



- (51) International Patent Classification:  
*B67B 7/48* (2006.01)
- (21) International Application Number:  
PCT/IB2012/055805
- (22) International Filing Date:  
22 October 2012 (22.10.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
13/310,060 2 December 2011 (02.12.2011) US
- (71) Applicant: **KIMBERLY-CLARK WORLDWIDE, INC.**  
[US/US]; Neenah, Wisconsin 54956 (US).
- (72) Inventors: **LIEN, Khoa, T.**; 520 Arcaro Drive, Milton,  
Georgia 30004 (US). **LIN, Brian, E.**; 2149 Millenium  
Way, NE, Atlanta, Georgia 30319 (US).
- (74) Agents: **ROBINSON, James, B.** et al.; 2300 Winchester  
Road, Neenah, Wisconsin 54956 (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, BN, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,  
RW, 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.

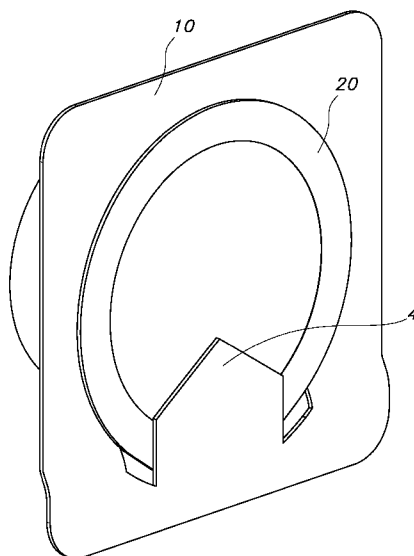
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,  
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,  
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, 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))
- 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:  
1 August 2013

(54) Title: LID PIERCER AND KIT



**FIG. 4**

(57) Abstract: The present disclosure describes a lid piercer (10) that pierces or punctures the lid (24) of a small container (20). The container (20) may hold a filler that is a liquid, gel, powder or granules needed for a specific task. The lid piercer (10) is desirably usable with one hand. Also provided is an oral care kit that contains a lid piercer (10); such a kit includes a bag (30) containing im-  
plements (32) needed to perform oral care for a patient. The kit also has a container (20) of oral care solution and the container (20) is made from a cup (22) with a top or lid (24) covering it. The kit also has a lid piercer (10) disposed in relation to the container (20) such that a user may bend the tip (4) of the lid piercer (10) into the top (24) of the container (20) to pierce the top (24) and release the oral care solution.



# INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2012/055805

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. B67B7/48  
 ADD.  
 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)  
 B67B B65D  
 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)  
 EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 10 2008 021537 A1 (KAUFMANN DIETER [DE]; TOPP DANIELA [DE]) 5 November 2009 (2009-11-05) figures 1-2b paragraphs [0024] - [0031]	1,2,4-7
X	DE 20 2008 000433 U1 (KOEKKE BARBARA [DE]) 3 April 2008 (2008-04-03) figures 1-21 paragraphs [0042] - [0049]	1-7
X	FR 2 385 599 A1 (CERVINKA FRANZ [AT]) 27 October 1978 (1978-10-27) figures 1-6 pages 2-3	1-7
	----- -/--	

Further documents are listed in the continuation of Box C.       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 another 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  <b>15 February 2013</b>	Date of mailing of the international search report  <b>05/06/2013</b>
--	---

Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer   <b>Pardo, Ignacio</b>
--	---

## INTERNATIONAL SEARCH REPORT

International application No PCT/IB2012/055805
---

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 581 768 A (O'GASEY THORNTON E) 8 January 1952 (1952-01-08) figures 1-7 -----	1-7
X	DE 20 2007 010176 U1 (KOHNZ FRANK [DE]) 27 September 2007 (2007-09-27) figures 1-3 -----	1-7
X	DE 32 02 921 A1 (MEGA PROD VERPACK MARKETING [DE]) 15 September 1983 (1983-09-15) figures 1-3 -----	1-7
X	US 2005/017022 A1 (FAYGENOV AARON [US]) 27 January 2005 (2005-01-27) figure 1 -----	1-7
X	US 2004/056033 A1 (BOHLMAN GUY [US]) 25 March 2004 (2004-03-25) figures 1-5 -----	1-7
X	US 2 532 244 A (JAMES PASMORE WILLIAM) 28 November 1950 (1950-11-28) figures 1-2 -----	1-7
X	WO 90/15561 A1 (DILWORTH TOM F [CA]; COOPER GILBERT L [CA]) 27 December 1990 (1990-12-27) figures 1-5 -----	1-7
A	DE 295 19 635 U1 (ROGALLA DIRK [DE]) 22 February 1996 (1996-02-22) figures 1-23 -----	1

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IB2012/055805

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-7

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7

Lid piercer

---

2. claims: 8-17

Kit for oral care

---

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IB2012/055805
---

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 102008021537 A1	05-11-2009	NONE	
-----			
DE 202008000433 U1	03-04-2008	NONE	
-----			
FR 2385599	A1	27-10-1978	
		AT 349973 B	10-05-1979
		CH 627702 A5	29-01-1982
		DE 2814008 A1	12-10-1978
		FR 2385599 A1	27-10-1978
-----			
US 2581768	A	08-01-1952	NONE
-----			
DE 202007010176 U1	27-09-2007	NONE	
-----			
DE 3202921	A1	15-09-1983	NONE
-----			
US 2005017022	A1	27-01-2005	NONE
-----			
US 2004056033	A1	25-03-2004	NONE
-----			
US 2532244	A	28-11-1950	NONE
-----			
WO 9015561	A1	27-12-1990	
		AU 5823890 A	08-01-1991
		US 5224619 A	06-07-1993
		WO 9015561 A1	27-12-1990
-----			
DE 29519635	U1	22-02-1996	NONE
-----			