

Title (en)

DIRECT SYNTHESIS OF BIO-BASED ALKYL&FURANIC DIOL ETHERS, ACETATES, ETHER-ACETATES, AND CARBONATES

Title (de)

DIREKTSYNTHESE BIOBASIRTER ALKYL- UND FURANDIOLEETHER, ACETATE, ETHER-ACETATE UND CARBONATE

Title (fr)

SYNTHÈSE DIRECTE D'ÉTHERS, D'ACÉTATES, D'ÉTHÉR-ACÉTATES ET DE CARBONATES D'ALKYLE ET DE DIOL FURANIQUE D'ORIGINE BIOLOGIQUE

Publication

EP 3083548 A1 20161026 (EN)

Application

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Priority

- US 201361918795 P 20131220
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- US 2014071512 W 20141219

Abstract (en)

[origin: WO2015095710A1] A method of preparing a glycol mono-ether or mono-acetate, or carbonate involving either one of two pathways from alkylene glycols, HMF or its reduction derivative products (i.e., FDM, bHMTTHFs), is provided. In particular, according to one pathway, the alkylene glycol, HMF or FDM, bHMTTHFs are reacted with a dialkyl carbonate in the presence of a deprotonating agent, in substantial absence of an extrinsic catalyst, to produce an ether, and subsequently reacting the ether with an acid base. According to the other pathway, alkylene glycols are reacted with an acetate donor in the presence of an acid, base, to generate an alkylene mono-acetate, and etherified with a carbonate in the presence of a deprotonating agent.

IPC 8 full level

C07C 67/08 (2006.01)

CPC (source: EP KR)

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