

Title (en)

Divisible hollow copolyester fibers and divided copolyester fibers, woven or knitted fabric, artificial leather and nonwoven fabric comprising same

Title (de)

Teilbare Hohlfasern und geteilte Fasern aus Copolyester, daraus hergestellte Gewebe, Gewirke, Kunstleder und Vlies

Title (fr)

Fibres creuses divisibles et fibres divisées en copolyester, étoffe tissée, tricotée ou non tissée et cuir artificiel les comprenant

Publication

EP 0953660 A1 19991103 (EN)

Application

EP 99303358 A 19990429

Priority

JP 12052098 A 19980430

Abstract (en)

Divisible hollow copolyester fibers having a satisfactory processing property, for example, carding property and capable of being divided by applying a mechanical stress thereto into fibril-like thin fibers, each include a hollow portion surrounded by a shell portion and extending along the longitudinal axes of the hollow fibers, wherein the shell portion is made from a copolyester of an acid component including terephthalic acid and 1 to 6 molar % of a sulfonate group-containing dicarboxylic acid, with a diol component including ethylene glycol; the hollow fibers have (1) thickness of 0.56 to 8.89 d tex (0.5 to 8.0 denier), (2) a hollow ratio of 25/100 or more, (3) a crystallization degree of 20% or more, and (4) a crystal size in (010) plane of 4 nm or more; and the shell portions each have a plurality of cracks intermittently extending along the longitudinal axes of the hollow fibers. <IMAGE>

IPC 1-7

D01F 6/84; **D01D 5/24**

IPC 8 full level

D01D 5/24 (2006.01); **D01F 6/84** (2006.01)

CPC (source: EP KR)

D01D 5/24 (2013.01 - EP); **D01F 6/84** (2013.01 - EP); **D06M 14/14** (2013.01 - KR)

Citation (search report)

- [X] EP 0087292 A2 19830831 - DU PONT [US]
- [A] EP 0688892 A1 19951227 - TEIJIN LTD [JP]
- [A] EP 0022182 A1 19810114 - TEIJIN LTD [JP]
- [DA] PATENT ABSTRACTS OF JAPAN vol. 097, no. 002 28 February 1997 (1997-02-28)

Cited by

DE10258112A1; DE10258112B4

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0953660 A1 19991103; **EP 0953660 B1 20030618**; DE 69908856 D1 20030724; DE 69908856 T2 20040506; HK 1023153 A1 20000901; ID 27466 A 20010412; KR 100557271 B1 20060307; KR 19990083556 A 19991125; TW 554097 B 20030921

DOCDB simple family (application)

EP 99303358 A 19990429; DE 69908856 T 19990429; HK 00102215 A 20000412; ID 990408 D 19990430; KR 19990015178 A 19990428; TW 88107029 A 19990430