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16 November 2006

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.

(54) Title: METHODS OF ENTRAPPING, INACTIVATING, AND REMOVING VIRAL INFECTIONS BY THE ADMINISTRATION OF RESPIRATORY TRACT COMPOSITIONS

(57) Abstract: The present invention is directed to methods of preventing and treating respiratory tract viral infections by administering compositions to areas of the respiratory tract such as the nasal cavity, wherein the compositions provide for the encapsulation, inactivation, and/or removal of viruses and/or viral strains associated with the common cold and influenza. The methods of encapsulation, inactivation, and removal of cold and influenza viruses have been shown to create and maintain environments that are hostile to the viruses to result in effective prevention and treatment of cold and influenza-like symptoms.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2005/039926

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K31/765 A61K33/30 A61K45/00

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)
A61K A61P

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, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/033260 A1 (RENNIE PAUL JOHN ET AL) 19 February 2004 (2004-02-19) the whole document	1-10
X	WO 01/28552 A (THE PROCTER & GAMBLE COMPANY) 26 April 2001 (2001-04-26) page 44 - page 66; claims 1-7	1-10
X	WO 01/28340 A (THE PROCTER & GAMBLE COMPANY) 26 April 2001 (2001-04-26) page 44 - page 64; claims 1-17	1-10
X	WO 01/28339 A (THE PROCTER & GAMBLE COMPANY) 26 April 2001 (2001-04-26) page 49 - page 71; claims 1-17	1-10
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family 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.
- *Z* document member of the same patent family

Date of the actual completion of the international search

6 July 2006

Date of mailing of the international search report

29/08/2006

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2005/039926

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 01/28337 A (THE PROCTER & GAMBLE COMPANY) 26 April 2001 (2001-04-26) page 27 - page 29 -----	1-10
X	US 6 294 186 B1 (BEERSE PETER WILLIAM ET AL) 25 September 2001 (2001-09-25) column 39 - column 60 -----	1-10
X	US 6 113 933 A (BEERSE ET AL) 5 September 2000 (2000-09-05) column 11 - column 20 -----	1-3,7-10

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claims 1 to 10 may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, the search was performed taking into consideration the non-compliance in determining the extent of the search of claims 1 to 10

The search of claims 1 to 10 was restricted to: the "rheological agents" explicitly claimed and disclosed in claim 4, to 6 and to the "virus inactivation agents" explicitly claimed and disclosed in claim 7 and 8

The applicant's attention is drawn to the fact that 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. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2005/039926

Box II Observations where certain claims were found unsearchable (Continuation of item 2 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:
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 III Observations where unity of invention is lacking (Continuation of item 3 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
PCT/US2005/039926

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