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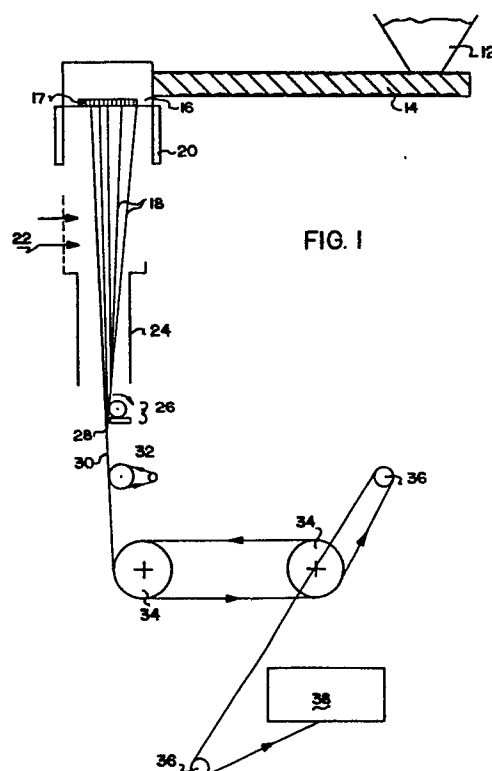
(54) **Process for the production of high-strength polyester yarn.**

(57) A process is described for the production of high strength polyester yarn having a tenacity of at least 7.5 g/d and an elongation of at least 9%. The yarn spun at a speed of at least 1900 meters per minute, may be used in tire cord and other industrial applications.

The molten polyester is pressure fed by the extruder to a spinnarett (16) having a plurality of capillaries (17) through which the polyester is extruded. The number of capillaries can vary from about 50 to over 100. The extruded filaments are maintained at a temperature near the melting point by a quench delay collar (20)

The filaments are then quenched by an inert gas or air stream (22) of ambient temperature before passing through a chute (24).

At the end of the chute (24) is a tray and kiss roll (26) which applies a conventional spin finish compound to the filaments. The filaments are then converged at point (28) into yarn (30), which is thereafter transported by a pretension godet (32), godets (34) and guide rolls (36) to winder (38), where the yarn is wound and may be either stored for future drawing or may be used as feed immediately to the drawing process in continuous fashion.



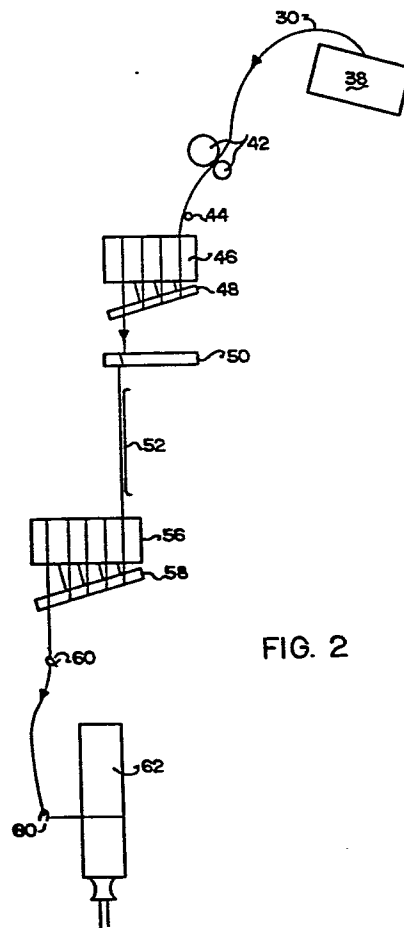


FIG. 2

0089912



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EUROPEAN SEARCH REPORT

Application number

EP 83 63 0028

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. 3)
Y	US-A-4 251 481 (M.C. HAMLYN) * Claims *	1-11	D 01 F 6/62 D 01 D 5/08
Y	US-A-4 070 432 (C. TAMADDON) * Claims *	1-11	
Y	GB-A-1 006 136 (E.I. DU PONT DE NEMOURS) * Claims; page 4, lines 22-28; page 5, lines 47-54 *	1-11	
Y	GB-A-1 111 649 (FUJI BOSEKI) * Page 2, lines 25-32; claims *	1, 3, 7, 9	
A	GB-A-1 174 101 (ICI) * Claim 5 *	1	TECHNICAL FIELDS SEARCHED (Int. Cl. 3) D 01 F D 01 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 07-12-1983	Examiner VAN GOETHEM G.A.J.M.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			