

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