



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
29.04.2015 Bulletin 2015/18

(51) Int Cl.:
A46B 11/00 (2006.01)

(43) Date of publication A2:
22.01.2014 Bulletin 2014/04

(21) Application number: **13183339.4**

(22) Date of filing: **16.12.2010**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **23.12.2009 PCT/US2009/069408**
23.12.2009 PCT/US2009/069402
05.11.2010 US 410514 P
15.12.2010 US 423397 P
15.12.2010 US 423414 P
15.12.2010 US 423435 P
15.12.2010 US 423449 P

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
10805553.4 / 2 515 702

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(54) **Oral care system**

(57) An oral care system comprising a toothbrush and a dispenser detachably coupled to the toothbrush. The dispenser comprises an internal reservoir containing a fluid and a conduit in fluid communication with the reservoir and terminating in an orifice for dispensing the fluid from the reservoir. A plug having an axis is disposed with its proximal portion within the conduit. The distal plug portion is disposed within a socket of the toothbrush. A first axial force is required to remove the proximal plug portion from the conduit of the dispenser and a second axial force is required to remove the distal plug portion from socket of the toothbrush. The second axial force is greater than the first axial force.

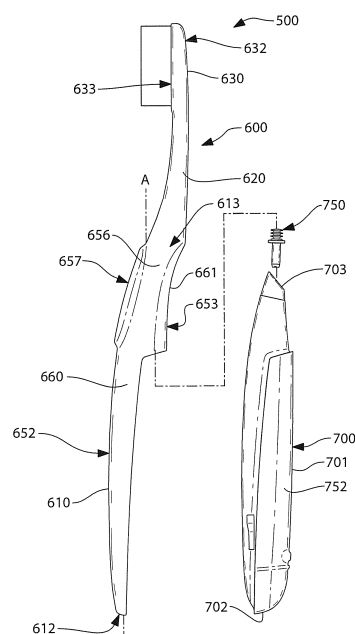


FIG. 17



EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 27 25 495 A1 (TRISA BUERSTENFABRIK AG) 29 December 1977 (1977-12-29)	1-12	INV. A46B11/00
A	* page 8, line 8 - page 14, line 23; figures 1-5 *	13-17	

X	US 3 910 706 A (DEL BON FRANCO) 7 October 1975 (1975-10-07)	1,6-12	
A	* column 4, line 15 - column 5, line 30; figures 1-4 *	2-5, 13-17	

A	US 2005/286967 A1 (BLAUZDYS RIMAS [CA]) 29 December 2005 (2005-12-29)	1-17	
	* paragraph [0017] - paragraph [0028]; figures 1-6 *		

A	EP 1 506 726 A1 (TRISA HOLDING AG [CH]) 16 February 2005 (2005-02-16)	1-17	
	* page 4, line 4 - page 5, line 40; figures 1-10 *		

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			A46B
Place of search		Date of completion of the search	Examiner
Munich		23 March 2015	Kunz, Lukas
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-03-2015

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 2725495 A1	29-12-1977	AR 215633 A1	31-10-1979
		AT 367988 B	25-08-1982
		AU 505429 B2	22-11-1979
		AU 2562677 A	07-12-1978
		BE 855446 A1	07-12-1977
		BR 7605205 A	28-02-1978
		CA 1108358 A1	08-09-1981
		CH 621054 A5	15-01-1981
		CS 209439 B2	31-12-1981
		DD 131617 A5	12-07-1978
		DE 2725495 A1	29-12-1977
		DK 249777 A	09-12-1977
		ES 459155 A1	01-04-1978
		FI 771729 A	09-12-1977
		FR 2354145 A1	06-01-1978
		GB 1585405 A	04-03-1981
		GR 63214 A1	09-10-1979
		HK 18782 A	14-05-1982
		HU 175427 B	28-07-1980
		IE 44963 B1	19-05-1982
		IL 52153 A	30-09-1979
		IN 144500 A1	13-05-1978
		IT 1081741 B	21-05-1985
		JP S5757344 B2	03-12-1982
		JP S52149869 A	13-12-1977
		MX 146866 A	31-08-1982
		NL 7705882 A	12-12-1977
		NO 146799 A	23-03-2015
		NO 771963 A	09-12-1977
		PT 66549 A	01-06-1977
		SE 439726 B	01-07-1985
		SU 1041042 A3	07-09-1983
		US 4068974 A	17-01-1978
		US 4236651 A	02-12-1980
		ZA 7702972 A	26-04-1978

US 3910706 A	07-10-1975	NONE	

US 2005286967 A1	29-12-2005	CA 2510499 A1	24-12-2005
		US 2005286967 A1	29-12-2005

EP 1506726 A1	16-02-2005	AR 045129 A1	19-10-2005
		AU 2004203277 A1	03-03-2005
		BR PI0403222 A	12-04-2005
		CA 2473844 A1	12-02-2005
		CN 1579284 A	16-02-2005

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 13 18 3339

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-03-2015

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15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		CO 5570102 A1	31-10-2005
		DE 10337062 A1	03-03-2005
		EP 1506726 A1	16-02-2005
		JP 2005058768 A	10-03-2005
		KR 20050019006 A	28-02-2005
		MX PA04007723 A	27-05-2005
		US 2005036821 A1	17-02-2005
		ZA 200405950 A	27-01-2005

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82