

Title (en)

Polyester fibres with improved bulk and process for their production.

Title (de)

PET-Fasern mit verbessertem Bausch und Verfahren zu ihrer Herstellung.

Title (fr)

Fibres de polyester avec gonflant amélioré et procédé pour sa production.

Publication

EP 0677601 A1 19951018 (DE)

Application

EP 95105498 A 19950412

Priority

DE 4412969 A 19940414

Abstract (en)

Stretch-oriented polyethylene terephthalate (PET) spun fibres with improved bulkiness and recovery contain (a) 0.01-2 wt.% of a known conventional nucleating agent, i.e. (a1) inorganic substances with a mean particle size of less than 10µm, (a2) monomeric cpds. such as carboxylate salts, benzophenone or alkali aralkylsulphonates or (a3) polyethylene, polypropylene, copolymers of ethylene and unsatd. acids, or styrene/diene copolymers, (b) 0.05-2 wt.% of an ester cpd. of formula (I), and other known conventional processing aids and use-related additives as required; (CH₃(CH₂)_aCO(OCH₂CH₂)_b-O-B)₂A (I) A = 1-10C alkylene; B = phenylene; a = 6-20; b = 1-5. Also claimed is a process for the prodn. of this fibre, by mixing PET with a relative viscosity of 1.45-1.68 with all additives etc., spinning the mixt. and stretching the prod.

Abstract (de)

Die Erfindung betrifft Polyethylenterephthalat-Fasern mit verbessertem Bausch, der erreicht wird, wenn sich die Wirkung von 0,05 bis 2 Gew.-% einer Esterverbindung der allgemeinen Formel [CH₃(CH₂)_aCO(O-CH₂-CH₂)_b-O-B]₂-A a = 6 - 20, b = 1 - 5; A =: Alkylrest C1 - C10; B =: Phenylrest, und die Wirkung von 0,01 bis 2,0 Gew.-% eines Nukleierungsmittels als Zusätze in der Polyesterschmelze ergänzen. Die gesponnen und gestreckten Fasern zeigen in Form eines Vlieses beim Messen der sogenannten Bauschigkeit einen hohen Anfangsbau und eine besonders hohe Rückstellkraft nach maximaler Belastung. <IMAGE>

IPC 1-7

D01F 6/62; **D01D 5/24**; **D01F 1/10**; **D01F 1/07**

IPC 8 full level

D01F 6/92 (2006.01); **D01D 5/08** (2006.01); **D01D 5/24** (2006.01); **D01F 1/07** (2006.01); **D01F 1/10** (2006.01); **D01F 6/62** (2006.01)

CPC (source: EP)

D01D 5/24 (2013.01); **D01F 1/07** (2013.01); **D01F 1/10** (2013.01); **D01F 6/62** (2013.01)

Citation (search report)

- [DA] EP 0194808 A1 19860917 - UNITIKA LTD [JP]
- [A] US 3772137 A 19731113 - TOLLIVER J
- [A] EP 0317192 A1 19890524 - DU PONT [US]
- [A] DE 1570350 A1 19700102 - CANADIAN IND

Cited by

CN108276566A; CN115948818A; EP1516079A4

Designated contracting state (EPC)

CH DE FR LI NL

DOCDB simple family (publication)

DE 4412969 C1 19950622; CN 1118819 A 19960320; CZ 92695 A3 19951115; DE 59502718 D1 19980813; EP 0677601 A1 19951018; EP 0677601 B1 19980708; RU 95105412 A 19970210; SK 46995 A3 19951108; TW 268050 B 19960111; ZA 952345 B 19951220

DOCDB simple family (application)

DE 4412969 A 19940414; CN 95103959 A 19950413; CZ 92695 A 19950412; DE 59502718 T 19950412; EP 95105498 A 19950412; RU 95105412 A 19950407; SK 46995 A 19950410; TW 84102652 A 19950320; ZA 952345 A 19950322