

Title (en)

Conductive, soil-resistant core-sheath fibre with high resistance to chemicals, its production process and use

Title (de)

Leitfähige, schmutzabweisende Kern-Mantel-Faser mit hoher Chemikalienresistenz, Verfahren zur deren Herstellung und Verwendung

Title (fr)

Fibre âme-gaine conductrice, résistant à la salissure et aux produits chimiques, procédé de fabrication et utilisation

Publication

EP 1413653 A3 20041006 (DE)

Application

EP 03021088 A 20030918

Priority

DE 10249585 A 20021024

Abstract (en)

[origin: EP1413653A2] A hotmelt spun fiber has a core and a mantle structure having a combined tensile strength of at least 15 cN/tex. The core is a synthetic thermoplastic polymer which is not a fluoro-polymer. The mantle is a hotmelt spun fluoropolymer incorporating particles which are electrical conductors. The core is a synthetic thermoplastic polymer esp. polyester. e.g. polyethyleneterephthalate or a liquid crystalline polyester. Also claimed is a hotmelt spinning process in which two compatible polymers are selected in which the melting point of the second polymer is at least 20C below that of the first, and in which the two polymers are co-extruded and stretched to achieve the desired tensile strength value.

IPC 1-7

D01F 8/14; D01F 8/12; D01F 1/09

IPC 8 full level

D01F 8/06 (2006.01); **D01F 1/09** (2006.01); **D01F 8/12** (2006.01); **D01F 8/14** (2006.01)

CPC (source: EP US)

D01F 1/09 (2013.01 - EP US); **D01F 8/12** (2013.01 - EP US); **D01F 8/14** (2013.01 - EP US)

Citation (search report)

- [PA] WO 03004738 A1 20030116 - HONEYWELL INT INC [US], et al
- [DA] DE 8606334 U1 19860507
- [A] EP 1203788 A1 20020508 - KUREHA CHEMICAL IND CO LTD [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 08 6 October 2000 (2000-10-06)

Cited by

AT503675B1; WO2008025557A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 03021088 A 20030918; AT 03021088 T 20030918; DE 10249585 A 20021024; DE 50311164 T 20030918; DK 03021088 T 20030918; ES 03021088 T 20030918; JP 2003364329 A 20031024; PL 36302103 A 20031022; PT 03021088 T 20030918; US 68028403 A 20031007