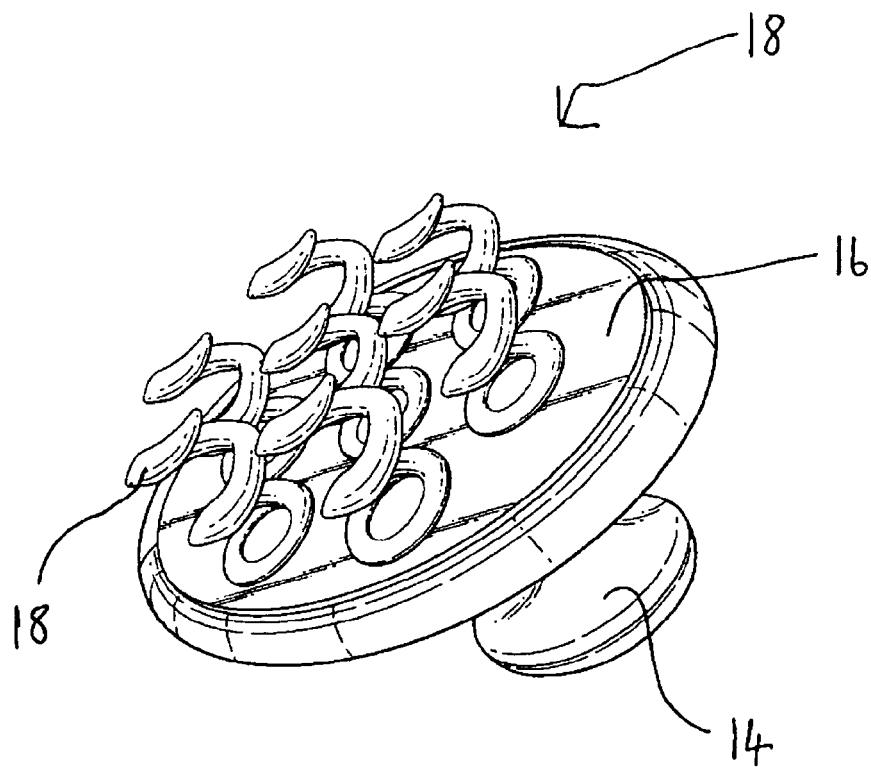


Fig.7



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EUROPEAN SEARCH REPORT

Application Number
EP 05 25 7086

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 626 156 A (VICORY, SR. ET AL) 6 May 1997 (1997-05-06) * column 4, line 20 - line 57 * * column 5, line 23 - column 6, line 5 * * column 7, line 39 - line 66 * * figures *	1-3, 6-11, 15-19	A45D20/52 A45D2/02 A45D7/02 A45D24/02
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 27 February 2006	Examiner Dinescu, D
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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EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 05 25 7086

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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27-02-2006

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