

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 May 2009 (28.05.2009)

PCT

(10) International Publication Number
WO 2009/067579 A1

(51) International Patent Classification:

C07D 451/04 (2006.01) A61K 31/46 (2006.01)
C07D 451/06 (2006.01) A61P 25/00 (2006.01)

Murali [US/US]; 1838 S. Waxwing Lane, Libertyville,
Illinois 60048 (US).

(21) International Application Number:

PCT/US2008/084148

(74) Agents: **CHEN, Portia** et al.; Abbott Laboratories, Dept.
0377, Bldg. AP6A-1A, 100 Abbott Park Road, Abbott
Park, Illinois 60064-6008 (US).

(22) International Filing Date:

20 November 2008 (20.11.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/989,538 21 November 2007 (21.11.2007) US

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, 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, LY, MA, MD, ME, 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, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM,
ZW.

(71) Applicant (*for all designated States except US*): **ABBOTT
LABORATORIES** [US/US]; 100 Abbott Park Road, Ab-
bott Park, Illinois 60064 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **Ji, Jianguo**
[US/US]; 1973 Sparrow Court, Libertyville, Illinois
60048 (US). **Li, Tao** [CN/US]; 33524 Gagewood Court,
Grayslake, Illinois 60030 (US). **SIPPY, Kevin B** [US/US];
633 Wood Creek Drive, Antioch, Illinois 60002 (US).
LEE, Chih-Hung [US/US]; 569 S. Central Place, Ver-
non Hills, Illinois 60061 (US). **GOPALAKRISHNAN,**

(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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,
NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(54) Title: BIARYL SUBSTITUTED AZABICYCLIC ALKANE DERIVATIVES AS NICOTINIC ACETYLCHOLINE RECEPTOR ACTIVITY MODULATORS

(57) Abstract: The invention relates to biaryl substituted azabicyclic alkane derivatives, compositions comprising such compounds, and methods of treating conditions and disorders using such compounds and compositions.

WO 2009/067579 A1