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(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, QA, RO, RS, RU, RW, SC, SD,

[Continued on nextpage]

(54) Title: ADVANCING CARTRIDGE DISPENSER HAVING SPIRAL ACTION

(57) Abstract: The present invention is a rotational cylinder filled with a plurality of cartridges having sealed contents is disclosed. The rotational cylinder includes a plurality of slots running longitudinally, which retain cartridge tabs that protrude radially from a ram slug that drives cartridges through the length of the dispenser as the rotational cylinder is rotated.



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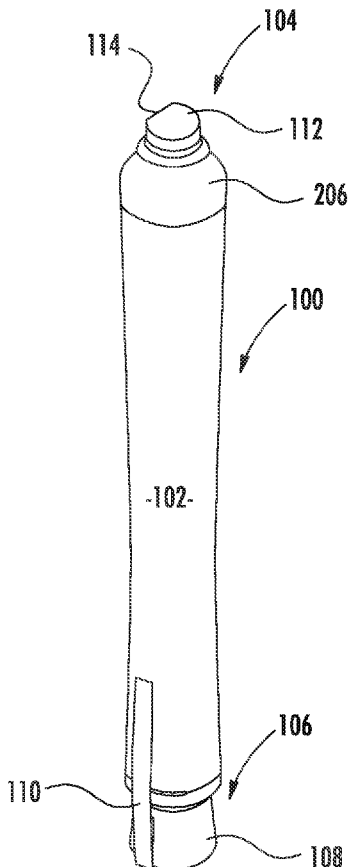


FIG. 1

SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

A45D 40/24; B43K 29/10; A45D 34/04; F41A 17/00; A45D 40/10

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: cartridge, dispenser, ram

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6585388 B2 (KIM, J.W.) 01 July 2003 See column 2 line 48 - column 4 line 33, and figures 1-7.	1-27
A	US 7150122 B1 (HA, D.D.) 19 December 2006 See column 6 line 36 - column 7 line 37, and figures 1-9.	1-27
A	JP 2008-539921 A (CHANEL PARFUMS BEAUTE) 20 November 2008 See abstract, pages 5-7 and claims 1-9.	1-27
A	JP 05-021810 U (TOKIWA CO., LTD.) 23 March 1993 See abstract, figures 1-4 and claims 1-2.	1-27

Further documents are listed in the continuation of Box C.

See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6585388 B2	01.07.2003	JP 03-086343 U JP 3086343 U KR 20-02592 13 Y1 US 2003-0043573 A1	20.03.2002 14.06.2002 05.01.2002 06.03.2003
US 7150122 B1	19.12.2006	US 2006-288624 A1	28.12.2006
JP 2008-53992 1 A	20.11.2008	AT 515959 T CA 2607266 A1 CA 2607266 C CN 101170925 B CN 102078071 A EP 1721543 A1 EP 2272394 A1 ES 2369279 T3 JP 2008-53992 1 T KR 10-2008-0015098 A US 2007-0110502 A1 US 7841794 B2 Wo 2006-120336 A1	15.07.2011 16.11.2006 09.08.2011 26.01.2011 01.06.2011 15.11.2006 12.01.2011 29.11.2011 20.11.2008 18.02.2008 17.05.2007 30.11.2010 16.11.2006
JP 05-021810 U	23.03.1993	JP HO-521810 U	23.03.1993