

Title (en)

Planar textile structure and yarn from synthetic fibres, method for producing them and use of the same

Title (de)

Textiles Flächengebilde und Garn aus Synthefasern, Verfahren zu deren Herstellung und deren Verwendung

Title (fr)

Structure textile plane et fil en fibres synthétiques, leur procédé de préparation et leur utilisation

Publication

**EP 1400623 A3 20040331 (DE)**

Application

**EP 03017691 A 20030818**

Priority

DE 10239004 A 20020826

Abstract (en)

[origin: EP1400623A2] Textile sheet material comprises synthetic fibers that have been surface-fluorinated and coated with a fluoropolymer coating free of adhesion promoters. Independent claims are also included for: (1) yarn comprising synthetic fibers or filaments that have been surface-fluorinated and coated with a fluoropolymer coating free of adhesion promoters; (2) sewing thread comprising synthetic fibers or filaments that have been surface-fluorinated and bonded together with a fluoropolymer coating free of adhesion promoters; (3) production of the textile sheet material by fluorinating the fibers in a fluorine/carrier gas atmosphere and coating the fibers with an aqueous fluoropolymer composition on both sides of the material; (4) production of the yarn by fluorinating the yarn in a fluorine/carrier gas atmosphere and dipping the yarn in an aqueous fluoropolymer composition; (5) production of the sewing thread by fluorinating the thread in a fluorine/carrier gas atmosphere and dipping the thread in an aqueous fluoropolymer composition to impregnate the thread with 14-21 wt.% (dry basis) of the fluoropolymer; (6) use of the yarn to make woven, knitted and nonwoven fabrics and multilayer textile materials.

IPC 1-7

**D06M 11/09**; **D06M 11/07**; **D06M 15/277**; **D06M 15/256**

IPC 8 full level

**D06M 11/07** (2006.01); **D06M 11/09** (2006.01); **D06M 15/256** (2006.01); **D06M 15/277** (2006.01)

CPC (source: EP KR US)

**D06M 11/07** (2013.01 - EP US); **D06M 11/09** (2013.01 - EP KR US); **D06M 15/256** (2013.01 - EP KR US); **D06M 15/277** (2013.01 - EP US); **Y10T 442/2189** (2015.04 - EP US); **Y10T 442/2238** (2015.04 - EP US); **Y10T 442/2287** (2015.04 - EP US); **Y10T 442/232** (2015.04 - EP US)

Citation (search report)

- [A] DE 19931348 C1 20010118 - FREUDENBERG CARL FA [DE]
- [A] US 4020223 A 19770426 - DIXON DALE D, et al
- [A] EP 0327047 A2 19890809 - HOECHST AG [DE]
- [X] DATABASE WPI Section Ch Week 199243, Derwent World Patents Index; Class A14, AN 1992-354796, XP002268492

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DOCDB simple family (publication)

**EP 1400623 A2 20040324**; **EP 1400623 A3 20040331**; DE 10239004 A1 20040311; DE 10239004 B4 20071115; KR 20040018949 A 20040304; US 2004121677 A1 20040624; US 7267843 B2 20070911

DOCDB simple family (application)

**EP 03017691 A 20030818**; DE 10239004 A 20020826; KR 20030058602 A 20030825; US 64611303 A 20030822