

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
29 October 2009 (29.10.2009)

(10) International Publication Number  
**WO 2009/132052 A3**

- (51) International Patent Classification:  
A61J 1/00 (2006.01) A45D 34/04 (2006.01)
- (21) International Application Number:  
PCT/US2009/041324
- (22) International Filing Date:  
22 April 2009 (22.04.2009)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
61/125,136 22 April 2008 (22.04.2008) US
- (71) Applicants and  
(72) Inventors: KOPTIS, Kurt [US/US]; 35 Iron Point Circle Suite 108, Folsom, CA 95630 (US). BODLAK, Bruce [US/US]; 35 Iron Point Circle Suite 108, Folsom, CA 95630 (US).
- (74) Agent: LANG, David; Law Offices of David M. Lang, 3051 Daggett Drive, Granite Bay, CA 95746 (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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

— of inventorship (Rule 4.17(iv))

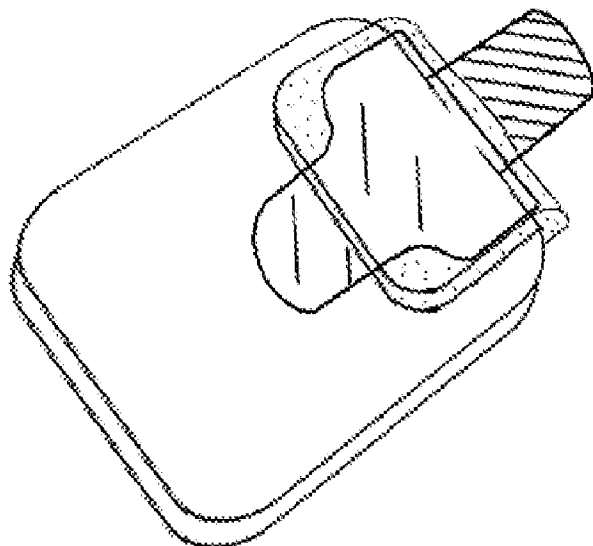
**Published:**

— 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))

[Continued on next page]

(54) Title: LEAK RESISTANT APPLICATOR POD AND METHOD



**FIG. 17**

(57) Abstract: An applicator apparatus having a sealed container pod which may be opened through an actuating tab. In certain embodiments the terminal end of the open package covered by an applicator surface that may be adherently affixed to the container pod. In certain embodiments, actuating tab passes through a void defined by a suitably shaped applicator surface. Certain embodiments describe a rupturable seal permitting mixing of contents within the container pod before distribution to applicator surface. A method for applying material to a desired surface, and method of applying a therapeutic substance to a desired tissue is disclosed.



WO 2009/132052 A3

**(88) Date of publication of the international search report:**  
30 December 2009

**A. CLASSIFICATION OF SUBJECT MATTER***A61J 1/00(2006.01)i, A45D 34/04(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)

IPC A45D 37/00, A46B 5/04, A61J 1/00, B43K 5/14, B65B 1/04, B65D 25/08, B65D 69/00

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 since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; keyword: applicator, contain, seal, open, actuate, tap, and surface

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0048062 A1 (MICHAEL S. BRUNNER et al.) 01 Mar 2007 See the whole document	1-25
A	US 2007-0068845 A1 (HERBERT SCHUEHRER) 29 Mar 2007 See the whole document	1-25
A	US 7,179,007 B2 (ARTHUR WONG et al.) 20 Feb 2007 See the whole document	1-25
A	US 2006-0283727 A1 (DONAVON NELSON et al.) 21 Dec 2006 See the whole document	1-25
A	WO 03-000089 A2 (THE PROCTER & GAMBLE COMPANY) 03 Jan 2003 See the whole document	1-25
A	US 6,315,480 B1 (STEPHANE CHRISTOPHER MARTEL et al.) 13 Nov 2001 See the whole document	1-25

 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 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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

09 NOVEMBER 2009 (09.11.2009)

Date of mailing of the international search report

**09 NOVEMBER 2009 (09.11.2009)**

Name and mailing address of the ISA/KR

Korean Intellectual Property Office  
Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu,  
Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

Chio Jun Ho

Telephone No. 82-42-481-5569



**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2009/041324**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007-0048062 A1	01.03.2007	EP 1919343 A1	14.05.2008
		KR 10-2008-0042099 A	14.05.2008
		WO 2007-027278 A1	08.03.2007
US 2007-0068845 A1	29.03.2007	DE 202005015085 U1	01.12.2005
		EP 1770024 A2	04.04.2007
		EP 1770024 A3	19.11.2008
		US 07552823 B2	30.06.2009
US 07179007 B2	20.02.2007	AU 2000-80063 A1	10.10.2000
		AU 2000-80062 A1	01.10.2000
		AU 2000-80061 A1	10.10.2000
		AU 2000-78773 A1	10.10.2000
		AU 2003-296980 A1	10.12.2003
		AU 2001-10768 A1	10.10.2000
		AU 2001-10769 A1	10.10.2000
		AU 2001-13311 A1	10.10.2000
		AU 2003-296980 A1	30.06.2004
		CA 2386603 C	09.12.2008
		CA 2386603 A1	19.04.2001
		CA 2386140 A1	19.04.2001
		CA 2385626 C	03.01.2006
		CA 2385626 A1	19.04.2001
		CA 2387052 A1	19.04.2001
		CA 2449232 A1	03.01.2003
		CA 2448216 A1	03.01.2003
		CA 2388017 A1	19.04.2001
		CA 2387255 C	07.06.2005
		CA 2387255 A1	19.04.2001
		CA 2387052 C	16.01.2007
		CN 1378433 A	06.11.2002
		CN 1387409 A0	25.12.2002
		CN 1378433 A0	06.11.2002
		CN 1191974 C	09.03.2005
		CN 1391525 A	15.01.2003
		CN 1177553 C	01.12.2004
		CN 1387409 A	25.12.2002
		CN 1391525 A0	15.01.2003
		EP 1217914 A1	03.07.2002
		EP 1217914 B1	06.04.2005
		EP 1217931 A1	03.07.2002
		EP 1217931 B1	28.11.2007
		EP 1217932 A1	03.07.2002
		EP 1217933 A1	03.07.2002
		EP 1217933 B1	14.06.2006
		EP 1217934 A1	03.07.2002
		EP 1217934 B1	22.11.2006
		EP 1218261 A1	03.07.2002
		EP 1218485 A1	03.07.2002
		EP 1397060 A1	17.03.2004
EP 1397066 A1	17.03.2004		

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2009/041324**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		JP 2003-511137 A	25.03.2003
		JP 03-881239 B2	17.11.2006
		JP 04-001577 B2	24.08.2007
		JP 2003-511127 A	25.03.2003
		JP 2004-531325 A	14.10.2004
		JP 2004-531322 A	14.10.2004
		JP 2003-511315 A	25.03.2003
		JP 2003-511234 A	25.03.2003
		JP 2003-511138 A	25.03.2003
		JP 2003-511136 A	25.03.2003
		KR 10-2002-0076231 A	09.10.2002
		KR 10-2002-0043619 A	10.06.2002
		KR 10-2002-0076230 A	09.10.2002
		TW 499365 A	21.08.2002
		US 2007-0223988 A1	27.09.2007
		US 2005-0201812 A1	15.09.2005
		US 2003-0086743 A1	08.05.2003
		US 2002-0197094 A1	26.12.2002
		US 2002-0017310 A1	14.02.2002
		US 07255506 B2	14.08.2007
		US 07108440 B1	19.09.2006
		US 07021848 B1	04.04.2006
		US 06508602 B1	21.01.2003
		US 06547468 B2	15.04.2003
		US 06669387 B2	30.12.2003
		US 06726386 B1	27.04.2004
		US 06811338 B1	02.11.2004
		WO 2001-026527 A1	19.04.2001
		WO 2001-026499 A1	19.04.2001
		WO 2003-000106 A1	03.01.2003
		WO 2003-000088 A1	03.01.2003
		WO 2004-052556 A1	24.06.2004
		WO 2001-026994 A1	19.04.2001
		WO 2001-026530 A1	19.04.2001
		WO 2001-026529 A1	19.04.2001
		WO 2001-026528 A1	19.04.2001
		WO 2001-027239 A1	19.04.2001
US 2006-0283727 A1	21.12.2006	US 2005-0178086 A1	18.08.2005
		US 07506762 B2	24.03.2009
WO 03-000089 A2	03.01.2003	CN 1518423 A	04.08.2004
		EP 1397058 A2	17.03.2004
		JP 2004-532776 T	28.10.2004
		JP 2004-532776 A	28.10.2004
		PA 03011925 A	26.03.2004
		US 2004-0109720 A1	10.06.2004
		WO 03-000089 A3	24.04.2003
		WO 03-000089 A3	03.01.2003

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2009/041324**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 06315480 B1	13.11.2001	AU 736098 B2	26.07.2001
		AU 1998-73405 B2	09.04.1998
		CA 2286561 A1	15.10.1998
		CN 1256666 A	14.06.2000
		CN 1102505 C	05.03.2003
		CN 1256666 C0	14.06.2000
		EP 0973650 B1	09.04.2003
		EP 0973650 A1	26.01.2000
		JP 2001-521473 A	06.11.2001
		WO 1998-045127 A1	15.10.1998