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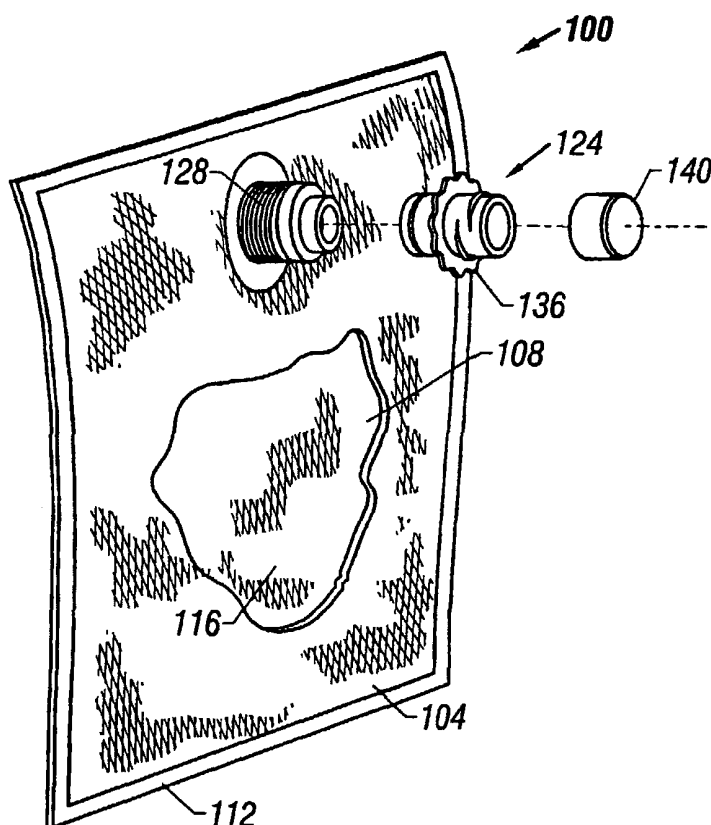
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[Continued on next page]

(54) Title: COLLAPSIBLE BAG FOR DISPENSING LIQUIDS AND METHOD



(57) Abstract: A collapsible bag (100) for dispensing liquids which includes at least one sheet (104, 108) sealed to define an enclosure and a fitment (124) (spout) attached to the enclosure and out through which liquid in the enclosure is dispensed. An interior surface of the one or more sheets has integral texture to assist in withdrawal of the liquid from the enclosure when collapsed. The texture can be provided by sheet surfaces that are mechanically or ultrasonically embossed or are bubble-cushioned (204) or which have sealed pleats (224) or accordion folds. The bottom surface (246) of a lower flange (244) of the fitment may have concentric ridges (298) (or spirals) (256) and/or radial grooves (278). Also disclosed are methods of making the bag from one, two, three or four sheets.

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# INTERNATIONAL SEARCH REPORT

International Application No

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 B65D75/58

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 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 743 435 A (TOMIC) 28 April 1998 (1998-04-28)  column 5, line 10 - line 22 column 5, line 41 - line 57 column 6, line 56 -column 7, line 7; figures	1,2, 10-12, 16-19, 21-28, 30-32, 50-53,55
A	---	48
X	US 5 566 851 A (SASAKI ET AL.) 22 October 1996 (1996-10-22)  the whole document  --- -/--	1,7,10, 11,16, 17,21, 22,50

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 497 911 A (ELLION ET AL.) 12 March 1996 (1996-03-12) column 7, line 28 -column 8, line 50; figures 17-21	1,2,4,6, 16,19,50
A	---	23
X	US 4 998 990 A (RICHTER ET AL.) 12 March 1991 (1991-03-12) abstract; figures 5-8 -----	30-32, 50-53

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/42021

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5743435	A	28-04-1998	US 5827164 A	27-10-1998
US 5566851	A	22-10-1996	US 5752613 A	19-05-1998
			AU 666950 B	29-02-1996
			AU 4164293 A	09-09-1993
			AU 641001 B	09-09-1993
			AU 7433491 A	17-10-1991
			CA 2040283 A	12-10-1991
			DE 69111125 D	17-08-1995
			EP 0453172 A	23-10-1991
			JP 2970953 B	02-11-1999
			JP 4242565 A	31-08-1992
US 5497911	A	12-03-1996	NONE	
US 4998990	A	12-03-1991	US 4893731 A	16-01-1990
			AU 7245791 A	05-08-1991
			WO 9110604 A	25-07-1991
			AU 4846290 A	10-07-1990
			BR 8906583 A	21-08-1990
			CA 2005521 A	20-06-1990
			EP 0449953 A	09-10-1991
			JP 4502600 T	14-05-1992
			MX 163448 B	14-05-1992
			NO 912354 A	16-08-1991
			NZ 231833 A	28-04-1992
			PH 26288 A	10-04-1992
			WO 9006888 A	28-06-1990