

Title (en)

METHOD FOR ISOLATING CELLULOSE FROM A BIOMASS AND PRODUCTS PROVIDED THEREFROM

Title (de)

VERFAHREN ZUM ISOLIEREN VON CELLULOSE AUS EINER BIOMASSE UND PRODUKTE DARAUS

Title (fr)

PROCÉDÉ D'ISOLEMENT DE CELLULOSE À PARTIR D'UNE BIOMASSE ET DES PRODUITS OBTENUS À PARTIR DE CELUI-CI

Publication

EP 3177768 A1 20170614 (EN)

Application

EP 15830054 A 20150211

Priority

- US 201414454972 A 20140808
- US 2015015368 W 20150211

Abstract (en)

[origin: CN105980630A] A pretreated biomass is subjected to high frequency pulses and shear forces without denaturing and/or degrading the individual components of the biomass. The biomass is then subjected to compressive force to separate a first liquid fraction from a first fractionated biomass. The first fractionated biomass may again then be subjected to the same high frequency pulses and shear forces as previously, particularly if there are hemicellulose and/or sugars still present in the first fractionated biomass. Compressive forces are used to separate a second liquid fraction from a second fractionated biomass. The second fractionated biomass is subjected to oxidation. The second fractionated biomass is then subjected to compressive forces to separate out one or more water insoluble components of the biomass in water soluble form and to provide cellulose that has not been denatured and/or degraded and has a lignin content of less than 7 percent.

IPC 8 full level

D21H 11/16 (2006.01); **C08B 15/08** (2006.01); **C12P 19/04** (2006.01)

CPC (source: EP US)

C08B 15/08 (2013.01 - EP US); **C08B 37/0057** (2013.01 - EP US); **C08G 63/06** (2013.01 - US); **C08G 63/912** (2013.01 - US);
C08H 6/00 (2013.01 - EP US); **C08H 8/00** (2013.01 - EP); **D21C 1/02** (2013.01 - EP US); **D21C 3/02** (2013.01 - EP); **D21C 3/224** (2013.01 - EP);
D21H 11/00 (2013.01 - EP US)

Citation (search report)

See references of WO 2016022172A1

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

DOCDB simple family (publication)

CN 105980630 A 20160928; EP 3177768 A1 20170614

DOCDB simple family (application)

CN 201580002207 A 20150211; EP 15830054 A 20150211