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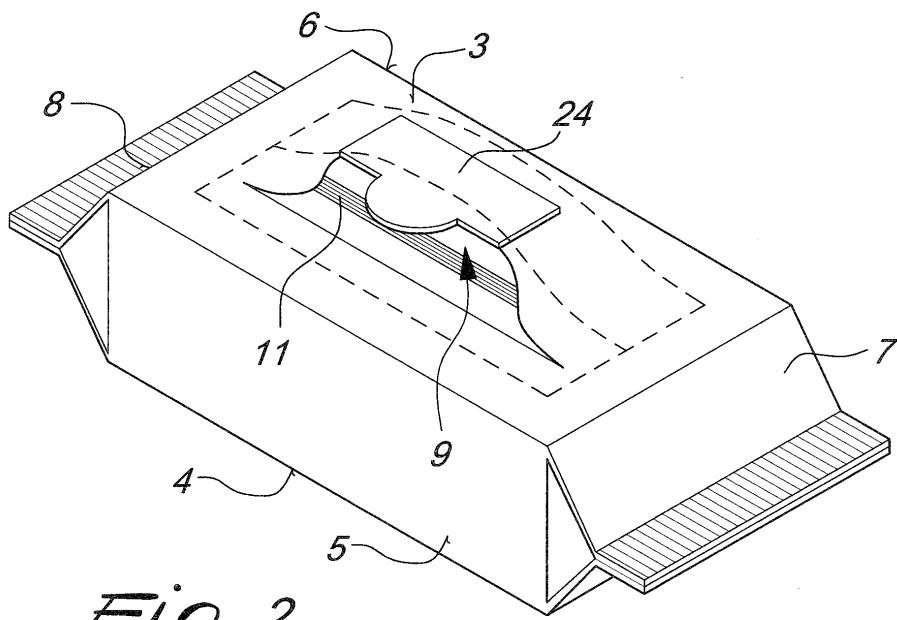
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(54) Container for hygienic wipes, tissues and the like

(57) A container for hygienic wipes, tissues and the like, which forms in an upper region at least one opening (9) for extracting the wipes (2) one by one, at which there are hermetic quick closure means (10) which are adapted to prevent, in a sealed closure configuration of the container, the drying and/or aging of the wipes (2) and to allow, in an open configuration of the container, the free removal of the wipes (2), the hermetic quick closure means (10) comprising a first element (11) and a second element (12), which are associated respectively with two mutually opposite parallel edges (13, 14) of the opening

(9) and can be mutually superimposed along a plane which is substantially parallel to the plane of the upper face (3) of the pack of wipes (2), the first element (11) and the second element (12) being provided with respective first protrusions (15) and second protrusions (16) having mutually complementarily shaped profiles which are adapted to engage detachably in one another in the sealed closure configuration of the container, the first and second protrusions (15, 16), in the open configuration of the container, being substantially mutually spaced, so as to allow the insertion of the fingers of the hand in the opening (9).



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Description

[0001] The present invention relates to a container for hygienic wipes, tissues and the like.

[0002] Small portable containers for wet wipes and/or tissues, to be used in the most disparate situations in which it is necessary to quickly clean one's hands or other parts of the body, or also for housecleaning (for example, for cleaning floors and furniture), are commercially widespread; similar products are also employed in the medical and sanitary field (for example, wipes for injections). The containers, generally of the disposable type, are provided with hermetic closure means which are adapted to ensure that the hygienic substances and/or fragrances with which the wipes or tissues are impregnated do not evaporate rapidly, dispersing into the environment and causing the rapid drying of the wipes, which therefore become unusable.

[0003] Currently, the containers are of various types, for example rigid or substantially soft and flexible (bags, pouches, etc); particularly in soft and flexible containers there are several drawbacks in relation to the various embodiments of the closure means that have been devised recently.

[0004] Some of such closure means are extremely cheap to manufacture but do not ensure a perfectly hermetic sealing of the contents: consider, for example, closure means constituted by a simple adhesive film which can be lifted and is applied above the opening for removing the wipes and which, as a consequence of repeated opening and closing, becomes dirty and loses adhesive and therefore also loses tightness.

[0005] Other closure means comprise a sort of protruding flap, which is articulated to a frame which is fixed to the container around the wipe removal opening. This solution is more effective than the preceding one from the point of view of hermetic sealing, but it is certainly too expensive and does not allow, as in the case of other similar solutions that have been adopted, to store and palletize in an optimum and stable manner large quantities of containers, since the hermetic closure protrudes conspicuously from the upper face of the container.

[0006] Moreover, some of the known types of container are provided by means of packaging lines which operate at relatively low production rates, indeed due to the fact that the hermetic closure means are often a hindrance to the execution of fast automated cycles.

[0007] The aim of the present invention is to obviate the above-mentioned drawbacks, by providing a container for wet wipes, tissues and the like which has hermetic quick closure means which are effective, durable and reliable and at the same time small and compact, so that it can be stored easily and stably.

[0008] Within this aim, an object of the present invention is to provide a container for wet wipes, tissues and the like which can be manufactured with automated lines having high production rates.

[0009] Another object of the present invention is to pro-

vide a container which is simple, relatively easy to provide in practice, safe in use, effective in operation, and has a relatively low cost.

[0010] This aim and these and other objects, which will become better apparent hereinafter, are achieved by the present container for wet wipes, tissues and the like, which forms in an upper region at least one opening for extracting the wipes one by one, at which there are hermetic quick closure means which are adapted to prevent, in a sealed closure configuration of the container, the drying and/or aging of the wipes and to allow, in an open configuration of the container, the free removal of the wipes, characterized in that said hermetic quick closure means comprise a first element and a second element, which are associated respectively with two mutually opposite parallel edges of said opening and can be mutually superimposed along a plane which is substantially parallel to the plane of the upper face of the pack of wipes, said first element and said second element being provided with respective first protrusions and second protrusions having mutually complementarily shaped profiles which are adapted to engage detachably in one another in said sealed closure configuration of the container, said first and second protrusions, in said open configuration of the container, being substantially mutually spaced, so as to allow the insertion of the fingers of the hand in said opening.

[0011] Further characteristics and advantages of the present invention will become better apparent from the following detailed description of a preferred but not exclusive embodiment of a container for wet wipes, tissues and the like according to the invention, illustrated by way of non-limiting example in the accompanying drawings, wherein:

35 Figure 1 is a perspective view of the container according to the invention, closed hermetically before opening;

40 Figure 2 is a perspective view of the container in the open condition;

45 Figure 3 is a detail view, taken from the inside, of the container of the hermetic quick closure means;

50 Figure 4 is a partially sectional side elevation detail view of the hermetic quick closure means, with the container closed;

55 Figure 5 is a partially sectional side elevation detail view of the hermetic quick closure means, with the container closed but after it has been opened a first time;

Figure 6 is a partially sectional side elevation detail view of the hermetic quick closure means, with the container open for freely removing the wipes one by one.

[0012] In the exemplary embodiment that follows, individual characteristics may actually be interchanged with other different characteristics that exist in other exemplary embodiments.

[0013] Moreover, it is noted that anything found to be already known during the patenting process is understood not to be claimed and to be the subject of a disclaimer.

[0014] With reference to Figure 1, the reference numeral 1 generally designates a container for wet wipes, tissues and the like according to the invention.

[0015] The container 1 described in detail hereinafter is preferably of the disposable type, i.e., of the type that cannot be reused after wipes 2 have been used up, and is made of a substantially flexible material, i.e., it is constituted by a thin film of synthetic material which is folded substantially into a tube and is sealed along its longitudinal and transverse edges, so as to form a sort of parallelepiped which comprises an upper face 3, a lower face 4, two lateral faces 5 and 6, a front face 7 and a rear face 8. However, in an equivalent manner the container can be provided according to any other shape, since the shape and dimensions of the container are not fundamental elements of the present invention.

[0016] The container forms, at the upper face 3, at least one opening 9 for removing the wipes 2 one by one, at which there are hermetic quick closure means, generally designated by the reference numeral 10, which are adapted to prevent, in a sealed closure configuration of the container (Figure 5), the drying and aging of the wipes 2 or tissues (for example, the evaporation of the sanitizing and refreshing liquid with which the wipes 2 are impregnated, or other unwanted phenomena) and to allow, in an open configuration of the container, the free removal of the wipes 2 (Figure 6).

[0017] According to the invention, the hermetic quick closure means 10 of the container advantageously comprise a first element 11 and a second element 12, which are associated respectively with two mutually opposite parallel edges 13, 14 of the opening 9 and can be mutually superimposed along a plane which is substantially parallel to the plane of the upper face 3 of the pack of wipes 2, so as to provide a configuration of minimum space occupation and without protruding parts.

[0018] The first element 11 and the second element 12 are conveniently fixed to the internal surface of the upper face 3 of the container (Figure 3); the first element 11 and the second element 12 have such a length as to run substantially from one end to the other of the opening 9 for removing the wipes 2. Preferably, the first element 11 and the second element 12 are fixed to the upper face 3 of the container by heat-sealing.

[0019] The first element 11 and the second element 12 are constituted by narrow elongated strips made of substantially elastically flexible material.

[0020] According to the invention, the first element 11 and the second element 12 are provided advantageously with respective first protrusions 15 and second protrusions 16, which have mutually complementarily shaped profiles adapted to detachably engage in each other: this provides, very simply and cheaply, the hermetic fixing of the first element 11 to the second element 12, so as to

achieve the reliable closure of the container, which can also be reopened easily whenever it is necessary to remove a wipe 2.

[0021] The first protrusions 15 of the first element 11 are preferably two and are elongated, narrow and parallel, like longitudinal ribs, and conveniently form between them a first slot 17. The second protrusions 16 of the second element 12 are preferably three and are elongated, narrow and parallel, like longitudinal ribs, and form between them a second slot 18 and a third slot 18a, which are parallel. Therefore, in the sealed closure configuration of the container (Figures 4 and 5), the first protrusions 15 of the first element 11 engage hermetically in the second slot 18 and in the third slot 18a, while at the same time the central protrusion among the second protrusions 16 engages hermetically in the first slot 17.

[0022] However, it should be noted that the number of the first protrusions 15 of the first element 11 and the number of the second protrusions 16 of the second element 20 can actually be any allowed by the requirements of the application and by production costs. The geometry of the first protrusions 15 and the second protrusions 16 also can be chosen conveniently in relation to the design specifications (they can be, for example, curved, constituted by broken lines, have a variable transverse cross-section, and others).

[0023] The first protrusions 15 and the second protrusions 16 run substantially from one end to the other, respectively, of the first element 11 and of the second element 12, and so do the first slot 17, the second slot 18 and the third slot 18a.

[0024] The first protrusions 15 are conveniently rigidly coupled to the second protrusions 16 at the respective ends 19 and 20; in particular, they are welded to each other in a manner which does not allow separation.

[0025] The upper face 3 of the container according to the invention is affected conveniently by at least one fracture line 21, which is provided at the opening 9 for extracting the wipes 2 one by one. The fracture line 21 is 40 provided substantially parallel to the first element 11 and to the second element 12, and is conveniently adapted to ensure the hermetic closure of the container, preventing the evaporation of the sanitizing liquid. The fracture line 21 can be opened quickly, thus separating two mutually opposite flaps 22, 23, by pulling gently upward when the container is first opened.

[0026] In order to facilitate this operation as well as any other subsequent opening of the container in order to remove the wipes 2, such container comprises at least one tab 24, which is rigidly coupled to one of the flaps 22, 23 (preferably the upper one 23) and is adapted to perform the first opening of the container by separating such flaps and subsequently to lift manually the flap 23 whenever a wipe 2 is removed (Figures 1, 3). The tab 24 is 50 preferably of the type which is fixed by adhesive bonding to the centerline of the upper flap 23 of the fracture line 21.

[0027] In practical use, with the container 1 still com-

pletely sealed (Figures 1 and 4), it is necessary first of all to break the fracture line 21, by pulling gently the tab 24, so as to separate the lower flap 22 from the upper flap 23 (Figure 5). Subsequently, a further slight manual pulling of the tab 24 allows to achieve the disengagement respectively of the first protrusions 15 from the second slot 18 and from the second slot 18a and then of the central protrusion of the second protrusions 16 from the first slot 17, so as to separate the first element 11 from the second element 12 and allow to extract the wipes 2 (Figures 2, 6).

[0028] After removing the chosen number of wipes 2, it is possible to close the container easily by engaging manually, along their entire length, the first protrusions 15 in the second slot 18 and in the third slot 18a, and then the central protrusion of the second protrusions 16 in the first slot 17 (Figure 5). Since the first protrusions 15 and the second protrusions 16 are mutually rigidly connected at the ends 19, 20, it is possible to achieve the quick sealed closure of the container simply by sliding one's fingers along the second element 12 while applying a slight pressure.

[0029] It has thus been shown that the invention achieves the intended aim and objects.

[0030] The container according to the invention first of all has an extremely compact configuration, is not bulky and is aesthetically pleasant, and further does not have closure means which protrude or are in relief: this allows to achieve optimum and stable storage and stacking.

[0031] Secondly, the container can be manufactured by means of particularly fast packaging lines.

[0032] Thirdly, the hermetic quick closure means according to the invention are extremely practical and reliable to use and allow to maintain the freshness of the wipes 2 even after several opening and closure actions.

[0033] It should also be noted that advantageously the opening 9 covers a portion which is substantially shorter than the length of the container, so that the terminal heat-sealed portions do not occur at the ends of said container.

[0034] The invention thus conceived is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

[0035] All the details may further be replaced with other technically equivalent ones.

[0036] In practice, the materials used, as well as the shapes and the dimensions, may be any according to requirements without thereby abandoning the scope of the protection of the appended claims.

[0037] The disclosures in Italian Patent Application No. BO2005A000055 from which this application claims priority are incorporated herein by reference.

[0038] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A container for wet wipes, tissues and the like, which forms in an upper region at least one opening (9) for extracting the wipes (2) one by one, at which there are hermetic quick closure means (10) which are adapted to prevent, in a sealed closure configuration of the container, the drying and/or aging of said wipes (2) and to allow, in an open configuration of the container, the free removal of the wipes (2), **characterized in that** said hermetic quick closure means (10) comprise a first element (11) and a second element (12), which are associated respectively with two mutually opposite parallel edges (13, 14) of said opening (9) and can be mutually superimposed along a plane which is substantially parallel to the plane of the upper face (3) of the pack of wipes (2), said first element (11) and said second element (12) being provided with respective first protrusions (15) and second protrusions (16) having mutually complementarily shaped profiles which are adapted to engage detachably in one another in said sealed closure configuration of the container, said first and second protrusions (15, 16), in said open configuration of the container, being substantially mutually spaced, so as to allow the insertion of the fingers of the hand in said opening (9).
2. The container according to claim 1, **characterized in that** said first protrusions (15) are substantially elongated, narrow and parallel like longitudinal ribs and form between them at least one first slot (17).
3. The container according to claim 2, **characterized in that** said first protrusions (15) are two.
4. The container according to one or more of the preceding claims, **characterized in that** said second protrusions (16) are substantially elongated, narrow and parallel like longitudinal ribs and form between them at least one second slot (18) and one third slot (18a).
5. The container according to claim 4, **characterized in that** said second protrusions (16) are three.
6. The container according to one or more of the preceding claims, **characterized in that** in said sealed closure configuration said first protrusions (15) are engaged hermetically in said second longitudinal slot (18) and in said third longitudinal slot (18a), the central protrusion of said second protrusions (16) being engaged hermetically in said first slot (17).
7. The container according to one or more of the preceding claims, **characterized in that** said first element (11) and said second element (12) have such a length as to run substantially from one end to the

other of said opening (9).

8. The container according to one or more of the preceding claims, **characterized in that** said ribs of said first protrusions (15) and of said second protrusions (16) run substantially from one end to the other of said first element (11) and of said second element (12), respectively. 5
9. The container according to one or more of the preceding claims, **characterized in that** said first protrusions (15) are rigidly coupled to said second protrusions (16) at the respective ends. 10
10. The container according to one or more of the preceding claims, **characterized in that** said first element (11) is constituted by a narrow elongated strip made of substantially elastically flexible material. 15
11. The container according to one or more of the preceding claims, **characterized in that** said second element (12) is constituted by a narrow and elongated strip made of substantially elastically flexible material. 20
12. The container according to one or more of the preceding claims, particularly of the type made of synthetic material, **characterized in that** said first element (11) and said second element (12) are fixed to said container by heat-sealing. 25 30
13. The container according to one or more of the preceding claims, **characterized in that** said first element (11) and said second element (12) are fixed to the internal surface of said upper face (3) of said container, said container being affected by at least one fracture line (21) at said extraction opening (9) which is parallel to said first element (11) and to said second element (12), said fracture line (21) being adapted to ensure the hermetic closure of the container and being openable by pulling gently when the container is first opened. 35 40
14. The container according to one or more of the preceding claims, **characterized in that** it comprises at least one tab (24), which is rigidly coupled to one of the flaps (22, 23) formed by said fracture line (21) and is adapted to perform the first opening of the container by breaking said fracture line (21) and subsequently manually lift said flap (22, 23) in order to allow the removal of the wipes (2) one by one. 45 50
15. The container according to one or more of the preceding claims, **characterized in that** it is of the disposable type made of substantially flexible material, which is folded substantially into a tube and is sealed along its edges, so as to form a sort of parallelepiped without protruding parts. 55

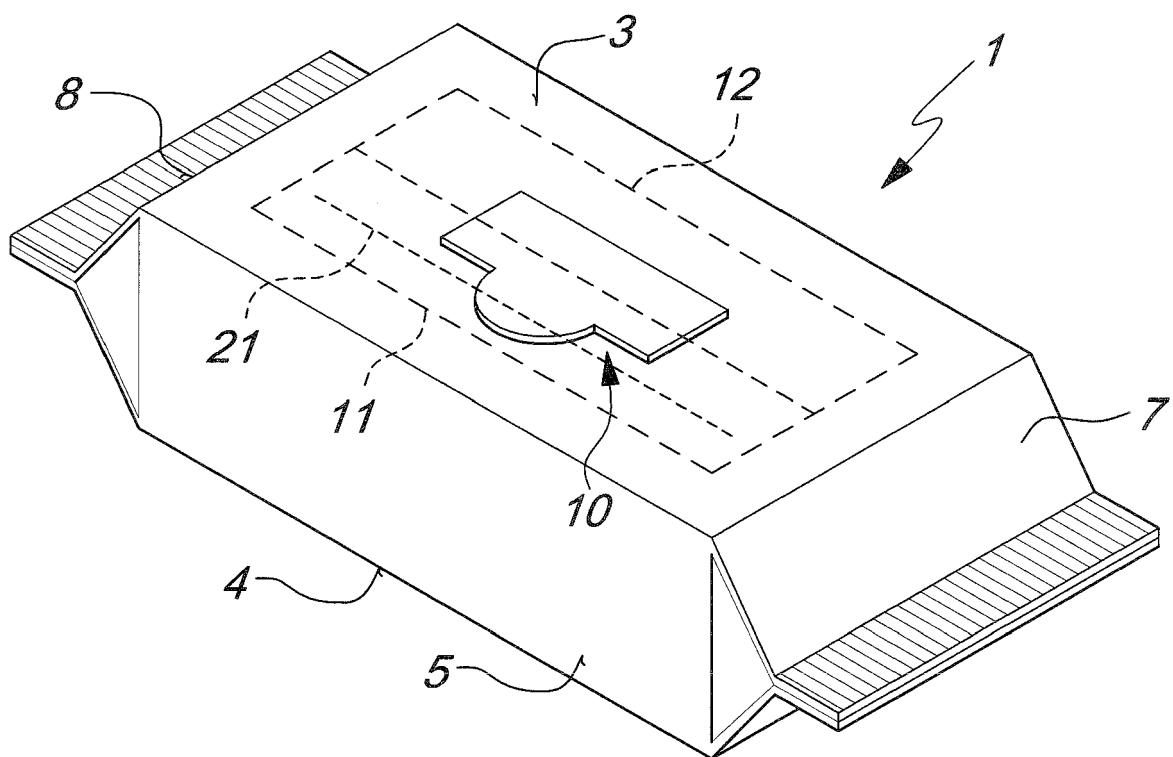


Fig. 1

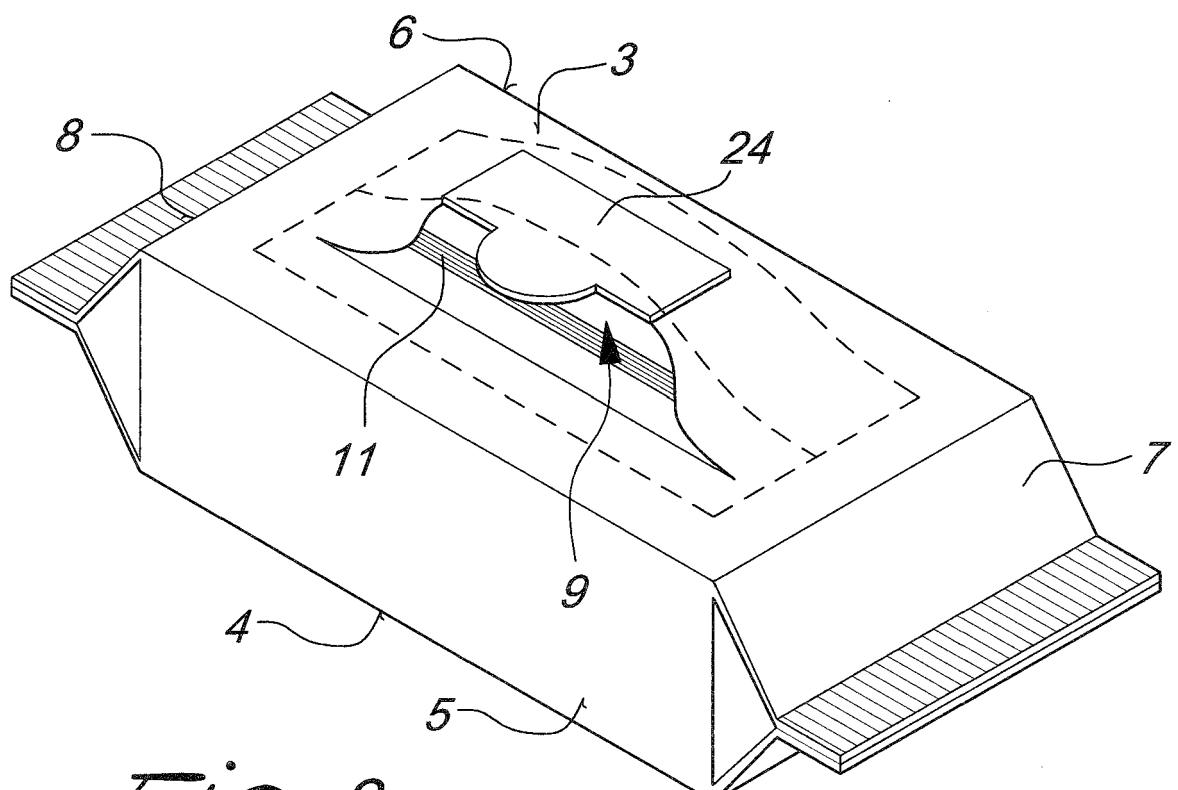


Fig. 2

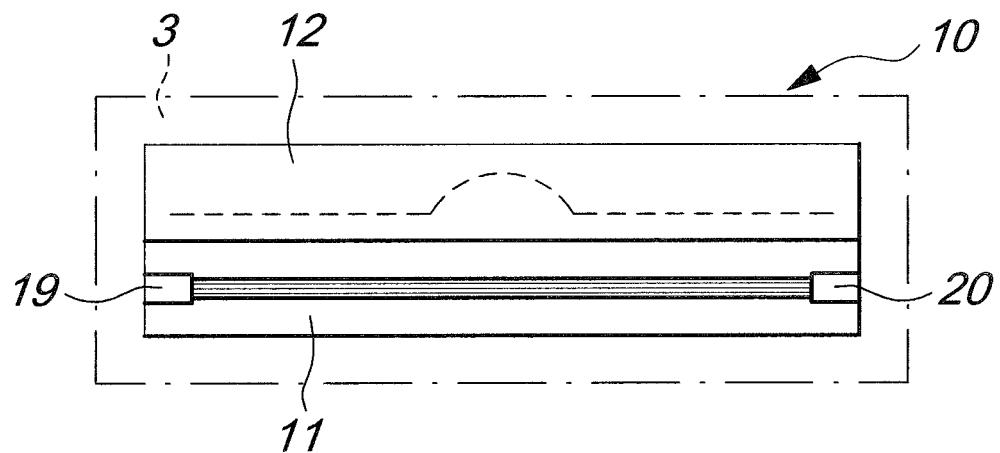


Fig. 3

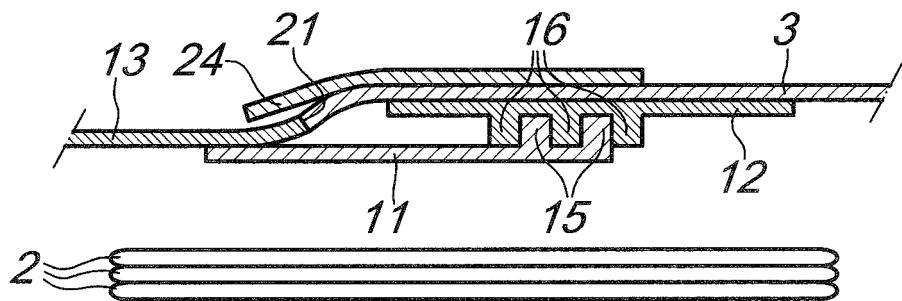


Fig. 4

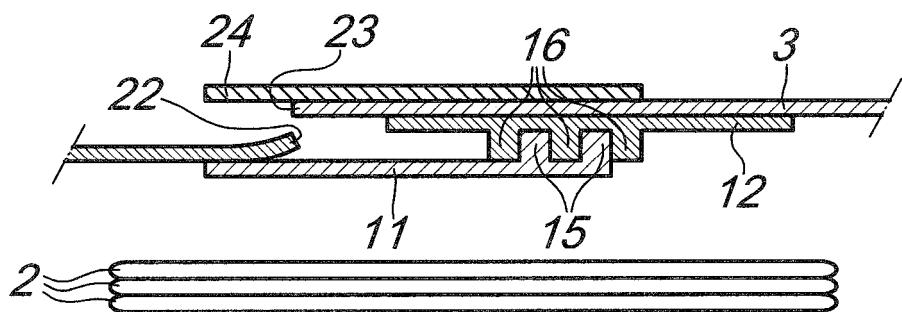


Fig. 5

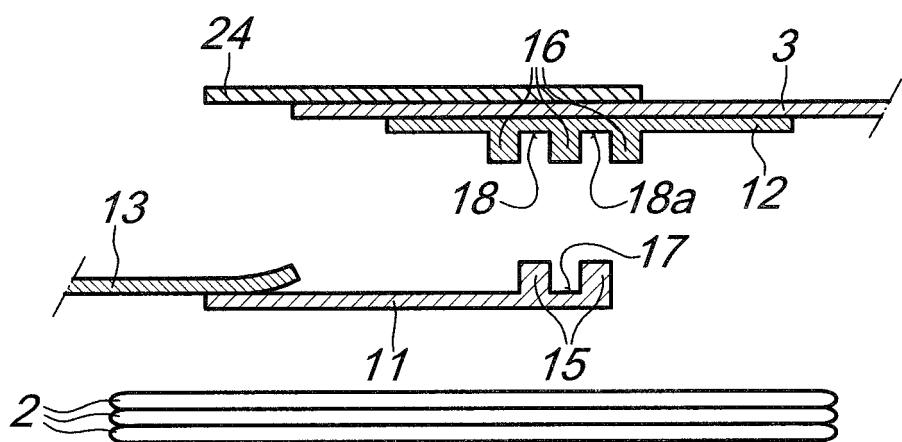


Fig. 6



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Y	* abstract * * column 1, line 58 - column 2, line 17 * * column 2, line 66 - column 3, line 3 * * column 3, line 22 - line 46 * * column 4, line 23 - line 37 * * figures 1-4 * -----	9	
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The present search report has been drawn up for all claims			
3	Place of search The Hague	Date of completion of the search 16 February 2006	Examiner Leijten, M
CATEGORY OF CITED DOCUMENTS		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	
EPO FORM 1503 03.82 (P04C01)			



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3	Place of search The Hague	Date of completion of the search 16 February 2006	Examiner Leijten, M
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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ON EUROPEAN PATENT APPLICATION NO.

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