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- (71) Applicant (for all designated States except US): **HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE** [US/US]; 1401 Rockville Pike, Suite 600, Rockville, MD 20852 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **MOND, James, J.** [US/US]; 527 Northwest Drive, Silver Spring, MD
- (74) Agents: **GARRETT, Arthur, S.** et al.; Finnegan, Henderson, Farabow Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (US).
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(54) Title: VACCINE AGAINST RSV

(57) Abstract: The present invention relates to a vaccine comprising adjuvanting oligodeoxynucleotides (ODNs), containing at least one CpG dinucleotide and an antigen comprising a peptide sequence bearing at least one epitope of a Paramyxoviridae F protein. In one embodiment, the ODN is admixed or conjugated to an F protein from a respiratory syncytial virus (RSV). The vaccine of the invention may be administered directly to mucosal tissues of the respiratory tract by inhalation or intranasal administration.

INTERNATIONAL SEARCH REPORT

International Application No

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K39/39 A61K39/155		
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 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) SEQUENCE SEARCH, BIOSIS, MEDLINE, WPI Data, EPO-Internal, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	TEBBEY P W ET AL: "A NOVEL AND EFFECTIVE INTRANASAL IMMUNIZATION STRATEGY FOR RESPIRATORY SYNCYTIAL VIRUS" VIRAL IMMUNOLOGY, MARY ANN LIEBERT, INC., NEW YORK, US, vol. 12, no. 1, 1999, pages 41-45, XP001055775 ISSN: 0882-8245 abstract table 1 figure 1 --- -/--	1-7
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.		
<input checked="" type="checkbox"/> 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		*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
E earlier document but published on or after the international filing date		*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
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)		*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.
O document referring to an oral disclosure, use, exhibition or other means		*&* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 17 July 2002		Date of mailing of the international search report 24/07/2002
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 COVONE-VAN HEES, M

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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.
A	WO 96 02555 A (UNIV IOWA RES FOUND) 1 February 1996 (1996-02-01) page 30, line 14 ----	4,5
P,X	WO 00 62802 A (SMITHKLINE BEECHAM BIOLOG ;DESCHAMPS MARGUERITE (BE)) 26 October 2000 (2000-10-26) page 1, line 2-11 example 1 claims ----	1-7
T	HANCOCK G E ET AL: "CpG containing oligodeoxynucleotides are potent adjuvants for parenteral vaccination with the fusion (F) protein of respiratory syncytial virus (RSV)" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 19, no. 32, 14 September 2001 (2001-09-14), pages 4874-4882, XP004303185 ISSN: 0264-410X the whole document -----	1-7

INTERNATIONAL SEARCH REPORT

International application No.
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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 6,7 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.
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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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