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WO 01/98328 A3

(54) Title: GLYCOPEPTIDE PHOSPHONATE DERIVATIVES

(57) Abstract: Disclosed are derivatives of glycopeptides that are substituted with one or more substituents each comprising one or more phosphono groups; and pharmaceutical compositions containing such glycopeptide derivatives. The disclosed glycopeptide derivatives are useful as antibacterial agents.

INTERNATIONAL SEARCH REPORT

International Application No PCT/US 01/13998
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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C07K9/00 A61K38/14 A61P31/04

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

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)
CHEM ABS Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00 04044 A (UNIV PRINCETON) 27 January 2000 (2000-01-27) claim 99; example 100 ---	1,23
P,A	WO 00 39156 A (ADVANCED MEDICINE INC ;LINSELL MARTIN SHERINGHAM (US); MU YONGQI) 6 July 2000 (2000-07-06) see compound 144 on page 30 claims -----	1,23

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
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Date of the actual completion of the international search 11 December 2001	Date of mailing of the international search report 10. 01. 2002
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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 <p style="text-align: center; font-size: 1.2em;">FUHR, C</p>
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/13998

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 33 and 34 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:

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

Present claim 1 relates to an 'glycopeptide with one or more substituents each comprising one or more phosphone groups'.

Dependent claim 5 relates to vancomycin derivatives which per definition do not necessarily comprise phosphono groups.

Therefore a lack of clarity (and/or conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear (and/or concise), namely phosphonated vancomycin derivatives as defined in the examples and closely related ones.

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 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 01/13998
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0004044	A	27-01-2000	AU 4991699 A 07-02-2000 EP 1095058 A1 02-05-2001 WO 0004044 A1 27-01-2000 AU 5141900 A 05-12-2000 WO 0069892 A1 23-11-2000
WO 0039156	A	06-07-2000	AU 3127300 A 31-07-2000 BR 9914221 A 26-06-2001 CN 1315961 T 03-10-2001 EP 1140993 A1 10-10-2001 NO 20006323 A 12-02-2001 WO 0039156 A1 06-07-2000