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

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 2 February 2006 (02.02.2006)

PCT

(10) International Publication Number WO 2006/01228 A3

(51) International Patent Classification: *B65D 33/01* (2006.01)

(21) International Application Number:

PCT/US2005/022309

(22) International Filing Date: 22 June 2005 (22.06.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/880,784 29 June 2004 (29.06.2004) US

(71) Applicant (for all designated States except US): THE GLAD PRODUCTS COMPANY [US/US]; 1221 Broadway, Oakland, CA 94612 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ZIMMERMAN, Dean, A. [US/US]; 7738 Cedar Creek Drive, West Chester, OH 45069 (US). BERGMAN, Carl, L. [US/US]; 6674 Quailrun Court, Loveland, OH 45140 (US). GAW, Chinto, B. [US/US]; 2264 Regis Court, Cincinnati, OH

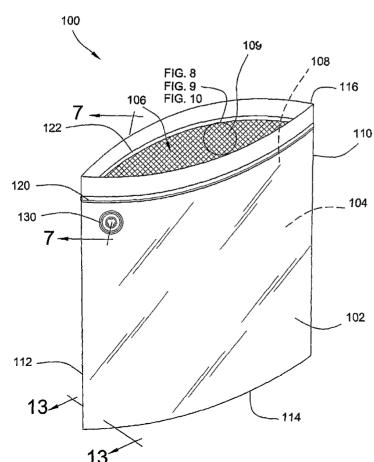
45244 (US). **BORCHARDT, Michael, G.** [US/US]; 7201 Adams Street, Willowbrook, IL 60527 (US).

(74) Agents: FEIX, Thomas, C. et al.; The Glad Products Company, 1221 Broadway, Oakland, CA 94612 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

[Continued on next page]

(54) Title: FLEXIBLE STORAGE BAG



(57) Abstract: The flexible storage bag includes overlaying first and second sidewalls defining an internal volume that can be accessed form an open top edge. To evacuate air from the internal volume after the open top edge has been closed, the bag includes a one-way valve element attached to the first sidewall and communicating with the internal volume. To prevent the one-way valve element from becoming clogged by the opposing second sidewall, the bag also includes a clearance member that maintains at least a partial clearance between the first and second sidewalls proximate the valve element. clearance member can take many forms such as a textured portion on the second sidewall that includes evacuation passages which provide air in the internal volume access to the valve element. a permeable element covering the valve element, and a rigid or compressible structure that spaces the second sidewall from the valve element.



WO 2006/012228 A3



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report: 3 January 2008

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/22309

A. CLAS	SIFICATION OF SUBJECT MATTER B65D 33/01(2006.01)			
USPC: 383/103 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) U.S.: 383/103, 44, 100; 53/405				
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)				
C. DOCU	JMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where ap	ppropriate, of the relevant passages	Relevant to claim No.	
Х	US 5,228,271 A (Wallace) 20 July 1993 (20.07.1993)	, see entire document.	18-19, 21-22, 35, 38-39	
Y			23, 41, 43, 45, 47	
х	US 5,450,963 A (Carson) 19 September 1995 (19.09.	24-34		
Y			41, 44, 46	
Y	US 6,059,457 A (Sprehe et al.) 9 May 2000 (09.05.2000), see entire document.		1-17, 23, 41-47	
Y	US 2,778,171 (Taunton) 22 January 1957 (22.01.195	1-17, 41-42, 44, 46		
Further	documents are listed in the continuation of Box C.	See patent family annex.		
date		date and not in conflict with the applic	ater document published after the international filing date or priority late and not in conflict with the application but cited to understand the principle or theory underlying the invention	
•	retevance plication or patent published on or after the international filing date	"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		
"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)		"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		
"O" documen	t referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the	ne art	
"P" document published prior to the international filing date but later than the "&" document member of the same patent fa priority date claimed				
Date of the actual completion of the international search Date of mailing of the international search report			ch report	
15 October 2007 (15.10.2007) Name and mailing address of the ISA/IIS Authorized officer			$\rightarrow \frown$	
Name and maining address of the 157005		ا ما ما		
Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450		Nathan Newhouse Telephone No. 571-272-3700		
Facsimile No. (571) 273-3201				

Form PCT/ISA/210 (second sheet) (April 2005)