

Title (en)

A HIGH SHRINKAGE SIDE BY SIDE TYPE COMPOSITE FILAMENT AND A METHOD FOR MANUFACTURING THE SAME

Title (de)

HOCHSCHRUMPFENDESVERBUNDFILAMENT DES TYPUS SEITE AN SEITE SOWIE SEINE HERSTELLUNG

Title (fr)

FILAMENT COMPOSE DE TYPE COTE-A-COTE A RETRAIT ELEVE ET SON PROCEDE DE FABRICATION

Publication

EP 1565601 A1 20050824 (EN)

Application

EP 03774281 A 20031121

Priority

- KR 0302522 W 20031121
- KR 20020073701 A 20021126

Abstract (en)

[origin: WO2004048650A1] The present invention relates to a high shrinkage side-by-side type composite filament, wherein two kinds of thermoplastic polymers are arranged side by side type and a boiling water shrinkage (Sr2) measured by the method (initial load = notified denier x 1/10g, static load = notified denier x 20/10g) of clause 5.10 of JIS L 1090 is 20 to 75% of a boiling water shrinkage (Sr1) measured by the method (initial load = notified denier x 1/30g, static load = notified denier x 40/30g) of clause 7.15 of JIS L 1013. The side-by-side type composite filament is made of two kinds of thermoplastic polymers having a number average molecular weight difference (\overline{M}_n) of 5,000 to 15,000 upon spinning and the composite filament is drawn and heat-treated so as to satisfy the following physical properties: Temperature area exhibiting 95% of maximum thermal stress (Tmax, 95%): 120 to 230 °C Range of maximum thermal stress per denier : 0.1 to 0.4g/denier

IPC 1-7

D01D 5/30

IPC 8 full level

D01D 5/32 (2006.01); **D01F 6/78** (2006.01); **D01F 8/04** (2006.01); **D01F 8/14** (2006.01); **D03D 15/56** (2021.01); **D03D 15/567** (2021.01)

CPC (source: EP KR US)

D01F 6/78 (2013.01 - EP US); **D01F 8/04** (2013.01 - KR); **Y10T 428/2913** (2015.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004048650 A1 20040610; AU 2003284739 A1 20040618; CN 1717510 A 20060104; EP 1565601 A1 20050824; EP 1565601 A4 20060607; JP 2006507421 A 20060302; KR 100667624 B1 20070111; KR 20040047600 A 20040605; TW 200420764 A 20041016; TW I259853 B 20060811; US 2006051575 A1 20060309

DOCDB simple family (application)

KR 0302522 W 20031121; AU 2003284739 A 20031121; CN 200380104288 A 20031121; EP 03774281 A 20031121; JP 2004555103 A 20031121; KR 20030082432 A 20031120; TW 92133097 A 20031125; US 53520505 A 20050517