

Title (en)

PRODUCING METHOD FOR ENHANCING ELECTROSTATIC SPINNING NANOFIBER MEMBRANE

Title (de)

HERSTELLUNGSVERFAHREN FÜR NANOFASERMENBRAN FÜR VERBESSERTES ELEKTROSTATISCHES SPINNEN

Title (fr)

PROCÉDÉ DE PRODUCTION D'UNE MEMBRANE EN NANOFIBRES D'AMÉLIORATION DE FILAGE ÉLECTROSTATIQUE

Publication

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Application

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Abstract (en)

[origin: EP3040462A1] A method for preparing a reinforced electrospinning nanofiber membrane, which performs alternate blending electrospinning by utilizing several thermoplastic polymer with a melting point at least 20°C lower than that of the other component or thermoplastic polymer with low melting point, and non-thermoplastic polymer. Electrospun jets of several components are arranged along the movement direction of receiving device in forth-and-back, fibers are arranged randomly and alternatively. The blending spinning fiber membrane is post-treated with thermal calendaring, and the hot-pressing temperature is slightly higher than that of starting melting temperature of the polymer with low melting point, time is 1#¼10 min, pressure is 1#¼20 MPa. After hot-pressing, the thermoplastic polymer with low melting point is partly melt and forms point bonding at the intersection of fibers, without clogging pores. This invention relates to an electrospun nanofiber membrane and a blending electrospinning device.

IPC 8 full level

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CPC (source: EP)

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