

Title (en)  
METHOD FOR THE PRODUCTION OF 6,6,6-TRIALO-3,5-DIOXOHEXANOIC ACID ESTERS

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON 6,6,6-TRIALO-3,5-DIOXOHEXANS UREESTERN

Title (fr)  
PROCEDE POUR PRODUIRE DES ESTERS DE L'ACIDE 6,6,6-TRIALO-3,5-DIOXOHEXANOIQUE

Publication  
**EP 1680391 A1 20060719 (DE)**

Application  
**EP 04817266 A 20041022**

Priority  

- EP 2004011970 W 20041022
- EP 03024344 A 20031024
- EP 04817266 A 20041022

Abstract (en)  
[origin: WO2005040087A1] The invention relates to a method for the production of 6,6,6-trihalo-3,5-dioxohexanic acid esters of formula (I) in addition to the enols thereof and E and Z isomers, wherein X independently represents fluorine, chlorine or bromine and R<1> represents alkyl, cycloalkyl, aryl or aralkyl. The invention also relates to a method for the production of enol ethers of formula (Ib) and the enols thereof (E and Z isomers) wherein X and R<1> have the above-mentioned meaning.

IPC 1-7  
**C07C 67/03**; **C07D 309/38**; **C07C 69/738**; **C07C 69/716**

IPC 8 full level  
**C07C 67/03** (2006.01); **C07C 69/738** (2006.01); **C07D 309/38** (2006.01)

CPC (source: EP US)  
**C07C 67/03** (2013.01 - EP US); **C07C 69/738** (2013.01 - EP US); **C07D 309/38** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005040087A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005040087 A1 20050506**; CA 2541843 A1 20050506; CN 101693664 A 20100414; CN 102030645 A 20110427;  
CN 1871202 A 20061129; EP 1680391 A1 20060719; JP 2007509105 A 20070412; JP 4638441 B2 20110223; US 2006235240 A1 20061019;  
US 2007083061 A1 20070412; US 2008161582 A1 20080703; US 7348450 B2 20080325; US 7351851 B2 20080401; US 7781601 B2 20100824

DOCDB simple family (application)  
**EP 2004011970 W 20041022**; CA 2541843 A 20041022; CN 200480031436 A 20041022; CN 200910175012 A 20041022;  
CN 201010535922 A 20041022; EP 04817266 A 20041022; JP 2006536059 A 20041022; US 41621206 A 20060503; US 57707004 A 20041022;  
US 7199108 A 20080228