(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau

(10) International Publication Number

WO 2010/099163 A3

(43) International Publication Date 2 September 2010 (02.09.2010)

(51) International Patent Classification: **B65D** 71/34 (2006.01) **B65D** 71/28 (2006.01) **B65D 5/46** (2006.01) B65D 5/54 (2006.01)

(21) International Application Number:

PCT/US2010/025177

(22) International Filing Date:

24 February 2010 (24.02.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

24 February 2009 (24.02.2009) 61/208,463

US

- (71) Applicant (for all designated States except US): GRAPHIC PACKAGING INTERNATIONAL, INC. [US/US]; 814 Livingston Court, Marietta, GA 30067 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): REQUENA, Emili [ES/ES]; Sant Cugat 21, E-08700 Igualada (ES). GON-ZALEZ, Ana [ES/ES]; Carretera De Manresa, E-53 3, 08700 Igualada (ES).
- Agents: CLAERBOUT, Andrew, N. et al.; Womble Carlyle Sandridge & Rice, PLLC, P.O. Box 7037, Atlanta, GA 30357-0037 (US).
- Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

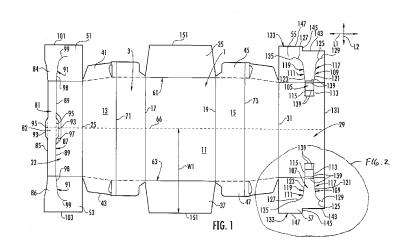
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

28 October 2010

(54) Title: CARTON WITH HANDLE



(57) Abstract: A carton for containing a plurality of articles. The carton comprises a first top panel, a second top panel, a bottom panel, a first side panel, and a second side panel. A handle comprises a first handle panel and a second handle panel. The first handle panel comprises a central portion in the top panel and an end portion in a first top end flap. The second handle panel comprises a first portion in the second top panel and a second portion in a second top end flap. The central portion of the first handle panel is attached to the first portion of the second handle panel and the end portion of the first handle panel is attached to the second portion of the second handle panel.





International application No. PCT/US2010/025177

A. CLASSIFICATION OF SUBJECT MATTER

B65D 71/28(2006.01)i, B65D 5/46(2006.01)i, B65D 71/34(2006.01)i, B65D 5/54(2006.01)i

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 71/28; B65D 5/46; B65D 5/465; B65D 5/468

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: carton, handle, strap, reinforce

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6131803 A1 (JAMES R. OLIFF et al.) 17 October 2000 See Figure 3 and Column 2 Line 28 - Column 3 Line 23.	1-33
A	US 5992733 A1 (JEAN-MANUEL GOMES) 30 November 1999 See Figure 2 and Column 2 Line 13 - Column 3 Line 7.	1-33
А	EP 0473266 A1 (THE MEAD CORPORATION) 04 March 1992 See Figure 1 and Column 2 Line 12 - Column 3 Line 11.	1-33

		Further	documents	are	listed	in	the	conti	nuatior	ιof	`Box	C.
--	--	---------	-----------	-----	--------	----	-----	-------	---------	-----	------	----

 \boxtimes s

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 application or patent 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 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 31 AUGUST 2010 (31.08.2010)

Date of mailing of the international search report

02 SEPTEMBER 2010 (02.09.2010)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

KIM, Tae Soo

Telephone No. 82-42-481-8468



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/025177

Patent document cited in search report Publication date Publication Patent family member(s) Publication date US 6131803 A1 17. 10.2000 AU 2000–56160 A1 09.01.2004 AU 2000–56160 B2 15.01.2004 CA 2340756 C 30.08.2005 CA 2340756–A1 28.12.2006 CN 1241793 C0 15.02.2006 CN 1320094 A0 31.10.2007 EP 1105314 A1 13.06.2007 EP 1105314 B1 24.11.2004 EP 1518792 A1 30.03.2005
AU 2000-56160 B2 15.01.2004 CA 2340756 C 30.08.2005 CA 2340756-A1 28.12.2006 CN 1241793 C0 15.02.2006 CN 1320094 A0 31.10.2006 EP 1105314 A1 13.06.2006 EP 1105314 B1 24.11.2004
JP 2003-502230 A 21.01.2003 KR 10-0785977 B1 14.12.2003 TW 431994 A 01.05.2003 US 6129266 A1 10.10.2003 US 6260755 B1 17.07.2003 W0 00-78618 A1 28.12.2003
US 5992733 A1 30.11.1999 EP 0844970 A1 13.01.1999 EP 0844970 A1 03.06.1998 EP 0844970 B1 01.12.1999 UP 11-512060 A 19.10.1999 W0 97-07031 A1 27.02.1997
P 0473266 A1 04.03.1992 DE 69124031 D1 20.02.1997 DE 69124031 T2 22.05.1997 EP 0473266 B1 08.01.1997 ES 2095296 T3 16.02.1997