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EUROPEAN PATENT APPLICATION

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14.11.90 Bulletin 90/46(71) Applicant: **Colgate-Palmolive Company**
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Somerset New Jersey(US)(74) Representative: **UEXKÜLL & STOLBERG**
Patentanwälte
Beselerstrasse 4
D-2000 Hamburg 52(DE)(54) **Dispensing device.**

(57) A dispenser, particularly useful as a pump for viscous material such as toothpaste has, in one embodiment, a body (15), a spout (13) at the top of the body, a tube (20) disposed vertically within the body aligned to register with the spout, a piston (17) surrounding the tube below the top and a spring (19) exerting continuous downward force on the piston so that the material to be dispensed which is located under the piston is forced up through the tube and out the spout when the spout is open. The spout may be the turret type. Another embodiment comprises the same basic design, but it adapted to receive a refill container of the material. This Abstract shall not be construed to limit the scope of the specification, drawings or claims.

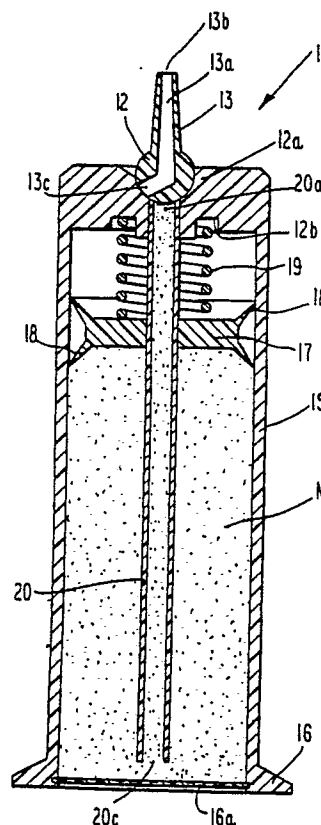


Fig. 1

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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 (Int. Cl.4)
X	FR-A-2 546 483 (AEROSOL INVENTIONS AND DEVELOPMENTS S.A.) * Abstract; page 4, lines 4-6,20-30; page 6, lines 16-23; figures 1,2 *	1,3,5, 11,15, 16	B 65 D 83/00
X	US-A-2 461 211 (GUTHRIE) * Column 2, lines 3-14,34-54; figures 1-4 *	1,3,5-8	
X,P	EP-A-0 262 535 (BRAMLAGE) * Abstract; column 6, lines 41-45; column 8, lines 1-22; figures 4,7 *	6-9,15- 17	
A		1,3,5, 11,12, 18	
X	WO-A-8 400 026 (CZECH) * Page 3, line 21 - page 4, line 19; fig. *	6-8	
X	US-A-4 223 808 (WILLIAMS) * Abstract; figures 2,4 *	6,10	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
X	GB-A-1 118 419 (CHEMICAL DEVELOPMENT CORP.) * Page 2, line 81 - page 3, line 28 *	6,10	B 65 D A 47 K
A	US-A-3 907 174 (STEIMAN) * Column 3, lines 33-55; figure 1 *	2	
A	WO-A-8 504 646 (KING)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24-08-1990	Examiner LEONG C.Y.
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			



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

X LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-5, 11-18: Means for dispensing a pasty material from a container
2. Claims 6-10: Means for attaching a re-fill container to any moveable piston dispensing device

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims: