

Title (en)

PET BI-COMPONENT ELASTIC YARN HAVING DIFFERENT VISCOSITIES AND PREPARATION METHOD THEREFOR

Title (de)

BIFUNKTIONELLES PET-ZWEIKOMPONENTENGARN, DAS UNTERSCHIEDLICHE VISKOSITÄTEN AUFWEIST, UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FIL ÉLASTIQUE À DEUX COMPOSANTS EN PET AYANT DIFFÉRENTES VISCOSITÉS ET SON PROCÉDÉ DE PRÉPARATION

Publication

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Application

**EP 20905706 A 20200611**

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Abstract (en)

A kind of PET bicomponent elastic yarn with different viscosities and preparation method thereof is disclosed, wherein the PET bicomponent elastic yarns with different viscosities are extruded from the same spinneret, and a high-viscosity PET melt is divided into two ways: one is directly extruded after distribution; and the other is extruded after distribution by side-by-side composite spinning together with a low-viscosity PET melt, and a ratio of the number of spinneret holes m for direct extrusion to the number of spinneret holes n for extrusion after distribution by side-by-side composite spinning is 1:(6-8); after extrusion, a fully drawn yarn (FDY) is prepared according to an FDY process, finally the PET bicomponent elastic yarn with different viscosities is obtained after a relaxation heat treatment; wherein the prepared bicomponent elastic yarn comprises a high-viscosity PET monofilament and a high-viscosity/low-viscosity PET side-by-side composite monofilament, and the monofilament crimping directions of the bicomponent elastic yarn are randomly distributed. The high-viscosity and low-viscosity PET side-by-side composite fibers in the present invention have low costs, and the problem of "strip unevenness" does not exist in the application of knitted fabrics.

IPC 8 full level

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