

Title (en)
METHOD FOR PRODUCING 4-HALOALKYL NICOTINE NITRILES

Title (de)
VERFAHREN ZUR HERSTELLUNG VON 4-HALOALKYLNICOTINNITRILEN

Title (fr)
PROCEDE DE FABRICATION DE 4-HALOALKYL-NICOTINE-NITRILES

Publication
EP 1345906 A2 20030924 (DE)

Application
EP 01985871 A 20011212

Priority

- DE 10061967 A 20001213
- DE 10120819 A 20010427
- DE 10144411 A 20010911
- EP 0114584 W 20011212

Abstract (en)
[origin: WO0248111A2] 4-haloalkyl nicotine nitriles (I) are suitable for use as intermediate products in the production of pesticides and can be obtained by means of a method which provides that a) 3-amino-1-haloalkyl-2-propen-1-one $R<F>-C(O)-CH=CH-NH_2$ (II) is reacted with a compound of formula (III) to (VII), $(R<1>Z)CH=CH-CN$ (III) $(R<1>Z)2CH-CH_2-CN$ (IV) $Hal-CH=CH-CN$ (V) Hal_2CH-CH_2CN (VI) $HC=C-CN$ (VII) in a condensation reaction, $R<F>$ meaning (C1-C4)-haloalkyl $R<1>$ alkyl, Hal Cl or Br and Z meaning O, S, NR<1> or OCO, and in the case of formula (IV), the two radicals Z being able to have the aforementioned meanings, independently of each other; to produce a compound of formula (VIII), (IX) and/or (X), $R<F>-C(O)-CH=CH-NH-CH=CH-CN$ (VIII) $R<F>-C(O)-CH=CH-NH-CH(ZR)-CH_2-CN$ (IX) $R<F>-C(O)-CH=CH-NH-CH(Hal)-CH_2-CN$ (X), R, Z and Hal having the meanings given above, and subjecting the product of the reaction b) to a ring closure reaction.

IPC 1-7
C07D 213/85; **C07D 213/82**; **C07C 255/27**; **C07D 211/78**; **C07D 211/90**; **A01N 43/42**

IPC 8 full level
C07B 61/00 (2006.01); **C07C 255/24** (2006.01); **C07C 255/27** (2006.01); **C07C 255/30** (2006.01); **C07D 211/78** (2006.01); **C07D 211/90** (2006.01); **C07D 213/82** (2006.01); **C07D 213/85** (2006.01)

CPC (source: EP KR US)
C07C 255/24 (2013.01 - EP US); **C07C 255/27** (2013.01 - EP US); **C07C 255/30** (2013.01 - EP US); **C07D 211/78** (2013.01 - EP US); **C07D 211/90** (2013.01 - EP US); **C07D 213/85** (2013.01 - EP KR US)

Citation (examination)
J. FALBE ET AL. (HRSG.): "HOUBEN-WEYL, METHODEN DER ORGANISCHEN CHEMIE", vol. E5, 1985, GEORG THIEME VERLAG, Stuttgart, DE, New York, US, article "Carbonsäuren und Carbonsäure-Derivate", pages: 818

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

DOCDB simple family (publication)
WO 0248111 A2 20020620; **WO 0248111 A3 20030327**; AR 031658 A1 20030924; AU 3577002 A 20020624; BR 0116124 A 20031209; CN 1244560 C 20060308; CN 1479723 A 20040303; CZ 20031662 A3 20030917; EP 1345906 A2 20030924; HU P0401099 A2 20040928; HU P0401099 A3 20070228; IL 156359 A0 20040104; IL 156359 A 20090504; IL 187126 A0 20080209; IL 187126 A 20090803; JP 2004525091 A 20040819; KR 100845376 B1 20080709; KR 20030060116 A 20030712; MX PA03005258 A 20030925; TW I222442 B 20041021; US 2002087004 A1 20020704; US 2003109711 A1 20030612; US 6541640 B2 20030401; US 6864385 B2 20050308

DOCDB simple family (application)
EP 0114584 W 20011212; AR P010105750 A 20011211; AU 3577002 A 20011212; BR 0116124 A 20011212; CN 01820484 A 20011212; CZ 20031662 A 20011212; EP 01985871 A 20011212; HU P0401099 A 20011212; IL 15635901 A 20011212; IL 15635903 A 20030609; IL 18712607 A 20071101; JP 2002549642 A 20011212; KR 20037007878 A 20030612; MX PA03005258 A 20011212; TW 90130677 A 20011211; US 1347001 A 20011213; US 33016602 A 20021230