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(54) Recycling trash can

(57) A recycling trash can includes a body (10), a top open end and a bottom open end. The body is made of cardboard and provided with a closed side wall and having multiple longitudinal seams (101) and latitudinal seams (102) formed on an outer periphery of the body to allow the body to be folded to be compact. The bottom open end has multiple bends (12) formed on a peripheral edge of the bottom open end and each bend (12) being separated from one another via a gap (121) defined between two adjacent bends (12). Each bend (12) is attachable to an adjacent bend (12) via an adhesive agent (13) applied to each of the bends (12).

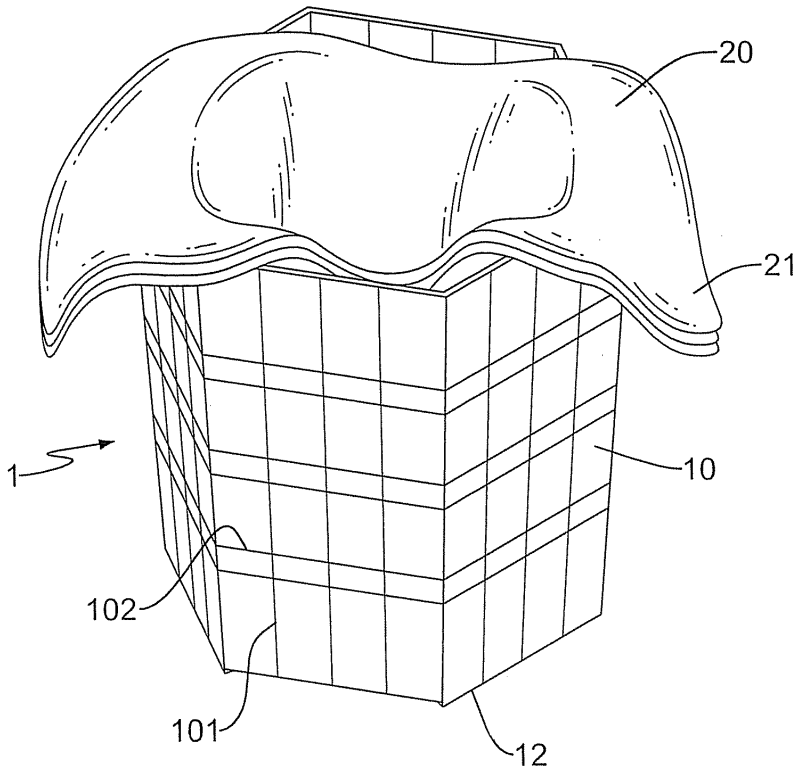

FIG.1

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Description

1. Field of the Invention

[0001] The present invention relates to a trash can, and more particularly to a recycling trash can made of paper and having therein multiple plastic bags superposed on top of each other such that the user is able to use one plastic bag at a time for containing waste and eventually the last plastic bag together with the trash can be disposed together.

2. Description of Related Art

[0002] Normally, a trash can is made of either metal or plastic and most of the time, a plastic bag is placed inside the trash can so that the interior of the can does not become contaminated by the waste. These trash cans do have the ability to meet all kinds of requirements concerning disposing waste though, due to their fixed dimension and being not decomposed, users often find it hard to dispose of the used trash cans. Furthermore, every time a plastic bag is full and is taken away from the trash can for disposition, a new plastic bag has to be placed inside the trash can, which is quite troublesome.

[0003] To overcome the shortcomings, the present invention tends to provide an improved recycling trash can to mitigate the aforementioned problems.

[0004] The primary objective of the present invention is to provide a recycling trash can made of cardboard paper such that when not in use, the trash can of the present invention is able to be folded to reduce storage space and when in use, the trash can of the present invention is able to stand by itself without any additional assistance.

[0005] In one aspect of the present invention, multiple plastic bags are placed inside the recycling can so that a new plastic bag is always ready for use after one is removed for disposal.

[0006] In order to accomplish the objective, the recycling trash can of the present invention has a substantially cylindrical body and two open ends, a top open end and a bottom end. The body is provided with multiple longitudinal and latitudinal seams so that the trash can is able to be folded according to the longitudinal seams to reduce storage space when not in use and the bottom end is able to be folded according to the latitudinal seams to form a base by which the trash can may be stood upright. Multiple plastic bags are received inside the body and are superposed on top of each other so that a new plastic bag is always ready for use everytime a plastic bag is removed from the trash can.

[0007] Other objects, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

In the drawings

[0008]

Fig. 1 is a perspective view of the trash can of the present invention;
Fig. 2 is a schematic exploded perspective view showing that plastic bags are superposed on top of each other;
Figs. 3A, 3B and 3C are schematic side plan views showing the steps of expanding the trash can of the present invention;
Figs. 4, 5, 6 and 7 are schematic perspective views showing different embodiments of the trash can of the present invention.

[0009] With reference to Fig. 1, it is noted that the trash can (1) in accordance with the present invention includes a substantially cylindrical body (10) with two open ends, i.e., a top open end and a bottom open end. Multiple longitudinal seams (101) and multiple latitudinal seams (102) are formed on an outer periphery of the cylindrical body (10).

[0010] With reference to Fig. 2, multiple plastic bags (20) are to be received in the cylindrical body (10). The plastic bags (20) are stacked on top of each other and each has two opposite ears (21) extending from a top periphery of an open end of the plastic bag (20) and a base (22). Therefore, after the plastic bags (20) are superposed on top of each other, a storage space required for the plastic bags (20) is small.

[0011] With reference to Figs. 3A, 3B and 3C, the bottom open end of the respective cylindrical body (10) is provided with bends (12) spaced apart from each other via a gap (121). The user is able to use some of the longitudinal seams (101) to fold the trash can (1) of the present invention. Thereafter, when the trash can (1) of the present invention is not in use, a storage space required for the trash can is diminished. Furthermore, an adhesive agent (13) with a releasing element attached to the adhesive agent (13) is applied to the bends (12) such that after gradually expanding the trash can (1) of the present invention (as shown in Figs. 3A and 3B), the user is able to use the adhesive agent (13) to secure engagement between two adjacent bends (12) so as to form a base of the trash can (1). Then after the trash can (1) of the present invention is able to stand by itself, the plastic bags (20) are placed inside the cylindrical body (10) of the trash can (1) to be ready for containing therein waste. It is to be noted that the two opposite ears (21) of the plastic bags (20) can be tied into a knot (as shown in the dashed lines in Fig. 3C) for easy carrying of the plastic bag (20) after the plastic bag (20) is full of waste.

[0012] With reference to Figs. 4, 5, 6 and 7, due to the trash can (1) being made of cardboard, the body (10) of the trash can (1) of the present invention may be configured into triangular, rectangular, pentagonal, hexagonal or circular forms in cross section.

[0013] From the above description, it is noted that the trash can of the present invention has the following advantages:

1. Minimum storage space
Due to the formation of the longitudinal and latitudinal seams (101,102) on the outer periphery of the body (10), the trash can (10) may be folded to have a compact dimension so that a required storage space is small.
2. Recycling
Due to the material of the trash can (1), the trash can (1) of the present invention is able to be recycled such that the environment is protected from contamination.
3. Portable
After having been folded into a compact dimension, the user may easily carry the trash can to wherever necessary.
It is to be understood, however, that even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made in detail, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

Claims

1. A recycling trash can comprising:

a body (10) made of cardboard and provided with a closed side wall and having multiple longitudinal seams (101) and latitudinal seams (102) formed on an outer periphery of the body to allow the body to be folded to be compact, the body (10) being able to be folded into various shapes via the longitudinal seams (101) and latitudinal seams (102);
a top open end defined in a top side of the body (10); and
a bottom open end defined in a bottom side of the body (10) to communicate with the top open end and having multiple bends (12) formed on a peripheral edge of the bottom open end, each bend (12) being separated from one another via a gap (121) defined between two adjacent bends (12) and each bend (12) being attachable to an adjacent bend (12) via an adhesive agent (13) applied to each of the bends (12).

2. The trash can as claimed in claim 1 further comprising multiple plastic bags (20) received inside the body (10) and each plastic bag (20) having two opposite ears (21) to be tied into a knot after the plastic bag is full of waste.

3. The trash can as claimed in claim 1 or 2, wherein the body (10) is of a shape selected from the group consisting essentially of triangular, rectangular, pentagonal, hexagonal and circular forms.

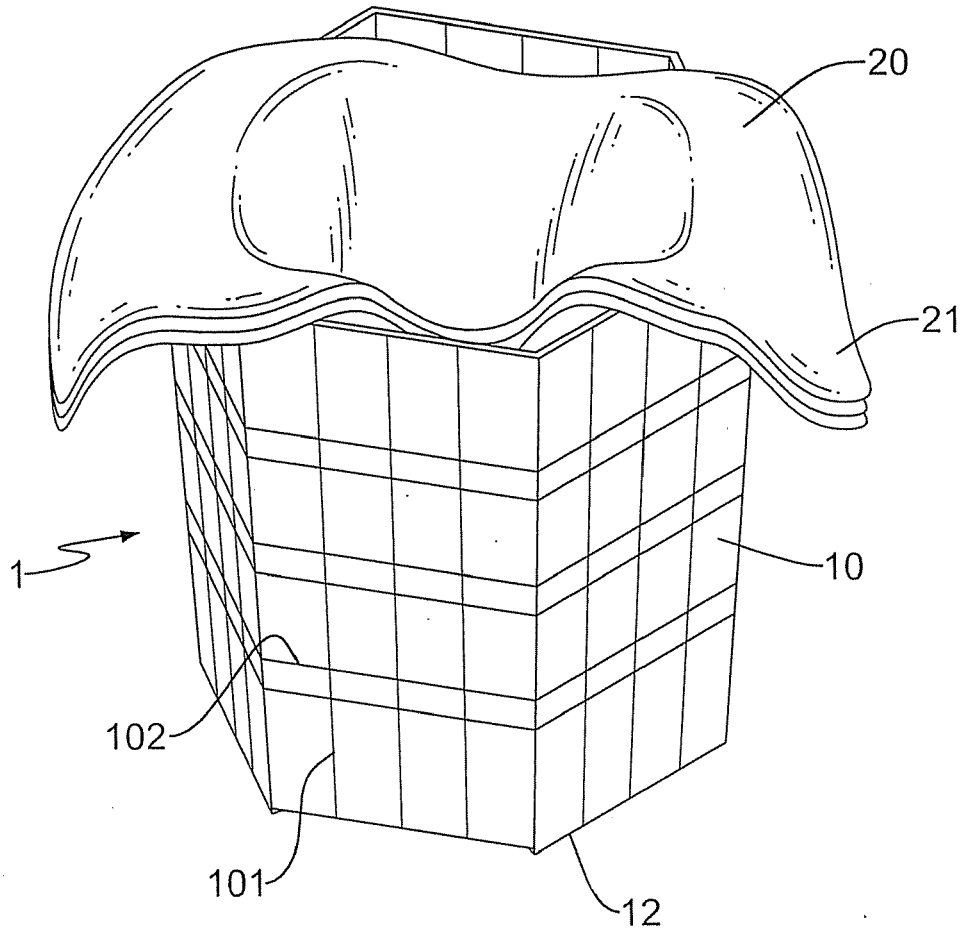


FIG.1

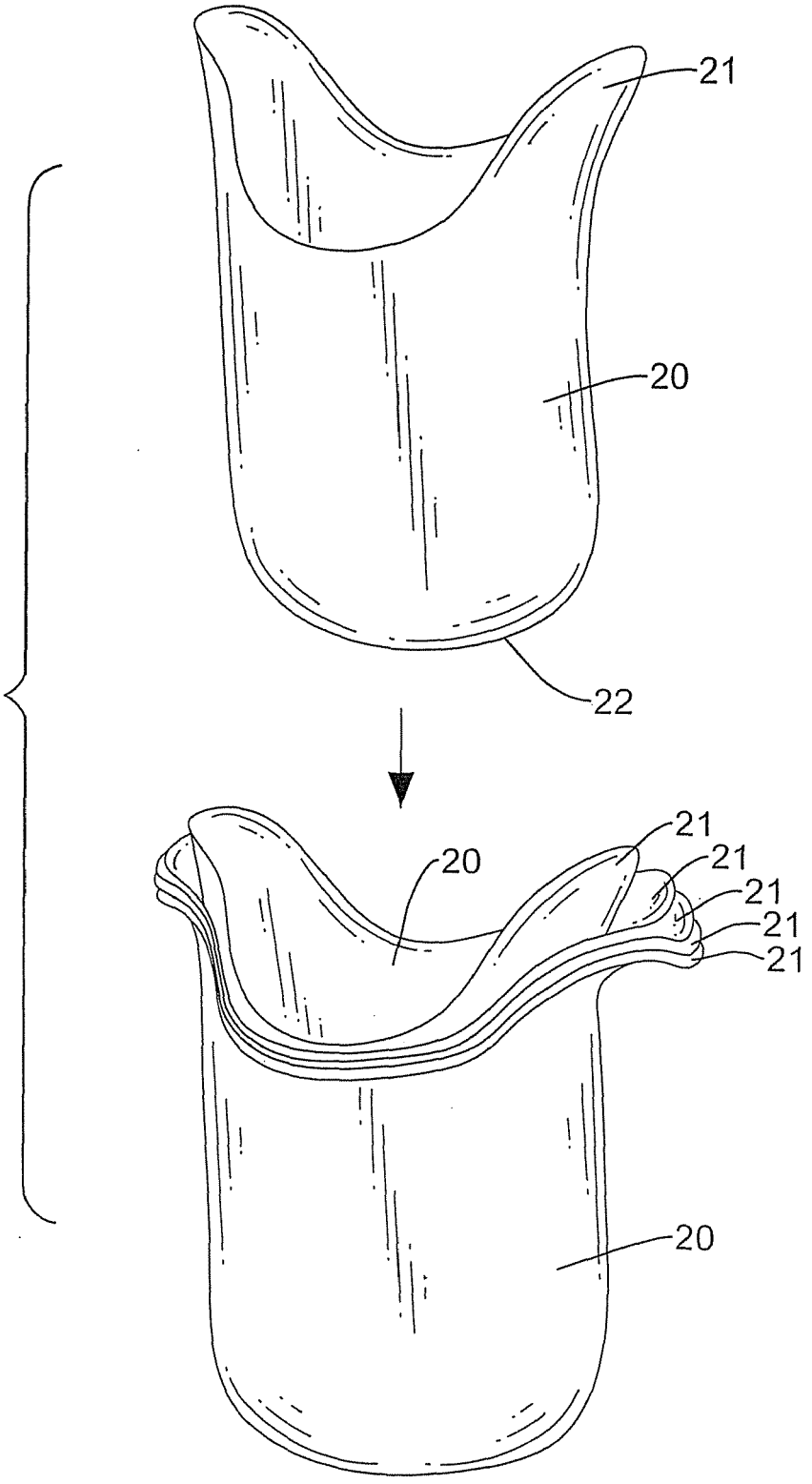


FIG.2

FIG.3A

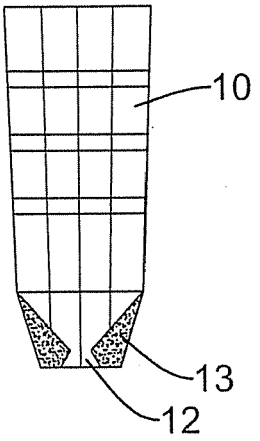


FIG.3B

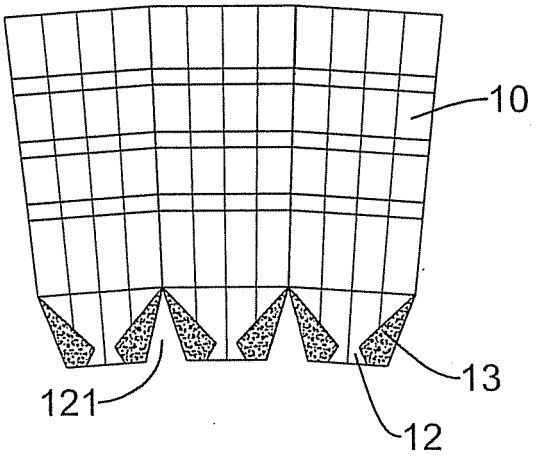
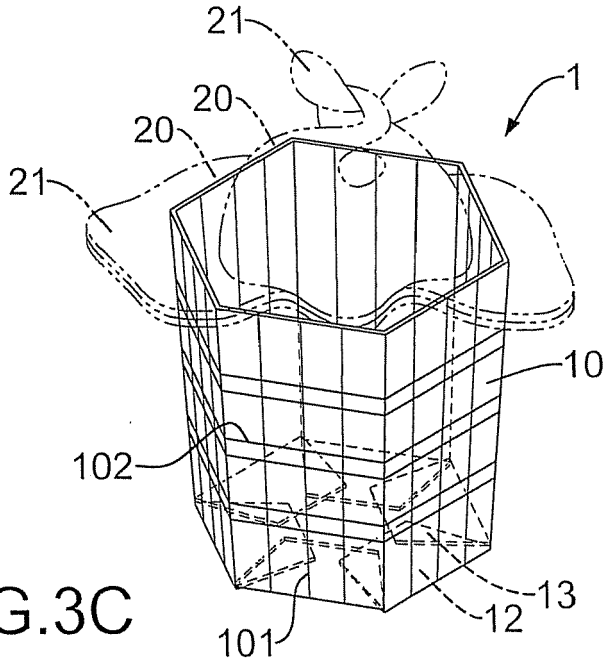


FIG.3C



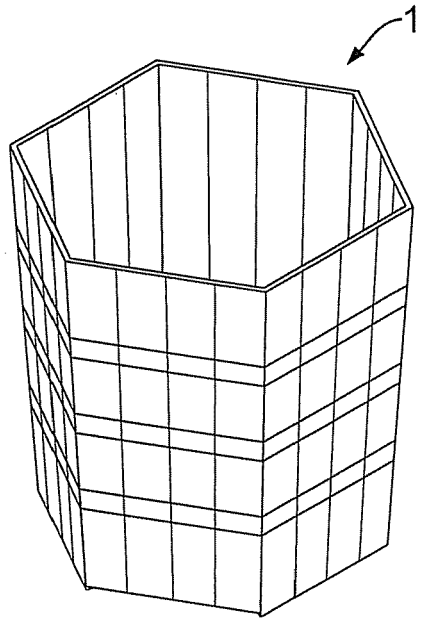


FIG.4

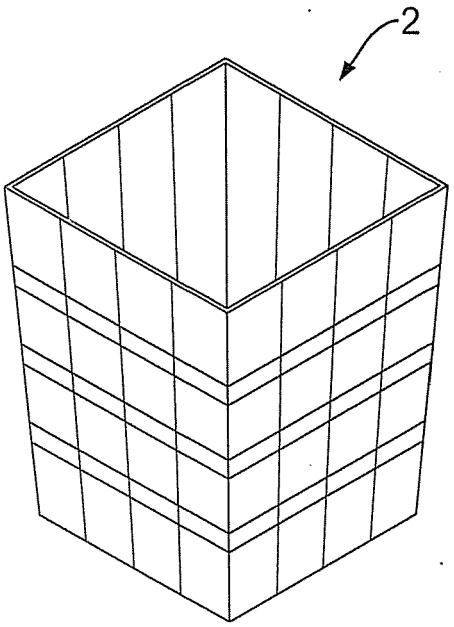


FIG.5

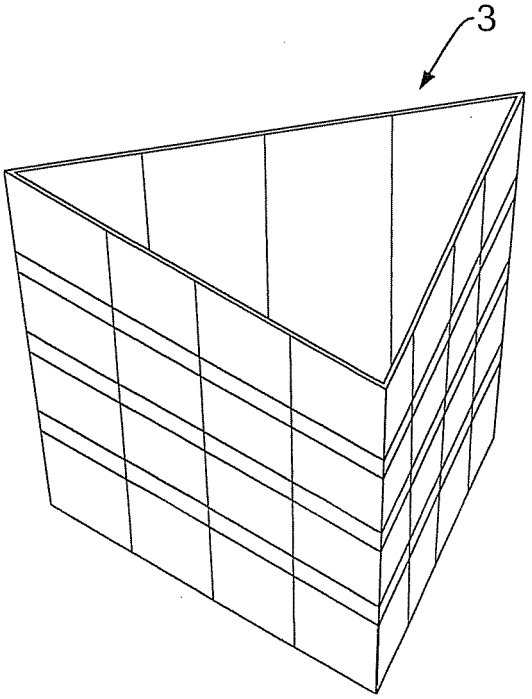


FIG.6

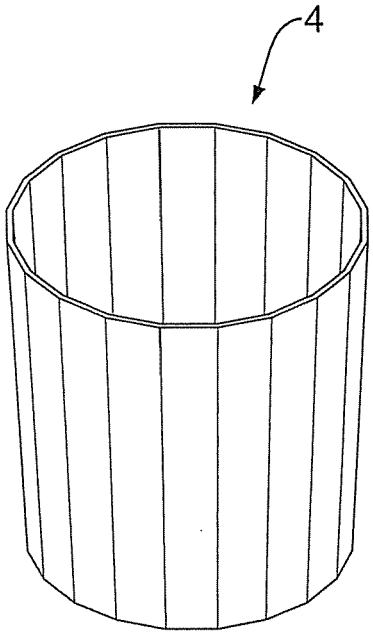


FIG.7

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EUROPEAN SEARCH REPORT

Application Number
EP 05 10 2594

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X Y	US 4 976 355 A (E. CRUTCHFIELD) 11 December 1990 (1990-12-11) * column 1, line 66 - column 2, line 16 * * figures 1-4 *	1,3 2	B65F1/06 B65D5/02 B65D5/04
Y	US 2002/190069 A1 (J. CUISINIER) 19 December 2002 (2002-12-19) * paragraph [0022] - paragraph [0025] * * figures 1,2,3a,3b *	2	
A	US 4 940 200 A (W. SAWYER ET AL.) 10 July 1990 (1990-07-10) * column 3, line 63 - column 6, line 27 * * figures 1-5 *	1-3	
A	US 5 363 980 A (ST. MULCAHY) 15 November 1994 (1994-11-15) * column 2, line 61 - column 4, line 59 * * figures 1-5 *	1-3	
A	DE 201 17 512 U (BOREALIS TECHNOLOGY OY) 28 March 2002 (2002-03-28) * the whole document *	1-3	TECHNICAL FIELDS SEARCHED (Int.Cl.7) B65F B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	26 August 2005	Smolders, R

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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26-08-2005

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