



(51) International Patent Classification:

C07D 279/08 (2006.01) *C07D 513/02* (2006.01)
C07D 498/04 (2006.01)

(21) International Application Number:

PCT/US2010/041034

(22) International Filing Date:

6 July 2010 (06.07.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/224,241 9 July 2009 (09.07.2009) US

(71) Applicant (for all designated States except US): **ELI LILLY AND COMPANY** [US/US]; Lilly Corporate Center, Indianapolis, Indiana 46285 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **AUDIA, James, Edmund** [US/US]; Eli Lilly and Company, Lilly Corporate Center, Indianapolis, Indiana 46285 (US). **MERGOTT, Dustin, James** [US/US]; Eli Lilly and Company, Lilly Corporate Center, Indianapolis, Indiana 46285 (US). **SHI, Chongsheng, Eric** [US/US]; Eli Lilly and Company, Lilly Corporate Center, Indianapolis, Indiana 46285 (US). **VAUGHT, Grant, Mathews** [US/US]; Eli Lilly

and Company, Lilly Corporate Center, Indianapolis, Indiana 46285 (US). **WATSON, Brian, Morgan** [US/US]; Eli Lilly and Company, Lilly Corporate Center, Indianapolis, Indiana 46285 (US). **WINNEROSKI, Leonard, Larry, Jr.** [US/US]; Eli Lilly and Company, Lilly Corporate Center, Indianapolis, Indiana 46285 (US).

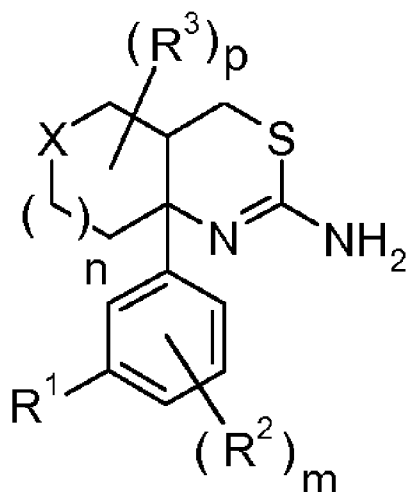
(74) Agents: **DINGESS-HAMMOND, Elizabeth A.** et al.; Eli Lilly and Company, Patent Division, P.O. Box 6288, Indianapolis, Indiana 46206-6288 (US).

(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, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,

[Continued on next page]

(54) Title: BACE INHIBITORS



I

(57) Abstract: The present invention provides BACE inhibitors of Formula I: methods for their use, intermediates, and methods for their preparation.



LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:**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))

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))