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

# (19) World Intellectual Property Organization

International Bureau



# 

# (10) International Publication Number WO 2012/021268 A3

(43) International Publication Date 16 February 2012 (16.02.2012)

(51) International Patent Classification: *B65D 47/20* (2006.01) *B65D 47/06* (2006.01)

(21) International Application Number:

PCT/US2011/044599

(22) International Filing Date:

20 July 2011 (20.07.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/856,393

13 August 2010 (13.08.2010)

US

(72) Inventor; and

(71) Applicant: STEUER, Paul, R. [US/US]; 19 Squire Rd, Hawthorn Woods, IL 60047 (US).

(74) Agent: JUFFERNBRUCH, Daniel, W.; Patents And Licensing Llc, 28 Barrington Bourne, Barrington, IL 60010-9605 (US).

(81) 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.

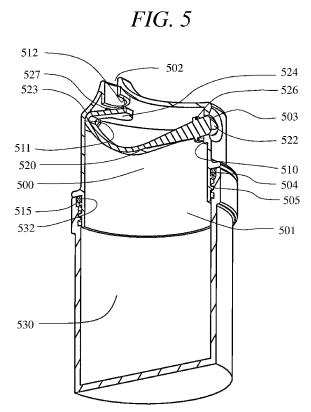
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE,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

#### Published:

— with international search report (Art. 21(3))

[Continued on next page]

#### (54) Title: SEALED CONTAINER WITH INTEGRAL BUTTON AND ORIFICE SEAL



(57) Abstract: A cover assembly (500) attaches to a container (530) and has a dispensing orifice (502) and a substantially perpendicular button opening (510) on a side with an actuator button (522). A single piece valve beam (520) of a deflectable material has the actuator button located on one end and a fulcrum (523) located on an opposite end. An inner region of the cover assembly has a retention surface (511) opposite the actuator button accommodating the fulcrum. The single piece valve beam is held between the button opening and the retention surface by deflection of the beam and rotation about the fulcrum such that a sealing surface (527) moves away from the dispensing orifice when the actuator button is pressed. The integral arm can alternatively be cantilevered off the valve beam or from a stem location (743), to respectively rotate in a same or opposite direction than at the fulcrum.

WO 2012/021268 A3



 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: 26 April 2012

International application No. PCT/US2011/044599

#### A. CLASSIFICATION OF SUBJECT MATTER

#### B65D 47/20(2006.01)i, B65D 47/06(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 47/20; B65D 47/06

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: dispensing, sealing, deflect, orifice, cover and similar terms

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	US 04094433A (JODY L. NUMBERS) 13 June 1978	1-5,8-9,12-20		
A	See column 2, line 50 - column 4, line68 and figs. 1 - 3.	6-7,10-11		
X	US 03972443A (KENNETH J. ALBERT ) 03 August 1976	1-3,5,8-9,12-20		
A	See column 3, line 16 - column 4, line63 and figs. 1 - 3.	4,6-7,10-11		
X	US 03964631A (KENNETH J. ALBERT) 22 June 1976	1-3,8-9,12-20		
A	See column 2, line 47 - column 4, line 21 and figs. 2 - 3.	4-7,10-11		
X	US 04212408A (JOSEPH F. VALENZONA) 15 July 1980	1-3,5,8-9,12-20		
A	See column 3, line 42 - column 6, line 48 and figs. 3 - 5.	4,6-7,10-11		
A	US 03967748A (KENNETH J. ALBERT) 06 July 1976 See column 3, line 35 - column 5, line 41 and fig. 2.	1-20		
A	US 04133446A (KENNETH J. ALBERT) 09 January 1979 See column 4, line 14 - column 5, line 63 and figs. 2 - 4.	1-20		

		Further	documents	are	listed	in	the	cont	inua	tion	of	Box	C.
--	--	---------	-----------	-----	--------	----	-----	------	------	------	----	-----	----

 $\times$ 

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 06 MARCH 2012 (06.03.2012)

Date of mailing of the international search report

07 MARCH 2012 (07.03.2012)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 189 Cheongsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

HONG, JUNG HYE

Telephone No. 82-42-481-5461



## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

## PCT/US2011/044599

	document n search report	Publication date	Patent family member(s)	Publication date
US 04	4094433A A	13.06.1978	JP 53-089585 A	07.08.1978
US 00	3972443A A	03.08.1976	None	
US 00	3964631A A	22.06.1976	None	
US 04	4212408A A	15.07.1980	None	
US 00	3967748A A	06.07.1976	JP 52-009163 A	24.01.1977
US 04	4133446A A	09.01.1979	None	