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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 June 2007 (28.06.2007)

PCT

(10) International Publication Number
WO 2007/071598 A1

(51) International Patent Classification:
C07D 413/04 (2006.01) *A61K 31/4439* (2006.01)
C07D 413/14 (2006.01) *A61P 25/28* (2006.01)
A61K 31/4245 (2006.01)

(21) International Application Number:
PCT/EP2006/069625

(22) International Filing Date:
13 December 2006 (13.12.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
05112956.7 23 December 2005 (23.12.2005) EP

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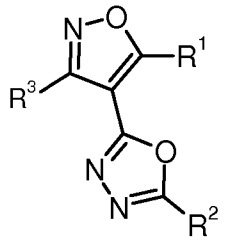
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, 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).

Published:
— *with international search 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.

(54) **Title:** ARYL-ISOXAZOLO-4-YL-OXADIAZOLE DERIVATIVES



(I)

(57) **Abstract:** The present invention is concerned with isoxazol-4-yl-oxadiazole derivatives of formula (I) wherein R^1 is hydrogen, halogen, aryl, heterocyclyl, heteroaryl, cyano, lower alkyl, -$(CH_2)_n$-cycloalkyl, -$(CH_2)_n$-N$(R)_2$, -$(CH_2)_n$-O-lower alkyl or -$(CH_2)_n$-OH; n is 0,1 or 2 R is hydrogen or lower alkyl; R^2 is cycloalkyl, aryl, heteroaryl or heterocyclyl, which are optionally substituted by one or more substituents, selected from the group consisting of halogen, cyano, nitro, lower alkyl, lower alkoxy, lower alkoxy substituted by halogen, lower alkyl substituted by halogen, C(O)O-lower alkyl, lower alkylsulfonyl, -NR^aR^b, -C(O)-NR^aR^b, -C(O)-heterocyclyl, benzyloxy, heterocyclyl optionally substituted by hydroxy, halogen or lower alkyl, or is heteroaryl optionally substituted by lower alkyl; R^a and R^b are independently hydrogen, lower alkylsulfonyl, -C(O)H, -$(CH_2)_n$-N$(R)_2$, -$(CH_2)_n$-O-lower alkyl, -$(CH_2)_n$-S-lower alkyl, -$(CH_2)_n$-S$(O)_2$-lower alkyl, heteroarylsulfonyl, lower alkyl, -(CH2)n-heterocyclyl, optionally substituted by lower alkyl, or is -$(CH_2)_n$-cycloalkyl, -$(CH_2)_n$-heteroaryl, -$(CH_2)_n$-OH, -(CO)-R', wherein R' is lower alkyl, cycloalkyl or heteroaryl; R^3 is aryl or heteroaryl, which are optionally substituted by halogen or lower alkyl substituted by halogen; as well as pharmaceutically acceptable acid addition salts thereof. It has been found that this class of compounds show high affinity and selectivity for GABA α5 receptor binding sites and might be useful as cognitive enhancer or for the treatment of cognitive disorders like Alzheimer's disease.

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