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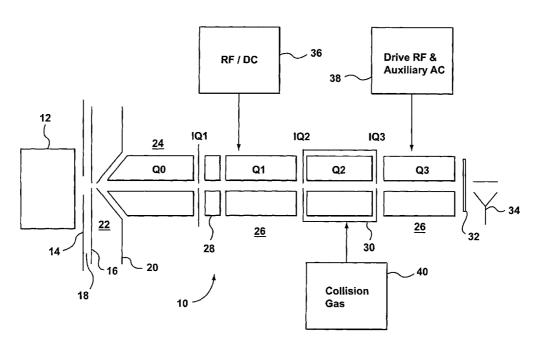
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(54) Title: METHOD FOR MASS SPECTROMETRY, SEPARATION OF IONS WITH DIFFERENT CHARGES



(57) Abstract: A method of analysing ions provides for separating ions with different charge states. Ions are first thermalized to have substantially the same energy, preferably in an ion trap. Then a barrier height is set to enable ions having a lower charge to escape, while retaining ions with higher charge states. Having effected separation of the ions either or both groups of ions can be subjected to various conventional mass analysis or other processing steps.

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### INTERNATIONAL SEARCH REPORT

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ΙP			H01J			H01J49/	04

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

 $\begin{array}{ccc} \mbox{Minimum documentation searched} & \mbox{(classification system followed by classification symbols)} \\ \mbox{IPC} & 7 & \mbox{H01J} \end{array}$ 

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

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A	STENSTROM K ET AL: "Application of Accelerator Mass Spectrometry (AMS) for High-sensitivity Measurements of CO2 in Long-term Studies of Fat Metabolism" APPLIED RADIATION AND ISOTOPES, PERGAMON PRESS LTD., EXETER, GB, vol. 47, no. 4, 1 April 1996 (1996-04-01), pages 417-422, XP004050553 ISSN: 0969-8043 page 419, left-hand column	1

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the International filing date</li> <li>"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)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	<ul> <li>"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</li> <li>"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</li> <li>"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.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
12 December 2002	20/12/2002
Name and mailing address of the ISA	Authorized officer
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