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Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

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(72) Inventor; and

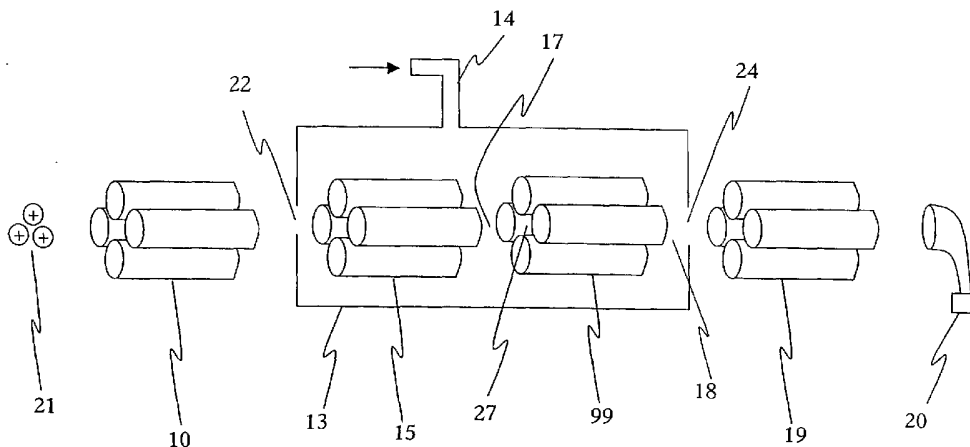
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TANDEM HIGH FIELD ASYMMETRIC WAVEFORM ION MOBILITY SPECTROMETRY (FAIMS)/TANDEM MASS SPECTROMETRY



(57) Abstract: A tandem mass spectrometer is disclosed. A first mass analyzer within a low-pressure region is provided for passing ions therethrough. A collision cell is at an ion outlet of the mass analyzer to provide a location for ions to collide therein with a collision gas to form resultant ions. The resultant ions are then provided to a FAIMS analyzer for separation thereof and the separate resultant ions are provided to a mass analyzer for analysis.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01J49/00 G01N27/64 H01J49/42

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 7 H01J G01N

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, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HARDEN C S ET AL: "DETECTION OF METHYL ISOCYANATE IN AIR WITH THE USE OF HAND-HELD IONMOBILITY SPECTROMETERS" FIELD ANALYTICAL CHEMISTRY AND TECHNOLOGY, WILEY, NEW YORK, NY,, US, vol. 1, no. 5, August 1997 (1997-08), pages 285-294, XP000944904 ISSN: 1086-900X	1,20
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *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.
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INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 01/00314

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GUEVREMONT R ET AL: "COMBINED ION MOBILITY/TIME-OF-FLIGHT MASS SPECTROMETRY STUDY OF ELECTROSPRAY-GENERATED IONS" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. COLUMBUS, US, vol. 69, no. 19, 1997, pages 3959-3965, XP000917362 ISSN: 0003-2700 page 3961; figure 2 ---	1,19,20
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International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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