

Title (en)

A SEA-ISLAND TYPE COMPOSITE FIBER FOR RAISED WARP KNIT FABRIC, AND A PROCESS OF PREPARING FOR THE SAME

Title (de)

INSEL-IMMEER-VERBUNDFASER FÜR GERAUHTE KETTGEWIRKE UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

FIBRE COMPOSITE DU TYPE MER-ILOT POUR TISSU A MAILLE JETEE MOLLETONNE ET SON PROCEDE DE PREPARATION

Publication

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Application

EP 01997579 A 20011121

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Abstract (en)

[origin: WO0242529A1] The present invention relates to a sea-island type composite fiber and a process for preparing the same. In accordance with the present invention, a sea-island type composite fiber used in raised warp knitting which is prepared by the direct spin draw method by using alkali soluble copolymer polyester as a sea component and polyester mainly consisting of polyethylene terephthalate of more than 90 mole% as an island component, wherein the process is characterized in that: the melt viscosities of the island component polymer and the sea component polymer are controlled so that the difference (DELTA MV9,000) in melt viscosity between the of island component polymer and sea component polymer at a shear rate of 9,000 (1/s) is 20% SIMILAR 70% of the difference (DELTA MV500) in melt viscosity between the of the island component polymer and the sea component polymer at a shear rate of 500(1/s). A sea-island type composite fiber according to the present invention, is characterized in that: the melt viscosity (DELTA MV9,000) of sea-island type composite fiber (filament) at a shear rate of 9,000(1/s) is 20 SIMILAR 60% of the melt viscosity (DELTA MV500) of the sea-island type composite fiber (filament) at a shear rate fo 500(1/s). With respect to the yarn of the present invention, the decline of physical properties of the yarn are minimized in the dissolution of sea components or in the raising process for thereby preparing a raised warp knit fabric with good appearance and touch.

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Citation (search report)

- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 14 22 December 1999 (1999-12-22)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 03 29 March 1996 (1996-03-29)
- See references of WO 0242529A1

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