

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 A2 20040428 (DE)

Application

EP 03021088 A 20030918

Priority

DE 10249585 A 20021024

Abstract (en)

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. polyethylenterephthalate 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.

Abstract (de)

Beschrieben wird eine schmelzgesponnene Faser mit Kern-Mantel Struktur und hoher Zugfestigkeit, wobei der Kern ein synthetisches thermoplastisches Polymer, das kein Fluorpolymer ist, enthält und der Mantel mindestens ein schmelzspinnbares Fluorpolymer und Teilchen aus elektrisch leitfähigem Material enthält. Die erfindungsgemäßen Fasern lassen sich insbesondere in Form von Monofilamenten zur Herstellung von textilen Flächengebilden für technische Anwendungen einsetzen.

IPC 1-7

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

IPC 8 full level

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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)

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