

Title (en)  
POLYESTER DIFFERENTIAL SHRINKAGE BLENDED WOVEN YARN AND PROCESS FOR PRODUCING THE SAME

Title (de)  
DIFFERENZIIERT SCHRUMPFENDES POLYESTERMISCHGARN UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
FIL POLYESTER TISSE MIXTE A RETRAIT DIFFERENTIEL ET PROCEDE DE FABRICATION ASSOCIE

Publication  
**EP 1703004 A4 20090121 (EN)**

Application  
**EP 04808170 A 20041227**

Priority  
• JP 2004019820 W 20041227  
• JP 2004002757 A 20040108

Abstract (en)  
[origin: EP1703004A1] A polyester combined filament yarn composed of a self-extending polyester multifilament yarn A and a heat-shrinkable polyester multifilament yarn B, wherein the polyester multifilament yarn A comprises a core portion and a plurality of fin portions protruding in a radial fashion from the core portion along the lengthwise direction of the core portion, and the following conditions (a) to (c) are simultaneously satisfied.  
( a )  $\frac{1}{20} \leq \frac{S_B}{S_A} \leq \frac{1}{3}$  ( b )  $0.6 \leq \frac{L_B}{D_A} \leq 3.0$  ( c )  $\frac{W_B}{D_A} \leq \frac{1}{4}$  (where S A represents the cross-sectional area of the core portion, D A represents the diameter of the core portion when the cross-section is a circle and the circumscribed circle diameter when it is not a circle, and S B , L B and W B represent the cross-sectional area, maximum length and maximum width, respectively, of the fin portions.)

IPC 8 full level  
**D02G 3/04** (2006.01); **D01F 6/62** (2006.01); **D01F 8/14** (2006.01); **D02G 3/02** (2006.01); **D02G 3/32** (2006.01); **D02J 1/08** (2006.01)

CPC (source: EP KR US)  
**D01F 6/62** (2013.01 - KR); **D01F 8/14** (2013.01 - EP US); **D02G 3/02** (2013.01 - KR); **D02G 3/04** (2013.01 - KR); **D02G 3/32** (2013.01 - EP US); **D02J 1/08** (2013.01 - EP KR US)

Citation (search report)  
• [XA] EP 0758027 A1 19970212 - TEIJIN LTD [JP]  
• [A] US 4965919 A 19901030 - FUJITA TAKAYOSHI [JP], et al  
• See references of WO 2005071149A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 1703004 A1 20060920; EP 1703004 A4 20090121**; CA 2552861 A1 20050408; CN 1902346 A 20070124; JP WO2005071149 A1 20070726; KR 20060130165 A 20061218; RU 2006128733 A 20080220; RU 2344213 C2 20090120; TW 200530446 A 20050916; US 2007186533 A1 20070816; WO 2005071149 A1 20050804

DOCDB simple family (application)  
**EP 04808170 A 20041227**; CA 2552861 A 20041227; CN 200480040040 A 20041227; JP 2004019820 W 20041227; JP 2005517211 A 20041227; KR 20067015697 A 20060803; RU 2006128733 A 20041227; TW 94100163 A 20050104; US 58530804 A 20041227