

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
5 April 2007 (05.04.2007)

PCT

(10) International Publication Number
WO 2007/038271 A1(51) International Patent Classification:
C07D 233/88 (2006.01) A61P 25/28 (2006.01)
A61K 31/4168 (2006.01)(74) Agent: LENCES, Barbara, L.; Wyeth, Patent Law
Department, Five Giralda Farms, Madison, New Jersey
07940, (US).(21) International Application Number:
PCT/US2006/036985(22) International Filing Date:
22 September 2006 (22.09.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/720,589 26 September 2005 (26.09.2005) 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, Jami-
son, Pennsylvania 18929 (US). ERDEI, James Joseph
[US/US]; 304b Cherry Street, Philadelphia, Pennsylvania
19016 (US). FOBARE, William Floyd [US/US]; 418
Bergen Street, Lawrenceville, New Jersey 08648 (US).
QUAGLIATO, Dominick Anthony [US/US]; 9 Cory
Lane, Bridgewater, New Jersey 08807 (US). ANTANE,
Schuyler Adam [US/US]; 56 Lillie Street, Princeton
Junction, New Jersey 08550 (US). ROBICHAUD, Albert
Jean [US/US]; 3 Riverview Court, Ringoes, New Jersey
08551 (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, HN, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT,
LU, LV, LY, MA, MD, 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.(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, LV, 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).

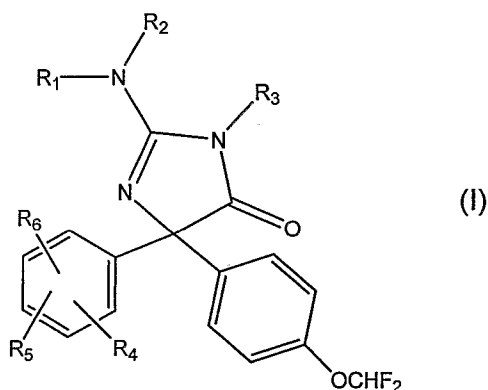
Declarations under Rule 4.17:

- 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
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: AMINO-5- [4- (DIFLUOROMETHOXY) PHENYL] -5-PHENYLIMIDAZOLONE COMPOUNDS AS INHIBITORS
OF THE BETA-SECRETASE (BACE)(57) Abstract: The present invention provides a
2-amino-5-[4-(difluoromethoxy)phenyl]-5-3,5-dihy-
dro-phenylimidazol-4-one 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.



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.