

Title (en)

ENZYMATIC PRETREATMENT OF WOOD IN A METHOD FOR PRODUCING MECHANICAL PAPER PULP

Title (de)

ENZYMATISCHE VORBEHANDLUNG VON HOLZ IN EINEM VERFAHREN ZUR HERSTELLUNG VON MECHANISCHEM PAPIERZELLSTOFF

Title (fr)

PRETRAITEMENT ENZYMATIQUE DE BOIS DANS UN PROCEDE DE FABRICATION DE PATE A PAPIER MECANIQUE

Publication

EP 2761081 A1 20140806 (FR)

Application

EP 12767039 A 20120906

Priority

- FR 1158871 A 20110930
- FR 2012051998 W 20120906

Abstract (en)

[origin: WO2013045782A1] The invention relates to a method for producing mechanical paper pulp comprising at least: a step in which unprocessed wood is impregnated, whereby unprocessed wood is exposed to an impregnating composition comprising at least a laccase enzyme and a formula mediator (I), in which R1 and R2 are identical or different groups, chosen from among a hydrogen atom, a hydrocarbon chain, linear or branched, saturated or unsaturated, comprising 1 to 14 carbon atoms, where each hydrocarbon chain can be replaced by one or more functional groups chosen from among -OH, -SO₃, benzyl, amino, mercapto, keto or carboxyl, where R1 and R2 in combination can form a cyclical structure, to achieve impregnation of the wood; and a step in which the impregnated wood is mechanically refined, such that a mechanical paper pulp is obtained. The invention also relates to the impregnating composition used in this method and to the use thereof in a method for producing mechanical paper pulp, as well as to a method for producing paper.

IPC 8 full level

D21C 5/00 (2006.01); **D21B 1/02** (2006.01); **D21B 1/16** (2006.01); **D21H 11/18** (2006.01)

CPC (source: EP US)

D21B 1/02 (2013.01 - US); **D21B 1/021** (2013.01 - EP US); **D21C 5/005** (2013.01 - EP US); **D21C 9/163** (2013.01 - US); **D21H 11/18** (2013.01 - EP US); **D21C 9/10** (2013.01 - EP US)

Citation (search report)

See references of WO 2013045782A1

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 2013045782 A1 20130404; CA 2844380 A1 20130404; CA 2844380 C 20161108; CN 103842581 A 20140604; CN 108660826 A 20181016; EP 2761081 A1 20140806; EP 2761081 B1 20180808; FR 2980805 A1 20130405; FR 2980805 B1 20130920; US 2014231034 A1 20140821; US 9834886 B2 20171205

DOCDB simple family (application)

FR 2012051998 W 20120906; CA 2844380 A 20120906; CN 201280047210 A 20120906; CN 201810478473 A 20120906; EP 12767039 A 20120906; FR 1158871 A 20110930; US 201214347753 A 20120906