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(54) **Piston retention unit**

(57) The present invention relates to apparatus (10) for the storing and dispensing of products. In particular, the present invention relates to apparatus for the storing and dispensing of products wherein the apparatus comprises means for retaining a piston member (14) within the dispensing apparatus

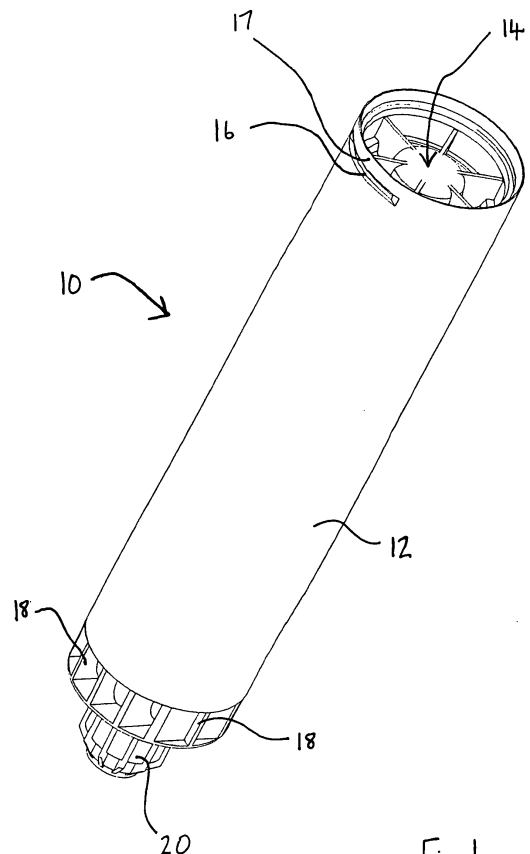


Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 05 25 6991

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	EP 0 688 727 A (KELLER, WILHELM A) 27 December 1995 (1995-12-27) * the whole document *	1-7,9, 10,12-22	B65D83/00
X	EP 0 351 441 A (ALFRED FISCHBACH KUNSTSTOFFSPRITZGUSSWERK) 24 January 1990 (1990-01-24) * the whole document *	1-5, 7-10, 12-22	
X	US 4 077 550 A (VAN MANEN ET AL) 7 March 1978 (1978-03-07) * the whole document *	1-6, 9-19,22	
X	US 6 000 581 A (WOODRUFF ET AL) 14 December 1999 (1999-12-14) * column 8, line 20 - line 49; figures 5a,5b *	1-5	
A	US 5 088 630 A (ARCH ET AL) 18 February 1992 (1992-02-18) * the whole document *	1-22	
A	DE 197 11 249 A1 (TOPIC, ANTON, 42719 SOLINGEN, DE) 24 September 1998 (1998-09-24) * the whole document *	1-22	
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		1 March 2006	Pernice, C
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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EPO FORM 1503 03.82 (P04C01)

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

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01-03-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0688727	A	27-12-1995	JP 8164984 A	25-06-1996
EP 0351441	A	24-01-1990	NONE	
US 4077550	A	07-03-1978	CA 1049977 A1	06-03-1979
			DE 2727835 A1	29-12-1977
			FR 2355727 A1	20-01-1978
US 6000581	A	14-12-1999	NONE	
US 5088630	A	18-02-1992	DE 3872173 D1	23-07-1992
			DE 3872173 T2	14-01-1993
			DE 8812154 U1	03-11-1988
			EP 0316102 A2	17-05-1989
DE 19711249	A1	24-09-1998	NONE	