(19) World Intellectual Property Organization

International Bureau





PCT

(43) International Publication Date 18 October 2007 (18.10.2007)

(51) International Patent Classification:

A45C 13/06 (2006.01) **B65B 67/04** (2006.01) **B65D 33/02** (2006.01)

(21) International Application Number:

PCT/US2007/008791

(22) International Filing Date: 11 April 2007 (11.04.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/401,819 10 April 2006 (10.04.2006) US

(71) Applicants and

- (72) Inventors: KUCERA, Robert [US/US]; Post Office Box 27951, Concord, CA 94527 (US). KUCERA, Beverly [US/US]; Post Office Box 27951, Concord, CA 94527 (US).
- (74) Agent: DERGOSITS, Michael; Dergosits & Noah LLP, Four Embarcadero Center, Suite 1450, San Francisco, CA 94111 (US).

(10) International Publication Number WO 2007/117691 A3

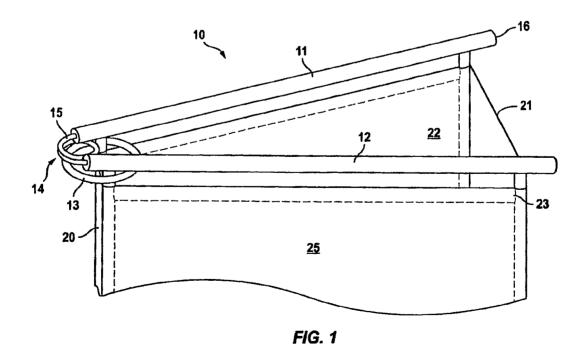
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, HU, IE, IS, IT, LT, LU, LV, MC, MT, 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
- the filing date of the international application is within two months from the date of expiration of the priority period
- (88) Date of publication of the international search report:

6 November 2008

(54) Title: CLOSURE DEVICE



(57) Abstract: A closure device for use in selectively opening and closing a receptacle. The closing device includes a pair of linear rods (11, 12) having proximal and distal ends and biasing means (14) connected to the proximal ends of the linear rods for urging the distal ends for the linear rods away from one another. A closure loop (13) is provided which is sized to pass along the linear rods.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/08791

A. CLAS IPC:	SSIFICATION OF SUBJECT MATTER A45C 13/06(2006.01);B65D 33/02(2006.01);B65	B 67/04 (2006.01)		
USPC: According to	150/120;383/33,34;248/99 International Patent Classification (IPC) or to both nat	tional classification and IPC		
B. FIELI	DS SEARCHED			
Minimum do	cumentation searched (classification system followed b 50/120; 383/33, 34; 248/99	oy classification symbols)		
Documentation	on searched other than minimum documentation to the	extent that such documents are included in	n the fields searched	
	ta base consulted during the international search (name	e of data base and, where practicable, searc	ch terms used)	
	UMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a		Relevant to claim No.	
X	US 2,03,1506 A (Ritter) 18 February 1936 (18.02.36	o), see figures.	1, 3-9, 11-13	
Y			1, 3-9, 11-13	
Y	US 2,051,413 A (Lowenstein) 18 August 1936 (18.08.1936), see figures.		1, 3-9, 11-13	
, Y	US 6,471,267 A (Asazuma) 29 October 2002(29.10.2002), see figures.		2, 10	
Ϋ,	US 4,323,272 A (Fortier) 06 April 1982 (06.04.1982), see figures.		1, 3-9, 11-13	
Y	US 321,505 A (Jenkinson) 07 July 1885 (07.07.1885), see portion e in Fig. 7.		2, 10	
Α	US 4,434,829 A (Barnard) 06 March 1984 (06.03.1984), see figures.		1-13	
		·		
Further	documents are listed in the continuation of Box C.	See patent family annex.		
* S	Special categories of cited documents: "T" later document public		published after the international filing date or priority conflict with the application but cited to understand the	
"A" document defining the general state of the art which is not considered to be of particular relevance		principle or theory underlying the invention		
•	plication or patent published on or after the international filing date	"X" document of particular relevance; the clamed 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) "O" document referring to an oral disclosure, use, exhibition or other means		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the documents combined		
		with one or more other such document obvious to a person skilled in the art		
"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		Date of mailing of the international search	_	
09 July 2008 (09.07.2008)		Authorized officer	2008	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US		hustra	HD .	
Commissioner for Patents		Tri M. Mai		
	. Box 1450 xandria, Virginia 22313-1450	Telephone No. (571)242-4050	7001	
Facsimile No	. (571) 273-3201		1001	
Form PCT/ISA	J210 (second sheet) (April 2007)			

INTERNATIONAL SEARCH REPORT

International application No. PCT/US07/08791

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No	
A	US 1,887,940 A (Marinsky) 15 November 1932 (15.11.1932), see figures.	1-13	
Α.	US 972,870 A (Kandlbinder) 18 October 1910 (18.10.1910), see figures.	1-13	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/08791

	16170507708751			
Box IV TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)				
The abstract is too long (PCT Rule 8.1(b)). The abstract must be less than 150 words, or 200 words when no figure is to be published.				
NEW ABSTRACT				
A closure device for use in selectively opening and closing a receptacle. The closing device includes a pair of linear rods (11, 12) having proximal and distal ends and biasing means (14) connected to the proximal ends of the linear rods for urging the distal ends for the linear rods away from one another. A closure loop (13) is provided which is sized to pass along the linear rods.				
	•			
	·			