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(54) Paper container with handles in the form of a bag.

(57) The object of the invention is a bag (1) made of paper which has carrying handles (4) that are glued to and fully wrap around the bag body so as to enhance the bag's load resistance. Given that said handles, also of paper and which are folded over and reinforced with natural fibres, are a continuous band, they have to be properly folded so as to adhere correctly to the bag.

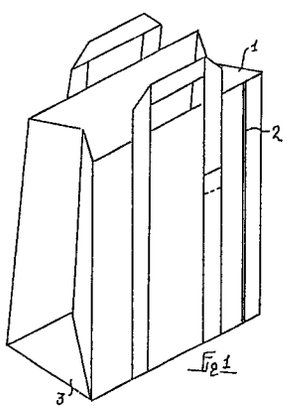

Fig 1

EP 0 275 239 A2

Description

PAPER CONTAINER WITH HANDLES IN THE FORM OF A BAG.

This invention relates to a paper bag for various uses which replaces the plastic bag currently being used by all merchants to contain merchandise.

The biodegradability of paper as compared to plastic is the reason the authorities elected paper over plastic. However, because of their high cost, paper bags are as yet not competitive with plastic ones which are tubular in shape and heatsealed.

This invention therefore is designed to offer a paper container so semplified as to reduce to a minimum manufacturing costs. It is common knowledge that paper bags are manufactured from a rectangular sheet of paper which is folded and glued along the generating line to form the bag-like shape, while the bottom is formed by folding the end flaps like an envelope and then gluing them. At times said glued flaps are reinforced by means of a rectangular piece of paper that is applied externelly to give added thickness to the bottom, a manufacturing step that clearly poses the most difficult problem to solve in so far as this tecnique is considerably more complicated that that employed for seamed plastic bags and in so far as resistance to weight is concerned in that, if execessive, said weight can break the bag. The second technical problem that is to be solved in the manufacture of paper bags concerns the application of the grip handles. This problem is currently solved by drilling through at the top of the bag and inserting a length of cord which is then knotted on the inside of the bag to prevent its coming loose.

This solution, however, has the drawback of considerably limiting the weight of the contents, which can otherwise cause the cord to tear the bag, and is the reason why the cord holes are reinforced by glueing pieces of cardboard to them.

The invention described herein is designed as an innovation over the construction of conventional bags in that it features handles that are entirely original and that are preferable to the conventional ones both for the extremely simple way of applying them and for the fact that they also help in making the bottom of the bag sturdier, thus enabling said bottom to be further simplified by eliminating for example the rectangular bottom reinforcement, or the bags themselves can be constructed of paper materials having less resistance and, hence, reduced costs. These and other scopes are attained by the invention which essentially comprises a bag-like paper body which as a bottom made by fording then glueing the flaps and which also has handles made of paper that is folded over several times so as to form a resistant band inside whith reinforcing material or synthetic fibers can be inserted.

The ends of the strip are then glued together to form a single, joined segment on the outside of the bag which then becomes a double ribbing that completely enfolds the bag and that at the top takes on the form of carrying handles.

These and other features of the invention will become more apparent when seen in relation to a simple embodiment of its manufacture with reference to the accompanying drawings and which is given as a purely indicative example and in no way whatsoever is intended to limit the extent of the present invention.

In Table 1, figure 1, of said drawings is shown the paper bag with handles.

In figure 2, is shown the folded band comprising the handle which is represented in final form in figure 3. In these figures, number 1 indicates the bag body in paper, number 2 the glue line, number 3 the bottom fold that walls off the bag and that can be reinforced by a rectangular piece of paper which is glued on but which is not shown in this version, numbers 4 and 4′ indicate the double band comprising the handle that is wrapped around and glued to the bag to enhance its resistance; number 5 is the core of this band in natural or artificial fibre placed between the two or more elements of the paper band; number 6 is the glue line of the strip, and number 7 indicates the folds of the continuous band which act to set the handle part so it is parallel to the top edge of the bag.

The details of construction, the dimensions, the materials, the form and the like of this invention are so intended that they can be readily changed without departing from the scope of the invention, for this invention is in effect intended to embody numerous modifications and variations that are part of the invention itself. Moreover, all elements can be replaced by other elements that are technically equivalent.

Claims

1. A paper container with handles in the form of a bag wherein said handles are made by glueing a continuous band on the outside of the bag so that the upper part of said band is not in contact with the bag and acts as a handle.

2. A paper container with handles in the form of a bag as claimed in Claim 1 wherein the band comprising the handle is usually made, as is the bag, of paper material that is formed into thin strips which are folded two or more times and reinforced, or not, as the case may be, on the inside by natural or synthetic fibres.

3. A paper container with handles in the form of a bag as claimed in Claims 1 and 2 wherein the band comprising the handle can also be made exclusively of fabric which can also be easily glued to the surface of the bag.

4. A paper container with handles in the form of a bag as claimed in Claims 1, 2 and 3 wherein the band, which initially ia linear, shall become a closed and joined segment by glueing the two ends.

5. A paper container with handles in the form

of a bag as claimed in Claims 1, 2, 3 and 4 wherein the said band by virtue of its being a closed segment and of having its undersurface glued to the bag, needs to be properly folden in the the part acting as handle. Otherwise said latter part would be perpendicular to the surface of the bag and, hence, less easy to grasp.

6. A paper container with handles in the form of a bag as claimed in Claims 1, 2, 3, 4 and 5 wherein the said band enhances the resistance of the bag to loads in that it wraps completely around the bag itself and, by so doing, can at times make it superfluous that the bag be fitted with reinforcement glued to the bottom as is always present in conventional bags.

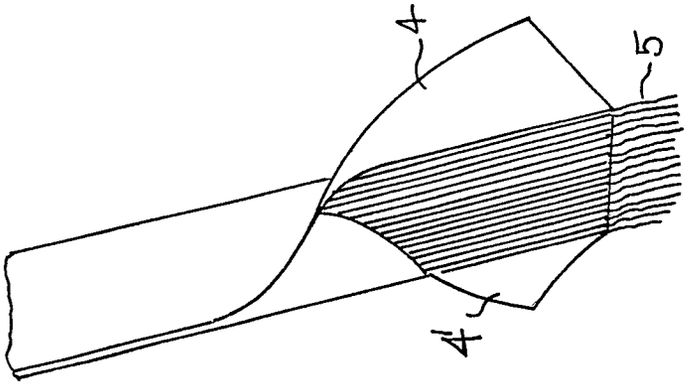

Fig 2

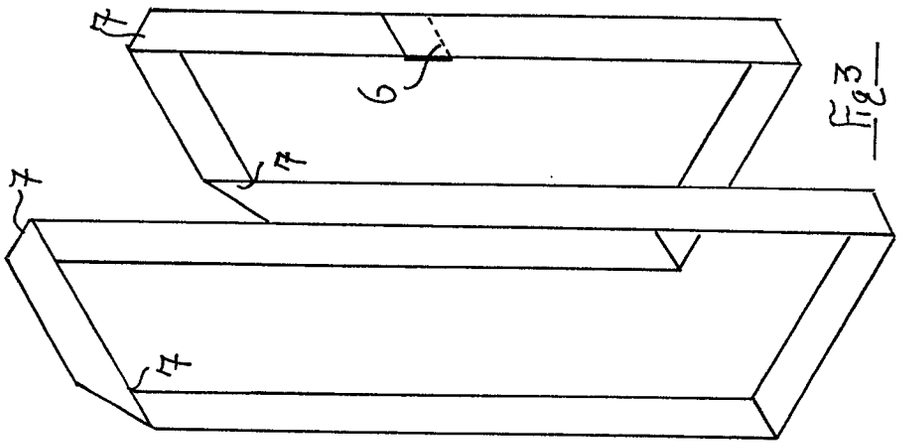

Fig 3

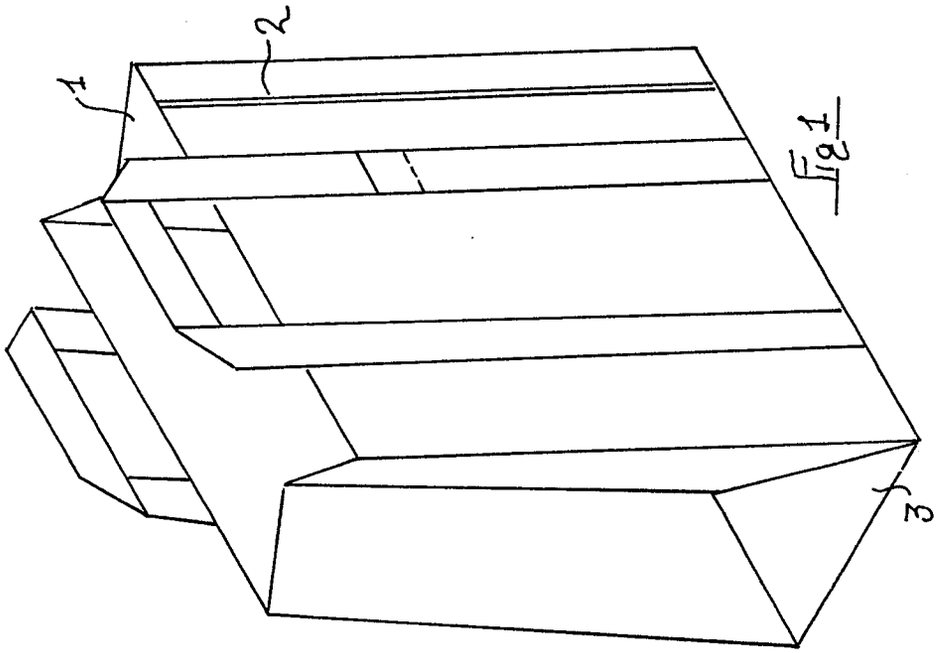

Fig 1