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(54) Title: ARYL UREA DERIVATIVES FOR TREATING OBESITY

(57) Abstract: A method of treating a condition associated with the CB-1 receptor, in particular obesity, by administering an effective amount of an aryl urea CB-1 receptor modulating compound to a subject in need of such treatment.

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INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2005/050131

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K31/426 A61K31/381 A61K31/428 A61K31/341 A61K31/404
A61K31/44 A61K31/455 A61P25/18 A61P25/08 A61P3/04
A61P25/16 A61P25/28 A61P25/32 A61P25/34 A61P25/36

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)

A61K

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, PAJ, CHEM ABS Data, MEDLINE, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/048319 A (7TM PHARMA A/S; HOEGBERG, THOMAS; BJURLING, ANNA, EMELIE; RECEVEUR, JE) 10 June 2004 (2004-06-10) examples 9,10,110,111 -----	1,2, 5-19, 22-33
X	DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; GWIAZDA, ZYGMUNT: "Infrared spectrophotometric method for determining diuron in industrial products" XP002390022 retrieved from STN Database accession no. 91:84890 abstract & ORGANIKA 76-83 CODEN: ORGAD2; ISSN: 0137-9933, 1978, ----- -/--	18,19, 22,24, 25,27, 29-31

☒ 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

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

14 July 2006

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INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2005/050131

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	NG PH BUU-HOI ET AL: "New NN'-disubstituted thioureas and ureas of biological interest" JOURNAL OF THE CHEMICAL SOCIETY, CHEMICAL SOCIETY. LETCHWORTH, GB, 1958, pages 2815-2821, XP002128092 ISSN: 0368-1769 -----	18,19, 22-27, 29-31,33

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 5-18, 22-33 (partially); 2, 19 (completely)

The compounds of claim 18, Y being phenyl, pharmaceutical compositions comprising said compounds and a method of treatment according to claim 1 by administering a compound of Formula I, Y being phenyl

2. claims: 1, 5-18, 22-33 (partially); 3, 20 (completely)

The compounds of claim 18, Y being a 5- or 6-membered heteroaryl group, pharmaceutical compositions comprising said compounds and a method of treatment according to claim 1 by administering a compound of Formula I, Y being a 5- or 6-membered heteroaryl group

3. claims: 1, 5-18, 22-33 (partially); 4, 21 (completely)

The compounds of claim 18, Y being a 9-membered bicyclic heteroaryl group attached to the urea through the 5-membered ring, pharmaceutical compositions comprising said compounds and a method of treatment according to claim 1 by administering a compound of Formula I, Y being a 9-membered bicyclic heteroaryl group attached to the urea through the 5-membered ring

4. claim: 34 (completely)

The process of claim 34

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2005/050131

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 1,2,5-17 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:

see additional sheet

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.:

1, 5-18, 22-33 (partially); 2, 19 (completely)

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/GB2005/050131

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2004048319 A	10-06-2004	AU 2003226929 A1	18-06-2004
