

Title (en)
ULTRAFINE COMPOSITE FIBER, ULTRAFINE FIBER, METHOD FOR MANUFACTURING SAME, AND FIBER STRUCTURE

Title (de)
ULTRAFEINE VERBUNDFASER, ULTRAFEINE FASER, HERSTELLUNGSVERFAHREN DAFÜR SOWIE FASERGEBILDE

Title (fr)
FIBRE COMPOSITE ULTRAFINE, FIBRE ULTRAFINE, SON PROCÉDÉ DE FABRICATION ET STRUCTURE DE FIBRE

Publication
EP 2221402 A4 20110112 (EN)

Application
EP 08853481 A 20081128

Priority
• JP 2008071677 W 20081128
• JP 2007311425 A 20071130
• JP 2007311535 A 20071130

Abstract (en)
[origin: EP2221402A1] An ultrafine composite fiber of the present invention is obtained by heating and melting a composite-resin-formed product in front of a supply-side electrode and/or in a space between electrodes and extending the composite-resin-formed product by electrospinning, wherein the composite-resin-formed product is a solid-state composite-resin-formed product having two or more phases and including a resin that has a volume specific resistance of 10 15 @-cm or less, and that is exposed on 30 % or more of a surface of the composite-resin-formed product. With this, an ultrafine composite synthetic fiber and an ultrafine synthetic fiber can be obtained by electrospinning, without a solvent being mixed in a supply resin, and further, a method for manufacturing an ultrafine composite fiber, as well as a fiber structure containing an ultrafine composite fiber, are provided

IPC 8 full level
D01D 5/08 (2006.01); **D01F 8/04** (2006.01); **D02J 1/22** (2006.01); **D04H 1/72** (2006.01); **D04H 3/00** (2012.01); **D04H 3/005** (2012.01); **D04H 3/16** (2006.01)

CPC (source: EP US)
D01D 1/04 (2013.01 - EP US); **D01D 5/0023** (2013.01 - EP US); **D01D 5/30** (2013.01 - EP US); **D01D 10/00** (2013.01 - EP US); **D04H 1/728** (2013.01 - EP US); **D04H 3/00** (2013.01 - EP US); **D04H 3/005** (2013.01 - EP US); **D04H 3/016** (2013.01 - EP US); **D04H 3/147** (2013.01 - EP US); **D04H 3/16** (2013.01 - EP US); **Y10T 428/2929** (2015.01 - EP US); **Y10T 428/2931** (2015.01 - EP US)

Citation (search report)
• [X] WO 0236865 A1 20020510 - SHELL INT RESEARCH [NL]
• [X] WO 9533874 A1 19951214 - MINNESOTA MINING & MFG [US]
• [X] WO 9801607 A1 19980115 - KIMBERLY CLARK CO [US]
• [X] US 2006213829 A1 20060928 - RUTLEDGE GREGORY C [US], et al
• [AD] WO 2007105479 A1 20070920 - KURARAY CO [JP], et al
• See references of WO 2009069759A1

Cited by
CN104088022A; CN112481825A; WO2017148460A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2221402 A1 20100825; **EP 2221402 A4 20110112**; CN 101878331 A 20101103; CN 101878331 B 20120620; US 2010297443 A1 20101125; WO 2009069759 A1 20090604

DOCDB simple family (application)
EP 08853481 A 20081128; CN 200880118354 A 20081128; JP 2008071677 W 20081128; US 74538909 A 20091128