**Title:** COMPOSITIONS FOR USE IN IDENTIFICATION OF STRAINS OF HEPATITIS C VIRUS

**Abstract:** The present invention provides compositions, kits and methods for rapid identification and quantification of strains of hepatitis C viruses by molecular mass and base composition analysis.
(15) Information about Correction:

Previous Correction::

see Notice of 4 June 2009
### A. CLASSIFICATION OF SUBJECT MATTER

C12N 15/10(2006.01)i, C12N 15/33(2006.01)i, C12N 15/51(2006.01)i, GOIN 33/569(2006.01)i

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 C12N 15/10, C12N 15/33, C12N 15/51, GOIN 33/569

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS (KIPO internal) & keywords hepatitis C virus

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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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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<tr>
<td>A</td>
<td>US 6638714 B1 (ORTHO CLINICAL DIAGNOSTICS INC) 28 October 2003 See column 6, line 27 - column 22, line 17</td>
<td>1 - 33</td>
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<tr>
<td>A</td>
<td>US 5527660 A (HOFFMANN-LA ROCHE INC) 18 June 1996 See column 8, line 66 - column 30, line 20</td>
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<td>A</td>
<td>EP 0633321 A1 (JAPAN IMMUNO INC) 11 January 1995 See the whole document</td>
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<td>US 2006/0205040 A1 (RANGARAJAN SAMPATH) 14 September 2006 See the whole document</td>
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</table>

* Further documents are listed in the continuation of Box C

** See patent family annex

- "A" Special categories of cited documents
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the purpose or theory underlying the invention
- "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
- "E" earlier application or patent 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 citation or other special reason (as specified)
- "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
- "K" document member of the same patent family

Date of the actual completion of the international search: 26 JUNE 2009 (26 06 2009)

Date of mailing of the international search report: 29 JUNE 2009 (29.06.2009)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Governament Complex-Daejeon, 139 Seomsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Facsimile No 82-42-472-7140

Authorized officer

LEE, CHUNG HO

Telephone No 82-42-481-8133

Form PCT/ISA/210 (second sheet) (My 2008)
Box No. I  Nucleotide and/or amino acid sequence(s) (Continuation of item I of the first sheet)

1 With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of

   a type of material
      ☑ a sequence listing
      ☑ table(s) related to the sequence listing

   b format of material
      ☑ on paper
      ☑ in electronic form

   c time of filing/furnishing
      ☑ contained in the international application as filed
      ☑ filed together with the international application in electronic form
      ☑ furnished subsequently to this Authority for the purposes of search

2 ☑ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished

3 Additional comments
### Box No. 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. [x] Claims Nos 34 - 46
   - 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
     - The claims are too unclear to make meaningful search

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 No. 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 and, where applicable, the payment of a protest fee

[ ] The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation

[ ] No protest accompanied the payment of additional search fees
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<td></td>
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<td>CA 2296144 A1</td>
<td>03.08.2000</td>
</tr>
<tr>
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<td></td>
<td>CN 1237186 C</td>
<td>18.01.2006</td>
</tr>
<tr>
<td></td>
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<td>EP 1026262 A2</td>
<td>09.08.2000</td>
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<td></td>
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</tr>
<tr>
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<td></td>
<td>KR 20070052723 A</td>
<td>22.05.2007</td>
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<tr>
<td>US 5527669 A</td>
<td>18.06.1996</td>
<td>AT 161291 T</td>
<td>15.01.1998</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AU 665952 B2</td>
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<tr>
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<td></td>
<td>EP 0529493 A2</td>
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<tr>
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