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(54) Title: GENERATION OF VIRUS-LIKE PARTICLES AND DEMONSTRATION OF LIPID RAFTS AS SITES OF FIVORIZUS ENTRY AND Budding

(57) Abstract: In this application is described a method for the formation of filovirus-like particles for both Ebola and Marburg and their use as a diagnostic and therapeutic agent as well as a filovirus vaccine. Also described is the association of Ebola and Marburg with lipid rafts during assembly and budding, and the requirement of functional rafts for entry of filoviruses into cells.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : C12N 7/01, 7/02, 7/04, 15/80, 15/87; A61K 39/12
US CL : 435/235.1, 471, 472, 69.1; 424/204.1, 205.1

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
U.S. : 435/235.1, 471, 472, 69.1; 424/204.1, 205.1

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>A</td>
<td>US 6,200,959 B1 (HAYNES et al.) 13 March 2001 (13.03.2001), see entire document.</td>
<td>5-44</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search: 12 December 2003 (12.12.2003)
Date of mailing of the international search report: 07 MAY 2004

Authorized officer: Bao Quan Li
Telephone No.: 703-308-0196
## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<td>A</td>
<td>KOLESNIKOVA et al. VP40, the Matrix Protein of Marburg Virus, Is Associated with Membranes of the Late Endosomal Compartment. J. Virol. February 2002, Vol. 76, No. 4, pages 1827-1838, see entire document.</td>
<td>1-44</td>
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</table>
Continuation of B. FIELDS SEARCHED Item 3:
CAPLUS, MEDLINE, WEST
Search terms: Filovirus like particle, Ebola virus, Marburg virus, matrix protein, envelope protein, glycoprotein, VP40, VLP, lipid raft