Title (en)
POLYESTER-STAPLE FIBERS AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
POLYESTER-STAPELFASERN UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
FIBRES DISCONTINUES EN POLYESTER ET PROCEDE DE FABRICATION DESDITES FIBRES

Publication
EP 1208254 A2 20020529 (DE)

Application
EP 00954560 A 20000725

Priority
• DE 19937727 A 19990810
• EP 0007087 W 20000725

Abstract (en)
[origin: US6576339B1] Polyester staple fibres consisting of a polyester, from 0.1 to 2.0% by weight of an incompatible, thermoplastic, amorphous, polymeric additive having a glass transition temperature of from 90 to 170° C. and a ratio of its melt viscosity to that of the polyester component of from 1:1 to 10:1, and from 0 to 5.0% by weight of conventional additives, where the polymeric additive is present in the staple fibres in the form of fibrils having a mean diameter of <=80 nm.Process for the production of these staple fibres by mixing with shearing of the polyester and of the polymeric additive and, optionally, of the conventional additives, spinning at a spinning take-off speed of <2500 m/min to give spun filaments, which are combined to form tows and stretched in a separate fibre stretching stage, crimped, dried and chopped to give staple fibres.

IPC 1-7
D01F 6/92

IPC 8 full level
C08L 67/02 (2006.01); **C08F 212/06** (2006.01); **C08F 220/00** (2006.01); **D01F 6/92** (2006.01)

CPC (source: EP KR US)
D01F 6/92 (2013.01 - EP KR US); Y10T 428/2913 (2015.01 - EP US); Y10T 428/2969 (2015.01 - EP US)

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

DOCDB simple family (publication)
US 6576339 B1 20030610; AT E262059 T1 20040415; AU 6697500 A 20010305; CN 1168857 C 20040929; CN 1370249 A 20020918; DE 19937727 A1 20010215; DE 50005713 D1 20040422; EA 004442 B1 20040429; EA 200200174 A1 20020829; EP 1208254 A2 20020529; EP 1208254 B1 20040317; ES 2214302 T3 20040916; JP 2003506586 A 20030218; KR 20020036842 A 20020516; MX PA02001289 A 20040910; PT 1208254 E 20040831; WO 0111117 A2 20010215; WO 0111117 A3 20011122

DOCDB simple family (application)
US 4901302 A 20020624; AT 00954560 T 20000725; AU 6697500 A 20000725; CN 00811651 A 20000725; DE 19937727 A 19990810; DE 50005713 T 20000725; EA 200200174 A 20000725; EP 0007087 W 20000725; EP 00954560 A 20000725; ES 00954560 T 20000725; JP 2001515360 A 20000725; KR 20027001701 A 20020207; MX PA02001289 A 20000725; PT 00954560 T 20000725