

Title (en)

THE CATALYST AND METHOD OF CATALYTIC HYDROGENATION OF HYDROXYCARBOXYLIC ACID ESTERS TO GLYCOLS

Title (de)

KATALYSATOR UND VERFAHREN ZUR KATALYTISCHEN HYDRIERUNG VON HYDROXYCARBONSÄUREESTERN IN GLYKOLE

Title (fr)

CATALYSEUR ET PROCÉDÉ D'HYDROGÉNATION CATALYTIQUE D'ESTERS D'ACIDES HYDROXYCARBOXYLIQUES EN GLYCOLS

Publication

EP 2480329 A2 20120801 (EN)

Application

EP 10765981 A 20100922

Priority

- EE P200900073 A 20090922
- EP 2010064001 W 20100922

Abstract (en)

[origin: WO2011036189A2] The invention relates to processes for the low-cost production of glycols from esters of hydroxycarboxylic acids. The esters of hydroxycarboxylic acids and hydrogen in gas phase are contacted with the catalyst which contains hydroxysilicate of copper or reduced hydroxysilicate of copper. The reduced hydrosilicate of copper contains metallic copper nanoparticles decorated by amorphous oxyhydroxide of silicon. Such decorated copper nanoparticles have advantageous activity and selectivity in catalytic hydrogenation of hydroxycarboxylic acid esters to glycols.

IPC 8 full level

B01J 21/06 (2006.01); **B01J 23/72** (2006.01); **B01J 37/18** (2006.01); **C07C 29/149** (2006.01); **C07C 31/20** (2006.01)

CPC (source: EP)

B01J 21/16 (2013.01); **B01J 23/72** (2013.01); **B01J 35/30** (2024.01); **B01J 37/18** (2013.01); **C07C 29/149** (2013.01); **Y02P 20/52** (2015.11)

Citation (search report)

See references of WO 2011036189A2

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2011036189 A2 20110331; **WO 2011036189 A3 20120223**; EA 021350 B1 20150529; EA 201200528 A1 20120928; EE 200900073 A 20110615; EP 2480329 A2 20120801

DOCDB simple family (application)

EP 2010064001 W 20100922; EA 201200528 A 20100922; EE P200900073 A 20090922; EP 10765981 A 20100922