(11) **EP 2 181 931 A1**

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication: **05.05.2010 Bulletin 2010/18**

(21) Application number: 09171593.8

(22) Date of filing: 29.09.2009

(51) Int Cl.: **B65D** 43/02^(2006.01) **B65D** 25/54^(2006.01)

B65D 25/22 (2006.01)

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated Extension States:

AL BA RS

(30) Priority: 29.10.2008 US 260396

(71) Applicant: Ali Industries, Inc. Fairborn OH 45324 (US)

(72) Inventors:

 Ali, Terry Fairborn, OH 45385 (US)

 Ali, Christopher Beavercreek, OH 45440 (US)

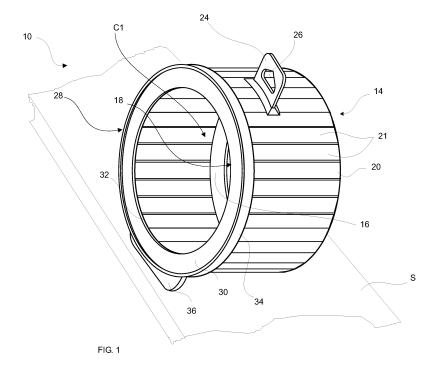
Ali, Frank
Xenia, OH 45385 (US)

(74) Representative: Kehl, Günther et al Kehl & Ettmayr Patentanwälte, Friedrich-Herschel-Straße 9 81679 München (DE)

(54) Bulk reclosable display package

(57) A reclosable bulk display package (10) includes a housing (14) having a back retaining surface (16) with an opening (18), a peripheral wall (20) connected thereto extending generally outward therefrom and terminating in a forward edge (22) to form an inner cavity for accepting an article, and a flange (24) extending from the wall and having an opening (26). A cover portion (28) is provided having a front retaining surface (30) having an opening (32), a peripheral wall edge (34) connected thereto and

extending generally laterally from the front retaining surface to form an inner cavity for accepting the forward edge (22) of the housing wall therein in a snap fit manner. A flange (36) extends from the wall edge (34) which serves a dual purpose as a tab to aid cover removal as well as a foot to form a part of a stand for shelf display to maintain the package in a position whereby the retaining surfaces are maintained generally normal and upright.



10

Description

FIELD OF THE INVENTION

[0001] The invention relates to display packages including a multifunctional display package. More particularly, the invention relates to a bulk package display having a product closure for removably containing articles therein and a cover for retaining the articles within the closure with a hanging support tab formed thereon and a base support for maintaining the display package in an upright manner when disposed on a support surface.

1

BACKGROUND OF THE INVENTION

[0002] There are numerous packages for storing or displaying articles. The packaging can be a function of the effect to be presented to the consumer. Display and presentation of merchandise are important aspects of retail marketing.

[0003] Display packages must not only be suitable for the effective presentation and marketing of the merchandise, but the manufacture of the packages must be efficiently produced and be designed to be easily adaptable to standard fixtures as well as to minimize the labor required by the retailer or jobber to unpack and display the merchandise.

[0004] In the case of sandpaper, most current market packaging includes cardboard or paper packages which are configured to house a plurality of sheets of sandpaper. With respect to certain articles, such as abrasive discs, existing packages suffer from several problems. For example, the packages are not suitable for display or storage in various retailer space or user space and lack of desirability in the market place.

[0005] There are reclosable display packages currently used for packaging and displaying consumer articles. For example, a common plastic package is a "clam shell" type package. Clam shell type package include a front and a back cover which hingedly connect and mate to one another at flange portions extending about the periphery thereof. The flange portions can include interlocking male and female portions and a tab for hanging the package. Such display packages are typically formed in a blister pack material, wherein a label or the like can be placed on or in the package in a visible manner which is formed in a manner which typically snaps fits about the product. Although some are vertically self-supporting, blister pack display packages is not as user friendly for reuse as this type package tends to be brittle and crack or break and renders reuse impractical. The cost for producing suitable display packages of a two-part interconnecting clam shell type system had reached the point where the manufacture of these display packages is becoming prohibitive.

[0006] Abrasive or sandpaper sheets are packaged in a manner such that the packages are hung in a vertical manner from a peg board or like for viewing and identification, taking up large amount of showroom square footage within a store. Alternatively, some retailer's space configuration only provides for stacking packages on shelves which limits the displaying of the goods.

[0007] It is also not uncommon for multiple sheets of a particular grit size to be sold in a package. The consumer typically does not require multiple sheets of a particular grit size. Rather, it is preferred to be able to select only the number and type of sandpaper sheets necessary to perform a particular job and from their standpoint it may be desirable to have a variety of grit size in one package.

[0008] The present inventor provided one attempt at solving the problem in commonly owned patent 6427832 which provided a reclosable display package of flexible thermoformed plastic material. While there has been some improvement, there continues to be a need for a more suitable package for abrasive discs for today's market.

20 [0009] The present invention solves the aforementioned and other problems of the prior art, and provides improved bulk display package of a relatively rigid material for displaying articles, particularly abrasive discs.

25 SUMMARY OF INVENTION

[0010] It is an object of the present invention to provide a bulk display package for containing and displaying articles of manufacture.

[0011] It is another object of the invention to provide a reclosable package wherein the article(s) being displayed are easily viewed.

[0012] It is yet another object of the invention to provide a relatively efficient and inexpensive reclosable package for displaying merchandise wherein the reclosable package is formed in a manner to permit multiple display and storage capability.

[0013] According to the invention, there is provided a reclosable bulk display package of plastic material for packaging and displaying an article therein. The reclosable bulk display package has a first portion having a back retaining surface having an opening therein, a peripheral wall surface connected to the back retaining surface and extending generally outward therefrom and terminating in a forward edge of the wall surface wherein the back retaining surface and wall surface form a cavity for accepting the article, and a flange extending laterally from the wall surface and having an opening therein to form a hanging support surface.

[0014] A second cover portion is provided having a front retaining surface having an opening therein, a peripheral wall edge connected thereto and extending generally laterally from the retaining surface wherein the front retaining surface and wall edge form a cavity for accepting the forward edge of the wall surface therein in a snap fit manner. A flange extends laterally from the wall edge which serves a dual purpose as a tab to aid in removing the second cover portion from the first portion as well as

40

45

15

a foot which when the portions are connected and disposed with their respective wall surface and wall edge adjacent a support surface aids to maintain the package in a position whereby the retaining surfaces are maintained generally normal and upright relative to the support surface.

[0015] The portions of the package are complementary formed to be removably connected to form an enclosure about the article. Each of the openings in the retaining surfaces permits the article to be easily viewed. The flange of the first portion thus forms a tab portion by which the package may be hung on a display rack or similar device for displaying the packaged article. The wall surface and wall edge can be configured to house sheets or discs of sandpaper.

[0016] These and other objects will be readily apparent from the following description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017]

FIG. 1 is a perspective view of the present invention.

FIG. 2 is a side view of the present invention.

FIG. 3 is a front view of the invention.

FIG. 4 is a front view of a part of the invention.

FIG. 5 is a cross-section of FIG. 4 through line 5-5.

FIG. 6 is a side view of another portion of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0018] Referring now to the drawings, the reclosable bulk display package present invention is depicted in the figures thereof and is generally designated by the numeral 10. The reclosable bulk display package 10 is shown with abrasive sanding sheet material 12 (discs) housed therein. The package 10 can be formed from a resilient plastic material such as polypropylene.

[0019] The display package 10 has a housing portion 14 having a back retaining surface 16 having an opening 18 therein. A peripheral wall surface 20 is connected to the back retaining surface 16 and extends generally outward therefrom and terminates in a forward edge 22 of the wall surface 20. The back retaining surface 16 and wall surface 20 forms a cavity C1 for accepting the sanding discs 12. A flange 24 extends laterally from the wall surface 20 and has an opening 26 therein to form a hanging support surface. The flange 24 thus forms a tab by which the package 10 may be hung on a display rack or similar device for displaying the packaged sandpaper 12. As a design and utility feature, the wall 20 can include a series of integrally formed panels 21 which provide inner cavity which is generally cylindrical with a dimension to retain the discs 12 in a transverse manner between the panels 21. It is contemplated that other geometric shapes, such as cylindrical may be employed to house

sandpaper discs 12.

[0020] A cover portion 28 is provided having a front retaining surface 30 having an opening 32 therein. A peripheral wall edge 34 is connected to and extends generally laterally from the front retaining surface 30. The front retaining surface 30 and wall edge 34 forms a cavity C2 for accepting the forward edge 22 of the wall surface 20 therein in a snap fit manner.

[0021] A flange 36 extends laterally from the wall edge 34 and serves a dual purpose as a tab to aid in removing the cover portion 28 from the housing portion 14 as well as a foot which when the portions 28 and 14 are connected and disposed with their respective wall surface 20 and wall edge 34 adjacent a support surface shelf S and aids to maintain the package in a position whereby the retaining surfaces 16 and 30 are maintained generally normal and upright relative to the support surface shelf S. The portions of the package are complementary formed to be removably connected to form an enclosure about the sandpaper 12. Each of the openings 18 and 32 in the retaining surfaces 16 and 28, respectively, permit the sandpaper discs 12 to be easily viewed. Each of the retaining surface 16 and 28 can include indicia relating to the sandpaper 12 packaged therein.

[0023] Thus, the present invention provides a unique packaging device which is extremely well suited for containing and displaying abrasive discs and other articles. The invention enables the discs to be shown and displayed in varying retailer and user environments thereby reducing shelf space requirements. Also, the package maintains the discs in a relatively flat position to prevent curl. It is understood that the invention is not confined to the particular construction and arrangement herein illustrated and described, but embraces such modified forms thereof as come within the scope of the following claims. [0024] While a preferred embodiment has been set forth above, it is intended only to present the invention in an embodiment. It will be readily apparent to those skilled in the art that many obvious modifications, derivations, and improvements exist and are intended to be included within the scope of the invention and appended claims hereto.

45 Claims

40

50

1. A reclosable bulk display package for packaging and displaying an article therein, which comprises:

a housing portion having a back retaining surface having an opening therein, a peripheral wall surface connected to said back retaining surface and extending generally outward therefrom and terminating in a forward edge of said wall surface wherein said back retaining surface and wall surface form an inner cavity for accepting said article, and a flange extending laterally outward from said wall surface and having an opening

20

30

40

therein to form a hanging support surface; and a cover portion is provided having a front retaining surface having an opening therein, a peripheral wall edge connected thereto and extending generally laterally from said front retaining surface wherein said front retaining surface and wall edge form an inner cavity for accepting said forward edge of said wall surface of said housing therein in a snap fit manner, and a flange extending laterally outward from said peripheral wall edge which serves a dual purpose as a tab to aid in removing said cover portion from said housing portion as well as a foot which when said portions are connected and disposed with their respective wall surface and wall edge adjacent a support surface to maintain said package in a position whereby said front and back retaining surfaces are maintained generally normal and upright relative to said support surface.

2. The bulk display package of claim 1, wherein said package is made of plastic material.

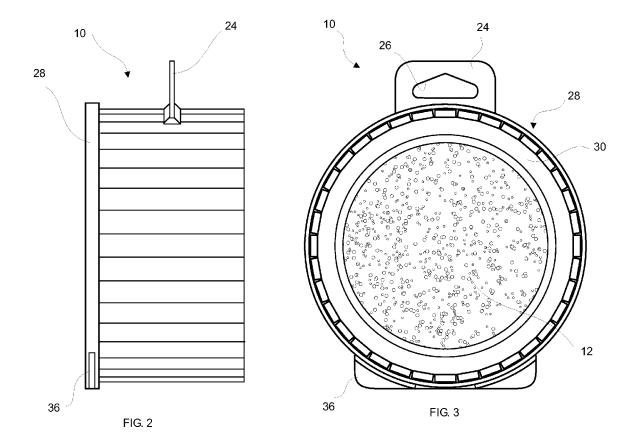
- **3.** The bulk reclosable display package of claim 1, wherein said wall surface and said wall edge are generally annular.
- 4. The bulk reclosable display package of claim 1, wherein said cavity of said housing portion is of a shape and size to retain discs of abrasive material to prevent curl thereof.
- **5.** The bulk reclosable display package of claim 1, wherein each of said retaining surfaces is generally flat.
- **6.** The bulk reclosable display package of claim 1, wherein said retaining surface provides indicia relating to the article packaged therein.
- The bulk reclosable display package of claim 1, wherein said package is for displaying sheets of abrasive material.
- **8.** A reclosable bulk display package for packaging and displaying an article therein, which comprises:

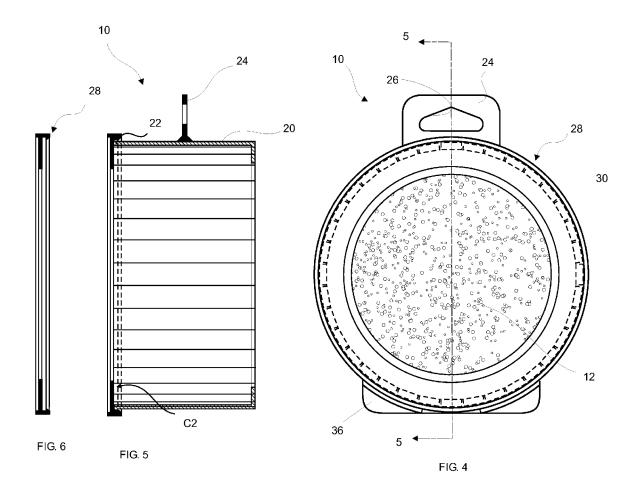
a generally cylindrical housing portion having a generally annular back retaining surface having an opening therein, a peripheral wall surface connected to said back retaining surface and extending generally normal and outward therefrom and terminating in a forward edge of said wall surface wherein said back retaining surface and wall surface form an inner cavity for accepting said article, and a flange extending laterally outward from said wall surface and having an opening therein to form a hanging support sur-

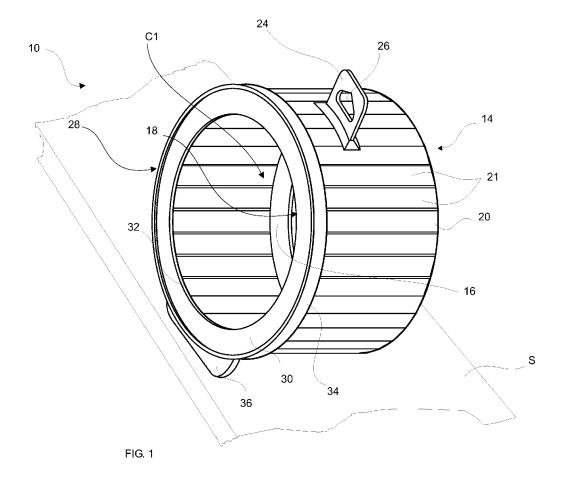
face: and

a generally annular cover portion is provided having an annular front retaining surface having an opening therein, a peripheral wall edge connected thereto and extending generally laterally and normal from said front retaining surface wherein said front retaining surface and wall edge form an inner cavity for accepting said forward edge of said wall surface of said housing therein in a snap fit manner, and a flange extending laterally outward from said peripheral wall edge which serves a dual purpose as a tab to aid in removing said cover portion from said housing portion as well as a foot which when said portions are connected and disposed with their respective wall surface and wall edge adjacent a support surface to maintain said package in a position whereby said front and back retaining surfaces are maintained generally normal and upright relative to said support surface.

- **9.** The bulk reclosable display package of claim 8, wherein said cavity of said housing portion is of a shape and size to retain discs of abrasive material to prevent curl thereof.
- The bulk reclosable display package of claim 8, wherein each of said retaining surfaces is generally flat.
- 11. The bulk reclosable display package of claim 8, wherein said retaining surface provides indicia relating to the article packaged therein.
- **12.** The bulk reclosable display package of claim 8, wherein said package is for displaying sheets of abrasive material.









EUROPEAN SEARCH REPORT

Application Number

EP 09 17 1593

Category	Citation of document with in	ndication, where appropriate,	Relevant	CLASSIFICATION OF THE
Jalegory	of relevant passa		to claim	APPLICATION (IPC)
Y	US 4 013 214 A (HAN 22 March 1977 (1977 * column 2, line 28 figures 1-5 *		1-12	INV. B65D43/02 B65D25/22 B65D25/54
Y,D	6 August 2002 (2002	I TERRY [US] ET AL) -08-06) - column 3, line 36;	1-12	
A	GB 2 229 705 A (HUN [GB]) 3 October 199 * page 3, line 13 - figures 1-4 *		1-2,5,7	
A	EP 0 117 673 A2 (MA 5 September 1984 (1 * page 3, line 2 - figures 1-8 *		1-5, 7-10,12	
A	GB 2 302 531 A (DOL MATERIALS LT [GB]) 22 January 1997 (19 * page 4, last para 24; figures 1-8 *		1-5, 7-10,12	TECHNICAL FIELDS SEARCHED (IPC)
	The present search report has I	•		
	Place of search	Date of completion of the search		Examiner
	Munich	3 March 2010	Ga1	li, Monia
X : parti Y : parti docu A : tech	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another to the same category nological background written disclosure	L : document cited for	the application other reasons	shed on, or

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 09 17 1593

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-03-2010

	ent document in search report		Publication date		Patent family member(s)		Publication date
US 4	013214	A	22-03-1977	NONE			
US 6	427832	B1	06-08-2002	US	2002079243	A1	27-06-200
GB 2	229705	Α	03-10-1990	NONE			
EP 0	117673	A2	05-09-1984	CA DE ES JP	1248050 3471074 285934 59209563	D1 U	03-01-198 16-06-198 01-11-198 28-11-198
GB 2	302531	Α	22-01-1997	NONE			

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82