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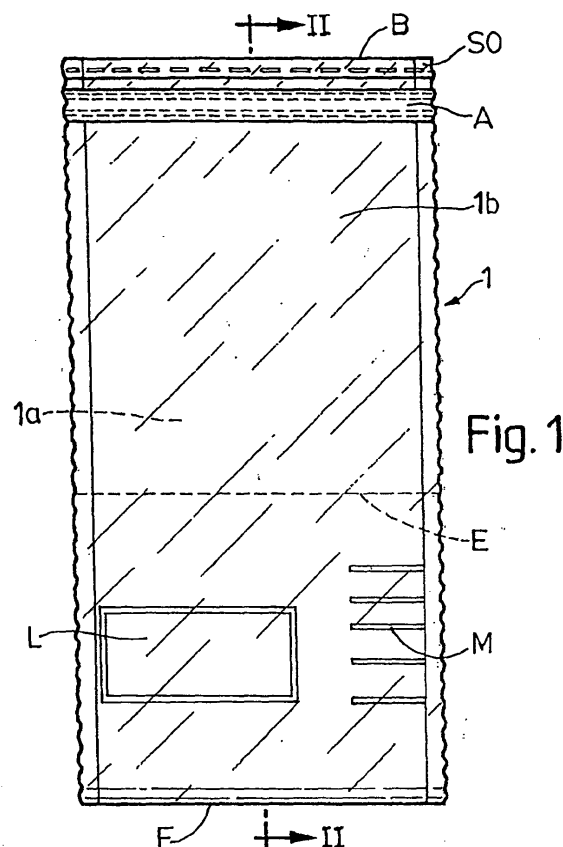
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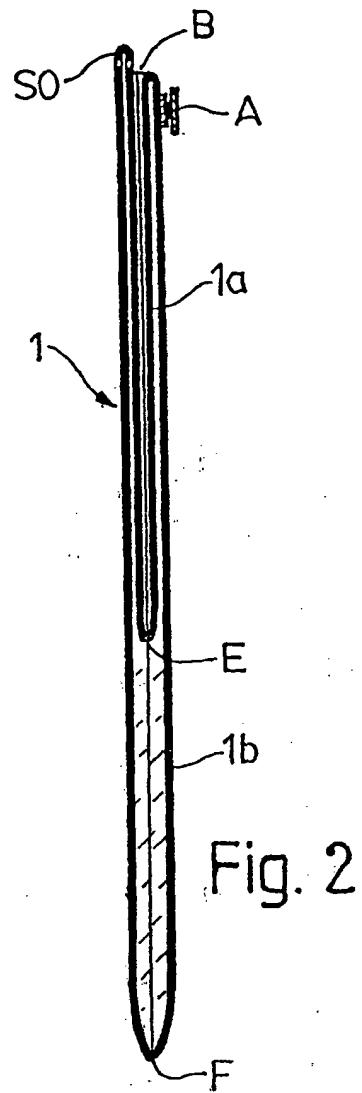
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(54) **IMPROVED BAG**

(57) The invention relates to an improved bag. Bags are currently available which are intended for very specific products, said bags comprising an inner part with an internally-disposed opening and non-return means which prevent the bag from emptying. However, said bags can only be used for a very limited number of applications. The inventive bag can be made from any material and can be used for multiple applications. Said bag can contain diverse materials of any type, nature or physical state, such as fluid materials and, in particular, liquid, pasty, slimy, powdery, granular, solid, semi-solid or similar materials. In addition, the bag also preferably comprises perforated tear lines which facilitate the opening thereof and the rapid emptying of the contents from same, as well as permanent/temporary closure means. The bag also comprises a flap which is disposed on one part of the edge of the opening and which can be folded back on the remaining part of the bag.





Description

[0001] The present invention has as its object an improved bag.

[0002] One of the applicants is the holder of Utility Model No. U 200101781 having as its object a urine collecting sanitary bag being made of flexible, tough, waterproof and transparent plastics material, said bag being structured in such a way that one portion is at least partially introduced within itself and thus has its opening arranged in the inside, said opening being at least partially open in order to thus allow the urine being collected to pass towards the bottom of the bag, said opening also preventing an unintentional emptying of the bag, this latter being completed with closure means so as to thus facilitate its transportation.

[0003] The bag being the object of the precited Utility Model obviates the previously existing drawbacks of the prior art having been known before, provides notable advantages, and facilitates the evacuation of urine.

[0004] The applicants have carried out a number of experiments and tests with the flexible bag being the object of the precited Utility Model, and have reached the conclusion that said bag has because of its nature a number of limitations.

[0005] Said limitations on the use or application of the bag being the object of the aforementioned previous Model have now been obviated by means of the present invention having as its object an improved bag allowing multiple applications.

[0006] The improved bag of the present invention provides great improvements on the bag being the object of the previous Model since it can be made of any suitable material and allows multiple applications or uses as a container being apt to contain different materials.

[0007] According to what has been set forth above an object of the improved bag of the invention allows its application or use as a container being apt to contain different materials of any type or nature and in any physical state, whether of a fluid nature such as especially that of the liquid materials such as the urine or of a different nature such as that of the pasty, powdered or granulated materials of any grain size, or that of the solid, semisolid and the like materials.

[0008] Another object of the present invention is the improvement of the features of the improved bag and relates to the fact that the bag's mouth possibly has in at least one portion of it perforated lines allowing to more expediently tear it open at least in part so as to thus quickly and at least in part empty the bag of its contents.

[0009] The bag's closure means also possibly consist in an adhesive tape allowing to permanently close the bag, or as the case might be to temporarily close it in order to have it closed and ulteriorly proceed to open it.

[0010] According to the invention at least one portion of the bag mouth's lip possibly projects from the rest and thus forms a flap being apt to be folded upon the remaining lip thus allowing to more efficiently close the bag.

[0011] The improved bag of the invention has a configuration whose intermediary portion possibly has a smaller section than the ends thus allowing to more expediently open the mouth by applying a pressure on the lateral ends towards the central portion when setting about to fill the bag.

[0012] These and other features will be best made apparent by the following detailed description whose understanding will be made easier by the accompanying sheet of drawings showing a practical embodiment being cited only by way of example not limiting the scope of the present invention.

[0013] In the drawings:

Fig. 1 is an elevational view of the improved bag being the object of the present invention;

Fig. 2 is a sectional view showing a longitudinal section as per section plane II-II of Fig. 1;

Figs. 3, 4 and 5 are each a fragmentary view showing the improved bag's mouth, that of Fig. 4 having a flap; and

Fig. 6 is an elevational view of the improved bag showing a configuration having been devised for a specific application.

[0014] According to the drawings the improved bag being the object of the present invention consists in a bag assembly being generally referenced at -1-, being made of any material and comprising a first portion -1a- being arranged inside a second portion -1b- having a bigger size, said portions preferentially having an elongated, preferably rectangular configuration, the opening -E- of the first portion being innerly arranged and spaced from the bottom -F- of the improved bag -1-. Both first and second portions -1a-, -1b- being respectively arranged in the inside and the outside of the improved bag -1- together define the mouth -B- of the improved bag assembly -1-.

[0015] The opening -E- can be totally or partially open, and it can thus have a fully open makeup, or else several sections for the ingress of the product to be contained in the bag, in which case said opening can have precut or punched lines or lines of perforations or microperforations being arranged in a linear or a staggered arrangement, this corresponding to an opening that would be partially opened, in such a way that said lines of perforations or the like would facilitate the opening by tearing the selected portion of said opening open so as to thus allow to more easily fill the bag with the material to be contained in it.

[0016] The opening -E- of the improved bag -1- in combination with its own first, inner portion -1a- and the second, outer portion -1b- of the improved bag in question define nonreturn means being apt to prevent the aforementioned improved bag from being emptied of its contents. Said nonreturn means would be effective both with liquids or semiliquids and with powdered products or materials or the like, and of course with those prod-

ucts or materials being of a pasty or solid type and the like.

[0017] The main object of the invention consists in the application or use of the improved bag -1- being able to contain different materials of any type or nature or in any physical state, such as fluid materials, especially those being of liquid, pasty, gelatinous, powdered, granulated, solid or semisolid nature, and the like.

[0018] According to the invention the improved bag -1- can have its mouth -B- provided with precut lines -C- being essentially similar to those having been mentioned before for the opening -E-, said lines being in form of precut, punched, perforated or microperforated lines, etc. being apt to allow to more expediently and in a total or in a partial manner tear the mouth -B- open, especially affecting the second, outer portion -1b- and being apt to allow to more expediently at a latter stage proceed to quickly and in a total or partial manner empty the bag of its contents whenever wishing to do so. Said precut lines -C- can be arranged around the whole mouth -B- as shown in Fig. 3 or only in one portion of said mouth -B- as shown in Fig. 4. The bag's mouth -B- can also have a plain makeup with no tear lines and the like as shown in Fig. 5.

[0019] The present invention provides for the bag's mouth B- to form a by way of flap -SO- as shown in Figs. 1, 2 and 4 thus allowing to fold the projecting lip portion -SO- and arrange it in an overlapping arrangement on the remaining complementary, opposite lip, said projecting lip portion being thus applied against the adhesive tape -A- being provided on said remaining, opposite lip, for such a purpose previously proceeding to remove the protective, releasable sheet having been originally provided and applied on the corresponding adhesive surface belonging to said adhesive tape, all this allowing to more efficiently effect the closure of the bag.

[0020] The improved bag -1- of the invention likewise provides for the whole lip of the mouth -B- to be arranged in a levelled arrangement without forming a flap as shown in Figs. 3, 5 and 6.

[0021] The improved bag -1- is provided with said adhesive tape -A- serving as a closure means totally assuring a preferentially tight closure especially in the case of some applications using the bag for the purpose of containing products of a liquid type.

[0022] According to the invention said adhesive tape -A- can be of the removable adhesion type, that is to say that the bag can be closed and reopened in order to introduce the product to be contained in the bag and to empty this latter of its contents whenever wishing to do so as many times as desired, or else said adhesive tape can be of the permanent adhesion type, in such a way that the bag is thus sealingly closed and cannot be opened by force or otherwise.

[0023] According to the invention the improved bag -1- has a configuration of any type as best befits the specific application being intended for it, and thus it can have an essentially rectangular, flat shape such as that

being shown in the figures, or any other configuration, or else it can be shaped as a by way of sack, container, vessel or the like.

[0024] For some specific applications in special cases the improved bag -1- of the invention can be rectangular and flat and can have a necking -ES- in the intermediary portion. Said necking allows to more easily open the mouth -B- in order to fill, collect or introduce the product, i.e. especially the liquid product to be contained in the bag.

[0025] As has been said, the improved bag -1- of the present invention can be made of any material whether of a plastic, cellulosic, animal, vegetal, mineral or metallic nature, and of blends or alloys of several of them, said bag possibly being flexible or rigid as best befits the specific application.

[0026] Said improved bag -1- can be a one-piece bag wherein one portion is simply introduced into the other and both portions are kept in position by known, conventional jointing means, or else it can be made up of several pieces of sheet material or having a surface being arranged in any tridimensional arrangement, said pieces being in this case jointed together by known, conventional jointing means such as by heatsealing, heat-fusing, welding, fusing, gluing and other means.

[0027] The material making up the improved bag -1- can also be of any type as might best befit the intended application, and hence it can be transparent to thus allow to see the inner contents of the bag, translucent, of any colour or colour combination, or else opaque whenever such a thing were deemed convenient for whatever reason, such as for example when the contents of the bag have to be protected from the light, and of other types. Said material can have the most suitable thickness according to the intended application.

[0028] The improved bag -1- can likewise be provided with any kind of print being suitable to provide the bag with indicia or markings -M- being apt to indicate the quantity of product being contained in the bag, each of them successively indicating different amounts of contained product, with frames -L- with legends being indicative of the product, and with other indicia being deemed convenient. Said print can be carried out by means of a lithographic, typographic, flexographic or offset process, intaglio printing, laser, scanner, silk-screen printing, etc., with one or more colours and on one or both sides or areas of the surface of the bag.

Claims

1. An improved bag of the type defining a bag having a first portion of it introduced within a second portion with the opening being arranged in an inner arrangement, both portions together defining the mouth of the bag assembly, said opening in combination with the introduced portion defining non-return means being apt to prevent the emptying of the

bag; **characterised in that** it can be applied for the purpose of containing different materials of any type or nature and in any physical state, such as those being of a fluid nature such as especially the liquid, pasty, gelatinous, powdered, granulated, solid or semisolid materials and the like. 5

2. An improved bag as per claim 1, **characterised in that** the bag's mouth is possibly provided in at least one portion of it with perforated lines allowing to more expediently tear it open at least in part so as to thus quickly and at least in part empty the bag of its contents. 10
3. An improved bag as per claim 1, **characterised in that** it possibly incorporates closure means consisting in an adhesive tape having been originally protected and allowing to permanently close the bag, or as the case might be to temporarily close it in order to have it closed and ulteriorly proceed to open it. 15 20
4. An improved bag as per claim 1, **characterised in that** at least one portion of the bag mouth's lip possibly projects from the rest and thus forms a flap being apt to be folded upon the remaining lip thus allowing to more efficiently close the bag. 25
5. An improved bag as per claim 1, **characterised in that** the intermediary portion of the bag possibly has a smaller section than the ends thus allowing to more expediently open the mouth by applying a pressure on the lateral ends towards the central portion when setting about to fill the bag. 30 35

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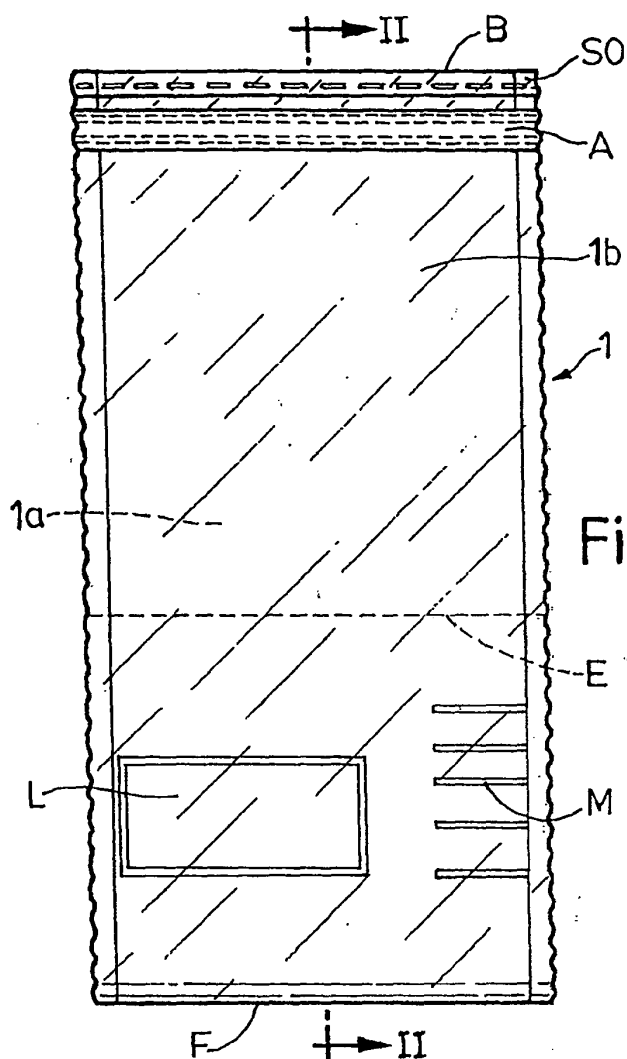


Fig. 1

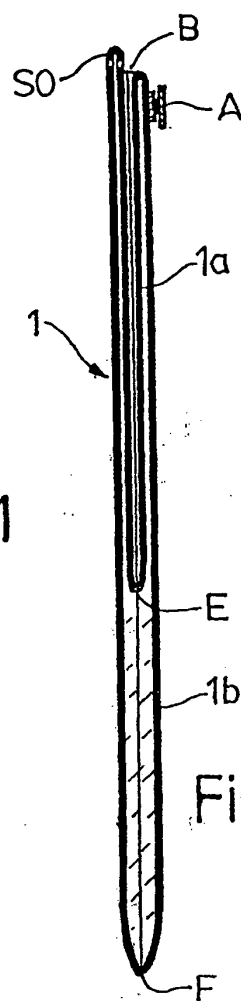


Fig. 2

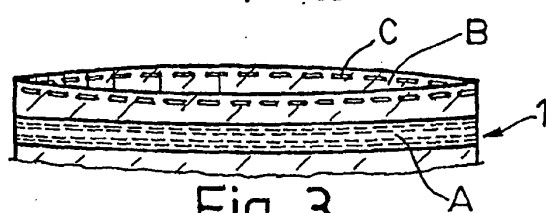


Fig. 3

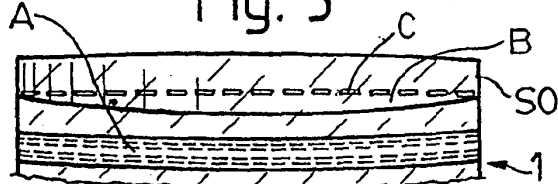


Fig. 4

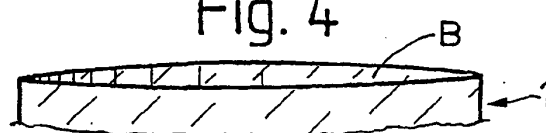


Fig. 5

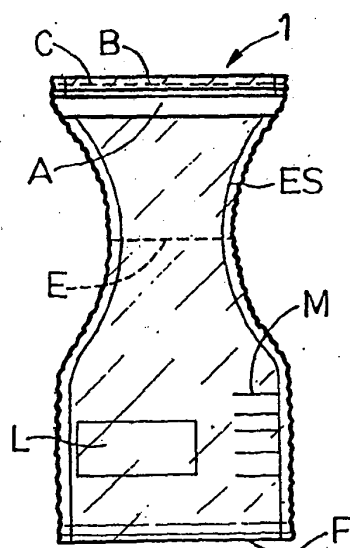


Fig. 6

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES02/00541

A. CLASSIFICATION OF SUBJECT MATTER		
IPC 7 A61F 5/44, 5/453, 5/455, A61G 9/00, B65D 33/18 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC 7 A61G, A61F, B65D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
CIBEPAT, EPODOC, WPI, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	column 4, line 46; figures	2
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X	ES 1049418 U (GAMEZ CANO) 01.12.2001, the whole document	1
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A		4
X	WO 9203994 A1 (AMERICAN INNOTEK, Inc.) 19.03.1992, page 6, lines 11-20; figures 1-3	1
A	GB 2188545 A (MIEKO IWAKURA) 07.10.1987, page 2, lines 3-12; figures	3, 4
☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
13 February 2003 (13. 02. 2003)		19 February 2003 (19. 02. 2003)
Name and mailing address of the ISA/ S.P.T.O.		Authorized officer
Facsimile No.		Telephone No.

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Form PCT/ISA/210 (continuation of second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

Information on patent family members

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