

Title (en)
FIBROUS SUPPORT MATERIAL FOR THE PRODUCTION OF A POROUS COVERING RAW PAPER OR PREIMPREGNATE, AND PROCESS FOR ITS MANUFACTURE

Title (de)
FASERIGES TRÄGERMATERIAL ZUR HERSTELLUNG EINES PORÖSEN BESCHICHTUNGSRÖHPAPIERS ODER VORIMPRÄGNATES, UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
MATERIAU DU SUPPORT FIBREUX POUR LA PRODUCTION D'UN PAPIER DE BASE DE REVETEMENT POREUX OU PRÉIMPRÉGNÉ, ET PROCÉDÉ POUR SA PRODUCTION

Publication
EP 3303701 B1 20190130 (DE)

Application
EP 16730730 A 20160603

Priority
• EP 15170612 A 20150603
• EP 2016062732 W 20160603

Abstract (en)
[origin: WO2016193485A1] A fibrous substrate for producing a porous coating base paper or prepreg comprises a flat, impregnatable structure consisting of cellulose fibers and containing at least one pigment species and optionally additional materials used for paper. The cellulose fibers contain a proportion of between 1 and 20 wt.% of nanofibrillated cellulose (NFC). A method for producing the fibrous substrate comprises the steps: – providing an aqueous suspension which contains a cellulose-containing material and an admixture of the mentioned pigment species and optionally additional materials used for paper; - sheet forming; - drying. The cellulose material contains a proportion of NFC from 1 to 20 wt.% with a specific surface area (SSA) of at least 125 m²/g.

IPC 8 full level
D21H 11/18 (2006.01); **D21H 17/67** (2006.01); **D21H 27/26** (2006.01)

CPC (source: EP RU US)
D21H 11/18 (2013.01 - EP RU US); **D21H 17/67** (2013.01 - EP RU US); **D21H 17/675** (2013.01 - EP RU US); **D21H 27/26** (2013.01 - EP RU US)

Citation (opposition)
Opponent : Felix Schoeller Holding GmbH & Co. KG
• US 4952278 A 19900828 - GREGORY PAUL E [US], et al
• K. ERHARD ET AL.: "Senkung der Kosten gefüllter Papiersorten durch die Einlagerung von Faser-Füllstoff-Compounds auf Basis nanoskaliger Cellulosen", PTS-FORSCHUNGSBERICHT IGF 16359, 2013, pages 1 - 44, XP055656665
• Z. FANG ET AL.: "Development, application and commercialization of transparent paper", TRANSLATIONAL MATERIALS RESEARCH, 015004, 2014, pages 1 - 18, XP055656683
• I. SIRO ET AL.: "Microfibrillated cellulose and new nanocomposite materials: a review", CELLULOSE, vol. 17, 2010, pages 459 - 494, XP055068118, DOI: 10.1007/s10570-010-9405-y
• H.P.S. ABDUL KHALIL ET AL.: "Green composites from sustainable cellulose nanofibrils: A review", CARBOHYDRATE POLYMERS, vol. 87, 2012, pages 963 - 979, XP028112374, DOI: 10.1016/j.carbpol.2011.08.078
• H. SCHLOSSER: "Nano Disperse Cellulose und Nano Fibrillierte Cellulose - neue Produkte für die Herstellung und Veredelung von Papier und Karton", WOCHENBLATT FÜR PAPIERFABRIKATION, vol. 6, 2008, pages 1 - 11, XP055656693
• JOSSET, S. ET AL.: "Energy consumption of the nanofibrillation of bleached pulp, wheat straw and recycled newspaper through a grinding process", NORDIC PULP & PAPER RESEARCH JOURNAL, vol. 29, no. 1, 2014, pages 167 - 175, XP055656697
• A.F. TURBAK: "Microfibrillated cellulose, a new cellulose product: properties, uses and commercial potential", APPLIED POLYMER SYMPOSIA., JOHN WILEY AND SONS, INC. NEW YORK., US, vol. 37, 1 January 1983 (1983-01-01), US, pages 815 - 827, XP009170845, ISSN: 0570-4898

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)
WO 2016193485 A1 20161208; BR 112017026008 A2 20190219; BR 112017026008 B1 20220628; CA 2989124 A1 20161208; CA 2989124 C 20230404; CN 108026701 A 20180511; CN 108026701 B 20201023; EP 3303701 A1 20180411; EP 3303701 B1 20190130; ES 2722550 T3 20190813; PL 3303701 T3 20190930; RU 2017146376 A 20190710; RU 2017146376 A3 20190821; RU 2712598 C2 20200129; TR 201906053 T4 20190521; US 10767311 B2 20200908; US 2018179707 A1 20180628

DOCDB simple family (application)
EP 2016062732 W 20160603; BR 112017026008 A 20160603; CA 2989124 A 20160603; CN 201680041820 A 20160603; EP 16730730 A 20160603; ES 16730730 T 20160603; PL 16730730 T 20160603; RU 2017146376 A 20160603; TR 201906053 T 20160603; US 201615578727 A 20160603