

Title (en)

TEXTILES CONTAINING AT LEAST ONE LAYER OF POLYMERIC NANOFIBRES AND METHOD OF PRODUCTION OF THE LAYER OF POLYMERIC NANOFIBRES FROM THE POLYMER SOLUTION THROUGH ELECTROSTATIC SPINNING

Title (de)

TEXTILIEN MIT MINDESTENS EINER SCHICHT VON POLYMEREN NANOFASERN UND VERFAHREN ZUR HERSTELLUNG DER SCHICHT VON POLYMEREN NANOFASERN AUS DER POLYMERLÖSUNG DURCH ELEKTROSTATISCHES SPINNEN

Title (fr)

TEXTILES CONTENANT AU MOINS UNE COUCHE DE NANOFIBRES POLYMERIQUES ET PROCEDE DE PRODUCTION DE CELLE-CI PAR FILAGE ELECTROSTATIQUE A PARTIR DE LA SOLUTION POLYMERIQUE

Publication

**EP 1869232 A1 20071226 (EN)**

Application

**EP 06722445 A 20060410**

Priority

- CZ 2006000018 W 20060410
- CZ 2005225 A 20050411

Abstract (en)

[origin: WO2006108364A1] The invention relates to the textile containing at least one layer of polymeric nanofibres having diameter to 600 nanometres produced through electrostatic spinning of the polymer solution. The polymeric nanofibres contain particles of low-molecular substance dissolved or dispersed in solution of polymer which is subject to electrostatic spinning, possibly particles of low molecular substance which was created through a consequent chemical reaction of the original low molecular substance dissolved or dispersed in solution subjected to electrostatic spinning. The invention also relates to the production method of the layer of nanofibres from the polymer solution through electrostatic spinning in electric field created by difference of potentials between the charged electrode and the counterelectrode, at which the solution of polymer is brought into the electric field for spinning through the surface of the rotating charged electrode, at the same time the nanofibres created in this electric field are carried to the counterelectrode and they deposit on the surface designated to it. Polymer solution for spinning contains the particles of low-molecular substance, which are at spinning seized together with polymer into the nanofibres being created.

IPC 8 full level

**D01D 5/00** (2006.01); **D01F 1/10** (2006.01); **D04H 1/40** (2012.01); **D04H 1/70** (2012.01); **D04H 1/72** (2012.01); **D04H 5/08** (2012.01)

CPC (source: EP KR US)

**B82Y 40/00** (2013.01 - KR); **D01D 5/0038** (2013.01 - EP KR US); **D01F 1/103** (2013.01 - EP KR US); **D03D 15/00** (2013.01 - KR); **Y10T 442/607** (2015.04 - EP US); **Y10T 442/614** (2015.04 - EP US); **Y10T 442/658** (2015.04 - EP US)

Citation (search report)

See references of WO 2006108364A1

Cited by

WO2012097762A1; WO2013007224A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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