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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 November 2007 (29.11.2007)

PCT

(10) International Publication Number
WO 2007/136324 A1

(51) International Patent Classification:
C07D 401/04 (2006.01) *A61P 1/00* (2006.01)
A61K 31/4523 (2006.01)

(21) International Application Number:
PCT/SE2007/000482

(22) International Filing Date: 16 May 2007 (16.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/801,577 18 May 2006 (18.05.2006) US

(71) Applicant *(for all designated States except US)*: **ASTRAZENECA AB** [SE/SE]; S-151 85 Södertälje (SE).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **JOHANSSON, Anders** [SE/SE]; AstraZeneca R & D Mölndal, S-431 83 Mölndal (SE). **JOHANSSON, Johan** [SE/SE]; AstraZeneca R & D Mölndal, S-431 83 Mölndal (SE). **SIGFRIDSSON, Carl-Gustav** [SE/SE]; AstraZeneca R & D Mölndal, S-431 83 Mölndal (SE).

(74) Agent: **ASTRAZENECA AB**; Global Intellectual Property, S-151 85 Södertälje (SE).

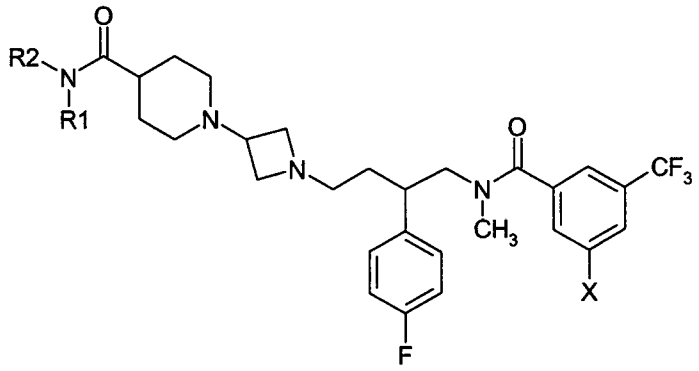
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, 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, MT, 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*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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: 1- [(4- [BENZOYL (METHYL) AMINO] -3- (PHENYL) BUTYL] AZETIDINE DERIVATIVES FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS 1



(I)

(57) Abstract: The present invention relates to new compounds of formula (I) wherein R1, R2 and X are as defined in the description, as well as salts and enantiomers thereof. The invention also relates to pharmaceutical compositions comprising said compounds, and to the use of said compounds in therapy, e.g. in the treatment of gastrointestinal disorders. The invention further relates to processes for the preparation of the compounds. The compounds are neurokinin (NK) receptor antagonists.

WO 2007/136324 A1