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(54) **SACHET FOR WASHING COLOURED FABRICS**

BEUTEL ZUM WASCHEN GEFÄRBTER STOFFE

SACHET POUR LAVER DES TISSUS COLORES

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**Description****BACKGROUND OF THE INVENTION**

**[0001]** The present invention relates to a bag package for washing fabrics, in particular colored fabrics e.g. see document GB-A-2254857.

**DESCRIPTION OF THE PRIOR ART**

**[0002]** It is known that fabrics are washed manually or in washing machine, usually with detergents in liquid, powder or tablet form.

**[0003]** It is also known that the colored fabrics, especially during the first washings, tend to release particles of dye into the washing water.

**[0004]** This fact can be detrimental, e.g. during washing of clothes of different colors in a washing machine; since the coloring dye present in the washing water (released by one or more garments) could be fixed to other garments of different color and cause thereon stains and/or changes of color.

**[0005]** Known products currently used (usually including a sheet of a particular material), for example, are placed in the washing machine drum during the fabrics washing, in order to reduce the presence of particles of dye possibly present in the washing water.

**[0006]** The object of the present invention is to propose a bag package for washing fabrics, in particular colored fabrics, which allows an efficient washing of the fabrics, preventing staining and consequently avoiding possible damaging thereof by particles of dye present in the washing water.

**[0007]** Moreover, the object of the present invention is to propose a package obtained by a simple technical solution, which is extremely functional and cheap.

**[0008]** The above mentioned objects are obtained, in accordance with the contents of the claims, by a bag package for washing fabrics, in particular colored fabrics, including:

at least a surrounding bag, enclosing a first space and permeable to a washing liquid and absorbing possible particles of dye present in the washing liquid during washing of said fabrics;

an inner bag, contained within said surrounding bag and enclosing a second space;

an additive, contained at least in said second space and released by said inner bag and surrounding bag during said washing, so as to be dissolved in said washing liquid.

**SUMMARY OF THE INVENTION**

**[0009]** The characteristic features of the invention will be pointed in the following description of some preferred,

but not exclusive embodiments, with reference to the enclosed drawings, in which:

- Figure 1 is a perspective view of the proposed bag package, with one portion removed, in order to better point out the package inside;
- Figure 2 is a schematic, longitudinal section view of the package;
- Figures 2A is an enlarged view of the particular K of Figure 2;
- Figures 3, 3A are respectively a lateral view of the package and an enlarged view of the particular K of the same package in use configuration;
- Figures 4, 4A are respectively a lateral view of the package and an enlarged view of the particular K in a subsequent use configuration;
- Figure 5 is a schematic, perspective view of the package during a further using step;
- Figure 6 is a schematic, perspective view of an embodiment of the proposed package.

**BEST MODES OF CARRYING OUT THE INVENTION**

**[0010]** Having regard to Figures 1, 2, the reference numeral 100 indicates the proposed bag package for washing fabrics, in particular colored fabrics.

**[0011]** The package 100 includes a surrounding bag 1, defining therein a first space V1, and an inner bag 2, contained by the first surrounding bag 1 and defining therein a second space V2.

**[0012]** A prefixed quantity of an additive 3 is accommodated in the second space V2 and leaves the surrounding bag 1 and inner bag 2 during the washing, as it will be better explained later on.

**[0013]** The surrounding bag 1 includes a first sheet element 10 and a second sheet element 11, facing each other and having the edges joined to each other (for example by heat-welding), so that the first space V1 is defined between the elements 10, 11 (Figure 2).

**[0014]** The first sheet element 10 is preferably made of a porous material, e.g. non-woven fabric, soaked with at least one selected chemical substance, which fixes possible particles 4 of the coloring dye present in the washing liquid 5, to the first sheet element 10.

**[0015]** The second sheet element 11 is preferably made of a porous material, e.g. non-woven fabric, and can be soaked with the above mentioned chemical substance.

**[0016]** According to an embodiment (not shown), the opposite surfaces of the first element 10 and of the second element 11 are covered with films of water-soluble material, or by a not uniform layer of water-soluble ma-

terial.

**[0017]** The water-soluble material can act also as a glue in the heat-welding areas.

**[0018]** The inner bag 2 includes a third sheet element 20 and a fourth sheet element 21, facing each other and having the edges joined to each other (for example by heat-welding), so that the second space V2 is defined between the elements 20, 21 (Figure 2).

**[0019]** In particular, an inner layer 28 of the third sheet element 20 is made of a porous while an outer layer 29 thereof is made of a water-soluble material, which is aimed at being dissolved after the contact with the washing liquid 5 (for example water).

**[0020]** The structure of the fourth element 21 is preferably similar to the structure of the third element 20 (Figures 2A, 2B).

**[0021]** According to an embodiment, not shown as easy to conceive, the third sheet element 20 and the fourth sheet element 21 are made only of a film of water-soluble material, which cannot be eaten by the detergent contained in the inner bag 2.

**[0022]** According to a further embodiment, not shown as easy to conceive, the third sheet element 20 and the fourth sheet element 21 are made of a film of not water-soluble material and are joined to each other by a water-soluble glue.

**[0023]** The additive 3 is preferably a detergent in a liquid and/or gelatinized form.

**[0024]** Otherwise, the detergent can be in bars, or in granular and/or powder form.

**[0025]** As an alternative solution, the additive 3 can be a fabric conditioner and/or an anti-felting substance, and/or a descaling substance.

**[0026]** According to an alternative embodiment, shown schematically in Figure 6, the surrounding bag 1 and the inner bag 2 have corresponding angular portions, respectively a first angular portion 15 and a second angular portion 25, which can be removed at the same time, in order to set the inside of the inner bag 2 in communication with the washing liquid 5.

**[0027]** In this embodiment, the surrounding bag 1 has the same characteristic features as described before, while an outer layer 29 of the third sheet element 20 and of the fourth sheet element 21, forming the inner bag 2 are made of a not water-soluble material.

**[0028]** The way of use of the proposed bag package 100 will be explained briefly, since it is easy to understand.

**[0029]** The use of the bag package 100 is particularly simple: actually, it is sufficient to put it into the drum of the washing machine together with the fabrics, for example clothes, to be washed.

**[0030]** The porosity of the material, of which the first element 10 and the third element 20 are made, allows the washing liquid 5 to enter the surrounding bag 1.

**[0031]** This causes the contact between the washing liquid 5 and the inner layer 29 of the third element 20 and of the fourth element 21 (Figure 2B).

**[0032]** Since the layer 29 are water-soluble, the contact with the washing liquid 5 allows the detergent to leave the inner bag 2 through the porous surfaces 28.

**[0033]** Thus, the detergent gets in contact only with the inner portion of the surrounding bag 1 and reaches the washing liquid 5 through the porous walls of the surrounding bag 1, so as to be dissolved therein, to allow the clothes washing (Figures 3, 3A).

**[0034]** It is obvious that a part of detergent is dissolved in the washing liquid 5 present inside the surrounding bag 1.

**[0035]** In case of the third sheet element 20 and the fourth sheet element 21 being made only of a film of water-soluble material, the contact between the latter and the washing liquid 5 allows directly the detergent to leave the inner bag 2 and dissolve gradually.

**[0036]** If the third sheet element 20 and the fourth sheet element 21 are made of a film of not water-soluble material and are joined to each other by the water-soluble glue, the contact between the film and the washing liquid makes the elements 20, 21 to separate and consequently allows the detergent to leave the inner bag 2.

**[0037]** Advantageously, the chemical substance, with which the first sheet element 10 and the second sheet element 11 are soaked, allows, during the washing, to eliminate possible particles 4 of coloring dye present in the washing liquid 5, fixing them to the elements 10, 11 (Figures 4, 4A, 5), thus protecting the washed clothes from possible stains.

**[0038]** With reference to the alternative embodiment shown in Figure 6, in order to use the bag package 100, it is sufficient for the user to remove manually the angular portions 15, 25 before placing the package 100 into the drum of the washing machine.

**[0039]** The removal of the angular portions allows the detergent to leave the surrounding bag 1 and the inner bag 2 and then dissolve in the washing liquid 5.

**[0040]** It is deduced from the previous explanation that the proposed bag package 100 for washing fabrics, in particular colored fabrics, including the surrounding bag 1, which can either absorb the possible particles 4 of dye present in the washing liquid 5, or be permeated by the detergent contained in the inner bag 2, allows an efficient washing of the fabrics and at the same time allows to prevent the clothes immersed in the washing liquid 5 from being stained, and consequently damaged by the particles 4.

**[0041]** Regards the alternative embodiment of Figure 6, it is deduced that it is easy for the user to remove the detachable portions 15, 25, which results in easiness of the package 100 use.

**[0042]** Advantageously, the proposed bag package 100 is extremely functional and cheap, because it is formed only by the surrounding bag 1, the inner bag 2 and the additive 3.

**[0043]** It is understood that the proposed invention has been described, with reference to the enclosed figures, as a mere, not limiting example. Therefore, it is obvious

that any changes or variants applied thereto remain within the protective scope defined by the following claims.

## Claims

1. A bag package for washing fabrics, in particular colored fabrics, including:

at least a surrounding bag (1), enclosing a first space (V1) and permeable to a washing liquid (5)  
 an inner bag (2), contained within said surrounding bag (1) and enclosing a second space (V2);  
 an additive (3), contained at least in said second space (V2) and released by said inner bag (2) and surrounding bag (1) during said washing, so as to be dissolved in said washing liquid (5)  
**characterised in that** said surrounding bag (1) absorbs possible particles (4) of dye present in the washing liquid during washing of said fabrics.

2. A bag package, according to claim 1, wherein said surrounding bag (1) includes a first sheet element (10) and a second sheet element (11), facing each other and defining walls of the surrounding bag (1), and having edges mutually joined, so as to define said first space (V1) between said first and second sheet elements (10, 11).
3. A bag package, according to claim 1, wherein said inner bag (2) includes a third sheet element (20) and a fourth sheet element (21), facing each other and defining walls of the inner bag (2), and having edges mutually joined, so as to define said second space (V2) between said third and fourth sheet elements (20, 21).
4. A bag package, according to claim 2, wherein at least a portion of said first sheet element (10) is made of a porous material, soaked with at least one chemical substance, which fixes said particles (4) to the first sheet element (10).
5. A bag package, according to claim 2, wherein at least a portion of said second element (11) is made of a porous material, soaked with at least one chemical substance, which fixes said particles (4) to the second sheet element (11).
6. A bag package, according to claim 4, wherein said first sheet element (10) and said second sheet element (11) have a surface covered at least partially with a layer of water-soluble material.
7. A bag package, according to claim 3, wherein said third sheet element (20) is made of a film of water-

soluble material.

8. A bag package, according to claim 3, wherein said fourth sheet element (21) is made of a film of water-soluble material.
9. A bag package, according to claim 3, wherein an inner layer (28) of said third sheet element (20) is made at least partially of a porous material and an outer layer (29) of the third sheet element is made at least partially of a material dissolving after contact with said washing liquid (5).
10. A bag package, according to claim 3, wherein an inner layer (28) of said fourth sheet element (21) is made at least partially of a porous material and an outer layer (29) of the fourth sheet element is made at least partially of a material dissolving after contact with said washing liquid (5).
11. A bag package, according to claim 1, wherein said surrounding bag (1) and said inner bag (2) include detachable portions (15, 25) removable to set the inside of the inner bag (2) in communication with said washing liquid (5).
12. A bag package, according to claim 1, wherein said additive (3) is liquid.
13. A bag package, according to claim 1, wherein said additive (3) is gelatinized.
14. A bag package, according to claim 1, wherein said additive (3) has a granular and/or powder form.
15. A bag package, according to claim 1, wherein said additive (3) is in tablets.
16. A bag package, according to claim 1, wherein said additive (3) is a detergent.
17. A bag package, according to claim 1, wherein said additive (3) is a fabric conditioner.
18. A bag package, according to claim 1, wherein said additive (3) is an anti-felting substance.

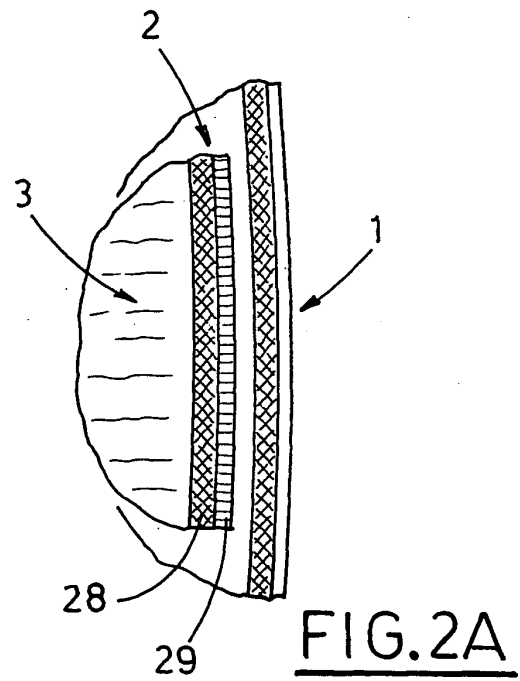
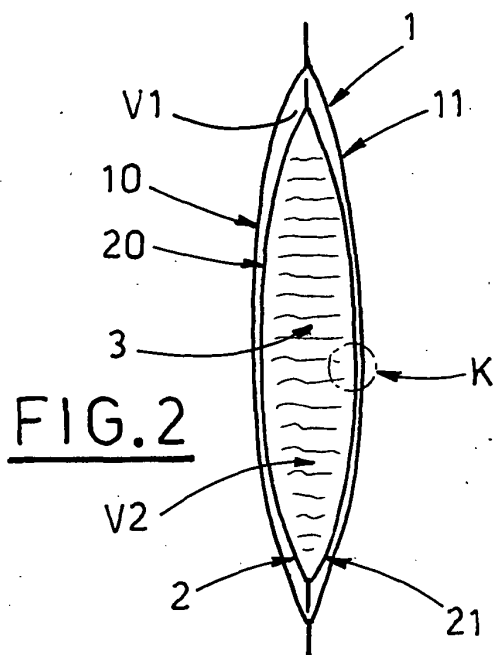
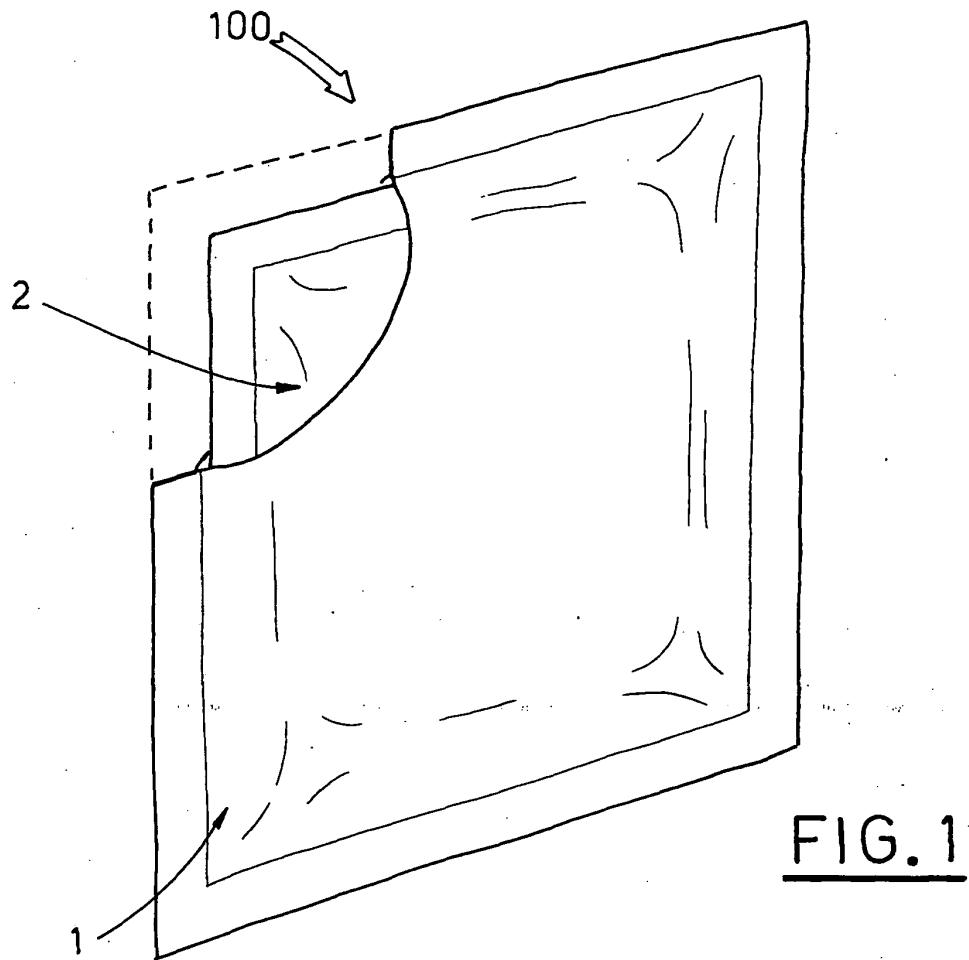
## Patentansprüche

1. Beutelpackung zum Waschen von Geweben, insbesondere bunten Geweben, mit mindestens einem umgebenden Beutel (1), der einen ersten Raum (V1) umschließt und für eine Waschlauge (5) durchlässig ist, einem inneren Beutel (2), der im umgebenden Beutel (1) enthalten ist und einen zweiten Raum (V2) umschließt,

- einem Zusatzmittel (3), das mindestens in dem zweiten Raum (V2) enthalten ist und während des Waschens von dem inneren Beutel (2) und dem umgebenden Beutel (1) freigesetzt wird, so dass es in der Waschlauge (5) gelöst wird, **dadurch gekennzeichnet, dass** der umgebende Beutel (1) mögliche Farbstoffpartikel (4), die während des Waschens der Gewebe in der Waschlauge vorliegen, absorbiert.
2. Beutelpackung nach Anspruch 1, wobei der umgebende Beutel (1) ein erstes flächiges Element (10) und ein zweites flächiges Element (11) aufweist, die sich gegenüberliegen, Wände des umgebenden Beutels (1) definieren und Ränder haben, die miteinander verbunden sind, um den ersten Raum (V1) zwischen dem ersten und dem zweiten flächigen Element (10, 11) zu definieren.
  3. Beutelpackung nach Anspruch 1, wobei der innere Beutel (2) ein drittes flächiges Element (20) und ein viertes flächiges Element (21) aufweist, die sich gegenüberliegen, Wände des inneren Beutels (2) definieren und Ränder haben, die miteinander verbunden sind, um den zweiten Raum (V2) zwischen dem dritten und dem vierten flächigen Element (20, 21) zu definieren.
  4. Beutelpackung nach Anspruch 2, wobei mindestens ein Abschnitt des ersten flächigen Elements (10) aus einem porösen Material hergestellt ist, das mit mindestens einer chemischen Substanz getränkt ist, die die Partikel (4) am ersten flächigen Element (10) fixiert.
  5. Beutelpackung nach Anspruch 2, wobei mindestens ein Abschnitt des zweiten Elements (11) aus einem porösen Material hergestellt ist, das mit mindestens einer chemischen Substanz getränkt ist, die die Partikel (4) am zweiten flächigen Element (11) fixiert.
  6. Beutelpackung nach Anspruch 4, wobei das erste flächige Element (10) und das zweite flächige Element (11) eine Oberfläche haben, die mindestens teilweise mit einer Schicht aus wasserlöslichem Material bedeckt ist.
  7. Beutelpackung nach Anspruch 3, wobei das dritte flächige Element (20) aus einem Film aus wasserlöslichem Material hergestellt ist.
  8. Beutelpackung nach Anspruch 3, wobei das vierte flächige Element (21) aus einem Film aus wasserlöslichem Material hergestellt ist.
  9. Beutelpackung nach Anspruch 3, wobei eine innere Schicht (28) des dritten flächigen Elements (20) mindestens teilweise aus einem porösen Material hergestellt ist, und eine äußere Schicht (29) des dritten flächigen Elements mindestens teilweise aus einem Material hergestellt ist, das sich nach Kontakt mit der Waschlauge (5) auflöst.
  10. Beutelpackung nach Anspruch 3, wobei eine innere Schicht (28) des vierten flächigen Elements (21) mindestens teilweise aus einem porösen Material hergestellt ist, und eine äußere Schicht (29) des vierten flächigen Elements mindestens teilweise aus einem Material hergestellt ist, das sich nach Kontakt mit der Waschlauge (5) auflöst.
  11. Beutelpackung nach Anspruch 1, wobei der umgebende Beutel (1) und der innere Beutel (2) abnehmbare Abschnitte (15, 25) aufweisen, die entfernt werden können, um das Innere des Beutels (2) mit der Waschlauge (5) in Verbindung zu bringen.
  12. Beutelpackung nach Anspruch 1, wobei das Zusatzmittel (3) flüssig ist.
  13. Beutelpackung nach Anspruch 1, wobei das Zusatzmittel (3) gelartig ist.
  14. Beutelpackung nach Anspruch 1, wobei das Zusatzmittel (3) granuliert- und/oder pulverförmig ist.
  15. Beutelpackung nach Anspruch 1, wobei das Zusatzmittel (3) in Form von Tabletten vorliegt.
  16. Beutelpackung nach Anspruch 1, wobei das Zusatzmittel (3) ein Waschmittel ist.
  17. Beutelpackung nach Anspruch 1, wobei das Zusatzmittel (3) ein Weichspüler ist.
  18. Beutelpackung nach Anspruch 1, wobei das Zusatzmittel (3) eine Filzfreisubstanz ist.
- ### Revendications
1. Sachet pour lavage de tissus, en particulier de tissus colorés, comprenant :  
  
au moins un sachet extérieur (1), enserrant un premier espacement (V1) et perméable à un liquide de lavage (5),  
un sachet intérieur (2), contenu dans ledit sachet extérieur (1) et enserrant un second espacement (V2) ;  
un additif (3), contenu au moins dans ledit second espacement (V2) et libéré par lesdits sachet intérieur (2) et sachet extérieur (1) pendant ledit lavage, de manière à se dissoudre dans ledit liquide de lavage (5), **caractérisé en ce que** ledit sachet extérieur (1) absorbe d'éventuelles particules (4) de colorant présentes dans

le liquide de lavage pendant le lavage desdits tissus.

2. Sachet selon la revendication 1, dans lequel ledit sachet extérieur (1) comprend un premier élément en feuille (10) et un deuxième élément en feuille (11), en regard l'un de l'autre et définissant des parois du sachet extérieur (1), ayant des bords joints l'un à l'autre, afin de définir ledit premier espacement (V1) entre lesdits premier et deuxième éléments en feuille (10, 11). 5
3. Sachet selon la revendication 1, dans lequel ledit sachet intérieur (2) comprend un troisième élément en feuille (20) et un quatrième élément en feuille (21), en regard l'un de l'autre et définissant des parois du sachet intérieur (2), ayant des bords joints l'un à l'autre, afin de définir ledit second espacement (V2) entre lesdits troisième et quatrième éléments en feuille (20, 21). 10
4. Sachet selon la revendication 2, dans lequel au moins une portion dudit premier élément en feuille (10) est formée d'un matériau poreux, imbibé d'au moins une substance chimique, qui fixe lesdites particules (4) sur le premier élément en feuille (10). 15
5. Sachet selon la revendication 2, dans lequel au moins une portion dudit deuxième élément (11) est formée d'un matériau poreux, imbibé d'au moins une substance chimique, qui fixe lesdites particules (4) sur le deuxième élément en feuille (11). 20
6. Sachet selon la revendication 4, dans lequel ledit premier élément en feuille (10) et ledit deuxième élément en feuille (11) ont une surface recouverte au moins en partie d'une couche de matériau soluble dans l'eau. 25
7. Sachet selon la revendication 3, dans lequel ledit troisième élément en feuille (20) est formé d'un film de matériau soluble dans l'eau. 30
8. Sachet selon la revendication 3, dans lequel ledit quatrième élément en feuille (21) est formé d'un film de matériau soluble dans l'eau. 35
9. Sachet selon la revendication 3, dans lequel une couche intérieure (28) dudit troisième élément en feuille (20) est formée au moins en partie d'un matériau poreux et une couche extérieure (29) du troisième élément en feuille est formée au moins en partie d'un matériau qui se dissout après contact avec ledit liquide de lavage (5). 40
10. Sachet selon la revendication 3, dans lequel une couche intérieure (28) dudit quatrième élément en feuille (21) est formée au moins en partie d'un ma- 45
11. Sachet selon la revendication 1, dans lequel ledit sachet extérieur (1) et ledit sachet intérieur (2) comprennent des portions détachables (15, 25) que l'on peut enlever pour placer l'intérieur du sachet intérieur (2) en communication avec ledit liquide de lavage (5). 50
12. Sachet selon la revendication 1, dans lequel ledit additif (3) est liquide. 55
13. Sachet selon la revendication 1, dans lequel ledit additif (3) est gélatinisé.
14. Sachet selon la revendication 1, dans lequel ledit additif (3) a une forme granulaire et/ou pulvérulente.
15. Sachet selon la revendication 1, dans lequel ledit additif (3) se présente sous la forme de comprimés.
16. Sachet selon la revendication 1, dans lequel ledit additif (3) est un détergent.
17. Sachet selon la revendication 1, dans lequel ledit additif (3) est un conditionneur de tissu.
18. Sachet selon la revendication 1, dans lequel ledit additif (3) est une substance anti-feutrage.



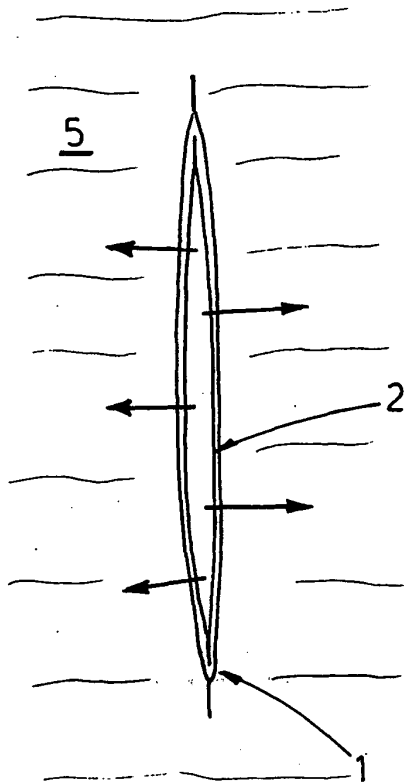


FIG. 3

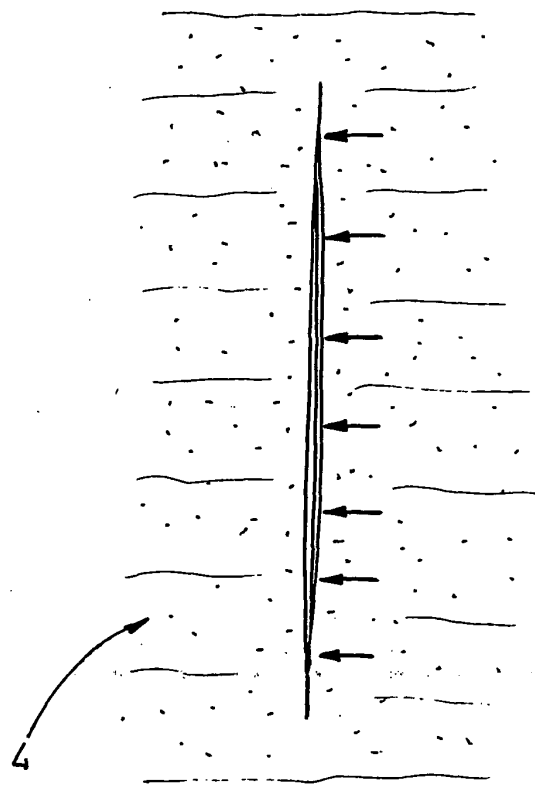


FIG. 4

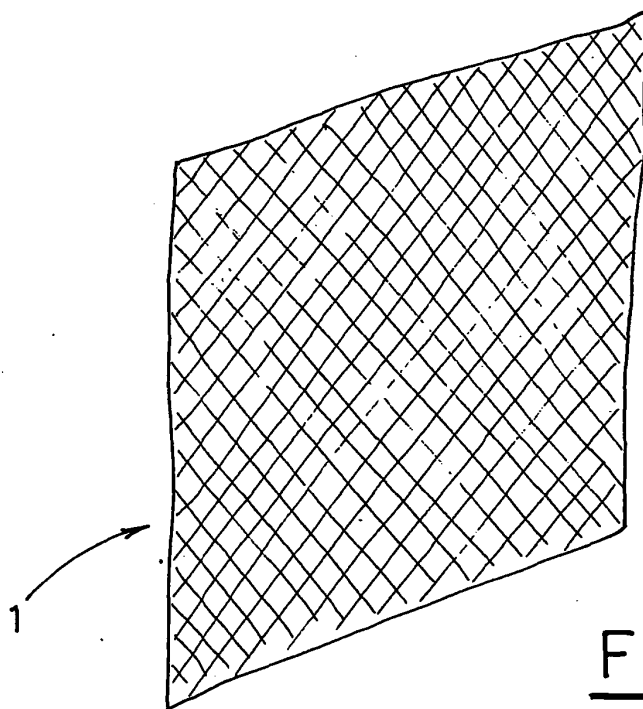


FIG. 5

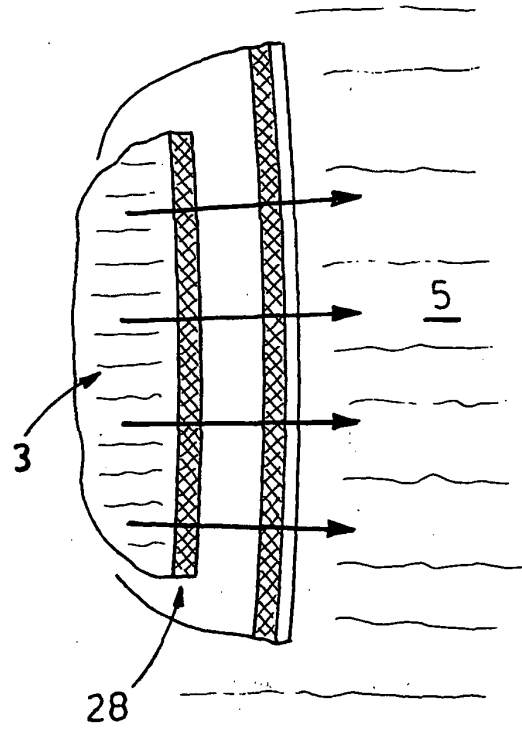
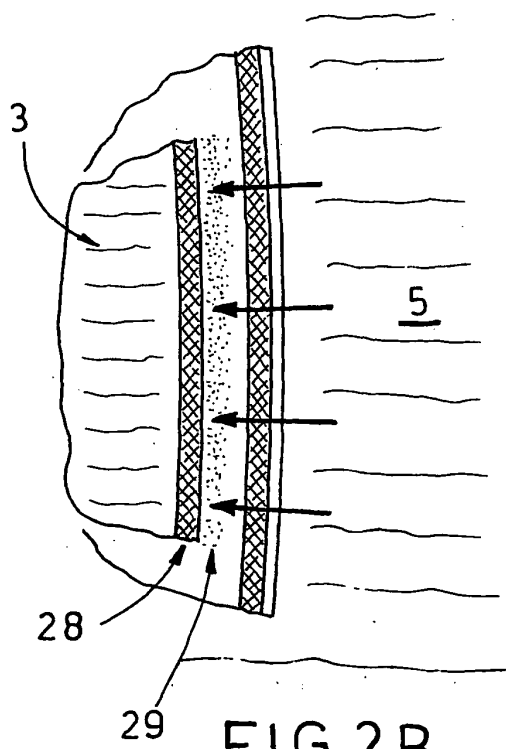
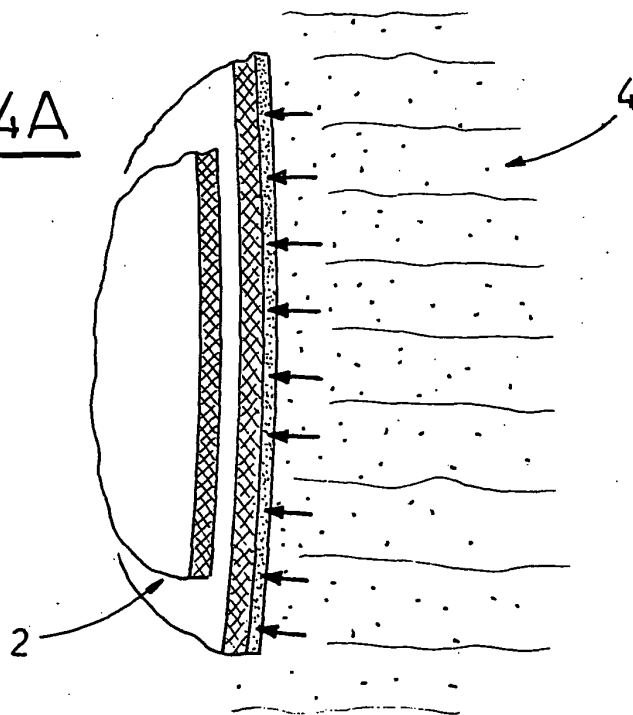


FIG. 4A



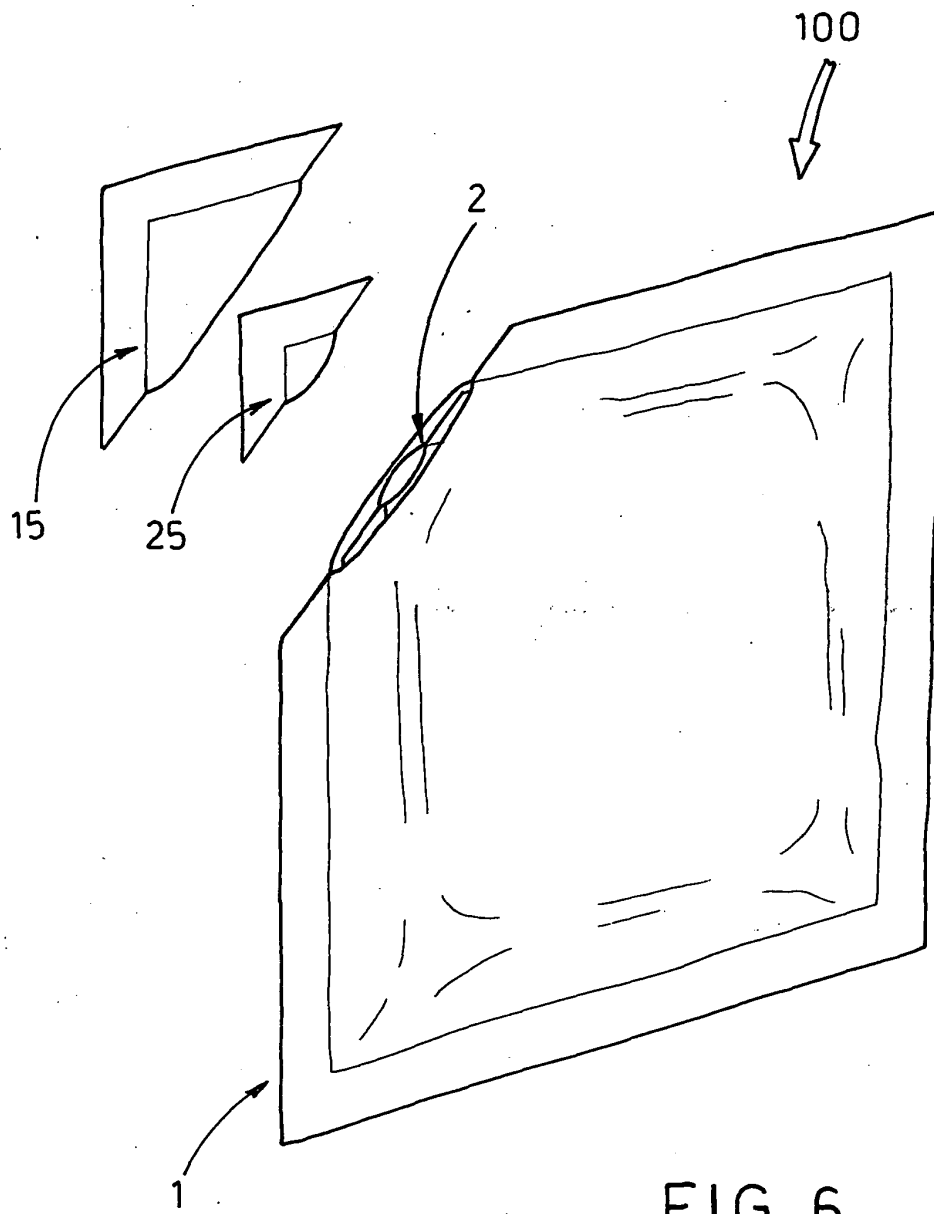


FIG. 6

**REFERENCES CITED IN THE DESCRIPTION**

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