

Title (en)

IMPROVEMENTS RELATING TO THE COLD-ALKALI PROCESS FOR THE PRODUCTION OF REGENERATED CELLULOSIC FIBERS

Title (de)

KALTALKALIVERFAHREN ZUR HERSTELLUNG VON REGENERIERTEN ZELLULOSEFASERN

Title (fr)

AMÉLIORATIONS SE RAPPORTANT À LA TRANSFORMATION BASIQUE À FROID POUR LA PRODUCTION DE FIBRES CELLULOSIQUES RÉGÉNÉRÉES

Publication

EP 4377501 A1 20240605 (EN)

Application

EP 22754087 A 20220722

Priority

- EP 21187686 A 20210726
- EP 2022070612 W 20220722

Abstract (en)

[origin: EP4124680A1] The present disclosure relates to a method and processing facility for producing regenerated cellulosic fibers. The method comprises extruding a spinning solution into a coagulation bath which contains a salt and preferably an alkali to produce the fibers. The spinning solution comprising cellulose dissolved in an aqueous solvent comprising NaOH and ZnO. The coagulation bath has a pH-value of at least seven. The method further comprises a continuous process of applying to the fibers in a never-dried state a crosslinking agent with two or more reactive groups and heating the fibers to a curing temperature while maintaining the never-dried condition to produce a reaction between the crosslinking agent and the cellulose of the fiber.

IPC 8 full level

D01D 1/02 (2006.01); **D01D 5/06** (2006.01); **D01D 10/02** (2006.01); **D01D 13/00** (2006.01); **D01F 2/02** (2006.01); **D01F 11/02** (2006.01)

CPC (source: EP)

D01D 1/02 (2013.01); **D01D 5/06** (2013.01); **D01D 10/02** (2013.01); **D01D 13/00** (2013.01); **D01F 2/02** (2013.01); **D01F 11/02** (2013.01)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4124680 A1 20230201; CA 3230533 A1 20230202; CN 117980548 A 20240503; EP 4377501 A1 20240605; TW 202313703 A 20230401; WO 2023006604 A1 20230202

DOCDB simple family (application)

EP 21187686 A 20210726; CA 3230533 A 20220722; CN 202280064423 A 20220722; EP 2022070612 W 20220722; EP 22754087 A 20220722; TW 111127772 A 20220725