

Title (en)

POLYETHER ESTER ELASTIC FIBER AND FABRICS AND CLOTHES MADE BY USING THE SAME

Title (de)

POLYETHERESTERELASTOFIBER SOWIE DAMIT HERGESTELLTE TEXTILE FLÄCHENGEBILDE UND KLEIDUNGSSTÜCKE

Title (fr)

FIBRE ELASTIQUE D'ESTER DE POLYETHER ET TISSUS ET VETEMENTS EN ETANT FAITS

Publication

**EP 1643019 A4 20070905 (EN)**

Application

**EP 04746409 A 20040618**

Priority

- JP 2004008940 W 20040618
- JP 2003175788 A 20030620
- JP 2003329584 A 20030922

Abstract (en)

[origin: EP1643019A1] A polyether ester elastic fiber comprising a polyether ester elastomer containing polybutylene terephthalate as a hard segment and polyoxyethylene glycol as a soft segment and copolymerized with a specific metal organic sulfonate, having a coefficient of moisture absorption of not less than 5 % at 35° C and at a RH of 95 % and a coefficient of water absorption extension of not less than 10 %. The above-mentioned polyether ester elastic fiber has a good moisture-absorbing property, and is reversibly largely expanded or contracted by the absorption or release of water. Therefore, a fabric giving excellent comfortableness can be obtained from said elastic fibers, and can be recycled.

IPC 8 full level

**D01F 6/86** (2006.01); **D03D 15/56** (2021.01)

CPC (source: EP KR US)

**D01F 6/86** (2013.01 - EP KR US); **Y10T 428/2913** (2015.01 - EP US)

Citation (search report)

- [A] EP 0821086 A2 19980128 - TEIJIN LTD [JP]
- [A] EP 0353768 A2 19900207 - DU PONT [US]
- See references of WO 2004113599A1

Cited by

US9334608B2

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

**EP 1643019 A1 20060405; EP 1643019 A4 20070905; EP 1643019 B1 20100922;** CA 2529842 A1 20041229; CA 2529842 C 20110712; DE 602004029254 D1 20101104; HK 1116520 A1 20081224; JP 4202361 B2 20081224; JP WO2004113599 A1 20060720; KR 101183498 B1 20120920; KR 20060021910 A 20060308; TW 200502451 A 20050116; TW 200722563 A 20070616; TW I285688 B 20070821; US 2006177655 A1 20060810; WO 2004113599 A1 20041229

DOCDB simple family (application)

**EP 04746409 A 20040618;** CA 2529842 A 20040618; DE 602004029254 T 20040618; HK 08105508 A 20080519; JP 2004008940 W 20040618; JP 2005507293 A 20040618; KR 20057024465 A 20040618; TW 93117766 A 20040618; TW 95148263 A 20040618; US 56115505 A 20051216