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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/089429 A1

(51) International Patent Classification[7]: C07D 413/06

(21) International Application Number: PCT/US03/11956

(22) International Filing Date: 17 April 2003 (17.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/373,734 18 April 2002 (18.04.2002) US

(71) Applicants *(for all designated States except US)*: **MERCK & CO., INC.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **MERCK SHARP & DOHME LIMITED** [GB/GB]; Hertford Road, Hoddesdon, Hertfordshire EN11 9BU (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **HUFFMAN, Mark** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **KABA, Mahmoud, S.** [LR/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **PAYACK, Joseph, F.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **HANDS, David** [GB/GB]; Hertford Road, Hoddesdon, Hertfordshire EN11 9BU (GB).

(74) Common Representative: **MERCK & CO., INC.**; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (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.

WO 03/089429 A1

(54) Title: PROCESS FOR 5-[[2(R)-[1(R)-[3,5-BIS(TRIFLUOROMETHYL)PHENYL]ETHOXY]-3(S)-(4-FLUOROPHENYL)-4-MORPHOLINYL]METHYL]-1,2-DIHYDRO-3H-1,2,4-TRIAZOL-3-ONE

(57) Abstract: The present invention is concerned with a novel process for the preparation of the compound 5-[[2(R)-[1(R)-[3,5-bis(trifluoromethyl)phenyl]ethoxy]-3(S)-(4-fluorophenyl)-4-morpholinyl]methyl]-1,2-dihydro-3H-1,2,4-triazol-3-one. This compound is useful as a substance P (neurokinin-1) receptor antagonist. In particular, the compound is useful e.g., in the treatment of psychiatric disorders, inflammatory diseases and emesis.