Title (en)

DECOMPOSITION OF MATERIALS CONTAINING CARBOHYDRATES USING INORGANIC CATALYSTS

Title (de)

ABBAU VON KOHLENHYDRATHALTIGEN MATERIALIEN MIT ANORGANISCHEN KATALYSATOREN

Title (fr)

DÉCOMPOSITION DE MATÉRIAUX CONTENANT DES HYDRATES DE CARBONE AVEC DES CATALYSEURS INORGANIQUES

Publication

EP 2294230 A1 20110316 (DE)

Application

EP 09780013 A 20090630

Priority

- EP 2009058144 W 20090630
- DE 102008030892 A 20080630

Abstract (en)

[origin: WO2010009958A1] The invention relates to a method for depolymerizing materials containing carbohydrates comprising the following steps: (a) treating a material containing carbohydrates with an inorganic catalyst in order to release defined monomeric or oligomeric building blocks from the material containing the carbohydrates; and (b) separating the defined monomeric or oligomeric building blocks produced in step (a) from the rest of the carbohydrate-containing material. Preferably, the inorganic catalyst used in step (a) comprises tectosilicates, phyilosilicates or hydrotalcites and more preferably zeolites or bentonites. The carbohydrate-containing material further comprises preferably LCB and the defined monomeric or oligomeric building blocks are preferably glucoses, xyloses, arabinoses and oligomers thereof. Other aspects of the invention refer to the use of solution promoters in combination with the inorganic catalyst.

IPC 8 full level

C13K 1/04 (2006.01); **C10G 1/08** (2006.01)

CPC (source: EP US)

C13K 1/02 (2013.01 - EP US); **C13K 1/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2010009958A1

Citation (examination)

- WO 2007100052 A1 20070907 - UNIV HOKKAIDO NAT UNIV CORP [JP], et al & EP 2011569 A1 20090107 - UNIV HOKKAIDO NAT UNIV CORP [JP]
- EP 0329923 A1 19890830 - SYNFINA SA [BE]

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 102008030892 A1 20091231; EP 2294230 A1 20110316; JP 2011526484 A 20111013; US 2011152514 A1 20110623; WO 2010009958 A1 20100128

DOCDB simple family (application)

DE 102008030892 A 20080630; EP 09780013 A 20090630; EP 2009058144 W 20090630; JP 2011515421 A 20090630; US 200913001860 A 20090630