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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 December 2005 (29.12.2005)

PCT

(10) International Publication Number
WO 2005/123718 A2

(51) International Patent Classification[7]: C07D 403/00

(21) International Application Number: PCT/IB2005/001825

(22) International Filing Date: 1 June 2005 (01.06.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

2004-177488	15 June 2004 (15.06.2004)	JP
60/607,008	2 September 2004 (02.09.2004)	US
60/607,035	2 September 2004 (02.09.2004)	US
60/607,048	2 September 2004 (02.09.2004)	US

(71) Applicant *(for JP only)*: **PFIZER JAPAN INC.** [JP/JP]; Shinjuku Bunka Quint Bldg., 3-22-7, Yoyogi, Shibuya-ku,, Tokyo 151-8589 (JP).

(71) Applicant *(for all designated States except JP, US)*: **PFIZER INC.,** [US/US]; 235 East 42nd Street, New York, NY 10017 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **ANDO, Koji** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP). **IGUCHI, Satoru** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP). **MURASE, Noriaki** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP). **MURATA, Yoshinori** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP). **NUMATA, Toyoharu** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP). **SONE, Hiroki** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP). **UCHIDA, Chikara** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP). **UEKI, Tatsuo** [JP/JP]; Pfizer Global Research and Development, 2 Aza 5-gochi, Taketoyo-cho, Chita-gun, Aichi-ken 470-2393 (JP).

(74) Agents: **HIRSCH, Denise** et al.; c/o European Pharma Patent Department, Pfizer Research and Development, Ramsgate Road, Sandwich, Kent CT13 9NJ (GB).

(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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

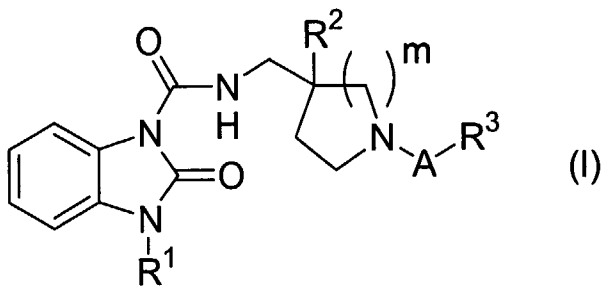
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, 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:

— *without international search report and to be republished upon receipt of that 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: BENZIMIDAZOLONE CARBOXYLIC ACID DERIVATIVES



(I)

(57) Abstract: This invention relates to compounds of the formula (I): wherein R^1, R^2, R^3, A and m are each as described herein or a pharmaceutically acceptable salt or solvate thereof, and compositions containing such compounds and the use of such compounds in the treatment of a condition mediated by 5-HT_4 receptor activity such as, but not limited to, gastroesophageal reflux disease, gastrointestinal disease, gastric motility disorder, non-ulcer dyspepsia, functional dyspepsia, irritable bowel syndrome (IBS), constipation, dyspepsia, esophagitis, gastroesophageral disease, nausea, central nervous system disease, Alzheimer's disease, cognitive disorder, emesis, migraine, neurological disease, pain, cardiovascular disorders such as cardiac failure and heart arrhythmia, diabetes and apnea syndrome.

WO 2005/123718 A2