

Title (en)

METHOD FOR TRANSFORMING LEVOGLUCOSENONE INTO 4-HYDROXYMETHYL BUTYROLACTONE OR 4-HYDROXYMETHYL BUTENOLIDE

Title (de)

VERFAHREN ZUR UMWANDLUNG VON LEVOGLUCOSENON IN 4-HYDROXYMETHYLBUTYROLACTON ODER 4-HYDROXYMETHYLBUTENOLID

Title (fr)

PROCÉDÉ DE TRANSFORMATION DE LÉVOGLUCOSÉNONE EN 4-HYDROXYMÉTHYLBUTYROLACTONE OU 4-HYDROXYMÉTHYLBUTÉNOLIDE

Publication

EP 3137617 A1 20170308 (FR)

Application

EP 15720056 A 20150429

Priority

- FR 1453957 A 20140430
- EP 2015059323 W 20150429

Abstract (en)

[origin: WO2015165957A1] The invention relates to a method for transforming levoglucosenone into 4-hydroxymethyl butyrolactone or 4-hydroxymethyl butenolide, comprising a step involving the oxidation of the levoglucosenone, or dihydrolevoglucosenone obtained by hydrogenation of levoglucosenone, by bringing a solution of levoglucosenone or dihydrolevoglucosenone in a solvent into contact with a lipase in the presence of an oxidizing agent and an acyl donor compound. The oxidation step is followed by a step involving the hydrolysis of the reaction mixture obtained, and, if necessary, a step involving the hydrogenation of the compound obtained at the end of the hydrolysis step.

IPC 8 full level

C12P 17/04 (2006.01)

CPC (source: EP US)

C12P 17/04 (2013.01 - EP US)

Citation (search report)

See references of WO 2015165957A1

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)

WO 2015165957 A1 20151105; AU 2015254654 A1 20161215; EP 3137617 A1 20170308; FR 3020638 A1 20151106; US 2017152536 A1 20170601

DOCDB simple family (application)

EP 2015059323 W 20150429; AU 2015254654 A 20150429; EP 15720056 A 20150429; FR 1453957 A 20140430; US 201515307712 A 20150429