

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 September 2008 (25.09.2008)

PCT

(10) International Publication Number
WO 2008/115552 A1

(51) International Patent Classification:
C07D 233/88 (2006.01)

(74) Agent: **SILVER, Joel, B.**; Wyeth, Patent Law Department, Five Giralda Farms, Madison, New Jersey 07076, (US).

(21) International Application Number:
PCT/US2008/003681

(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, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date: 20 March 2008 (20.03.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/919,087 20 March 2007 (20.03.2007) US

(71) Applicant (*for all designated States except US*): **WYETH** [US/US]; Five Giralda Farms, Madison, New Jersey 07940 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **MALAMAS, Michael Sotirios** [US/US]; 2443 Oleander Circle, Jamison, Pennsylvania 18929 (US). **ROBICHAUD, Albert Jean** [US/US]; 3 Riverview Court, Ringoes, New Jersey 08551 (US). **PORTE, Alexander Michael** [US/US]; 26 Avalon Rd., Pennington, New Jersey 08534 (US). **SOLVIBILE, William Ronald** [US/US]; 49 Sandstone Road, East Windsor, New Jersey 08520 (US). **MORRIS, Koi Michele** [US/US]; 1919 Aspen Dr., Plainsboro, New Jersey 08536 (US). **ANTANE, Schuyler Adam** [US/US]; 56 Lillie St., Princeton Junction, New Jersey 08550 (US). **KIM, Ji-In** [US/US]; 672 Prospect Avenue, Princeton, New Jersey 08540 (US). **MCDEVITT, Robert Emmett** [US/US]; 6 Drift Rd., Freehold, New Jersey 07728 (US).

(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).

Declarations under Rule 4.17:

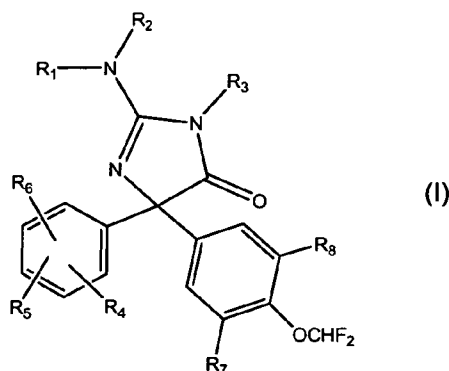
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report

[Continued on next page]

(54) Title: AMINO-5-[SUBSTITUTED-4-(DIFLUOROMETHOXY)PHENYL]-5-PHENYLIMIDAZOLONE COMPOUNDS AS β -SECRETASE INHIBITORS



(I)

(57) Abstract: The present invention provides a 2-amino-5-[substituted-4-(difluoromethoxy)phenyl]-5-phenylimidazolone compound of formula (I). The present invention also provides methods for the use thereof to inhibit β -secretase (BACE) and treat β -amyloid deposits and neurofibrillary tangles.

WO 2008/115552 A1



-
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*
- *with sequence listing part of description published separately in electronic form and available upon request from the International Bureau*