

Title (en)
FIBER STRUCTURE AND METHOD FOR MANUFACTURING SAME

Title (de)
FASERSTRUKTUR UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
STRUCTURE DE FIBRE ET PROCÉDÉ POUR SA FABRICATION

Publication
EP 4060115 A4 20231220 (EN)

Application
EP 21832998 A 20210527

Priority
• JP 2020113068 A 20200630
• JP 2021020188 W 20210527

Abstract (en)
[origin: EP4060115A1] A fiber structure contains polyester fibers 1 and a hydrophilic polyester resin treatment agent, wherein part 2a of a molecule 2 of the hydrophilic polyester resin treatment agent is absorbed in at least part of the polyester fibers 1, and the remainder 2b of the molecule extends along the surface of the polyester fibers 1 to hydrophilize the surface. The fiber structure has the properties below: (1) antifouling properties of grade 4 or higher according to the gray scale assessment determined by applying 200 g of muddy water, which is a mixture of normal staining soil and sand and distilled water at a ratio of 1:1, to the fiber structure, followed by standing for 24 hours, washing, and drying; (2) water absorbability of 10 seconds or less according to the falling-drop method; and (3) diffusivity of 55 minutes or less according to the diffusible residual water content test (dropping 0.6 mL of water). Thus, the present invention provides a fiber structure not involving curing to keep a good texture while having high antifouling properties, water absorbability, diffusivity, etc.

IPC 8 full level
D06M 15/507 (2006.01); **D06M 11/83** (2006.01); **D06M 15/53** (2006.01); **D06M 15/55** (2006.01); **D06M 16/00** (2006.01); **D06P 1/52** (2006.01); **D06P 1/60** (2006.01); **D06P 3/54** (2006.01); **D06M 101/32** (2006.01)

CPC (source: EP KR US)
D06M 11/83 (2013.01 - EP); **D06M 13/432** (2013.01 - EP); **D06M 13/46** (2013.01 - EP); **D06M 15/507** (2013.01 - EP KR US); **D06M 15/53** (2013.01 - EP); **D06M 16/00** (2013.01 - EP); **D06P 1/5271** (2013.01 - EP); **D06P 1/60** (2013.01 - EP); **D06P 3/54** (2013.01 - EP); **D06M 2101/32** (2013.01 - EP); **D10B 2401/13** (2013.01 - KR US)

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• See references of WO 2022004208A1

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 4060115 A1 20220921; **EP 4060115 A4 20231220**; CN 115003877 A 20220902; JP 2022011738 A 20220117; JP 6892541 B1 20210623; KR 20220097523 A 20220707; TW 202204724 A 20220201; TW I785633 B 20221201; US 2023032732 A1 20230202; WO 2022004208 A1 20220106

DOCDB simple family (application)
EP 21832998 A 20210527; CN 202180010144 A 20210527; JP 2020113068 A 20200630; JP 2021020188 W 20210527; KR 20227020385 A 20210527; TW 110120188 A 20210603; US 202117786285 A 20210527