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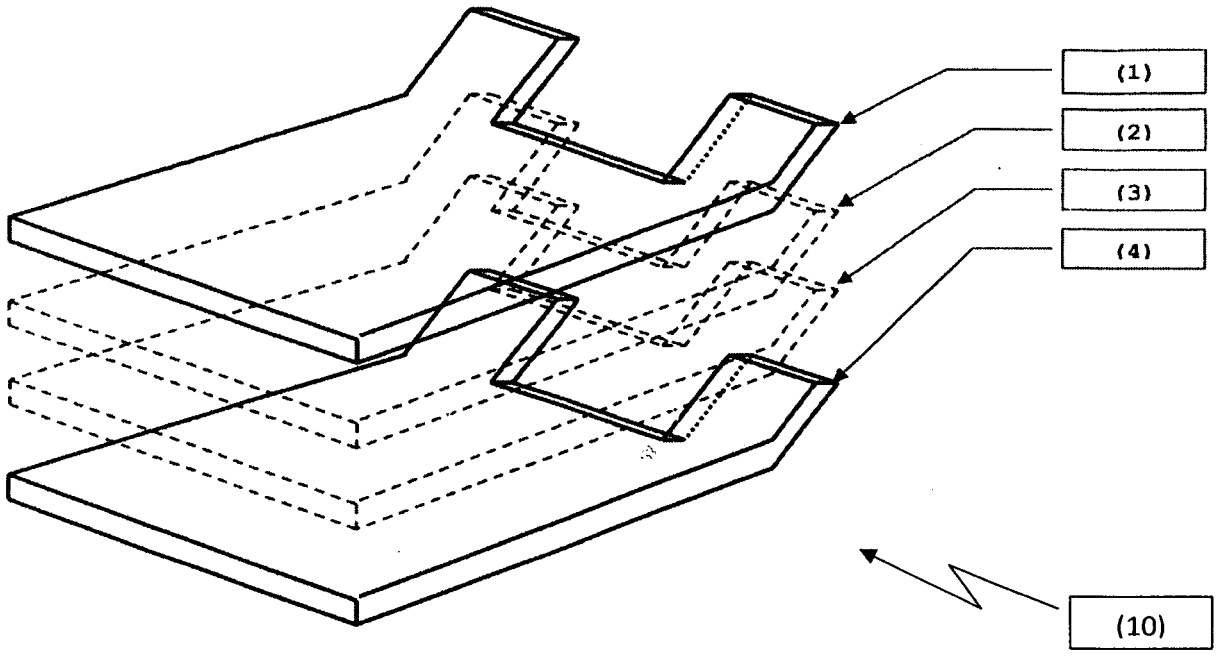
(54) Disposable bib

(57) The invention relates to a disposable bib which comprises; a first layer (1), to be disposed in front in use for forming the front part of the bib, constituted of recyclable and biodegradable porous material; a second layer (4), to be disposed in the back of the bib in use for forming the back of the bib, constituted of waterproof material, recyclable and biodegradable; a third layer (2), interposed between the first and second layer, constituted of an absorbent material, recyclable and biodegradable (FIG.1).

Fig. 1



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Description

[0001] The present invention relates to a disposable bib usable for children, adults, disabled people, etc.

[0002] In particular, the invention is designed to solve problems that occur during the feeding of infants and the use of bibs for elderly and disabled people, problems that the known products fail to eliminate, as described below.

[0003] One of the drawbacks of known bibs, which are generally made of fabric, is the need to wash once used. Once washed, the bibs must be dried and ironed.

[0004] To eliminate this type of drawback are produced disposable bibs, which have a shape substantially similar to the fabric bibs, but are made of paper or other similar material.

[0005] Also the disposable bibs have drawbacks.

[0006] A first drawback relates to the limited potential for absorption of liquids. For this reason, after the contact with the liquid, the known disposable bibs become unusable and must be replaced.

[0007] Another drawback of disposable bibs actually on the market is the relatively little structural strength. In fact, the paper body of the bibs determines a predisposition to tear and / or breakage, especially if combined with a partial absorption of liquids by the same bibs. The relatively little mechanical strength is greater in areas relating to the strings, i.e. in the portions of the bib which are tied behind the neck to fix the bib.

[0008] Another disadvantage of known type disposable bibs relates to the environment. In fact, the use of disposable bibs increases the amount of waste, adversely affecting environmental pollution. The aim of the present invention is to provide a disposable bib able to eliminate all the drawbacks mentioned above.

[0009] This result has been achieved according to the invention thanks to the idea of producing a bib having the features described in claim 1. Other features relate to the dependant claims.

[0010] Among the advantages of the present invention:

- the bib provides a very high absorbent action;
- the bib protects in a adequate manner the user from the moisture deriving from the contact of the same bib with liquid;
- the bib has a remarkable mechanical strength, if compared to the known disposable bibs;
- the bib can be totally recycled;
- the bib is biodegradable;
- the bib is provided with fixing portions which allow the association to the user simply and effectively;
- the bib has, preferably, a highly simplified shape which facilitates the manufacturing and the packaging;
- the bib has a particular layered structure in which the disposition of the layers determines interactions among the layers themselves, suitable to provide a total result not imaginable from the simple sum of the results of the individual layers; this result is significant for the absorbent power, for the waterproofing power and for the mechanical strength offered;
- the bib has manufacturing costs relatively low.

[0011] These and other advantages and characteristics of the invention will be best understood by anyone skilled in the art from a reading of the following description in conjunction with the attached drawings given as a practical exemplification of the invention, but not to be considered in a limitative sense, wherein:

- Fig.1 is a schematic perspective view of a possible embodiment of a bib in which the layers that compose the bib it are shown in exploded;
- Fig.2 is a schematic view from the back of the bib shown in Fig. 1.

[0012] In this description the term bib is used to indicate the subject-matter of the invention, which is related to all similar items used for this purpose, such as bibs, napkins, etc..

[0013] A disposable bib (10) according to the invention comprises at least three layers, marked by the numerical references 1, 3 and 4 in Fig. 1.

[0014] A first layer (1) is intended to be disposed in front of the bib in use, i.e. to form the front part of the bib. The layer (1) (which forms the front of the bib (10)) consists of a porous material (1), recyclable and biodegradable, and it is preferably formed by at least two layers of porous paper, recyclable and biodegradable, preferably paper in pure cellulose wadding.

[0015] A second layer (4) is intended to be disposed in the back of the bib in use, so as to form the back of the bib. The layer in the back (4) is preferably made of wicking waterproof fabric, recyclable and biodegradable, of the type called "Mater-Bi" or similar.

[0016] A third layer (2) is interposed between the first and second layer, and it forms the inner of the bib (10). This layer is realized in an absorbent recyclable and biodegradable material. It can be preferably made of cotton 100% not bleached or similar.

[0017] In a preferable embodiment, the bib also comprises a fourth layer (3), interposed between the third (2) and the second layer (4). The fourth layer is a porous material, recyclable and biodegradable, preferably porous paper recyclable and biodegradable, for example paper in pure cellulose wadding.

[0018] Advantageously, the bib (10) is provided with two fixing appendices (a, b) for adhering to the clothes of the user. Appendices (a, b), visible in Fig.2, may comprise adhesive portions, or elements of "velcro" suitable fixing to the clothes of the user.

[0019] The particular form, substantially rectangular, of the bib (10) determines a high rationalization of the production and storage processes. In addition, the fixing of the various layers, so as to form a single body is realizable for gluing or welding, using recyclable and biode-

gradable materials.

[0020] In phase of experimentation, it was found that the particular provision of the layers described and shown in the drawings has provided optimal results if compared to the known bibs. In particular, it was verified that these results are reproducible only if the materials mentioned above are used, with the same number and same positioning of the layers. The alternatives do not provide equally beneficial results.

[0021] Furthermore, the bib (10) isn't provided with parts which offer a limited resistance as, for example, the strings of the known disposable bibs. The particular conformation, which has layers of different materials with the features mentioned above, provides an excellent protection to the user, together with a relatively high mechanical strength, even when the bib is wet.

[0022] In practice, changes may be made to the form, dimensions, component part locations, and type of materials employed in the embodiment described and illustrated herein without, however, departing from the scope of the present invention.

Claims

1. Disposable bib, **characterized in that** it comprises:

   - a first layer (1), to be disposed in front in use for forming the front part of the bib, constituted of recyclable and biodegradable porous material;
   - a second layer (4), to be disposed in the back of the bib in use for forming the back of the bib, constituted of waterproof material, recyclable and biodegradable;
   - a third layer (2), interposed between the first and second layer, constituted of an absorbent material, recyclable and biodegradable.

2. Disposable bib according to claim 1, **characterized in that** it comprises a fourth layer (3), interposed between the third and second layer, constituted of recyclable and biodegradable porous material.

3. Disposable bib according to claim 1, **characterized in that** the first layer (1) is composed of at least two layers of porous paper, recyclable and biodegradable.

4. Disposable bib according to claim 1, **characterized in that** the second layer (4) is composed of waterproof fabric recyclable and biodegradable.

5. Disposable bib according to claim 1, **characterized in that** the second layer (4) is composed of waterproof fabric recyclable and biodegradable type called "Mater-Bi".

6. Disposable bib according to claim 1, **characterized in that** the third layer (2) is composed of 100% cotton not bleached.

7. Disposable bib according to claim 2, **characterized in that** the fourth layer (3) consists of porous paper recyclable and biodegradable.

8. Disposable bib according to claim 1, **characterized in that** the first layer (1) is composed of at least two layers of porous paper, recyclable and biodegradable, by pure cellulose wadding and that the fourth layer (3) is composed of paper by pure cellulose wadding.

9. Disposable bib according to claim 1, **characterized in that** the bib (10) is provided with two fixing appendices (a, b) for adhering to the clothing of the user.

Fig. 1

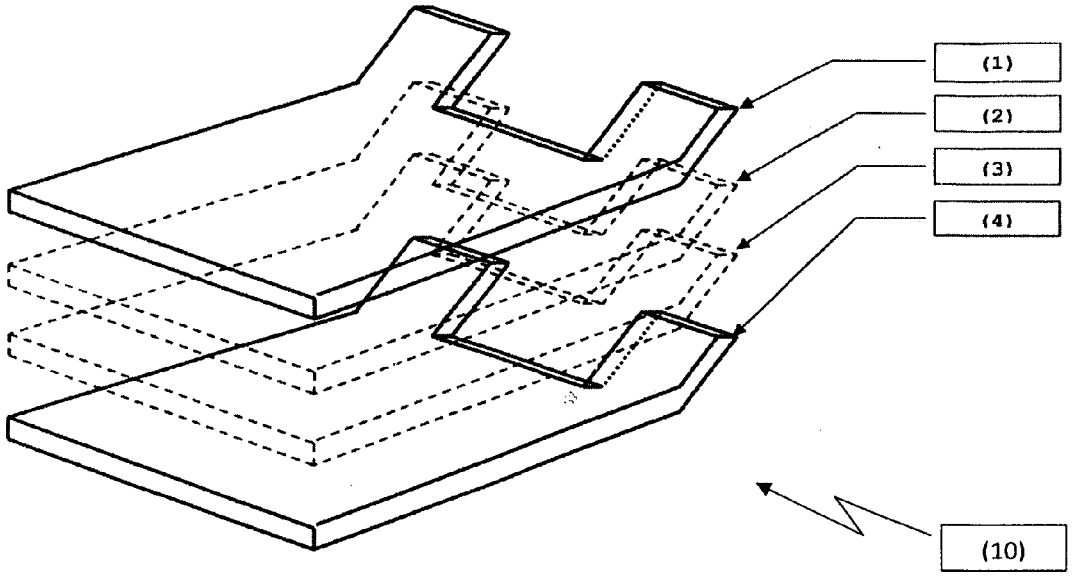
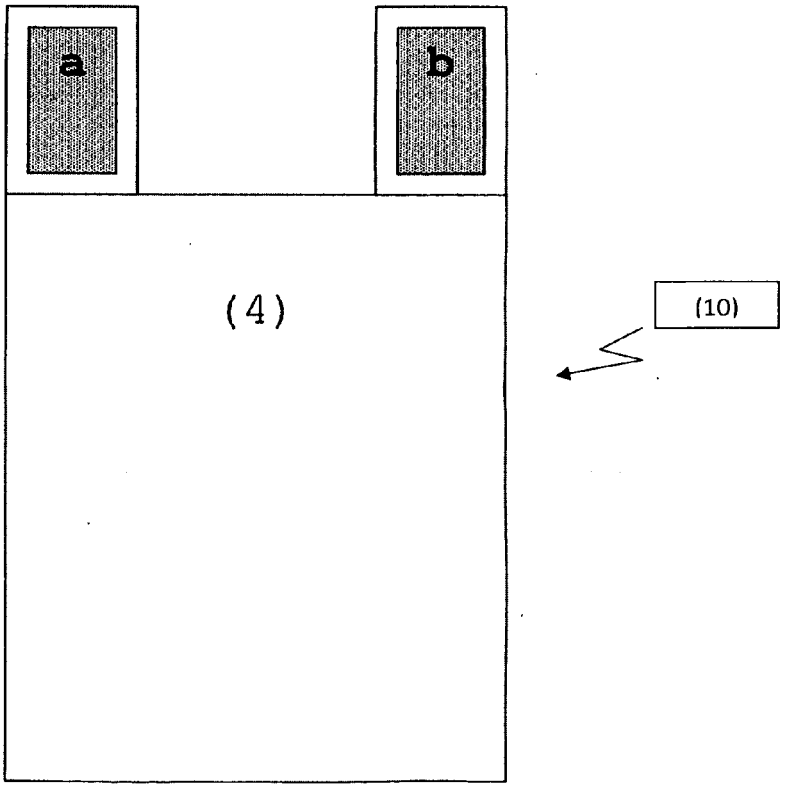


Fig. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 08 00 8106

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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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Y	* column 3, lines 9-30; figure 5 *	2-5,7,8	
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Y	* page 5, paragraph 3 - page 6, paragraph 1; figure 3 *	6	
X	US 2001/047532 A1 (MARRERO A LESLIE [US]) 6 December 2001 (2001-12-06) * paragraph [0007] *	1	
X	US 6 308 333 B1 (JACKSON VALARIE D [US]) 30 October 2001 (2001-10-30) * column 2, lines 39-64; figure 2 *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			A41B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	30 June 2008	Monné, Eric

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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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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30-06-2008

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82