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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
31 May 2007 (31.05.2007)

PCT

(10) International Publication Number
WO 2007/062370 A3

(51) International Patent Classification:
A61K 31/513 (2006.01)

(21) International Application Number:
PCT/US2006/061150

(22) International Filing Date:
21 November 2006 (21.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/739,067	22 November 2005 (22.11.2005)	US
60/738,731	22 November 2005 (22.11.2005)	US

(71) Applicant *(for all designated States except US)*: **SMITHKLINE BEECHAM CORPORATION** [US/US]; One Franklin Plaza, P.O. BoX 7929, Philadelphia, PA 19101 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KU, Thomas, Wen Fu** [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **LIN, Hong** [CN/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **LUENGO, Juan, I.** [ES/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **MARQUIS, Robert, W. Jr.,** [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **RAMANJULU, Joshi, M.** [IN/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **TROUT, Robert** [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **YAMASHITA, Dennis, S.** [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US).

(74) Agents: **SIMON, Soma, G.** et al.; GLAXOSMITHKLINE, Corporate Intellectual Property, UW2220, 709 Swedeland Road, P.O. BoX 1539, King Of Prussia, PA 19406-0939 (US).

(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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, IS, IT, LT, LU, LV, 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:
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
— *of inventorship (Rule 4.17(iv))*

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:
22 November 2007

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.

(54) Title: CALCILYTIC COMPOUNDS

(57) Abstract: Novel calcilytic compounds, pharmaceutical compositions, methods of synthesis and methods of using them are provided.

WO 2007/062370 A3