(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 095 736 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
02.09.2009 Bulletin 2009/36

(51) Int Cl.:
A45D 1/04 *(2006.01)* ***A45D 1/12*** *(2006.01)*

(21) Application number: **08152070.2**

(22) Date of filing: **28.02.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(71) Applicant: **Wella Aktiengesellschaft**
64572 Darmstadt (DE)

(72) Inventor: **Schmider, Andreas**
64285, Darmstadt (DE)

(54) Hair shaping device

(57) A hair shaping device (1) designed as a curling bar, in particular for drying or wave-styling of hair, equipped with a handle (2) and a heatable hair shaping component (3), whereby the hair shaping component (3) has a curled structure (4), and where the hair shaping component (3) features an elliptical cross section down its longitudinal axis, at least down the length of a section (5). This shape of cross section is retained while the alignment of the ellipse (6) is changed in order to achieve the curled structure (4).

The proposed hair shaping device (1) permits uniform wave-styling and drying of locks of hair through the application of relatively high levels of tension to those locks of hair.

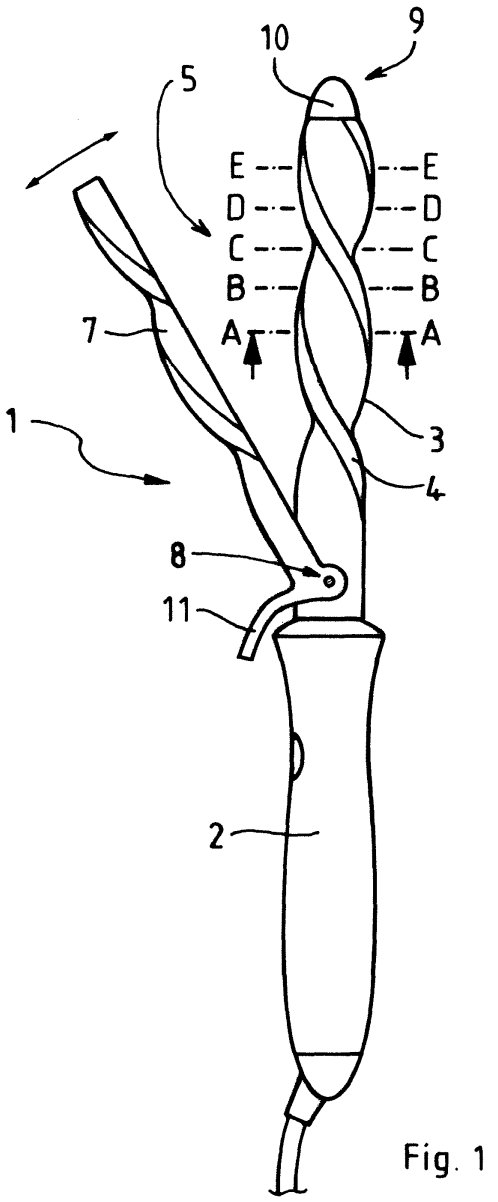

Fig. 1

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Description

[0001] This invention relates to a hair shaping device for the drying or styling of hair.

[0002] We are familiar from US 1,491,415 with a hair shaping device comprising a handle component and a heatable hair styling component. The hair styling component features a curled structure and a hair retaining clip adapted to the shape of this structure to assist with the spiral curling of locks of hair on the hair styling component.

This hair shaping device is intended for the styling of hair. Essentially, a heating unit arranged inside the hair styling component is a suitable way of heating the outer surface of the hair styling component. This heat helps both to dry and to style locks of hair.

[0003] The disadvantage of the familiar hair shaping device is that it is relatively unsuited to tight curling of locks of hair using only a relatively narrow range of the entire section. This curling technique, frequently used in practice, delivers relatively high mechanical tension to the locks of hair and therefore an improved styling outcome.

With the previously familiar hair shaping device, this gives rise to the formation of straight sections of these locks of hair which extend beyond the curled structure. On the one hand, straight sections of hair of this kind are undesirable in locks of hair being styled. On the other hand, these straight sections of hair, in contrast to the relatively tightly curled strands of hair, do not lie on the surface of the heatable hair styling component, which means that the straight sections of hair are dried less well than the curled strands which, in overall terms, gives rise to a relatively long drying process during permanent wave treatment.

[0004] The task faced in this instance is to overcome the aforementioned disadvantages associated with a hair shaping device in accordance with the main heading of Claim 1. This task is accomplished in accordance with the designating component of Claim 1. In this instance, the hair shaping component features an elliptical cross section, at least down its longitudinal axis down one section, and this shape of cross section is retained by changing the alignment of the ellipse on the cross section in order to achieve the curled structure down the length of the section.

[0005] The advantage of the proposed hair shaping device is that it can be used to achieve a wave effect in hair which features no straight strands of hair at all and which therefore looks relatively natural. By virtue of the fact that all elliptical cross section surfaces are only differently aligned, but still share the same extent, the hairs in a single lock of hair can be curled under uniform and relatively high tension, and these locks of hair then lie evenly on the surface of the heatable hair shaping component. Using the heat of the hair shaping component, these locks of hair are then uniformly wave-styled and dried.

[0006] Advantageous embodiments of the proposed hair shaping device are described in Claims 2 to 4.

[0007] A curled lock of hair is held under tension on the hair shaping component if, in accordance with Claim 2, a hair retaining clip adapted to suit the surface of the hair shaping component is provided on the hair shaping device and if this hair retaining clip is connected by means of a joint to the handle section or to the hair shaping component. The hair retaining clip features an identical curled structure to the hair shaping component in order, especially under spring force, to apply uniform pressure to the section holding a curled lock of hair clamped between the hair retaining clip and the hair shaping component.

[0008] A particularly good wave-styling outcome is achieved if, in accordance with Claim 3, the curled structure, relative to the section with the curled hair shaping component, constitutes between half a complete turn and three complete turns, but preferably between one and one-and-a-half complete turns. With curling of this nature, a wave effect is introduced to hair which approximately corresponds to a natural wave in hair. Furthermore, a sufficient level of tension can be generated in a curled lock of hair.

[0009] If an uncurled separating spike is provided at the end of the hair shaping component (Claim 4), this can be used in an advantageous manner, first to separate out a lock of hair which needs to be styled and then to curl that lock around the hair shaping component. Owing to the fact that this separating spike is not curled but instead describes a pronouncedly tapered shape or a somewhat tapered shape, it is able to perform its function in a reliable manner, independently of the application angle of the separating spike.

[0010] In the following section, the proposed hair shaping device is described in more detail with the help of Figures depicting a practical application, i.e. these show:

Figure 1 in a side view, a hair shaping device designed as a curling bar with a curled hair shaping component, whose curled structure is created by having an elliptical cross section down the length of the entire hair shaping component which maintains a constant shape in dimensional terms, only rotated around the length of the hair shaping component with the ellipse shape only discernible when viewed in cross section;

Figure 2 cross section A-A cut as shown in Figure 1 from the hair shaping component depicted on Figure 1;

Figure 3 cross section B-B cut as shown in Figure 1 from the hair shaping component depicted on Figure 1;

Figure 4 cross section C-C cut as shown in Figure 1

from the hair shaping component depicted on Figure 1;

Figure 5 cross section D-D cut as shown in Figure 1 from the hair shaping component depicted on Figure 1; as well as

Figure 6 cross section E-E cut as shown in Figure 1 from the hair shaping component depicted on Figure 1.

[0011] On a hair shaping device 1 for drying and wave-styling of hair, with a handle section 2 and a heatable hair shaping component 3, hair shaping component 3 exhibits a curled structure 4. The hair shaping component 3 has an elliptical cross section down its longitudinal axis along a section 5 corresponding to the entire length of the hair shaping component 3. This form of cross section is retained by altering the alignment of the ellipse 6 on this cross section in order to achieve the curled structure 4. A hair retaining clip 7 adapted to suit the surface of the hair shaping component 3 is provided on the hair shaping device 1. The hair retaining clip 7 is connected by means of a joint 8 to the hair shaping component 3. The hair retaining clip 7 can be opened and closed by manually actuating a spring-loaded button 11. When button 11 is released, the hair retaining clip 7 shaped in the same way as structure 4 is placed back on hair shaping component 3 where it holds down curled locks of hair by means of spring force.

[0012] The curled structure 4 describes, when related to section 5 with the curled hair shaping component 3, approximately one and a quarter complete turns. At the end 9 of hair shaping component 3, an uncurled separating spike 10 is formed which is used for separating out locks of hair for wave-styling.

REFERENCE LIST

[0013]

1	Hair shaping device
2	Handle
3	Hair shaping component
4	Structure
5	Section
6	Ellipse
7	Hair retaining clip
8	Joint
9	End
10	Separating spike
11	Button

Claims

1. Hair shaping device (1), in particular for the drying and wave-styling of hair, having a handle (2) and a heatable hair shaping component (3), where said hair shaping component (3) exhibits a curled structure (4), **characterized in that** the hair shaping component (3) features an elliptical cross section down its longitudinal axis at least down the length of a section (5), and **in that** this shape of cross section is retained down the length of that same section (5) while the alignment of the ellipse (6) is altered on the cross section in order to achieve the curled structure (4).

2. Hair shaping device according to Claim 1, **characterized in that** a hair retaining clip (7) adapted to the surface of the hair shaping component (3) is provided on the hair shaping device (1) and that the hair retaining clip (7) is connected by means of a joint (8) to the handle (2) or to the hair shaping component (3).

3. Hair shaping device according to Claim 1 or Claim 2, **characterized in that** the curled structure (4), relative to the section (5) with the curled hair shaping component (3), constitutes between half a complete turn and three complete turns, but preferably between one and one-and-a-half complete turns.

4. Hair shaping device according to Claim 1, Claim 2 or Claim 3, **characterized in that** a non-curled separating spike (10) is provided at the end (9) of the hair shaping component (3).

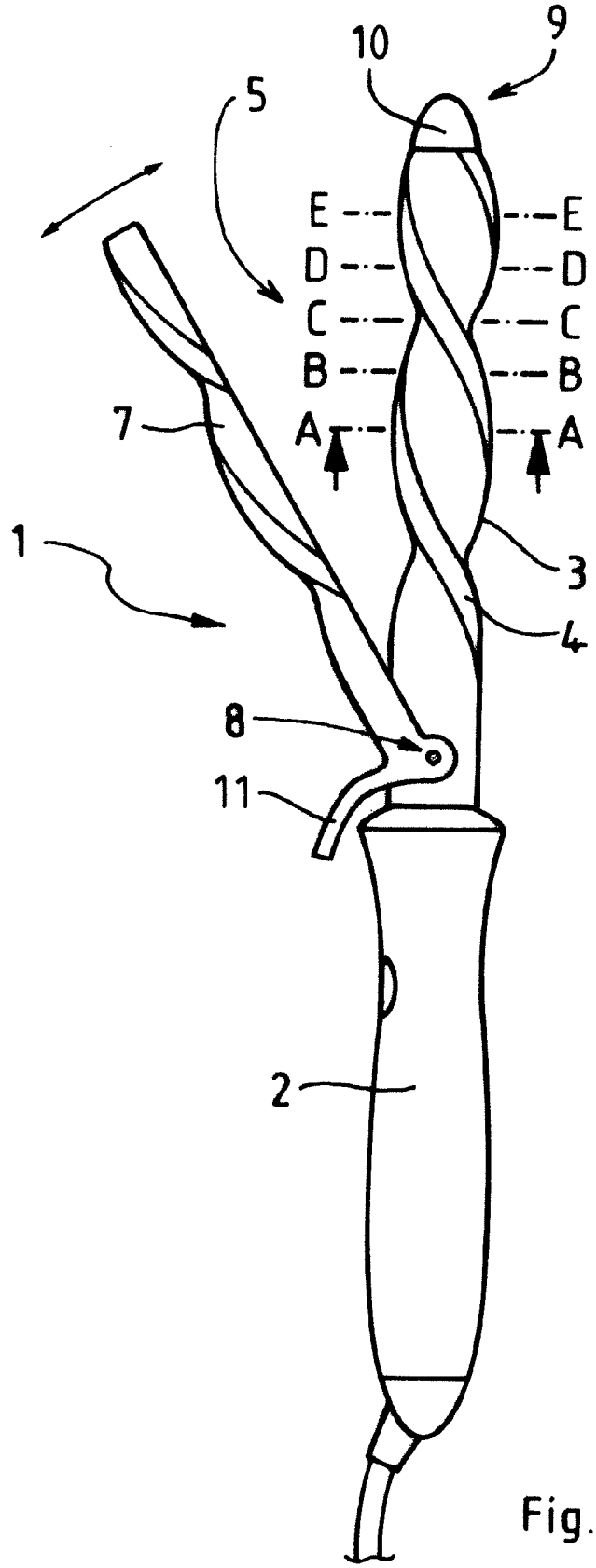

Fig. 1

Fig. 6 E - E

Fig. 5 D - D

Fig. 4 C - C

Fig. 3 B - B

Fig. 2 A - A

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EUROPEAN SEARCH REPORT

Application Number
EP 08 15 2070

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	7 August 2008	Lang, Denis

CATEGORY OF CITED DOCUMENTS

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REFERENCES CITED IN THE DESCRIPTION

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