

Title (en)
STAPLE FIBER TREATMENT AGENT, STAPLE FIBER, AND METHOD FOR MANUFACTURING SPUN-LACE NON-WOVEN CLOTH

Title (de)
STAPELFASERBEHANDLUNGSMITTEL, STAPELFASER UND VERFAHREN ZUR HERSTELLUNG VON SPINNLIESSTOFF

Title (fr)
AGENT DE TRAITEMENT DE FIBRES DISCONTINUES, FIBRE DISCONTINUE ET PROCÉDÉ DE FABRICATION DE TISSU NON TISSÉ HYDROLIÉ

Publication
EP 3907326 A4 20220420 (EN)

Application
EP 19907909 A 20191224

Priority
• JP 2019000238 A 20190104
• JP 2019050497 W 20191224

Abstract (en)
[origin: EP3907326A1] This staple fiber treatment agent includes: the fatty acid derivative described below; at least one selected from the fatty acid described below and the fat/oil described below; and the polyhydric alcohol described below (excepting polyoxyethylene (number of oxyethylene units is 20) polyoxypropylene (number of oxypropylene units is 30) glycol). Fatty acid derivative: A derivative manufactured by adding alkylene oxide in a ratio of 0.1-30 mol per mol of C12-24 fatty acid. Fatty acid: A C12-24 fatty acid. Fat/oil: At least one selected from vegetable oils, animal oils, and hydrogenated oils of the vegetable oils and the animal oils. Polyhydric alcohol: A polyhydric alcohol having 2-6 hydroxyl groups per molecule.

IPC 8 full level
D06M 13/224 (2006.01); **D04H 1/4258** (2012.01); **D04H 1/492** (2012.01); **D04H 1/74** (2006.01); **D06M 13/02** (2006.01); **D06M 13/148** (2006.01); **D06M 13/17** (2006.01); **D06M 13/184** (2006.01); **D06M 15/53** (2006.01); **D06M 15/643** (2006.01); **D06M 101/04** (2006.01)

CPC (source: EP)
D04H 1/4258 (2013.01); **D04H 1/492** (2013.01); **D04H 1/74** (2013.01); **D06M 13/02** (2013.01); **D06M 13/148** (2013.01); **D06M 13/17** (2013.01); **D06M 13/188** (2013.01); **D06M 13/224** (2013.01); **D06M 15/53** (2013.01); **D06M 15/643** (2013.01); **D06M 15/6436** (2013.01); **D06M 2200/40** (2013.01)

Citation (search report)
• [XI] JP 2018071013 A 20180510 - TAKEMOTO OIL & FAT CO LTD
• [X] CN 106176291 A 20161207 - GOLD HONG YE PAPER CO LTD
• [X] EP 2712956 A1 20140402 - TAKEMOTO OIL & FAT CO LTD [JP]
• [X] JP 2015145545 A 20150813 - MATSUMOTO YUSHI SEIYAKU KK
• [A] DE 3932032 A1 19910404 - KUHNLE PETER DR [DE]
• [A] JP 2018040100 A 20180315 - DAIWABO HOLDINGS CO LTD, et al
• [AD] JP 2014240530 A 20141225 - MATSUMOTO YUSHI SEIYAKU KK
• [AD] WO 2016104106 A1 20160630 - MATSUMOTO YUSHI SEIYAKU KK [JP]
• [A] US 5258129 A 19931102 - KATO TOMOHIRO [JP], et al
• [A] US 2005136098 A1 20050623 - SPADINI ALESSANDRO L [US], et al
• See also references of WO 2020141592A1

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

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EP 3907326 A1 20211110; EP 3907326 A4 20220420; CN 111757954 A 20201009; CN 111757954 B 20210706; JP 2020109221 A 20200716; JP 6533020 B1 20190619; TW 202031964 A 20200901; TW I727563 B 20210511; WO 2020141592 A1 20200709

DOCDB simple family (application)
EP 19907909 A 20191224; CN 201980013978 A 20191224; JP 2019000238 A 20190104; JP 2019050497 W 20191224; TW 108147485 A 20191225