

Title (en)
PULP-CONTAINING BIODEGRADABLE NON-WOVEN FABRIC AND METHOD FOR PRODUCING THE SAME

Title (de)
ZELLSTOFFHALTIGER BIOLOGISCH ABBAUBARER VLIESTOFF UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
TISSU NON-TISSÉ BIODÉGRADABLE CONTENANT DE LA PÂTE ET SON PROCÉDÉ DE PRODUCTION

Publication
EP 3867435 B1 20230503 (EN)

Application
EP 19787262 A 20191016

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Abstract (en)
[origin: WO2020079083A1] The present invention relates to a biodegradable non-woven fabric, a method for producing a biodegradable non-woven fabric and a wipe or tissue. The biodegradable non-woven fabric comprises biodegradable fibers and pulp fibers. At least a part of the biodegradable fibers is entangled with each other. At least a part of the pulp fibers is covalently bonded to each other by at least one of the group consisting of a biodegradable binder, a biodegradable wet-strength agent and a biodegradable binder fiber.

IPC 8 full level
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D04H 1/425 (2013.01 - EP RU); **D04H 1/4258** (2013.01 - EP RU); **D04H 1/488** (2013.01 - EP RU); **D04H 1/49** (2013.01 - EP RU); **D04H 1/492** (2013.01 - EP RU); **D04H 1/5412** (2020.05 - EP RU US); **D04H 1/5418** (2020.05 - EP RU US); **D04H 1/587** (2013.01 - EP); **D04H 5/03** (2013.01 - EP RU US); **D04H 5/04** (2013.01 - EP); **D06B 5/22** (2013.01 - US); **D21H 13/08** (2013.01 - EP); **D21H 21/20** (2013.01 - EP); **D21H 27/002** (2013.01 - EP)

Citation (examination)
• EP 2108676 A1 20091014 - ORGANOCLICK AB [SE]
• EP 2985375 A1 20160217 - GLATFELTER GERNSBACH GMBH [DE]

Citation (opposition)
Opponent : **AHLSTROM OYJ**
• JP H03241050 A 19911028 - AGENCY IND SCIENCE TECHN, et al
• WO 2018007092 A1 20180111 - ELLEPOT AS [DK]
• US 5656367 A 19970812 - IOVINE CARMINE P [US], et al
• EP 0602881 A1 19940622 - DEXTER CORP [US]
• JP 2007190531 A 20070802 - KANAI JUYO KOGYO KK, et al
• EP 2985375 A1 20160217 - GLATFELTER GERNSBACH GMBH [DE]
• EP 2108676 A1 20091014 - ORGANOCLICK AB [SE]
• WO 2018038671 A1 20180301 - ORGANOCLICK AB [SE]
• WO 2018038670 A1 20180301 - ORGANOCLICK AB [SE]
• WO 2017086851 A1 20170526 - SCA HYGIENE PROD AB [SE]
• "Paper Products Physics and Technology", 16 October 2009, WALTER DE GRUYTER, ISBN: 978-3-11-021345-4, article BO ANDREASSON: "7. On the Mechanisms Behind the Action of Wet Strength and Wet Strength Agents", pages: 185 - 208, XP093161375, DOI: 10.1515/9783110213461.185
• "Encyclopedia of polymer science and technology", 1 January 1987, JOHN WILEY & SONS, INC., ISBN: 978-0-471-80942-5, article ARTHUR DRELICH: "NONAQUEOUS DISPERSIONS", pages: 204 - 226, XP093161381
• LAURA ANDZE: "EFFECT OF MOLECULAR CHITOSAN ON RECOVERED PAPER PROPERTIES DESCRIBED BY A MATHEMATIC MODEL", CELLULOSE CHEMISTRY AND TECHNOLOGY, vol. 52, no. 9-10, 1 January 2018 (2018-01-01), pages 873 - 881, XP093161386

Opponent : **Kemira Oyj**
• WO 2020079083 A1 20200423 - GLATFELTER GERNSBACH GMBH [DE]
• WO 2014117964 A1 20140807 - GLATFELTER GERNSBACH GMBH & CO KG [DE]
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• US 5308663 A 19940503 - NAKAGAWA MUTUO [JP], et al
• JP H093757 A 19970107 - NEW OJI PAPER CO LTD
• WO 9612849 A1 19960502 - MOELNLYCKE AB [SE], et al
• WO 2019152638 A1 20190808 - GEORGIA PACIFIC NONWOVENS LLC [US]
• GB 2513124 A 20141022 - WELLAND MEDICAL LTD [GB]

Opponent : **Suominen Oyj**
• WO 2014117964 A1 20140807 - GLATFELTER GERNSBACH GMBH & CO KG [DE]
• JP H03241050 A 19911028 - AGENCY IND SCIENCE TECHN, et al
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• US 2003203195 A1 20031030 - MARSH DAVID G [US]
• JP H093757 A 19970107 - NEW OJI PAPER CO LTD
• US 2001023160 A1 20010920 - YAMADA DAISUKE [JP], et al
• WO 2019152638 A1 20190808 - GEORGIA PACIFIC NONWOVENS LLC [US]
• WO 2018038671 A1 20180301 - ORGANOCLICK AB [SE]

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DOCDB simple family (publication)
WO 2020079083 A1 20200423; CA 3116792 A1 20200423; CN 113227480 A 20210806; CN 113227480 B 20230411; EP 3867435 A1 20210825; EP 3867435 B1 20230503; ES 2949666 T3 20231002; PL 3867435 T3 20230828; RU 2769362 C1 20220330; US 2021340700 A1 20211104

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