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(71) Applicant: **Gori, Roberto**
20862 Arcore (MB) (IT)

(72) Inventor: **Gori, Roberto**
20862 Arcore (MB) (IT)

(74) Representative: **Mittler, Andrea et al**
MITTLER & C. s.r.l.
Viale Lombardia, 20
20131 Milano (IT)

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(54) **CURLER**

(57) A curler is described comprising a shaped body provided with two concave annular surfaces (1, 2) which intersect perpendicularly in two points (10, 20) belonging to a symmetry axis (A3) of the body itself. The curler comprises four lobes 4, each of which connects a respec-

tive part of the edge of the concave annular surface to the contiguous part of the edge of the other surface; each of said four lobes has at least one through hole (7) passing through the entire width (La) of the lobe.

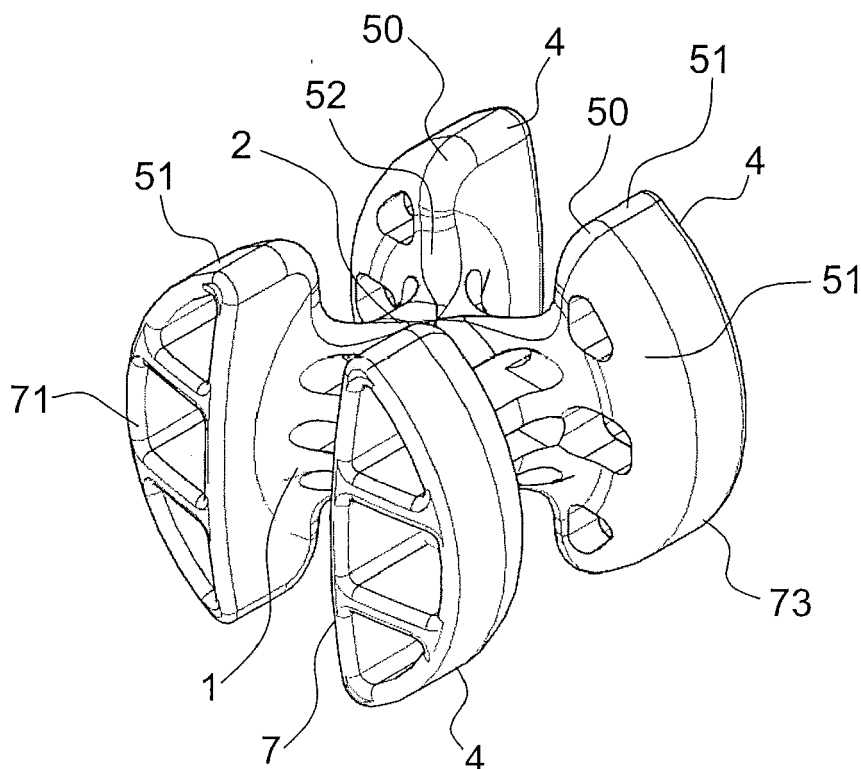


Fig. 1

Description

[0001] The present invention relates to a curler.

[0002] Hair curlers are known. Curlers normally consist of cylinders of different sizes and materials about which locks of hair are wound in order to curl them.

[0003] The known curlers are normally adapted to produce constants curls of the locks of hair because the cylindrical shape of the curler determines the winding of the lock of hair on a surface at a constant curvature.

[0004] Curlers are known which confer a differentiated wave to a lock of hair along its extensions as a function of the manner by which the hairdresser winds the lock on the surfaces of the curler.

[0005] In view of the described prior art, it is the object of the present invention to provide a curler which is different the known ones.

[0006] According to the present invention, said object is achieved by a curler comprising a shaped body provided with two concave annular surfaces which intersect perpendicularly at two points belonging to a symmetry axis of the body itself, and four lobes, each one of which connects a respective part of the edge of a surface with the adjacent part of the edge of the other surface, characterized in that each one of said four lobes comprises at least one through hole passing through the entire width of the lobe.

[0007] By virtue of the curler according to the present invention, the drying of the hair can be improved due to the presence of holes in the lobes. Preferably, the presence of holes in the concave annular surfaces of the curler make it possible to improve hair drying.

[0008] The features and the advantages of the present invention will be apparent from the following detailed description of a practical embodiment thereof, illustrated by way of non-limiting example in the accompanying drawings, in which:

figures 1 and 2 are perspective views of the curler according with the present invention;

figure 3 is a front view of the curler in figures 1 and 2;

figure 4 is a top view of the curler in figures 1 and 2;

figure 5 is a side view of the curler in figures 1 and 2.

[0009] Figures 1-5 show a curler comprising a body shaped so as to have two concave annular surfaces 1 and 2, the symmetry axes A1, A2 of which intersect perpendicularly in a point 5 at the center of the body itself. The two concave annular surfaces 1 and 2 intersect each other perpendicularly so as to have two points 10, 20 in common belonging to a symmetry axis A3 of the body itself.

[0010] The curler comprises four lobes 4, the surface 52 of each of which connects a respective part of the edge of the concave annular surface 1 to the adjacent or contiguous part of the edge of the other concave annular surface 2.

[0011] The lobes 4 comprise at least one through hole

or channel 7, preferably a plurality of through holes or channels 7, to facilitate the passage of drying air onto the lock of hair once the lock of hair is wrapped on the curler.

5 [0012] The through holes 7 pass through only the lobe 4 and not the whole curler; indeed, they are arranged so as to face the side parts of the lock of hair wound round the curler. The flow of drying air flows over the lock of hair and not inside it.

10 [0013] The through holes 7 pass through the lobe 4 for its entire width La so as to be adjacent to the hair of the lock wound round the curler. In this manner, the drying air coming from the drying means, e.g. a hairdryer, is directed onto the side parts of the lock through the holes 7 to allow drying the hair faster and better.

15 [0014] Preferably, the through holes 7 are arranged on the entire length Lu of the lobe 4 so that the flow of drying air strikes most of the lock of hair wound round the curler.

[0015] Furthermore, the holes 7 allow the spraying of liquids or perm fixatives.

20 [0016] The two concave annular surfaces 1 and 2 comprise a plurality of holes 6, preferably of oval shape, to facilitate the passage of the drying air into the lock of hair once the lock of hair is wound on the curler.

25 [0017] The two concave annular surfaces 1 and 2 preferably have a circular extension but both or at least one may have an elliptical extension.

[0018] The curler according with the invention is made of plastic material, preferably by injection molding.

30 [0019] Preferably, the channels 7 comprise a mouth or input aperture 71, preferably triangular or square, in the outermost part of the lobes and end with an outlet hole 7, preferably oval shaped, in the part of the lobes adjacent to the concave annular surface 2; preferably, the channels 7 are funnel-shaped in which the mouth 71 is larger than the oval-shaped outlet hole or aperture 73 so as to direct the flow of drying air onto the lock of hair and allow a better drying of the lock of hair.

35 [0020] Each lobe 4 of the curler 1 comprises two curved surfaces 50 with a radius of curvature comprised between 0.5 mm and 3 mm at the two ends 51 from which two surfaces 52 depart, which surfaces connect a respective part of the edge of a concave annular surface 1 to the adjacent or contiguous part of the edge of the other concave annular surface 2; the surfaces 52 of the lobes 4 are the parts in contact with the lock of hair once the lock of hair is wound on the curler. The curved surfaces 50 of the ends 51 of the lobes 4 allow a best winding of the lock of hair on the curler.

40 [0021] The curler according to the invention allows a hairdresser to wind a lock of hair in various directions comprising parts of the concave annular surfaces 1 and 2 and of the connecting parts of the surfaces 1 and 2 to the lobes 4 so that the lock of hair is partially wound on one or more lobes 4, whereby obtaining different possible waves.

45 [0022] Once the winding of the lock of hair on this curler is completed, the channels or holes 7 become accessible

through the openings thereof through which the drying air flows from a hairdryer or other hair drying means which, by virtue of the presence of the plurality of channels 7 of each lobe 4 allow an easier and more homogeneous drying of the hair.

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Claims

1. Curler comprising a shaped body provided with two concave annular surfaces (1, 2) which intersect perpendicularly at two points (10, 20) belonging to a symmetry axis (A3) of the body itself, four lobes (4) each one of which connects a respective part of the edge of a surface with the adjacent part of the edge of the other surface, **characterized in that** each one of said four lobes comprises at least one through hole (7) passing through the entire width (La) of the lobe.

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2. Curler according to claim 1, **characterized in that** said two concave annular surfaces comprise a plurality of through holes (6).
3. Curler according to claim 1, **characterized in that** each lobe comprises a plurality of through holes (7) passing through the entire width (La) of the lobe

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4. Curler according to claim 3, **characterized in that** said plurality of through holes (7) passing through the entire width (La) of the lobe extends for the entire length (Lu) of the lobe.

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5. Curler according to any one of the preceding claims, **characterized in that** each through hole (7) passing through the entire width (La) comprises an input aperture (71) and an output aperture (73) adjacent to at least one concave annular surface, said input aperture having a greater size than the output aperture.

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6. Curler according to any one of the preceding claims, **characterized in that** each one of the four lobes (4) of the curler comprises two curved surfaces (50), having a radius of curvature ranging from 0.5 mm to 3 mm, at two lobe end parts (51) from which two surfaces (52), which connect a respective part of the edge of a concave annular surface with the adjacent part of the edge of the other concave annular surface, depart.

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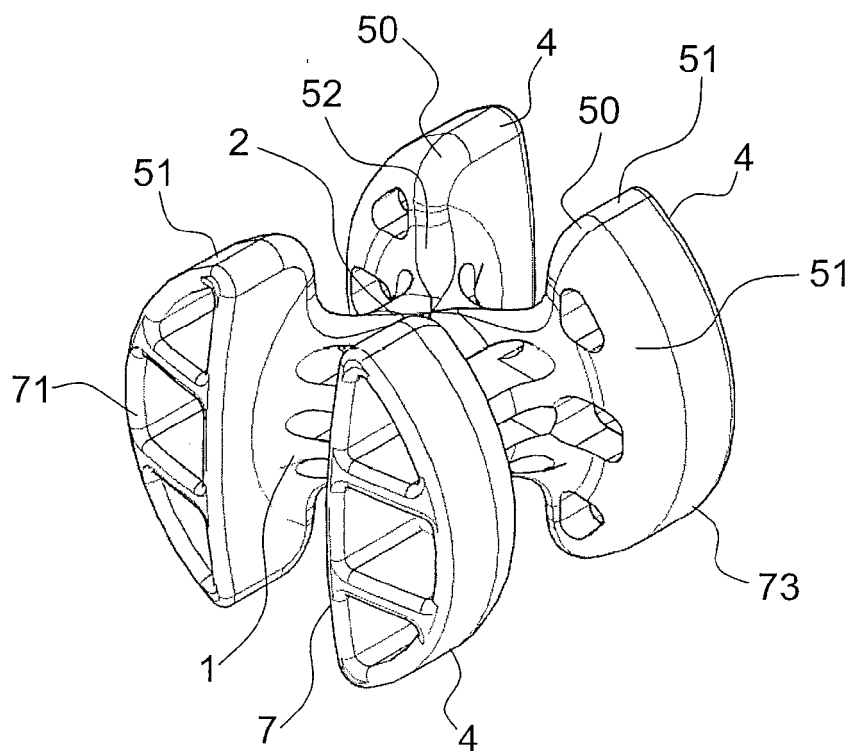


Fig.1

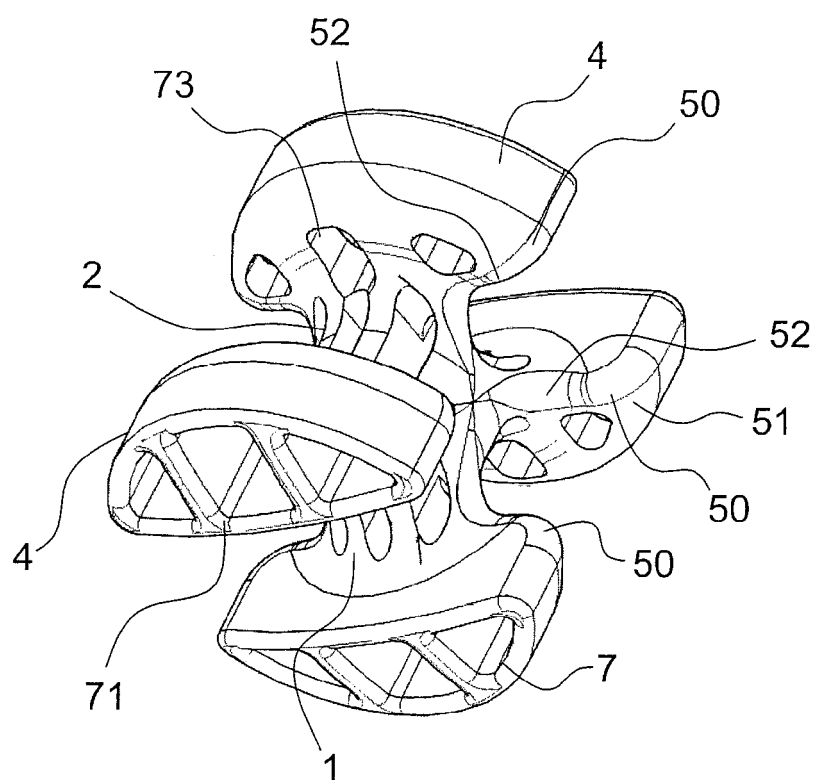


Fig.2

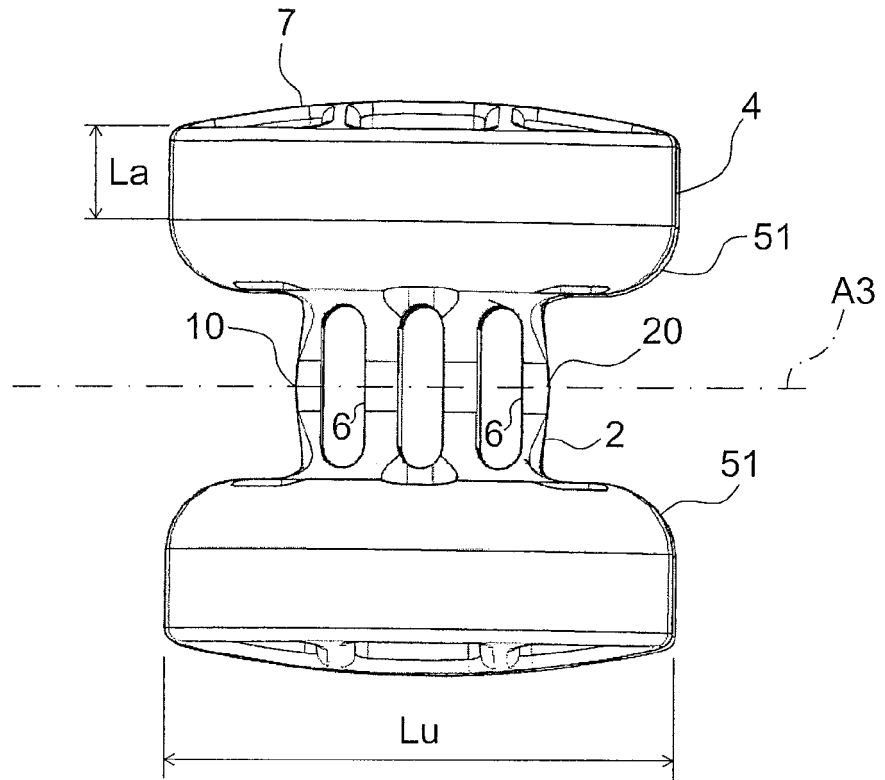


Fig.3

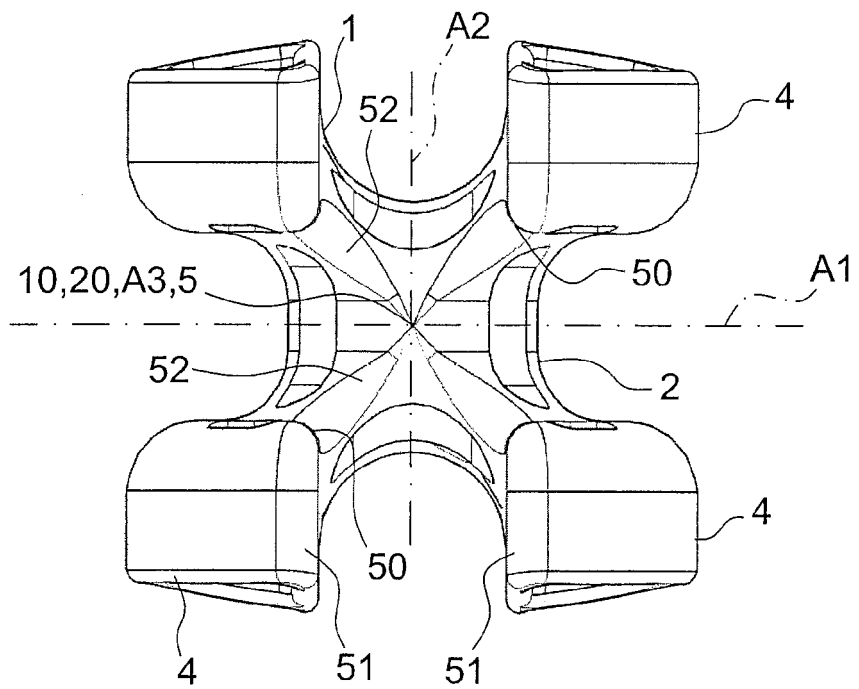


Fig.4

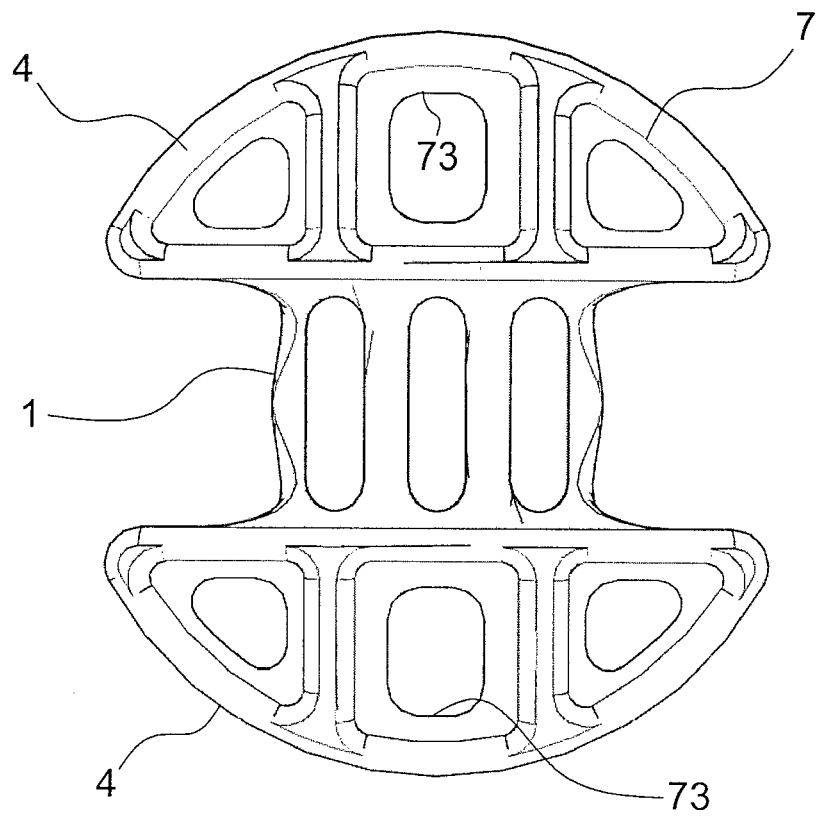


Fig.5



EUROPEAN SEARCH REPORT

 Application Number
 EP 18 19 6038

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			TECHNICAL FIELDS SEARCHED (IPC)
			A45D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 17 October 2018	Examiner van de Beek-Duijker
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
ON EUROPEAN PATENT APPLICATION NO.**

EP 18 19 6038

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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