

Title (en)

METHOD FOR THE PRODUCTION OF OLEFINS FROM CARBONYL COMPOUNDS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON OLEFINEN AUS CARBONYLVERBINDUNGEN

Title (fr)

PROCEDE DE PRODUCTION D'OLEFINES A PARTIR DE COMPOSES CARBONYLE

Publication

EP 1879848 A2 20080123 (DE)

Application

EP 06742316 A 20060509

Priority

- DE 2006000796 W 20060509
- DE 102005022361 A 20050510

Abstract (en)

[origin: WO2006119745A2] A method for the production of α,β -unsaturated compounds of general formula (I) is disclosed, where $R¹$ and $R²$ independently = H, substituted or unsubstituted alkyl or aryl, $R³$ = H, substituted or unsubstituted alkyl or aryl, or a functional group such as $OR⁴$, $NR⁵R⁶$, $SR⁷$, where $R⁴$, $R⁵$, $R⁶$ and $R⁷$ = common substituents in particular, alkyl- and/or aryl groups, or halogen, EWG = an electron withdrawing group such as for example, $CO₂H$, $CO₂R⁸$, $CONR⁹$, $R¹⁰$, $COSR¹¹$, CN , $NO₂$, $SO₂R¹²$, CHO , $COR¹³$, etc. where $R⁸$, $R⁹$, $R¹⁰$, $R¹¹$, $R¹²$ and $R¹³$ = common substituents, in particular, alkyl- and/or aryl groups, in which a carbonyl compound of formula (II), in which $R¹$ and $R²$ are as defined above, is reacted with a carboxylic acid of formula (III) in the presence of an amine or with the same acid generated in situ by the addition of an acid to the salt thereof in which $R³$ and EWG are as defined above. Under mild reaction conditions unsaturated esters with high (E)-stereoselectivity are obtained. The reaction typically occurs at room temperature or lower without particular requirements such as inert gas, exclusion of humidity, heat etc. $CO₂$ and water are obtained as the only by-products.

IPC 8 full level

C07C 67/32 (2006.01); **C07C 69/533** (2006.01); **C07C 69/608** (2006.01); **C07C 69/618** (2006.01); **C07C 69/732** (2006.01);
C07C 69/734 (2006.01); **C07C 69/738** (2006.01); **C07C 253/30** (2006.01); **C07C 255/57** (2006.01); **C07D 307/54** (2006.01)

CPC (source: EP US)

C07C 67/343 (2013.01 - EP US); **C07C 253/30** (2013.01 - EP US); **C07D 307/54** (2013.01 - EP US); **C07C 2601/14** (2017.04 - EP US)

C-Set (source: EP US)

1. **C07C 67/343 + C07C 69/738**
2. **C07C 67/343 + C07C 69/533**
3. **C07C 67/343 + C07C 69/608**
4. **C07C 67/343 + C07C 69/732**
5. **C07C 67/343 + C07C 69/734**
6. **C07C 67/343 + C07C 69/618**
7. **C07C 253/30 + C07C 255/57**

Citation (search report)

See references of WO 2006119745A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006119745 A2 20061116; **WO 2006119745 A3 20070104**; CN 101193850 A 20080604; DE 102005022361 A1 20061123;
EP 1879848 A2 20080123; JP 2008540464 A 20081120; US 2009012320 A1 20090108

DOCDB simple family (application)

DE 2006000796 W 20060509; CN 200680015805 A 20060509; DE 102005022361 A 20050510; EP 06742316 A 20060509;
JP 2008510398 A 20060509; US 91370606 A 20060509