

Title (en)

METHOD FOR HIGH-PURITY QUATERNARY AMMONIUM COMPOUNDS

Title (de)

VERFAHREN ZUR HERSTELLUNG QUARTÄRER AMMONIUMVERBINDUNGEN HOHER REINHEIT

Title (fr)

PROCEDE DE PRODUCTION DE COMPOSES D'AMMONIUM QUATERNAIRES DE GRANDE PURETE

Publication

EP 1784380 A1 20070516 (DE)

Application

EP 05768765 A 20050803

Priority

- EP 2005008413 W 20050803
- DE 102004041139 A 20040824

Abstract (en)

[origin: WO2006021304A1] The invention relates to a method for producing quaternary ammonium compounds by reacting the corresponding tertiary sp³-hybridized amine or sp²-hybridized imine with dimethyl sulfite. The inventive method is characterized by carrying out the reaction (i) in the presence of a solvent selected from the group including aromatic hydrocarbons having 6 to 10 carbon atoms, symmetrical or unsymmetrical dialkyl ethers having a total of 5 to 10 carbon atoms, cycloalkane having 5 to 8 carbon atoms and C₅ to C₁₀ alkane; and (ii) at a temperature of 10 to 100 °C.

IPC 8 full level

C07C 209/20 (2006.01); **C07C 211/43** (2006.01); **C07D 213/20** (2006.01); **C07D 233/54** (2006.01)

CPC (source: EP KR US)

C07C 209/20 (2013.01 - EP KR US); **C07C 211/43** (2013.01 - KR); **C07D 213/20** (2013.01 - KR); **C07D 233/54** (2013.01 - KR)

C-Set (source: EP US)

C07C 209/20 + C07C 211/43

Citation (search report)

See references of WO 2006021304A1

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 2006021304 A1 20060302; CN 101006046 A 20070725; EP 1784380 A1 20070516; JP 2008510742 A 20080410; KR 20070053783 A 20070525; US 2008033209 A1 20080207

DOCDB simple family (application)

EP 2005008413 W 20050803; CN 200580028437 A 20050803; EP 05768765 A 20050803; JP 2007528655 A 20050803; KR 20077006688 A 20070323; US 66108005 A 20050803