

Title (en)  
PROCESS FOR SYNTHESIZING CARBAPENEM INTERMEDIATES

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON CARBAPENEM ZWISCHENPRODUKTEN

Title (fr)  
PROCEDE DE SYNTHESE POUR COMPOSES INTERMEDIAIRES DE CARBAPENEM

Publication  
**EP 0981522 A1 20000301 (EN)**

Application  
**EP 98920961 A 19980508**

Priority  
• GB 9806023 A 19980320  
• US 9809036 W 19980508  
• US 4635797 P 19970513

Abstract (en)  
[origin: WO9851677A1] A process for synthesizing a compound of formula (I) is disclosed wherein R represents halo or C1-6 alkyl, unsubstituted or substituted with OP, wherein P represents a protecting group, comprising: (a) reacting a compound of formula (II) with chlorosulfonic acid to produce a compound of formula (III), (b) reacting compound (III) with NHR<a>R<b>, wherein R<a> and R<b> represent H or C1-6 alkyl, to produce a compound of formula (IV), (c) reacting compound (IV) with HNO<sub>3</sub> to produce a compound of formula (V), (d) reacting compound (V) with a reducing agent to produce a compound of formula (VI) and (e) reacting compound (VI) with acid to produce a compound of formula (I). Intermediate compounds that are useful in the synthesis of carbapenem side chains are included as well.

IPC 1-7  
**C07D 275/06**; C07C 311/16; C07C 311/29; C07F 1/02

IPC 8 full level  
**C07C 311/16** (2006.01); **C07D 275/06** (2006.01); **C07F 1/02** (2006.01)

CPC (source: EP)  
**C07C 311/16** (2013.01); **C07D 275/06** (2013.01); **Y02P 20/55** (2015.11)

Citation (search report)  
See references of WO 9851677A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)  
**WO 9851677 A1 19981119**; AR 011735 A1 20000830; AU 728091 B2 20010104; AU 7367898 A 19981208; CA 2287931 A1 19981119; EP 0981522 A1 20000301; JP 2001527557 A 20011225; TW 408116 B 20001011

DOCDB simple family (application)  
**US 9809036 W 19980508**; AR P980102207 A 19980512; AU 7367898 A 19980508; CA 2287931 A 19980508; EP 98920961 A 19980508; JP 54927898 A 19980508; TW 87107245 A 19980511