

Title (en)

Polyester fibres, their production process and use

Title (de)

Polyesterfasern, Verfahren zu deren Herstellung und deren Verwendung

Title (fr)

Fibres de polyester, leur procédé de fabrication et leur utilisation

Publication

EP 1743963 A1 20070117 (DE)

Application

EP 06012933 A 20060623

Priority

DE 102005033350 A 20050716

Abstract (en)

The monofilament fibers have an aliphatic-aromatic polyester, which shows recurring structure units derived from recurring polyethylene terephthalate units combined with alkylene glycols and an aromatic dicarbonic acids and has a concentration of 0.5-2 wt.% related to the total mass of the polymer. The polyester exhibits a free carboxyl groups of lesser than or equal to 3 mval/kg. The carboxyl groups like carbodiimide and/or epoxide compound, are disguised by hydrolysis stabilizer. The monofilament fibers have an aliphatic-aromatic polyester, which shows recurring structure units derived from recurring polyethylene terephthalate units combined with alkylene glycols and an aromatic dicarbonic acids and has a concentration of 0.5-2 wt.% related to the total mass of the polymer. The polyester exhibits a free carboxyl groups of lesser than or equal to 3 mval/kg. The carboxyl groups like carbodiimide and/or epoxide compound, are disguised by hydrolysis stabilizer. A non-layer formed, disc shaped particle (1-2 wt.%) exhibits a thickness of more than 20 nm and lesser than or equal to 60 nm and aspect ratio of no more than 20:1. An independent claim is included for production of monofilament transparent fibers.

IPC 8 full level

D01F 1/10 (2006.01); **D01F 6/62** (2006.01)

CPC (source: EP US)

D01F 1/10 (2013.01 - EP US); **D01F 6/62** (2013.01 - EP US); **Y10T 428/2933** (2015.01 - EP US)

Citation (applicant)

- GB 759374 A 19561017 - DEGUSSA
- EP 1186628 A2 20020313 - DEGUSSA [DE]
- US 6544644 B1 20030408 - BOUQUEREL FRANCK [FR], et al
- WO 0102629 A1 20010111 - RHODIANYL [FR], et al

Citation (search report)

- [XDA] WO 0102629 A1 20010111 - RHODIANYL [FR], et al
- [A] US 6667360 B1 20031223 - NG CHEK BENG [US], et al
- [A] EP 0761847 A2 19970312 - HOECHST TREVIRA GMBH & CO KG [DE]
- [A] EP 1548066 A1 20050629 - TEIJIN LTD [JP]

Designated contracting state (EPC)

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Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

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DOCDB simple family (application)

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