

Title (en)

ULTRA-FINE HIGH-STRENGTH POLYAMIDE MULTIFILAMENT, AND COVERING YARN, STOCKING, AND FABRIC USING SAME

Title (de)

ULTRAFEINES, HOCHFESTES POLYAMIDMULTIFILAMENT UND UMSPINNUNGSGARN, SOCKE UND STOFF MIT VERWENDUNG DAVON

Title (fr)

MULTI-FILAMENT DE POLYAMIDE ULTRA-FIN À HAUTE RÉSISTANCE ET FIL DE GUIPAGE, BAS ET TISSU L'UTILISANT

Publication

EP 3219835 A4 20180711 (EN)

Application

EP 15859298 A 20151105

Priority

- JP 2014230055 A 20141112
- JP 2015081110 W 20151105

Abstract (en)

[origin: EP3219835A1] A polyamide multifilament, characterized in having a total fineness of 4.0-6.0 dtex, a single yarn fineness of 1.2 dtex or below, a strength-elongation product of 9.1 or above, and an elongation degree of 40-50%. Provided is a polyamide fiber having a small total fineness and single fiber fineness while having a high strength-elongation product and exhibiting a low unevenness (U%) in the longitudinal direction. Also provided are: a stocking exhibiting an excellent higher-order process passability and productivity and exhibiting an excellent softness, durability, and transparent feel; and a fabric exhibiting an excellent softness and durability.

IPC 8 full level

D01F 6/60 (2006.01); **A41B 11/00** (2006.01); **A41B 11/14** (2006.01); **D02G 3/04** (2006.01); **D02G 3/32** (2006.01); **D02G 3/36** (2006.01); **D03D 15/00** (2006.01)

CPC (source: EP KR US)

A41B 11/00 (2013.01 - EP US); **A41B 11/14** (2013.01 - EP KR US); **D01F 6/60** (2013.01 - EP KR US); **D02G 3/045** (2013.01 - EP US); **D02G 3/32** (2013.01 - EP US); **D02G 3/36** (2013.01 - EP KR US); **D03D 15/00** (2013.01 - EP US); **D03D 15/283** (2021.01 - EP KR US); **D03D 15/33** (2021.01 - KR); **D03D 15/41** (2021.01 - EP US); **D03D 15/50** (2021.01 - KR); **D03D 15/573** (2021.01 - EP US); **D10B 2331/02** (2013.01 - EP US); **D10B 2401/063** (2013.01 - KR); **D10B 2501/021** (2013.01 - EP KR US)

Citation (search report)

- [I] JP H0874102 A 19960319 - TORAY INDUSTRIES
- [A] JP 2009079331 A 20090416 - TORAY INDUSTRIES
- [A] JP H1121739 A 19990126 - TORAY INDUSTRIES
- See references of WO 2016076184A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3219835 A1 20170920; EP 3219835 A4 20180711; EP 3219835 B1 20190925; BR 112017009271 A2 20171219; CN 107075741 A 20170818; CN 107075741 B 20200327; ES 2749086 T3 20200319; JP 5983899 B1 20160906; JP WO2016076184 A1 20170427; KR 102403482 B1 20220530; KR 20170083021 A 20170717; TW 201636466 A 20161016; TW I645084 B 20181221; US 2017311651 A1 20171102; WO 2016076184 A1 20160519

DOCDB simple family (application)

EP 15859298 A 20151105; BR 112017009271 A 20151105; CN 201580056151 A 20151105; ES 15859298 T 20151105; JP 2015081110 W 20151105; JP 2016501468 A 20151105; KR 20177006999 A 20151105; TW 104137348 A 20151112; US 201515522978 A 20151105