(54) Title: MASS SPECTROMETRY WITH SELECTIVE ION FILTRATION BY DIGITAL THRESHOLDING

(57) Abstract: The methods described herein generally relate to characterization of large analytes, such as biomolecules, by molecular mass analysis. Specifically, the methods are directed to molecular mass analysis of singly- or multiply-charged ions by selective ion filtering carried out by a digital thresholding process.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC: H01L 49/08 (2006.01)

USPC: 250/288

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)

U.S.: 250/288, 282; 702/104

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 6,906,319 (HOYES) 14 June 2005 (14.05.2005), column 1, line 50-67; column 10, line 41-65; column 11, line 40-65.</td>
<td>1-3, 9-15, 21, 22, 28-32</td>
</tr>
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<td>Y</td>
<td>US 6,705,530 (HILLENKAMP) 16 March 2004, (16.03.2004), column 10, line 54-67; column 13, line 1-12</td>
<td>4-8, 16, 20, 24-27</td>
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<td>Y</td>
<td>US 6,836,742 (BREKENFELD) 28 December 2004 (28.12.2004), column 5, line 1-10</td>
<td>23</td>
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</tbody>
</table>

[-boxes for further documents and patent family annex]

Date of the actual completion of the international search: 28 August 2005 (28.08.2005)

Date of mailing of the international search report: 1 Oct 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

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