

Title (en)
METHOD FOR PREPARING 5-(1-METHYLETHYL)-6-(PHENYLMETHYL)PYRIMIDINE-2,4(1H,3H)-DIONE

Title (de)
VERFAHREN ZUR HERSTELLUNG VON 5-(1-METHYLETHYL) 6-(PHENYLMETHYL)PYRIMIDIN-2,4(1H,3H)-DIONE

Title (fr)
PROCEDE POUR LA PREPARATION DE 5-(1-METHYLETHYL)-6-(PHENYLMETHYL)PYRIMIDINE-2, 4(1H,3H)-DIONE

Publication
EP 1097143 A1 20010509 (FR)

Application
EP 99929485 A 19990715

Priority
• FR 9901723 W 19990715
• FR 9809085 A 19980716

Abstract (en)
[origin: FR2781219A1] Preparation of 1-alkoxyalkyl-6-benzyl-5-isopropyl-pyrimidine-2,4(1H,3H)-diones (II) involves preparing 5-(phenylmethyl)-4-(1-methylethyl)-pyrimidines (IV) by reacting a 4-chloro-5-(1-methylethyl)-pyrimidine with an organometallic reagent over a homogeneous metal catalyst, then hydrolyzing and alkylating. (IV) are new compounds. Preparation of 1-alkoxyalkyl-5-(1-methylethyl)-6-(phenylmethyl)-pyrimidine-2,4(1H,3H)-diones of formula (II) involves: (a) preparing 5-(phenylmethyl)-4-(1-methylethyl)-pyrimidines of formula (IV) by reacting a 4-chloro-5-(1-methylethyl)-pyrimidine of formula (VI) with an organometallic reagent of formula PhCH₂MX (V) (or with a benzyl halide in presence of magnesium), in presence of a homogeneous metal catalyst; (b) converting (IV) into 5-(1-methylethyl)-6-(phenylmethyl)-pyrimidine-2,4(1H,3H)-dione of formula (I) by direct acid hydrolysis or alternatively (if R₁ = halo) by dialkoxylation followed by hydrolysis; and (c) alkylating (I). R₁ = halo or 1-4C alkoxy; M = alkaline earth metal or other Group II or III metal; X = halo; R_a = 1-6C alkyl; R_b = H or 1-4C alkyl. Independent claims are included for: (1) preparation of (IV) by step (a) as above; (2) preparation of (I) by steps (a) and (b) as above; and (3) intermediates (IV) as new compounds.

IPC 1-7
C07D 239/54; **C07D 239/52**; **C07D 239/30**

IPC 8 full level
C07D 239/30 (2006.01); **C07D 239/52** (2006.01); **C07D 239/54** (2006.01)

CPC (source: EP KR US)
C07D 239/30 (2013.01 - EP KR US); **C07D 239/52** (2013.01 - EP KR US); **C07D 239/54** (2013.01 - EP KR US)

Citation (search report)
See references of WO 0003999A1

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

DOCDB simple family (publication)
FR 2781219 A1 20000121; **FR 2781219 B1 20000825**; AU 4628699 A 20000207; AU 764168 B2 20030814; CA 2337243 A1 20000127; EP 1097143 A1 20010509; JP 2002520400 A 20020709; KR 20010092262 A 20011024; US 6452006 B1 20020917; WO 0003999 A1 20000127

DOCDB simple family (application)
FR 9809085 A 19980716; AU 4628699 A 19990715; CA 2337243 A 19990715; EP 99929485 A 19990715; FR 9901723 W 19990715; JP 2000560106 A 19990715; KR 20017000598 A 20010115; US 74346301 A 20010507