

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 January 2007 (25.01.2007)

PCT

(10) International Publication Number
WO 2007/009894 A3

(51) International Patent Classification:

A61K 47/48 (2006.01) C07K 7/08 (2006.01)
C07K 7/06 (2006.01)

(21) International Application Number:

PCT/EP2006/064027

(22) International Filing Date: 7 July 2006 (07.07.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

05106554.8 18 July 2005 (18.07.2005) EP

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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, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, 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, RS, RU, SC, SD, SE, SG, SK, SL, SM, 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, 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

(88) Date of publication of the international search report:
13 September 2007

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: PEPTIDES FOR USE IN THE TREATMENT OF OBESITY

(57) Abstract: The present invention relates to novel peptide compounds which are effective in modulating one or more melanocortin receptor types, to the use of the compounds in therapy, to methods of treatment comprising administration of the compounds to patients in need thereof, and to the use of the compounds in the manufacture of medicaments. The compounds of the invention are of particular interest in relation to the treatment of obesity as well as a variety of diseases or conditions associated with obesity.



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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2006/064027

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K47/48 C07K7/06 C07K7/08

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)

C07K 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, CHEM ABS Data, WPI Data, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 128 448 A (DANHO WALEED [US] ET AL) 7 July 1992 (1992-07-07)	1, 42, 43, 54
X	claim 47	1, 42, 43, 54
A	the whole document	2-41, 44-53, 55, 56
X	JEFFERSON W TILLEY ET AL.: "Carboxylic Acids and Tetrazoles as Isosteric Replacements for Sulfate in Cholecystokinin Analogues" JOURNAL OF MEDICINAL CHEMISTRY, vol. 34, no. 3, March 1991 (1991-03), pages 1125-1136, XP002413472	1, 42, 43, 54
X	compound 51	1, 42, 43, 54
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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

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.

G document member of the same patent family

Date of the actual completion of the international search

13 June 2007

Date of mailing of the international search report

12/07/2007

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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2006/064027

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 339 549 A2 (HOFFMANN LA ROCHE [CH]) 2 November 1989 (1989-11-02)	1
X	claim 50	1
A	the whole document	2-56
X	WO 2004/099246 A2 (NOVO NORDISK AS [DK]; SENSFUSS ULRICH [DK]; CONDE FRIEBOES KILIAN WALD) 18 November 2004 (2004-11-18)	3,5,8, 18,21, 27, 29-34, 36,39-56
	claims 57-73; example 18	
A	WO 03/006620 A2 (PALATIN TECHNOLOGIES INC [US]; SHARMA SHUBH D [US]; SHADIACK ANNETTE M) 23 January 2003 (2003-01-23)	1-56
	the whole document	
A	US 6 054 556 A (HUBY VICTOR J [US] ET AL) 25 April 2000 (2000-04-25)	1-56
	the whole document	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2006/064027

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 39-53 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.:

Remark on Protest

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

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 and 2; partially 3-56

Compounds according to formula I, and compounds according to formulas II, IVa, IVb, IVc that contain a tetrazol-5-yl group.

2. claims: partially 3-56

Compounds according to formulas II, IVa, IVb and IVc that contain a carboxy- rather than a tetrazol-5-yl group.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2006/064027

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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