



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C12N 15/31, C07K 14/295, C12N 1/21, 5/10, 15/62, A61K 39/118, C12Q 1/68, C07K 16/12, 1/22, G01N 33/569, A61K 48/00	A3	(11) International Publication Number: WO 00/06742 (43) International Publication Date: 10 February 2000 (10.02.00)
(21) International Application Number: PCT/IB99/01331 (22) International Filing Date: 27 July 1999 (27.07.99) (30) Priority Data: 60/094,195 27 July 1998 (27.07.98) US 09/361,443 26 July 1999 (26.07.99) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/094,195 (CIP) Filed on 27 July 1998 (27.07.98) (71) Applicant (for all designated States except US): CONNAUGHT LABORATORIES LIMITED [CA/CA]; 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): MURDIN, Andrew, D. [GB/CA]; 146 Rhodes Circle, Newmarket, Ontario L3X 1V2 (CA). OOMEN, Raymond, P. [CA/CA]; Rural Route Number 1, Schomberg, Ontario L0G 1T0 (CA).	(74) Agent: SCHLICH, George, William; Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL (GB). (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 27 April 2000 (27.04.00)	
(54) Title: <i>CHLAMYDIA</i> ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF (57) Abstract In summary of this disclosure, the present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia, specifically <i>C. pneumoniae</i>, employing a vector, containing a nucleotide sequence encoding a CPN100605 polypeptide of a strain of <i>Chlamydia pneumoniae</i> and a promoter to effect expression of the CPN100605 polypeptide in the host. Modifications are possible within the scope of this invention.		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 99/01331

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/31 C07K14/295 C12N1/21 C12N5/10 C12N15/62
A61K39/118 C12Q1/68 C07K16/12 C07K1/22 G01N33/569
A61K48/00

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 C12N C07K A61K C12Q G01N

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE GENEMBL [Online] 22 July 1998 (1998-07-22) STEPHENS ET AL: "Chlamydia trachomatis section 61 of 87 of the complete genome" XP002129450 Accession AE001334 -& STEPHENS ET AL.: "Genome sequence of an obligate intracellular pathogen of humans: Chlamydia trachomatis" SCIENCE, vol. 282, 23 October 1998 (1998-10-23), pages 754-759, XP002104802 --- -/--	1-4, 10-20, 25-28



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

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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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Date of the actual completion of the international search

3 February 2000

Date of mailing of the international search report

09.02.00

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

ALCONADA RODRIG..., A

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 99/01331

C.(Continuation) 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 27105 A (GRIFFAIS REMY ;GENSET (FR)) 3 June 1999 (1999-06-03) page 7, line 6-18 page 13, line 34 -page 14, line 3 page 46, line 4-14 page 51, line 6 -page 54, line 28 page 56, line 30 -page 57, line 2 page 62, line 10-30 page 68, line 25-32 page 69, line 7 -page 70, line 22 page 119 SEQ ID NO 6851 SEQ ID NO 793	1-37
P,X	----- DATABASE GENEMBL [Online] 15 March 1999 (1999-03-15) KALMAN ET AL: "Chlamydia pneumoniae section 72 of 103 of the complete genome" XP002129403 Accession AE001656 -& KALMAN ET AL: "Comparative genomes of Chlamydia pneumoniae and C. trachomatis" NATURE GENETICS, vol. 21, no. 4, April 1999 (1999-04), pages 385-389, XP000853883 -----	1,4-6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 99/01331

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 20 and 24 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 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.
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Remark on Protest

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

Information on patent family members

PCT/IB 99/01331

Form PCT/ISA/210 (patent family annex) (July 1992)