

Title (en)

Polyolefin fibers having high and permanent hydrophile characteristics and extrusion and spinning process thereof

Title (de)

Polyolefinfasern mit hohen und permanenten hydrophilen Eigenschaften und Verfahren zum Extrudieren und Spinnen derselben

Title (fr)

Fibres en polyoléfines ayant des caractéristiques hydrophiles élevées et permanentes et procédé pour leur extrusion et filage

Publication

EP 1162292 A1 20011212 (EN)

Application

EP 00830374 A 20000524

Priority

EP 00830374 A 20000524

Abstract (en)

Polyolefin fibers having high and permanent hydrophile characteristics obtained from a mixture of a polyolefin and a polyamide. Such fibers are produced by extrusion through the holes of a die and by spinning comprising the following steps: feeding the mixture of polyolefin and polyamide to an accumulation chamber (3) by means of a pump formed by two parallel, cooperating, rotary and grooved cylinders (2), placed perpendicularly with respect to the axis of the die holes; melting the mixture in a melting chamber; mixing the molten mixture in a heated melting chamber at a temperature higher than that of melting of the mixture by at least 10 DEG C, and extruding the molten mixture through the holes of a die (0) heated to a temperature higher than that of the mixture by about 10 DEG C. <IMAGE>

IPC 1-7

D01F 6/46; D01F 6/90; D01D 5/28; D01D 1/06; D01D 1/09

IPC 8 full level

D01D 1/06 (2006.01); **D01D 1/09** (2006.01); **D01D 5/28** (2006.01); **D01F 6/46** (2006.01); **D01F 6/90** (2006.01)

CPC (source: EP)

D01D 1/06 (2013.01); **D01D 1/09** (2013.01); **D01D 5/28** (2013.01); **D01F 6/46** (2013.01); **D01F 6/90** (2013.01)

Citation (search report)

- [X] WO 9827256 A2 19980625 - KIMBERLY CLARK CO [US]
- [X] WO 9417226 A1 19940804 - FIBERWEB NORTH AMERICA INC [US], et al
- [A] FR 2622602 A1 19890505 - CALVETE CAPDEVILA EUGENIO [FR]
- [A] FR 2541177 A1 19840824 - CALVETE CAPDEVILA EUGENIO [FR]
- [A] US 3500500 A 19700317 - CAPDEVILA EUGENIO CALVETE
- [A] US 3788613 A 19740129 - ROMERO A
- [A] FR 2594857 A1 19870828 - CALVETE CAPDEVILA EUGENIO [FR]
- [X] PATENT ABSTRACTS OF JAPAN vol. 004, no. 109 (E - 020) 6 August 1980 (1980-08-06)

Cited by

CN115449905A; CN111676534A

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)

EP 1162292 A1 20011212

DOCDB simple family (application)

EP 00830374 A 20000524