

Title (en)  
PREPARATION OF ALPHA, BETA-UNSATURATED CARBOXYLIC ACIDS AND ESTERS THEREOF

Title (de)  
HERSTELLUNG VON ALPHA, BETA-UNGESÄTTIGTEN CARBONSÄUREN UND ESTERN DAVON

Title (fr)  
PRÉPARATION D'ACIDES CARBOXYLIQUES ALPHA,BÊTA-INSATURÉS ET DE LEURS ESTERS

Publication  
**EP 2822923 A4 20151104 (EN)**

Application  
**EP 13758082 A 20130306**

Priority  
• US 201261608053 P 20120307  
• US 201313819035 A 20130226  
• US 2013029368 W 20130306

Abstract (en)  
[origin: WO2013134385A1] An L-type zeolite, a modified L-type zeolite, or any combination thereof may be useful in catalytically preparing alpha,beta-unsaturated carboxylic acids and/or esters thereof through reaction pathways that include dehydroxylation reactions and optionally esterification reactions. In some reaction pathways, dehydroxylation reactions and esterification reactions may be performed sequentially or concurrently.

IPC 8 full level  
**C07C 51/377** (2006.01); **B01J 29/06** (2006.01); **C07C 51/09** (2006.01); **C07C 57/04** (2006.01); **C07C 67/327** (2006.01); **C07C 69/54** (2006.01)

CPC (source: CN EP)  
**B01J 29/06** (2013.01 - CN EP); **B01J 29/60** (2013.01 - CN EP); **B01J 29/605** (2013.01 - CN EP); **B01J 29/64** (2013.01 - CN EP); **B01J 35/40** (2024.01 - CN EP); **B01J 37/06** (2013.01 - CN EP); **C07C 51/09** (2013.01 - CN EP); **C07C 51/377** (2013.01 - CN EP); **C07C 67/327** (2013.01 - CN EP); **B01J 2229/186** (2013.01 - CN EP); **Y02P 20/50** (2015.11 - EP)

Citation (search report)  
• No further relevant documents disclosed  
• See references of WO 2013134385A1

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

DOCDB simple family (publication)  
**WO 2013134385 A1 20130912**; CA 2866003 A1 20130912; CN 104159883 A 20141119; EP 2822923 A1 20150114; EP 2822923 A4 20151104; IN 7484DEN2014 A 20150424; JP 2015510885 A 20150413; KR 20140131589 A 20141113

DOCDB simple family (application)  
**US 2013029368 W 20130306**; CA 2866003 A 20130306; CN 201380013134 A 20130306; EP 13758082 A 20130306; IN 7484DEN2014 A 20140904; JP 2014561076 A 20130306; KR 20147028049 A 20130306