

Title (en)

Monofilamentary bicomponent core-sheath fibres

Title (de)

Monofile Bikomponentenfäden des Kernmanteltyps

Title (fr)

Fibres à deux composants âme-gaine monofilamentaires

Publication

EP 0976854 A1 20000202 (DE)

Application

EP 99114642 A 19990727

Priority

DE 19834008 A 19980729

Abstract (en)

Core-sheath bicomponent monofilaments have a core containing a liquid crystal polymer and a homogeneous sheath containing a polyester. An Independent claim is also included for the production of the monofilaments by melt extrusion and cooling in a gas stream or liquid below the spinneret to a temperature at least 0-30 degrees C below the glass transition temperature of the sheath material, such that the ratio of the spinning speed (in volume/area - time) to haul-off speed is 1:5-30, preferably 1:(8-15). The monofilament may then be wound up and conditioned.

Abstract (de)

Es werden monofile Bikomponentenfäden des Kernmanteltyps beschrieben, deren Kern ein flüssig-kristallines Polymer enthält und deren Mantel aus einem im wesentlichen homogenen Material besteht, das einen Polyester enthält. Die Fäden zeichnen sich durch eine gute Haftung der Komponenten, gute Festigkeiten und hohe Abriebbeständigkeit aus. Sie sind besonders geeignet für Papiermaschinenbespannungen, Herstellung von Sieben und zur Verstärkung von Elastomeren.

IPC 1-7

D01F 8/14

IPC 8 full level

D01F 8/14 (2006.01)

CPC (source: EP US)

D01F 8/14 (2013.01 - EP US); **Y10T 428/2924** (2015.01 - EP US); **Y10T 428/2929** (2015.01 - EP US)

Citation (search report)

- [Y] WO 8301253 A1 19830414 - BHATT GIRISH M
- [Y] WO 9516064 A1 19950615 - ASTEN GROUP [US]
- [Y] WO 9828472 A1 19980702 - ASTEN INC [US]
- [Y] EP 0506983 A1 19921007 - TORAY INDUSTRIES [JP]
- [XY] DATABASE WPI Section Ch Week 199245, Derwent World Patents Index; Class A23, AN 1992-370322, XP002121852
- [XY] DATABASE WPI Section Ch Week 199245, Derwent World Patents Index; Class A23, AN 1992-370321, XP002121853
- [Y] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01 30 January 1998 (1998-01-30)

Cited by

EP1835055A1; EP2974878A3; EP1132507A1; DE10008845C2; EP2974878A2; US6517917B2; WO2015192932A1; WO2018206203A1; US10793975B2; DE202011003102U1; DE102011011126A1

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EP 0976854 A1 20000202; EP 0976854 B1 20041110; AT E282103 T1 20041115; CA 2278962 A1 20000129; DE 19834008 A1 20000203; DE 19834008 C2 20001130; DE 59911028 D1 20041216; ES 2227942 T3 20050401; PT 976854 E 20050228; US 6254987 B1 20010703

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