

Title (en)

ULTRAFINE POLYAMIDE FIBER, AND MELT-SPINNING METHOD AND DEVICE THEREFOR

Title (de)

ULTRAFINE POLYAMIDFASERN SOWIE SCHMELZSPINNVERFAHREN UND -VORRICHTUNG DAFÜR

Title (fr)

FIBRE DE POLYAMIDE ULTRAFINE ET PROCÉDÉ ET DISPOSITIF DE FILAGE À L'ÉTAT FONDU POUR LA PRODUCTION DE CETTE FIBRE

Publication

**EP 2647746 A4 20140730 (EN)**

Application

**EP 11844483 A 20111121**

Priority

- JP 2010264475 A 20101129
- JP 2011076780 W 20111121

Abstract (en)

[origin: EP2647746A1] This ultrafine polyamide fiber is a polyamide fiber having a single-filament fineness of 0.10-0.50 dtex, in which the average number of fluffs per 12,000 m of the length of the filaments is 1.0 or less. The melt-spinning method of the invention for producing the ultrafine polyamide fiber comprises: cooling melt-spun filaments discharged from a spinneret having orifices annularly disposed in the peripheral part of the spinneret, using a cooler (3) which is located under the center of the spinneret and which blows cooling air against the melt-spun filaments ejected from the orifices, from inside or outside the melt-spun filaments to cool the melt-spun filaments; oiling the filaments using an annular oiling device (4) that has a disk-shaped guide part which is located vertically under the cooler (3) and in which single filaments come into contact with the periphery of the disk and that has an annular slit for oil ejection which has been formed right over the guide part along the periphery of the guide; and then collecting the filaments and simultaneously performing second-stage oiling, by means of a collecting guide type oiling device (5).

IPC 8 full level

**D01F 6/60** (2006.01); **D01D 5/092** (2006.01); **D01D 5/096** (2006.01)

CPC (source: EP KR US)

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**D01F 6/60** (2013.01 - EP KR US); **D01F 6/605** (2013.01 - KR); **Y10T 428/2913** (2015.01 - EP US)

Citation (search report)

- [XAI] JP 2007077547 A 20070329 - TORAY INDUSTRIES
- [XAI] US 6420025 B1 20020716 - MUELLER ANDREAS [DE], et al
- [AD] JP 2009084749 A 20090423 - TORAY INDUSTRIES
- [A] JP H07118912 A 19950509 - MURATA MACHINERY LTD
- [A] JP 2002105740 A 20020410 - MURATA MACHINERY LTD
- [A] JP 2009209479 A 20090917 - NIPPON ESTER CO LTD
- [AD] JP 2010126846 A 20100610 - TORAY INDUSTRIES
- See references of WO 2012073737A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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JP 5780237 B2 20150916; JP WO2012073737 A1 20140519; KR 101580883 B1 20151230; KR 20130141484 A 20131226;  
TW 201231746 A 20120801; TW I527945 B 20160401; US 2013251992 A1 20130926; WO 2012073737 A1 20120607

DOCDB simple family (application)

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