

Title (en)

A SEA-ISLAND TYPED COMPOSITE FIBER FOR WARP KNIT TREATED RAISING, AND A PROCESS OF PREPARING FOR THE SAME

Title (de)

INSEL-IMMEERVERBUNDFASER FÜR GERAUHTE KETTENGEWIRKE UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

FIBRE COMPOSITE DE TYPE SEA ISLAND POUR GRATTAGE DE TRICOT A MAILLES JETEES ET PROCEDE DE FABRICATION DE CELLE-CI

Publication

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Application

**EP 01998676 A 20011120**

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Abstract (en)

[origin: WO0244447A1] The present invention relates to a sea-island type composite fiber and process of preparing the same. In accordance with the present invention, a sea-island type composite fiber for a raised warp knit fabric 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 composite fiber is characterized in that it satisfies the following thermal properties and viscoelastic properties: - a number of presence of melting point peaks: 4, - a temperature of main melting point peak of sea component [Tms]: 220 SIMILAR 235 DEG C, - a temperature of main melting point peak of island component [Tmi]: 245 SIMILAR 255 DEG C, - a first transition peak temperature [T alpha ] of viscoelastic index (tan delta ): 120 SIMILAR 150 DEG C and - a viscoelastic index value [tan delta alpha ] of the first transition peak ( delta -peak): 0.10 SIMILAR 0.20. The sea-island type composite fiber prepared by the present invention has good thermal shrinkage properties and excellent raising property and improves the appearance and touch of warp knit.

IPC 1-7

**D01D 5/34**

IPC 8 full level

**D01F 8/14** (2006.01)

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- [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 0244447A1

Cited by

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**WO 0244447 A1 20020606**; AU 2314602 A 20020611; BR 0115678 A 20040217; CN 1277962 C 20061004; CN 1440468 A 20030903; EP 1373607 A1 20040102; EP 1373607 A4 20050309; TW 512189 B 20021201; TW 522181 B 20030301

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