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(54) **Acrylic precursor for carbon fibres and method for its preparation.**

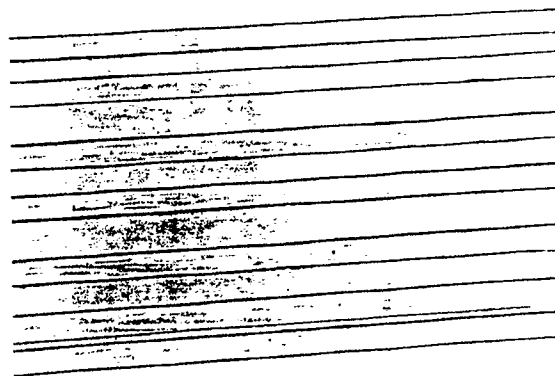
(57) A method for preparing acrylic precursors with improved characteristics suitable for transformation into carbon fibres of superior mechanical characteristics comprises wet-spinning an acrylic polymer dissolved in dimethylacetamide followed by coagulation in a solvent-non solvent binary mixture bath of rigorously controlled composition and temperature, and a series of controlled-condition stretching operations with interposed washing stages, followed by yarn drying before its final collection.

The method is characterised essentially by its coagulation stage, which is conducted under such rigorously controlled bath temperature and composition conditions as to obtain at the end of the process an acrylic yarn which has a perfectly compact structure practically free of flaws (voids), a perfectly circular cross-section and mechanical characteristics which are distinctly better than those of acrylic yarns of identical composition obtained by spinning pro-

cesses of the known art.

The specific destination of the acrylic yarn is the production of high-performance carbon fibres.

Fig.1



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EUROPEAN SEARCH REPORT

Application Number

EP 89 20 3017

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.5)
A	EP-A-0 044 534 (HOECHST AG) - - -		D 01 F 6/18 D 01 D 5/06 D 01 F 9/22 D 01 F 6/38
A	EP-A-0 255 109 (MITSUBISHI RAYON) - - -		
A	EP-A-0 223 199 (TORAY INDUSTRIES) - - - - -		
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		29 January 91	VAN GOETHEM G.A.J.M.
<div><div>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</div><div>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</div></div>			