(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 10 February 2005 (10.02.2005)

PCT

(10) International Publication Number WO 2005/012092 A3

(51) International Patent Classification⁷: B65B 31/00

(21) International Application Number:

PCT/US2004/024923

(22) International Filing Date: 30 July 2004 (30.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/492,090 31 July 2003 (31.07.2003) US 10/897,570 23 July 2004 (23.07.2004) US

- (71) Applicant (for all designated States except US): TILIA INTERNATIONAL, INC. [US/US]; 303 Second Street, North Tower, 5th Floor, San Francisco, CA 94107 (US).
- (72) Inventors: HIGER, Landen; *. ALBRITTON, Charles, Wade; *.
- (74) Agent: COLEMAN, Brian, R.; Perkins Coie LLP, 101 Jefferson Drive, Menlo Park, CA 94025 (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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

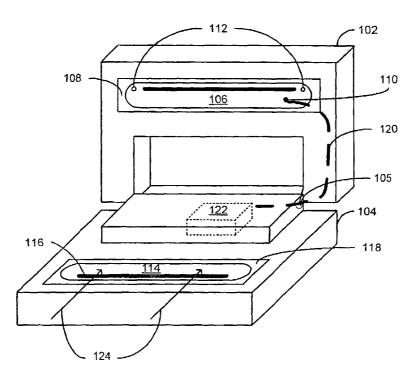
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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

[Continued on next page]

(54) Title: VACUUM SEALING SYSTEM WITH A SEALING ELEMENT INSIDE AN EVACUATION CHAMBER



(57) **Abstract:** A vacuum packaging appliance for sealing items in a plastic gab is disclosed. The appliance comprises a lid 170 adapted to define a vacuum chamber when it is moved to a closed position relative to a trough in the base of the device. The trough in the lower portion (38) of the device contains a heat-sealing element used to seal the contents of the bag once the vacuum packaging is complete.

WO 2005/012092 A3



(88) Date of publication of the international search report: 17 March 2005

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/US04/24923

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : B65B 31/00							
US CL : 53/512							
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.: 53/512, 510, 511, 434							
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.							
Cate	ategory * Citation of document, with indication, where a				Relevant to claim No.		
	A	US 6,058,998 A (KRISTEN) 09 May 2000 (09.05.20	000), See t	he entire document.		1-33	
	A	US 4,941,310 A (KRISTEN) 17 July 1990 (17.07.19	990), See th	ne entire document.		1-33	
4	A US 4,561,925 A (SKERJANEC et al.) 31 December doucment.			12.1985), See the entir	re	1-33	
	A	US 4,541,224 A (MUGNAI) 17 September 1985 (17	'.09.1985),	See the entire doucme	ent.	1-33	
Ш	Further	documents are listed in the continuation of Box C.		See patent family anne	ex.		
Special categories of cited documents:			"T" later document published after the i			nternational filing date or priority	
"A" document defining the general state of the art which is not considered to be of particular relevance			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				
"E"	"E" earlier application 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			
	" 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)		"Υ"	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"	document	ment referring to an oral disclosure, use, exhibition or other means		being obvious to a person skilled			
"P" document published prior to the international filing date but later than the priority date claimed			"&" document member of the same patent family				
Date of the actual completion of the international search 30 December 2004 (30.12.2004)				Date of mailing of the international search report 28 JAN 2005			
Name and mailing address of the ISA/US Authorized officer						000	
		1 Stop PCT, Attn: ISA/US	7~	The / Lucy			
Commissioner for Patents P.O. Box 1450			Sameh Tawfik Sheili H. V Paralegal Sne			of Consider	
Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230				Telephone No. 571-272-4470 Tech. Center 3700			