

Title (en)

Process for the preparation of alpha-substituted-thien-3-ylacetic acid and derivatives thereof.

Title (de)

Verfahren zur Herstellung von alpha-substituierter-Thien-3-yl-essigsäure und deren Derivaten.

Title (fr)

Procédé pour la préparation de l'acide thién-3-yl-acétique alpha-substitué et ses dérivés.

Publication

EP 0000633 A2 19790207 (EN)

Application

EP 78300140 A 19780712

Priority

GB 3100877 A 19770723

Abstract (en)

A process for the preparation of 3-substituted thiophenes which involves cyclisation of a novel intermediate, avoids the use of previously employed expensive starting materials. The thiophenes are useful for the preparation of penicillins and cephalosporins. The process is for the preparation of a thiophene of formula (I): where R^{1} represents a carboxylic acid group, or an ester or amide thereof or a nitrile group; R^{2} represents a group suitable for use as an α -substituent in the side-chain of a penicillin or cephalosporin; which comprises treating a compound of formula (II): wherein X represents halogen or optionally functionalised hydroxyl, Y represents halogen, hydroxyl, or alkoxy; with a source of nucleophilic sulphur under basic conditions.

IPC 1-7

C07D 333/24; **C07C 57/02**; **C07C 69/52**

IPC 8 full level

C07C 45/00 (2006.01); **C07C 57/52** (2006.01); **C07C 67/00** (2006.01); **C07C 69/65** (2006.01); **C07C 231/00** (2006.01); **C07C 231/12** (2006.01); **C07C 233/09** (2006.01); **C07C 235/28** (2006.01); **C07C 253/00** (2006.01); **C07C 255/10** (2006.01); **C07D 333/24** (2006.01)

CPC (source: EP US)

C07C 45/00 (2013.01 - EP US); **C07C 57/52** (2013.01 - EP US); **C07C 255/00** (2013.01 - EP US); **C07D 333/24** (2013.01 - EP US)

C-Set (source: EP US)

C07C 45/00 + **C07C 49/227**

Cited by

EP0038121A3; FR2511368A1; DE202008004595U1

Designated contracting state (EPC)

BE CH DE FR GB NL SE

DOCDB simple family (publication)

EP 0023726 A1 19810211; **EP 0023726 B1 19820519**; DK 323978 A 19790124; EP 0000633 A2 19790207; EP 0000633 A3 19790613; EP 0000633 B1 19811104; ES 471964 A1 19800116; FI 782300 A 19790124; IE 47135 B1 19831228; IE 781469 L 19790123; IL 55144 A0 19780929; IT 1105934 B 19851111; IT 7850415 A0 19780721; JP S5424867 A 19790224; US 4252976 A 19810224; US 4282373 A 19810804; ZA 784101 B 19790725

DOCDB simple family (application)

EP 80105285 A 19780712; DK 323978 A 19780719; EP 78300140 A 19780712; ES 471964 A 19780721; FI 782300 A 19780720; IE 146978 A 19780721; IL 5514478 A 19780714; IT 5041578 A 19780721; JP 9032178 A 19780724; US 3640779 A 19790507; US 92672778 A 19780721; ZA 784101 A 19780719