(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/019201 A3

(51) International Patent Classification[7]: C07D 215/54, 405/04, 495/04

(21) International Application Number: PCT/US2004/026329

(22) International Filing Date: 13 August 2004 (13.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/496,191 19 August 2003 (19.08.2003) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

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(54) Title: PROCESS FOR THE PREPARATION OF 4-AMINO-3-QUINOLINECARBONITRILES

(57) Abstract: This invention discloses a process for the preparation of a 4-amino-3quinolinecarbonitrile comprising combining an amine compound with a cyanoacetic acid and an acid catalyst to yield a cyanoacetamide; condensing the cyanoacetamide with an optionally up-to tetra-substituted aniline in an alcoholic solvent and a trialkylorthoformate to yield an 2-amino-2-cyanoacrylamide; combining the 3-amino2-cyanoacrylamide with phosphorus oxychloride in acetonitrile, butyronitrile, toluene or xylene, optionally in the presence of a catalyst to yield a 4-amino-3quinolinecarbonitrile and also discloses a process for the preparation of a 7-amino-thieno[3,2-b]pyridine6-carbonitrile comprising combining a 3-amino thiophene with a cyanoacetamide and trial kylorthoformate in an alcoholic solvent to obtain a 3-amino2-cyanoacrylamide; and combining the 3-amino-2-cyanoacrylamide with phosphorus oxychloride and acetonitrile, butyronitrile, toluene or xylene, optionally in the presence of a catalyst to yield a 7-amino-thieno[3,2-b]pyridine-6-carbonitrile and also discloses a process for the preparation of a 4 amino-3-quinolinecarbonitrile comprising: combining an amine compound with cyanoacetic acid and a peptide coupling reagent to obtain a suspension; filtering the suspension; to yield cyanoacetamide; condensing the cyanoacetamide with an optionally up to tetra-substituted aniline with an alcoholic solvent to yield a 4-amino-3-quinolinecarbonitrile, and the invention discloses a process for obtaining a cyanoacetamide.

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IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
4 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.