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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/061458 A2

(51) International Patent Classification[7]: C07D 213/74, 405/14, 405/12, 277/28, 401/12, A61K 31/506, 31/443, 31/444, A61P 25/00

(21) International Application Number:
PCT/US2004/041068

(22) International Filing Date:
10 December 2004 (10.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/528,486 11 December 2003 (11.12.2003) US

(71) Applicant *(for all designated States except US)*: **MEMORY PHARMACEUTICALS CORPORATION** [US/US]; 100 Philips Parkway, Montvale, NJ 07645 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **SCHUMACHER, Richard** [US/US]; 16 Dorothy Drive, Monroe, NY 10950 (US). **HOPPER, Allen** [US/US]; 29 Dean Street, Glen Rock, NJ 07452 (US). **DUNN, Robert** [US/US]; 3 Osborne Place, Towaco, NJ 07082 (US). **KUESTER, Erik** [US/US]; 3 Haines Court, Franklin, NJ 07416 (US). **TEHIM, Ashok** [US/US]; 246 N. Walnut Street, Ridgewood, NJ 07450 (US). **RENAU, Thomas, E.** [US/US]; 7 Philip Lane, San Carlos, CA 94070 (US). **CAROON, Joan** [US/US]; 1938 Silverwood Avenue, Mountain View, CA 94043 (US). **TALAMAS, Francisco** [MX/US]; 1658 Tulane Drive, Mountain View, CA 94040 (US). **LABADIE, Sharada** [US/US]; 1618 Kamsack Drive, Sunnyvale, CA 94087 (US).

(74) Agents: **HEANEY, Brion, P.** et al.; Millen, White, Zelano & Branigan, P.C., Arlington Courthouse Plaza 1, Suite 1400, 2200 Clarendon Boulevard, Arlington, VA 22201 (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, 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.

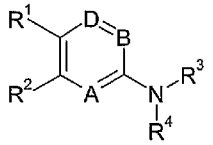
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, 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).

Published:
— *without international search report and to be republished upon receipt of that report*

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.

WO 2005/061458 A2

(54) Title: PHOSPHODIESTERASE 4 INHIBITORS, INCLUDING N-SUBSTITUTED DIARYLAMINE ANALOGS



(I)

(57) Abstract: PDE4 inhibition is achieved by novel compounds, e.g., N-substituted diarylamine analogs. The compounds of the present invention are of Formula (I), wherein A, B, D, R^1, R^2, R^3 and R^4 are as defined herein.