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

(19) World Intellectual Property Organization
International Bureau

G00002

(43) International Publication Date
29 August 2002 (29.08.2002)

PCT

(10) International Publication Number
WO 02/066456 A3

(51) International Patent Classification[7]: C07D 333/20, 409/10, A61K 31/381, A61P 25/28

(21) International Application Number: PCT/CA02/00176

(22) International Filing Date: 15 February 2002 (15.02.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/269,241 16 February 2001 (16.02.2001) US

(71) Applicants: **ALLELIX NEUROSCIENCE, INC.** [US/CA]; 6850 Goreway Drive, Mississauga, Ontario L4V 1V7 (CA). **NPS ALLELIX CORP.** [US/CA]; 6850 Goreway Drive, Mississauga, Ontario L4V 1V7 (CA).

(72) Inventors: **EGLE, Ian**; 4205 Shipp Drive, Apt. 1708, Mississauga, Ontario L4Z 2Y9 (CA). **DELANEY, William**; c/o Allelix Neuroscience, Inc., 6850 Goreway Drive, Mississauga, Ontario L4V 1V7 (CA). **WANG, Zhaoqing**; c/o Allelix Neuroscience, Inc., 6850 Goreway Drive, Mississauga, Ontario L4V 1V7 (CA). **SHUMACHER, Richard**; 16 Dorothy Drive, Monroe, NY 10950 (US). **HOPPER, Allen, T.**; 166 Jordans Circle, Somerset, NJ 08873 (US). **TEHIM, Ashok**; 349 Graydon Terrace, Ridgewood, NJ 07450 (US). **MADDAROD, Shawn**; 150 Lakeshore Road West, Apt. 210, Mississauga, Ontario L5H 3R2 (CA).

(74) Agent: **BERESKIN & PARR**; 40 King Street West, Box 401, 40th Floor, Toronto, Ontario M5H 3Y2 (CA).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

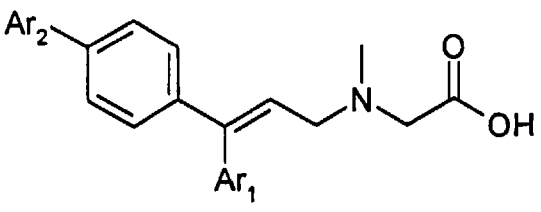
(88) Date of publication of the international search report:
17 October 2002

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.

162162

WO 02/066456 A3

(54) Title: THIOPHENE SUBSTITUTED AMINE DERIVATIVES AS GLYT-1 INHIBITORS



(I)

(57) Abstract: The invention provides a pharmaceutical for treatment of neurological and neuropsychiatric disorders comprising a compound of the formula (I) or a pharmaceutically acceptable salt thereof.