

Title (en)  
METHOD AND DEVICE FOR MAKING INDUSTRIAL CONTINUOUS FILAMENT YARN BY ENTANGLEMENT, AND POLYESTER CONTINUOUS FILAMENT

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON TECHNISCHEN FILAMENTGARNEN DURCH VERWIRBELN SOWIE EIN POLYESTERFILAMENTGARN

Title (fr)  
PROCEDE ET DISPOSITIF POUR LA FABRICATION DE FILS CONTINUS INDUSTRIELS PAR ENCHEVETREMENT, AINSI QUE FIL CONTINU POLYESTER

Publication  
**EP 1002148 A1 20000524 (DE)**

Application  
**EP 98934734 A 19980804**

Priority  
• CH 9800330 W 19980804  
• CH 185197 A 19970806

Abstract (en)  
[origin: WO9907930A1] The invention concerns a method for making industrial continuous filament yarn by entangling a polyester multifilament yarn at high temperature, under yarn traction force less than 140 cN. By means of a tangling cop tube consisting of a body (1) provided with a perforated plate (2) and a deflection plate (3), heat is directly transmitted to the polyester filament and the air passing through the cop tube body (1) is directly transmitted to a metal block (8) with high thermal conductivity directly connected to the deflection plate (3). In the device for implementing said method, the deflection plate (3) is directly connected to a metal block (8) with high thermal conductivity, wherein a bore (7) is provided for housing a heating element. The polyester continuous filament designed for spinning applications, with a yarn count of 500-2000 dtex, has a resistance of at least 70 cN/tex for a breaking elongation less than 24 %, and a knot strength higher than 80 % and a spacing between 2 knots more than 4.0 cm.

IPC 1-7  
**D02G 1/16**; **D02J 1/08**

IPC 8 full level  
**D02G 1/16** (2006.01); **D02J 1/08** (2006.01)

CPC (source: EP KR US)  
**D02G 1/16** (2013.01 - KR); **D02G 1/161** (2013.01 - EP US); **D02J 1/08** (2013.01 - EP US); **Y10T 428/2913** (2015.01 - EP US); **Y10T 428/2969** (2015.01 - EP US)

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB IE IT LI LU NL PT SE

DOCDB simple family (publication)  
**WO 9907930 A1 19990218**; AT E219174 T1 20020615; BR 9811820 A 20000815; CN 1091179 C 20020918; CN 1266466 A 20000913; DE 59804444 D1 20020718; DK 1002148 T3 20021014; EP 1002148 A1 20000524; EP 1002148 B1 20020612; ES 2178236 T3 20021216; JP 2001512794 A 20010828; KR 100469602 B1 20050202; KR 20010022589 A 20010326; PT 1002148 E 20021129; US 2002101011 A1 20020801; US 6365091 B1 20020402; US 6465093 B2 20021015

DOCDB simple family (application)  
**CH 9800330 W 19980804**; AT 98934734 T 19980804; BR 9811820 A 19980804; CN 98808007 A 19980804; DE 59804444 T 19980804; DK 98934734 T 19980804; EP 98934734 A 19980804; ES 98934734 T 19980804; JP 2000506407 A 19980804; KR 20007001181 A 20000203; PT 98934734 T 19980804; US 46393600 A 20000202; US 98994901 A 20011120