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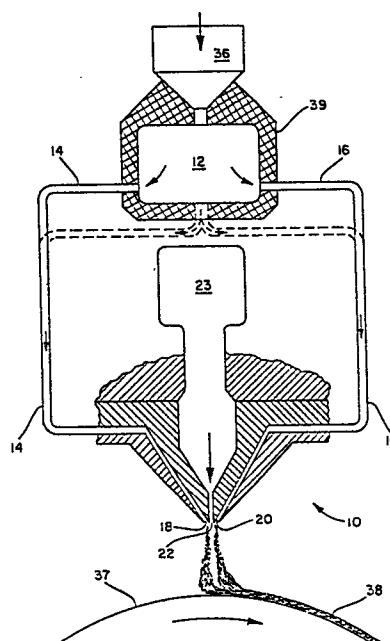
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54 Extrusion process and an extrusion die with a central air jet.

57 A thermoplastic material extrusion mechanism is provided which includes a die head (10) having a centrally disposed high velocity gas delivery means (22) adapted to continuously emit a jet of a gas having shear layers, at least one chamber (17) for the thermoplastic material, thermoplastic material delivery means (18) (20) arranged at least partially surrounding the centrally disposed high velocity gas delivery means (22) for directing extruded thermoplastic material emitted from the thermoplastic material, chamber (12) toward the gas jet, causing the extruded thermoplastic material to be introduced into the shear layers of the gas jet, and a thermoplastic material conduit (14) (16) which communicates the at least one chamber (12) with each of the thermoplastic material extrusion openings (18) (20).

A method of producing fibers of a thermoplastic material is also provided which comprises the steps of (a) forming a high velocity gas jet having shear layers, (b) extruding at least one stream of a molten thermoplastic material from at least one thermoplastic material delivery means arranged adjacent and at least partly surrounding the high velocity gas jet, and (c) merging the at least one thermoplastic material stream with the shear layers of the high velocity gas jet to attenuate the thermoplastic material into fibers, forming thereby fiber streams of the thermoplastic material.





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EUROPEAN SEARCH REPORT

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Application Number

EP 85 11 0883

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)
A	GB-A- 609 167 (BAKELITE CORP.) * Claims 1,5,12-15,17; figures 2-4; page 2, line 61 - page 3, line 28 * ---	1,7,21, 24	D 01 D 4/02 D 04 H 1/56
A	US-A-3 981 650 (BELOIT) * Claims 1,3,12 * ---	1-9	
A	US-A-3 942 723 (BELOIT) * Claim 1; figure 7; column 9, line 63 - column 10, line 22 * ---	1,14	
A	US-A-4 429 001 (MINNESOTA) * Claims 1,13,17,19,21; column 3, lines 3-26; column 4, lines 3-12 * ---	27,28, 30	
A	US-A-4 100 324 (KIMBERLY-CLARK) * Claim 15 * -----	29	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			D 01 D D 04 H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 03-12-1987	Examiner CATTOIRE V.A.
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	