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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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, 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.

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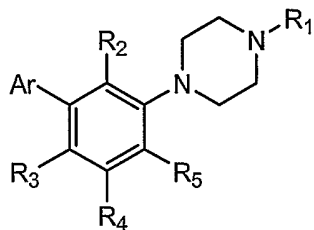
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3 August 2006

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: N-BIARYL AND N-ARYLHETEROARYL PIPERAZINE DERIVATIVES AS MODULATORS OF THE 5HT_{2C} RECEPTOR USEFUL FOR THE TREATMENT OF DISORDERS RELATED THERETO



(Ia)

(57) Abstract: The present invention relates to certain biaryl and arylheteroaryl piperazine derivatives of Formula (Ia) that are modulators of the 5HT_{2c} receptor. Accordingly, compounds of the present invention are useful for the treatment of 5HT_{2c} receptor associated diseases or disorders, such as, obesity, Alzheimer Disease, erectile dysfunction and related disorders.

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
 INV. C07D295/06 C07D295/08 A61K31/496 A61P3/00 C07D213/38
 C07D307/52 C07D333/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 C07D A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
 EPO-Internal, WPI Data, BEILSTEIN Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 675 118 A (EISAI CO., LTD) 4 October 1995 (1995-10-04) compounds 12, 20-22, 24, 25, 27, 49-55, 127, 129, 131, 142-144, 147, 151, 156, 178, 185, 205, 206, 208-212, 215-217, 220, 221, 246 page 1, line 5 - line 10	1-4, 13, 14, 19-44
X	DUNCAN W G; HENRY D W: "N-DIALKYLAMINOALKYLBI PHENYLAMINES AS ANTI MALARIAL AND ANTISCHISTOSOMAL AGENTS" JOURNAL OF MEDICINAL CHEMISTRY, vol. 12, no. 1, 1969, pages 25-29, XP002377508 ISSN: 0022-2623	1, 13, 14
X	table 2; compound 6	2
X	table 2; compound 28	3, 4
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Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- *G* document member of the same patent family

Date of the actual completion of the international search 20 April 2006	Date of mailing of the International search report 09/05/2006
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Moriggi, J-D
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2005/044293

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	URAWA, Y; MIYAZAWA, M; OZEKI, N; OGURA, K: "A Novel Methodology for Efficient Removal of Residual Palladium from a Product of the Suzuki-Miyaura Coupling with Polymer-Supported Ethylenediamine Derivatives" ORGANIC PROCESS RESEARCH & DEVELOPMENT, vol. 7, no. 2, 2003, pages 191-195, XP002377509 compounds (R)-2	1,2
A	DE 199 39 516 A1 (BOEHRINGER INGELHEIM PHARMA KG) 22 February 2001 (2001-02-22) compound II	1-44
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2005/044293

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 20-32 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2005/044293

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