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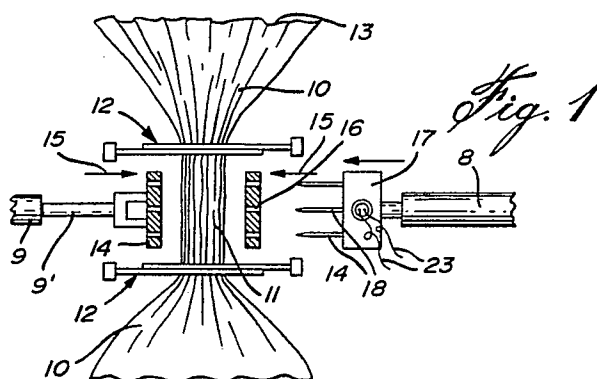
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(54) **Fused plastic bag closure and apparatus for making same.**

(57) A plastic bag for retaining a content therein has a gathered throat portion (11) adjacent an end opening (13) thereof, the gathered throat portion (11) being formed by randomly disposed wall portions of the plastic material fused together by two or more rows of adjacent spaced apart fused zones (27) of plastic material disposed about a plurality of needle holes (25). Apparatus for forming the bag comprises at least one set of opposed gathering jaw plates (12, 12') for gathering, in a random fashion, a circumferential portion of the plastic bag adjacent the end opening (13) thereof to form a gathered throat portion (11). Two pressing plates (14) are disposed on a respective side of the gathered throat portion (11) and are each provided with two or more spaced apart rows of needle receiving bores (16) disposed adjacent one another in differing planes (21,21',21"). A needle support block (17) of heat conductive material has needles (18) secured thereto for conducting heat from the block (17). The block (17) is connected for movement to and away from one of the pressing plates (14) once the pressing plates (14) have moved to a pressing position so that the needles (18) will enter the bores (16) of both pressing plates (14) to puncture a press portion of the

gathered throat portion (11) of the bag to fuse plastic material adjacent randomly disposed wall portions of the plastic material in the areas (26) of the penetrating needles (18) and in adjacent spaced apart planes (21,21',21").





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)
Y	FR-A-2 494 216 (ETS MASURE ET FILS) * Whole document *	1-3	B 65 B 51/10
X	---	9-12	B 65 D 33/16
Y	GB-A-2 034 278 (WINDMOLLER & HOLSCHER) * Whole document *	1-3	
A	---		
A	US-A-3 377 692 (TIPPER) * Column 3, lines 44-46; figure 2 *	4,5	
A	---		
A	US-A-3 195 285 (TOSS) * Column 4, lines 13-15; figures 1-4 *	1	

			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 65 B B 65 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 04-11-1988	Examiner SCHELLE, J.
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			