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(54) **Artificial hair**

(57) Artificial hair, characterized in that it mainly consists of a synthetic support (2) which is provided with a

coating (3) on the basis of crosslinkable aliphatic polyurethane.

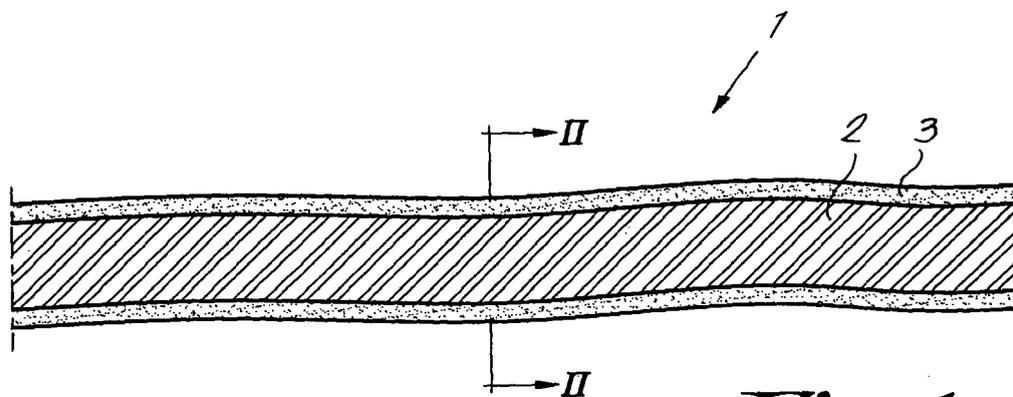


Fig. 1

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Description

[0001] The present invention concerns improved artificial hair.

[0002] It is known that artificial hair usually does not look like, neither feels like real hair, such that it does not give a natural impression and it is often obvious that someone is wearing a wig made of such artificial hair.

[0003] The present invention aims to remedy the above-mentioned and other disadvantages by providing improved artificial hair which looks and also feels like real hair.

[0004] To this end, the present invention concerns improved artificial hair which mainly consists of a synthetic support provided with a coating on the basis of cross-linkable aliphatic polyurethane.

[0005] By cross-linkable is to be understood that the aliphatic polyurethane offers the possibility to form cross links within the scope of an appropriate treatment.

[0006] Thanks to the coating, the color will look more natural as far as appearance, reflection and sheen are concerned, just as with healthy natural hair, as opposed to non-coated dry artificial hair.

[0007] Apart from the advantage of the resemblance to real hair, another advantage of the improved artificial hair is that the coating does not wear by washing or combing the hair and that it is also resistant to chemicals, as a result of which the artificial hair will retain a natural look for a long time.

[0008] The present invention also aims to provide a method for manufacturing improved artificial hair as described above, whereby a synthetic support is provided at least once with a liquid coating on the basis of cross-linkable aliphatic polyurethane.

[0009] In order to better explain the characteristics of the invention, the following preferred embodiment of improved artificial hair according to the invention is described as an example only without being limitative in any way, with reference to the accompanying drawings, in which:

figure 1 is a longitudinal section of an improved artificial hair according to the invention;

figure 2 represents a cross section according to line II-II in figure 1 to a larger scale;

figures 3 and 4 represent variants of an improved artificial hair according to figure 2.

[0010] The improved artificial hair 1 according to the invention mainly consists of a synthetic support 2 with a circular cross section which is provided with a coating 3.

[0011] The above-mentioned synthetic support 2 consists for example of a polyester such as polyethylene, or preferably of polyethylene terephthalate or what is called PETP.

[0012] The above-mentioned coating 3 according to

the invention is made on the basis of cross-linkable aliphatic polyurethane.

[0013] According to the invention, it is also possible to provide the above-mentioned coating 3, while being applied, with one or several additives in the form of thinners, distributors, drying time accelerators, means determining the hardness, means to influence the reflection, or the like.

[0014] The thickness of the improved artificial hair 1 is situated between one tenth and four hundredths of a millimeter.

[0015] Figure 3 represents a variant of an improved artificial hair 1 according to the invention, whereby the cross section has an oval shape.

[0016] Figure 4 represents yet another embodiment of an improved artificial hair according to the invention whereby the cross section has what is called a "double round glass shape".

[0017] It is clear that the cross section of an improved artificial hair 1 according to the invention is not limited to the shapes represented in the figures.

[0018] The present invention also concerns a method for manufacturing improved artificial hair 1 according to the invention, whereby a synthetic support 2 is provided at least once and preferably several times with a liquid coating on the basis of cross-linkable aliphatic polyurethane.

[0019] The coating is carried out by pulling the synthetic support through a bath of the coating material.

[0020] The coating is done in a mechanical manner, by means of specialized equipment, whereby a single thread is pulled through the coating machine according to what is called the "single thread coating" process.

[0021] After the coating, a drying time between ten seconds and ten minutes is preferably observed, whereby the improved artificial hair 1 according to the invention is exposed to a temperature between fifty and two hundred degrees Celsius. The hair 1 will subsequently cure further for 24 hours.

[0022] The present invention is by no means limited to the embodiment given as an example and represented in the accompanying drawings; on the contrary, such an improved artificial hair according to the invention can be made in all sorts of shapes and dimensions while still remaining within the scope of the invention.

Claims

1. Improved artificial hair, **characterized in that** it mainly consists of a synthetic support (2) which is provided with a coating (3) on the basis of cross-linkable aliphatic polyurethane.
2. Improved artificial hair according to claim 1, **characterized in that** the above-mentioned synthetic support (2) consists of a polyester.

3. Improved artificial hair according to claim 2, **characterized in that** the above-mentioned synthetic support (2) consists of polyethylene.
4. Improved artificial hair according to claim 2, **characterized in that** the above-mentioned synthetic support (2) consists of polyethylene terephthalate. 5
5. Improved artificial hair according to claim 1, **characterized in that** the coating material can also be provided with one or several of the following additives: 10
- drying time accelerators;
 - thinners;
 - distributors; 15
 - means determining the hardness;
 - means to influence the reflection.
6. Improved artificial hair according to claim 1, **characterized in that** the thickness of the artificial hair (1) is situated between one tenth and four hundredths of a millimeter. 20
7. Method for manufacturing improved artificial hair according to one or several of the preceding claims, **characterized in that** a synthetic support (2) is provided at least once with a liquid coating on the basis of cross-linkable aliphatic polyurethane. 25
8. Method according to claim 7, **characterized in that** the synthetic support (2) is coated several times with cross-linkable aliphatic polyurethane. 30
9. Method according to claim 7, **characterized in that**, after the coating, a drying time between ten seconds and ten minutes is observed. 35
10. Method according to claim 9, **characterized in that** the temperature during the drying process amounts to between fifty and two hundred degrees Celsius. 40

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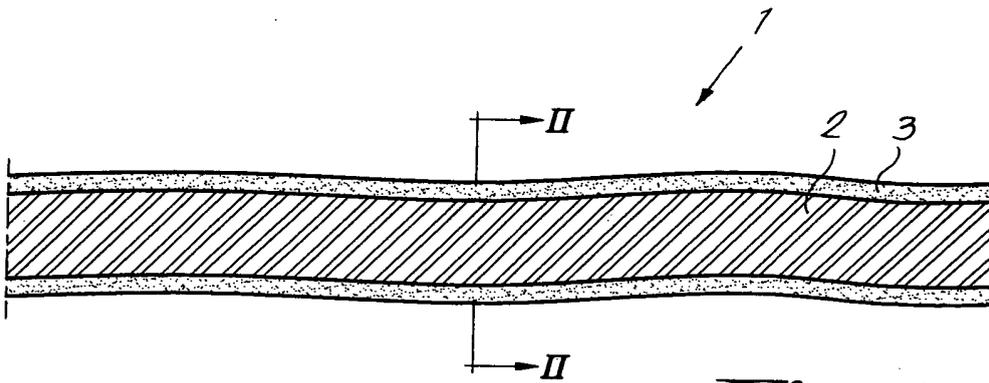


Fig. 1

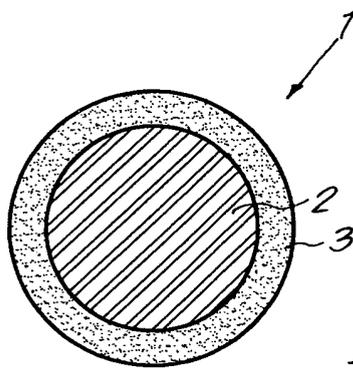


Fig. 2

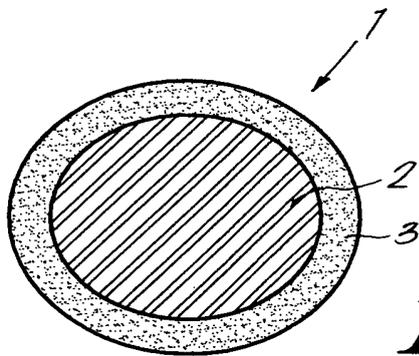


Fig. 3

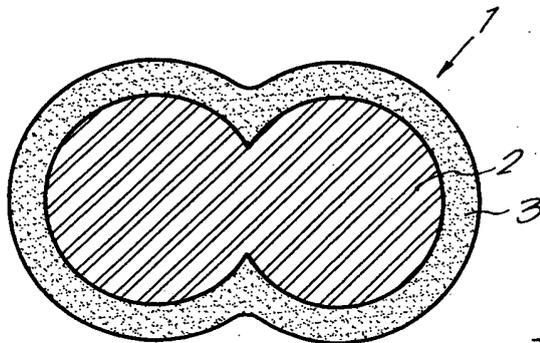


Fig. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 05 07 5852

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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 20 October 2005	Examiner Tarrida Torrell, J
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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