

Title (en)

Acrylic precursor for carbon fibres and method for its preparation.

Title (de)

Acrylvorläufer für Kohlenstoffasern und Verfahren zur Herstellung derselben.

Title (fr)

Précurseur acrylique pour fibres de carbone et son procédé de fabrication.

Publication

EP 0372622 A2 19900613 (EN)

Application

EP 89203017 A 19891128

Priority

IT 2283688 A 19881202

Abstract (en)

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

IPC 1-7

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IPC 8 full level

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CPC (source: EP KR)

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