

Title (en)
COMPOSITE FIBER AND MOLDED ARTICLE

Title (de)
VERBUNDFASER UND FORMARTIKEL

Title (fr)
FIBRE COMPOSITE ET ARTICLE MOULÉ

Publication
EP 3690087 A4 20210602 (EN)

Application
EP 18862330 A 20180831

Priority
• JP 2017185816 A 20170927
• JP 2018032501 W 20180831

Abstract (en)
[origin: EP3690087A1] There are provided a composite fiber from which a fabric-feel molded article having a fiber texture can be obtained and a molded article using the composite fiber. The composite fiber has a sea-island structure in which, in a sea component 1 of which a cross section vertical to a longitudinal direction is made of a first thermoplastic resin, a plurality of island components 2 made of a second thermoplastic resin higher in melting point than the first thermoplastic resin is interspersed. Woven cloth, knitted cloth, or braided cloth is formed using a composite fiber 10 for two or more axes in which the sea component 1 has a parallel light transmittance of 5% or more, the island components 2 have a crystallinity of 10% or more, and the volume ratio of the island components 2 is 50 to 90%, and is thermally molded to form a molded article.

IPC 8 full level
D01F 8/04 (2006.01); **D01D 5/34** (2006.01); **D01F 8/06** (2006.01); **D02G 3/40** (2006.01); **D03D 15/00** (2021.01); **D04B 1/16** (2006.01); **D04B 21/16** (2006.01); **D04C 1/02** (2006.01)

CPC (source: EP US)
D01D 5/34 (2013.01 - EP); **D01F 8/04** (2013.01 - EP); **D01F 8/06** (2013.01 - EP); **D02G 3/40** (2013.01 - EP); **D03D 15/00** (2013.01 - EP US); **D03D 15/283** (2021.01 - EP US); **D04B 1/16** (2013.01 - EP); **D04B 21/16** (2013.01 - EP); **D04C 1/02** (2013.01 - EP); **D01D 5/36** (2013.01 - EP)

Citation (search report)
• [X] JP 2015112784 A 20150622 - UBE EXSYMO CO LTD
• [X] EP 1731641 A1 20061213 - UBE NITTO KASEI CO [JP]
• [XA] US 2008045109 A1 20080221 - OGATA TOSHIYUKI [JP], et al
• [A] CN 102560708 A 20120711 - UNIV SHAOXING, et al
• See also references of WO 2019065093A1

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

DOCDB simple family (publication)
EP 3690087 A1 20200805; **EP 3690087 A4 20210602**; CN 111065768 A 20200424; JP 2019060048 A 20190418; JP 7095967 B2 20220705; TW 201918596 A 20190516; TW I802586 B 20230521; WO 2019065093 A1 20190404

DOCDB simple family (application)
EP 18862330 A 20180831; CN 201880055707 A 20180831; JP 2017185816 A 20170927; JP 2018032501 W 20180831; TW 107130742 A 20180831