



(51) International Patent Classification:

C07D 403/12 (2006.01) *C07D 207/273* (2006.01)
C07D 233/42 (2006.01) *A61K 31/4164* (2006.01)
C07D 401/12 (2006.01) *A61P 25/00* (2006.01)
C07D 205/04 (2006.01)

(21) International Application Number:

PCT/EP2014/072235

(22) International Filing Date:

16 October 2014 (16.10.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/892,142 17 October 2013 (17.10.2013) US

(71) Applicants: **ABBVIE DEUTSCHLAND GMBH & CO. KG** [DE/DE]; Mainzer Str. 81, 65189 Wiesbaden (DE). **ABBVIE INC.** [US/US]; 1 North Waukegan Road, North Chicago, Illinois 60064 (US).(72) Inventors: **AMBERG, Wilhelm**; c/o AbbVie Deutschland GmbH & Co. KG, Knollstr. 50, 67061 Ludwigshafen (DE). **POHLKI, Frauke**; c/o AbbVie Deutschland GmbH & Co. KG, Knollstr. 50, 67061 Ludwigshafen (DE). **LANGE, Udo**; c/o AbbVie Deutschland GmbH & Co. KG, Knollstr. 50, 67061 Ludwigshafen (DE). **WANG, Ying**; 764 E. Sunnyside Ave., Libertyville, Illinois 60048 (US). **ZHAO, Hongyu**; 4572 Gavin Lane, Libertyville, Illinois 60048 (US). **LI, Huan-Qiu**; 200 17th Street, Wilmette, Illinois 60091 (US). **BREWER, Jason**; 3901 Harmony Ct., Zion, Illinois 60099 (US). **VASUDEVAN, Anil**; 105, 13th Avenue, Union Grove, Wisconsin 53182 (US). **LAO, Yan-**

bin; c/o AbbVie Inc., 1 North Waukegan Road, North Chicago, Illinois 60064 (US). **HUTCHINS, Charles W.**; 31005 Prairie Ridge Road, Green Oaks, Illinois 60048 (US).

(74) Agent: **REITSTÖTTER KINZEBACH**; Sternwartstraße 4, 81679 München (DE).

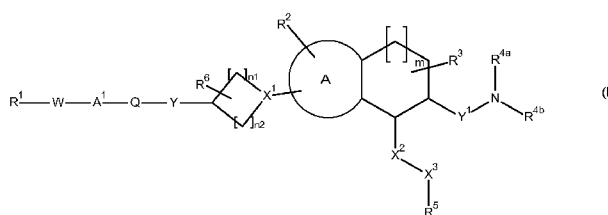
(81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) **Title:** AMINOTETRALINE AND AMINOINDANE DERIVATIVES, PHARMACEUTICAL COMPOSITIONS CONTAINING THEM, AND THEIR USE IN THERAPY



(57) **Abstract:** The present invention relates to aminotetraline and aminoindane derivatives of the formula (I) (I) or a physiologically tolerated salt thereof. The invention relates to pharmaceutical compositions comprising such aminotetraline and aminoindane derivatives, and the use of such aminotetraline and aminoindane derivatives for therapeutic purposes. The aminotetraline and aminoindane derivatives are GlyT1 inhibitors.