Title (en)

FIBER WITH NETWORK STRUCTURE, NONWOVEN FABRIC CONSTITUTED THEREOF, AND PROCESS FOR PRODUCING THE FIBER AND THE FABRIC

Title (de)

FASER MIT NETZWERKSTRUKTUR, DARAUS GEBILDETER VLIESSTOFF UND VERFAHREN ZUR HERSTELLUNG DER FASER UND DES VLIESSTOFFES

Title (fr)

FIBRE A STRUCTURE RETICULEE, NON-TISSE CONSTITUE DE TELLES FIBRES, ET PROCEDE DE PRODUCTION DE LA FIBRE ET DU NON-TISSE

Publication

EP 0645480 B1 20021120 (EN)

Application

EP 94912067 A 19940406

Priority

- JP 8158493 A 19930408
- JP 8158593 A 19930408
- JP 10487093 A 19930506
- JP 9400581 W 19940406

Abstract (en)

[origin: EP0645480A1] An ultrafine fiber with a network structure, wherein the defect of an olefin polymer and that of an ester polymer have been offset while utilizing the merits of both polymers; and a nonwoven fabric constituted thereof and having a dense structure. This fiber is produced from a mixture consisting at least of an olefin polymer and an ester polymer which are mutually incompatible and has a network structure. It is highly fibrillated to such an extent as has been unattainable heretobefore, has high strength and modulus, and is dyeable. The nonwoven fabric contains network-structure fibers of a mixture of an olefin polymer with an ester polymer incompatible therewith in a ratio of 5/95 to 95/5, and these fibers are bonded to each other wholly or partly. It is excellent in strength, moisture permeability and water pressure resistance and is dyeable.

IPC 1-7

D01D 5/11; D04H 1/42

IPC 8 full level

D01F 8/06 (2006.01); **D01F 8/14** (2006.01); **D04H 1/42** (2006.01); **D04H 1/54** (2006.01); **D04H 3/00** (2006.01); **D04H 3/005** (2012.01); **D04H 3/147** (2012.01); **D04H 3/153** (2012.01); **D04H 3/16** (2006.01)

CPC (source: EP US)

D01F 8/06 (2013.01 - EP); **D01F 8/14** (2013.01 - EP); **D04H 1/4291** (2013.01 - EP); **D04H 1/435** (2013.01 - EP); **D04H 1/43838** (2020.05 - EP US); **D04H 1/724** (2013.01 - EP); **D04H 3/00** (2013.01 - EP); **D04H 3/007** (2013.01 - EP); **D04H 3/011** (2013.01 - EP)

Cited by

US6096421A; EP2096198A1; US6004672A; US9605126B2; US9617685B2; WO9725461A1; WO2015191493A1; US9580845B2; US10011929B2

Designated contracting state (EPC)

DE FR GB LU

DOCDB simple family (publication)

EP 0645480 A1 19950329; **EP 0645480 A4 19950503**; **EP 0645480 B1 20021120**; DE 69431745 D1 20030102; DE 69431745 T2 20030904; JP 3317703 B2 20020826; WO 9424347 A1 19941027

DOCDB simple family (application)

EP 94912067 A 19940406; DE 69431745 T 19940406; JP 52296894 A 19940406; JP 9400581 W 19940406