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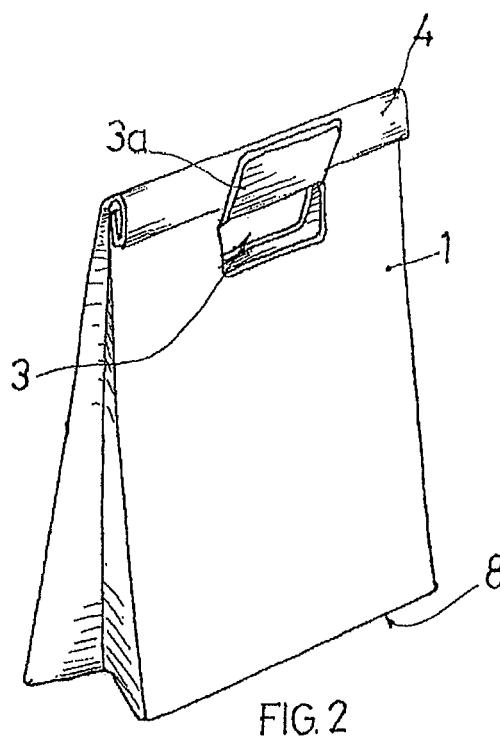
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(54) **PAPER BAG HAVING A BUILT-IN HANDLE**

(57) On the top part of the pleated-style bag (1) or "American"-style bag (2), without pleat, and near its open edge, it has some die cut drill holes with a rectangular (3) or circular (5) shape, located at a sufficient distance from the top edge to allow performing some folds (4) to close the bag (1) or (2), being said die cut drill holes (3) or (5) located just below said folds (4), defining the height, from the folds (4) to the base (8) of the bag, for its usable capacity. In the "American"-style bag (2) there is a second area (7) of die cut drill holes, which allows performing more folds (4) when closing the bag (2). It optionally has two reinforcements made of paper, fabric or cotton mesh, attached to the inner sides and in the area of the die cut drill holes, which can have a rectangular shape (3) with its flap (3a), and a circular (5), triangular (9), ovoid (10), semi-circular (11) slanted (12) or multi-slanted (13) shape.



Description

[0001] The present invention refers to a bag, made of paper, essentially characterized in that the handle for grabbing and transporting it is built into its own body, formed by some die cut drill holes and with its essential characteristics being described below.

[0002] The environmental protection actions so frequent nowadays, tend, among other measures, to the elimination of bags elaborated with hard self-destructing materials and with a serious impact in the environment, like plastic containers and bags. Therefore, several regulations on environmental protection are in favor of using paper, preferably recycled, to manufacture bags that are generally used in supermarkets and department stores to hold the different products offered for sale and to carry them comfortably.

STATE OF THE ART

[0003] Currently, there are bags without handles, made of paper, to hold and carry several objects and specially food products, these bags are known as "American"-style and have to be carried in the arms, a position that is evidently uncomfortable.

[0004] As an alternative to this kind of bags, there are models also made of paper and provided with supplementary handles, especially glued, that even though they facilitate handling, its manufacture is excessively costly, which is a serious drawback for its use in great quantities, as it is generally the case in large-scale stores.

[0005] Also, regarding to actions for the environmental protection, the complete elimination of bags with a plastic interior cover such as bubble wrap, either for insulation or protection, is a current trend.

OBJECT OF THIS INVENTION

[0006] The object of this invention is to present a paper bag, either "pleated" or "American"-style without pleats, provided with some improvements that will allow its easy handling to carry the products contained within, without making its manufacture process costly, as no complementary accessories have been added.

[0007] The concept of the bag described herein, allows its use for carrying different weights as its capacity can be varied, and with this, the amount of products that are placed in it, always having the same gripping and holding system, which essentially consists of performing a series of die cut drill holes in the bag's top area, which allow passing the fingers and/or forehand of the user through them, once the products to be transported are placed inside and folding the open top part of the bag so it stays closed and can then be grabbed to carry it.

[0008] Placing a second area of die cut drill holes below the first one, will allow performing more folds in the top part of the bag, reducing its height, when there is no need to use the entire capacity of the bag, as there are not many objects to be placed inside, leaving the bag with a smaller size and bearing less weight as its volume has been reduced.

[0009] The characteristics of the paper, preferably recycled, that will be used in the manufacturing of the bag, will require, depending on the applications and with the purpose of increasing its strength at the area where the cut die drill holes have been made, placing horizontal or vertical reinforcements made of paper, fabric or cotton mesh, for example, in its interior, which cover the area of said die cut drill holes to increase the safety in that area.

[0010] Likewise, and in other applications, the bag can be covered inside with an anti-moisture material, such as paraffin or wax, for its use when carrying refrigerated products.

GRAPHIC REPRESENTATION

[0011] To complement the description being made and in order to help better understand the features of the invention, a set of drawings have been attached, wherein some embodiments of the paper bag with an integrated handle object of the invention, have been represented.

[0012] In said drawings,

Figure 1, is a perspective view of a regular paper bag, "pleated"-style, without being closed at the top and provided with a rectangular die cut drill hole, and some optional reinforcements, placed in the inner side of the bag and covering the cut die drill hole area, have been drawn in dotted lines;

Figure 2, represents the same bag, closed at its top by means of some folds that come just above the opening;

Figure 3, shows also in perspective, an "American"-style bag, without "pleats" provided with two drilled areas, located at different heights with respect to its top part, which is closed by means of folds that come up to the top die cut drill holes, where it will be grabbed by the user;

Figure 4, is a complementary figure to the previous one, representing the bag, closed with more folds that come up to the second area of die cut drill holes, where it will be grabbed by the user, thus showing a smaller size bag, and consequently, smaller capacity; and

Finally, figure 5 represents several types of die cut drill holes that can be performed on the bag's surface to configure the gripping area.

DESCRIPTION OF THE INVENTION

[0013] According to the referenced drawings, the paper bag is manufactured like the well known "pleated"-style (1) or "American"-style (2) without said pleat.

[0014] According to the embodiment represented in figures 1 and 2, the "pleated"-style bag (1) is provided, in this embodiment, with a rectangular die cut drill hole (3) located near the top edge of the bag and centered with respect to the side edges of the bag. This die cut drill hole (3) which still has the flap (3a) after the die cut, is located at a sufficient distance from the top edge which allows performing some folds (4) to close the bag (1) at the top part, the die cut drill hole (3) remaining just below the aforementioned folds (4) which, in turn, work as a reinforcement for the handle.

[0015] The bag can also be manufactured, in the embodiment represented in figures 3 and 4, according to the "American"-style (2), provided with two die cut drill holes areas, in this case several die cut drill holes with a circular shape (5), which allows closing the top part of the bag (2) by means of the folds (4) until reaching the first area (6) of die cut drill holes (5) forming a bag which height is determined from those die cut drill holes (5) to the base (8) of the bag (2). By performing more folds (4) until reaching the lower area (7) of die cut drill holes (5) the height of the bag, as well as its capacity is reduced, and consequently, the weight to be carried is less. The folds (4) increase the handle's reinforcement.

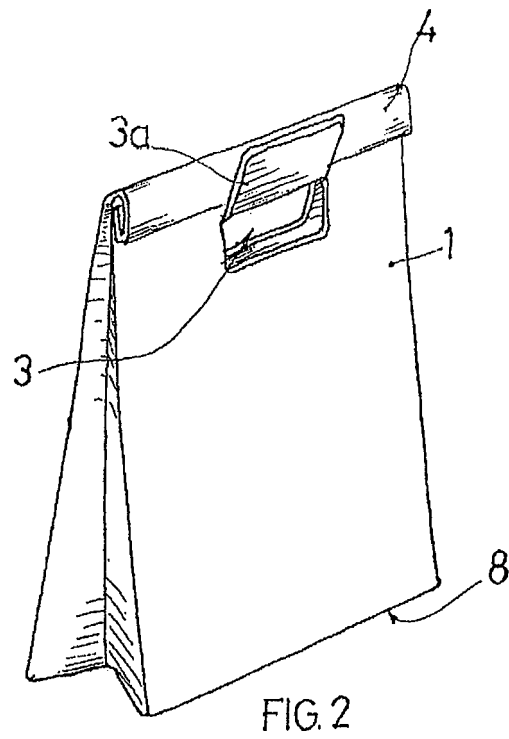
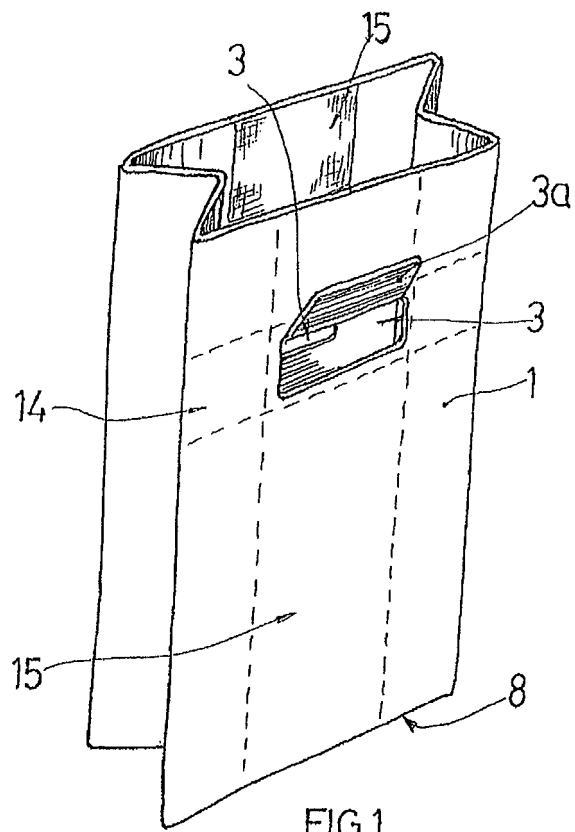
[0016] The die cut drill holes are cut on both sides of the bag (1) and (2), and can have a rectangular shape, reference (3) of figures 1 and 2, or a circular shape, reference (5) of figures 3 and 4, or they can adopt several shapes, such as triangular (9), ovoid (10), semi-circular (11) slanted (12) or multi-slanted (13), among others, schematically represented in figure 5.

[0017] As an optional safety element in the area of the die cut drill holes, reinforcements (14) are vertically placed in the inner sides of the bag, covering the die cut drill holes area, or some other reinforcements (15) are horizontally placed in the same area, these reinforcements can be, as appropriate, made of paper, fabric or cotton mesh, among other materials.

[0018] Having the object of the present invention been sufficiently described, it should be noted that every variation in dimensions, shape and exterior aspect of the bags provided with an incorporated gripping element, will not alter in any way the essentiality of the present invention that is being summarized in the following claims.

Claims

1. Paper bag having a built-in handle, preferably manufactured in eventually recycled paper and which adopts the well known "pleated"-style (1) shape or "American"-style (2), without pleat shape, **characterized in that** it has, on the top part of the bag, near its open edge, die cut drill holes with a rectangular (3) or circular (5) shape, located at a sufficient distance from the top edge to allow performing some folds (4) to close the bag (2), in a way that said die cut drill holes (3) or (5) are just below said folds (4) allowing for the user's fingers to go through in order to grab the bag, defining the height, from the folds (4) to the base (8) of the bag, for its usable capacity.
2. Paper bag having a built-in handle, according to the previous claim, **characterized in that** it optionally has, below the first area (6) of die cut drill holes (3) or (5), a second area (7) of die cut drill holes, which allows performing more folds (4) when closing the bag (1) or (2), defining a lower height to the base (8) of the bag and therefore, a lower capacity of the same.
3. Paper bag having a built-in handle, according to claims 1 and 2, **characterized in that** it optionally has two reinforcements made of paper, fabric or cotton mesh, as appropriate, attached to the inner sides and in the area of the die cut drill holes, located horizontally (14) or vertically (15) to reinforce the die cut drill holes area, which can have a rectangular shape (3) with its flap (3a), and a circular (5), triangular (9), ovoid (10), semi-circular (11) slanted (12) or multi-slanted (13) shape.



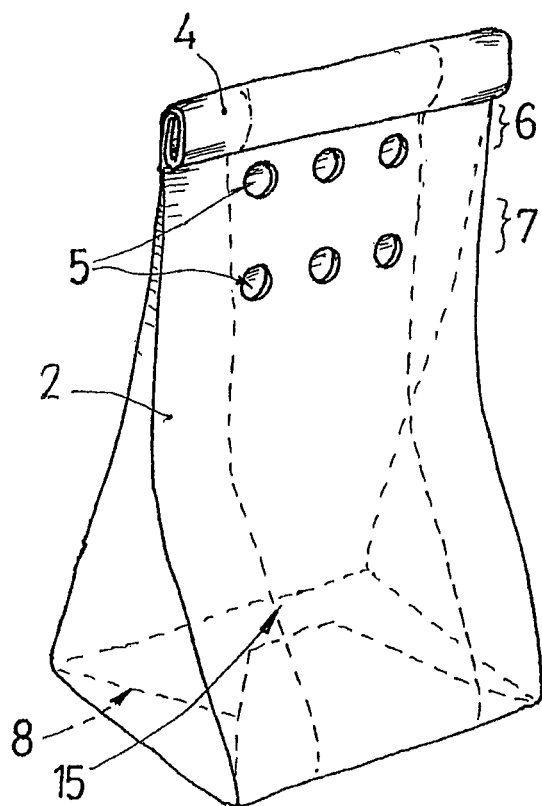


FIG. 3

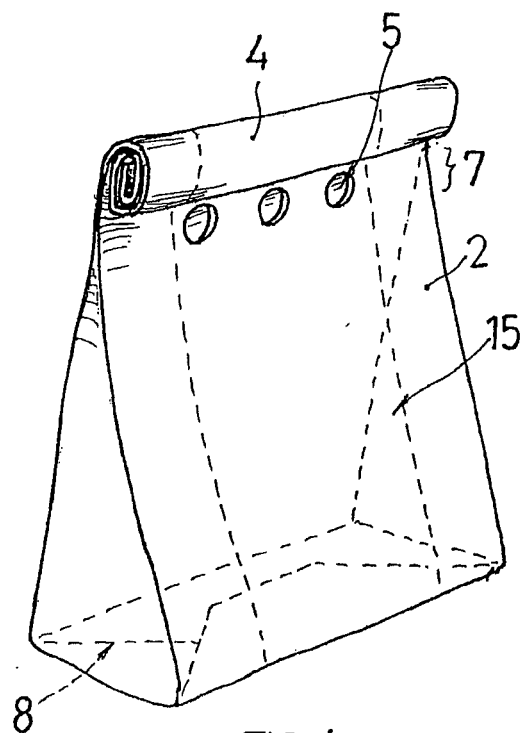


FIG. 4

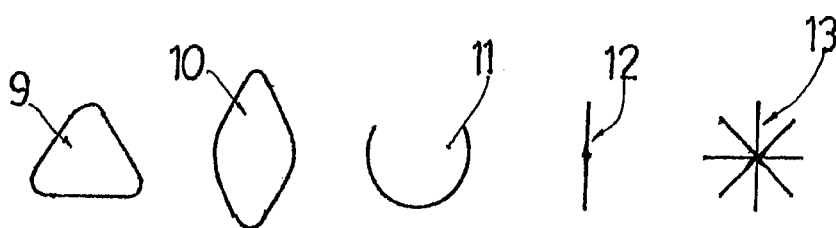


FIG. 5

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES2012/000013

A. CLASSIFICATION OF SUBJECT MATTER

B65D5/46 (2006.01)

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)

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)

EPODOC, INVENES, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003111521 A1 (HOLMES) 19.06.2003, the whole the document.	1-3
A	US 4243171 A (PRIN) 06.01.1981, the whole document.	1-3
A	CH 591993 A5 (MUELLER&LEUTWYLER AG) 14.10.1977, figures & abstract from DataBase WPI; Retrieved from EPOQUE, AN 1977-K5671Y.	1-3
A	DE 7615937U U1 (HENKEL KGAA) 01.02.1979, abstract, figures.	1-3

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:	"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
"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)	"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
"O" document referring to an oral disclosure use, exhibition, or other means.	"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 documents, such combination being obvious to a person skilled in the art
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search
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Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.

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Information on patent family members

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
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