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- 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.*



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(54) Title: COMPOUNDS AND METHODS TO INHIBIT OR AUGMENT AN INFLAMMATORY RESPONSE

(57) Abstract: Isolated and purified chemokine peptides, variants, and derivatives thereof, as well as chemokine peptide analogs, are provided.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/00821

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/52 C07C237/22 C07C229/30 A61K31/435 A61K38/19

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)

IPC 7 C07K A61K C07C

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, CHEM ABS Data, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 99 12968 A (GRAINGER DAVID J ;TATALICK LAUREN MARIE (US); NEORX CORP (US); KAN) 18 March 1999 (1999-03-18) the whole document ---	1-62
X	US 5 459 128 A (ROLLINS BARRETT ET AL) 17 October 1995 (1995-10-17) claim 1 ---	1
X	US 5 824 647 A (KANG ANDREW ET AL) 20 October 1998 (1998-10-20) claims 1-5; example 11 ---	1,2,5,12
X	WO 86 04334 A (MERCK PATENT GMBH) 31 July 1986 (1986-07-31) claims 1,12-16; table 7 ---	1,2,9, 20,22
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Further documents are listed in the continuation of box C.

Patent family members are listed in 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

31 August 2000

Date of mailing of the international search report

26.09.00

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 05191 A (UAB RESEARCH FOUNDATION) 23 February 1995 (1995-02-23) claims 1-21; tables I-III ---	1-22
X	US 5 807 482 A (HOUSE DAVID W) 15 September 1998 (1998-09-15) column 5, line 1 - line 28 ---	23,24, 26,44-49
X	WO 98 42354 A (UNIV MARYLAND BIOTECHNOLOGY IN) 1 October 1998 (1998-10-01) claims 1,6,31 ---	1,36-38, 58-62
Y	WO 93 10796 A (GLYCOMED INC) 10 June 1993 (1993-06-10) claim 15 ---	25,27
Y	US 5 028 594 A (CARSON DENNIS A) 2 July 1991 (1991-07-02) claim 1 ---	25,27
X	WO 96 29074 A (LILLY CO ELI) 26 September 1996 (1996-09-26) page 13, line 7 - line 10 ---	23,24, 26,44-49
X	DE 27 10 246 A (RICHTER GEDEON VEGYESZET) 22 September 1977 (1977-09-22) claim 1 ---	23,24, 26,44-49
X	YOSHIHIRO SHIBBATA ET AL.: "N-Alkylphthalimides: Structural Requirement of Thalidomidal Action on 12-O-Tetradecanoylphorbol- 13- acetate Induced Tumor Necrosis Factor alpha Production by Human Leukemia HL-60 Cells" CHEM.PHARM.BULL., vol. 43, no. 1, 1995, pages 177-9, XP002146324 examples 4,5,7; table I -----	23,24, 26,44-49

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 00/00821

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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 1-14,19-22,29-32,34-36,52,53 are directed to a method of treatment of the human/animal body, the partial search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.: 1-62 (partially)
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:
see FURTHER INFORMATION sheet PCT/ISA/210
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 II Observations where unity of invention is lacking (Continuation of item 2 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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-62 (partially)

Present claims 1- 62 relate to an extremely large number of possible compounds and methods. Support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds and methods claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds and methods exemplified in examples 1 to 7 of the present application.

In addition Claims 1 to 14, 19 to 22, 29 to 32 to 36, 52, 53 have been drafted as separated independent claims directed to different uses of known and unknown compounds taking reference to the description. However, reading the description the application is directed to different compounds itself comprising different formulae I to XIX. This renders the scope of the claims unclear because the application might also be directed to the compounds I to XIX itself. Lack of clarity of the claims as a whole arises, since the plurality of independent claims makes it difficult, if not impossible, to determine the matter for which protection is sought, and places an undue burden on others seeking to establish the extent of the protection (Article 6 PCT).

The definition of 'chemokine peptide 3' in combination with the terms 'variant or derivative thereof' in the claims is vague and unclear. The definitions given in the description according to formula I to XIX contain so many options, variables, possible permutations and provisos that a lack of clarity within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible.

In addition claims 1 to 14 for example comprise saccharide conjugate of a chemokine peptide 3, a variant thereof and different compounds of different formula. It is not clear whether use of the saccharide conjugate of peptide 3 only or also of all other formulae is claimed.

Article 17(2)(a)(ii) and (b) PCT, Guidelines CIII, 2.1 and CIII,3.7

Consequently, the search has been carried out for those parts of the application which do appear to be clear namely 1- 62 partially in as far as compounds and tests of examples 1 to 28 and those specifically listed on pages 51 to 54 are concerned.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/00821

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