

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 November 2005 (03.11.2005)

PCT

(10) International Publication Number
WO 2005/104182 A3

(51) International Patent Classification:

H01J 49/42 (2006.01) G01N 27/64 (2006.01)
H01J 49/40 (2006.01)

(21) International Application Number:

PCT/GB2005/001488

(22) International Filing Date: 20 April 2005 (20.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0408751.6 20 April 2004 (20.04.2004) GB
60/584,476 2 July 2004 (02.07.2004) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

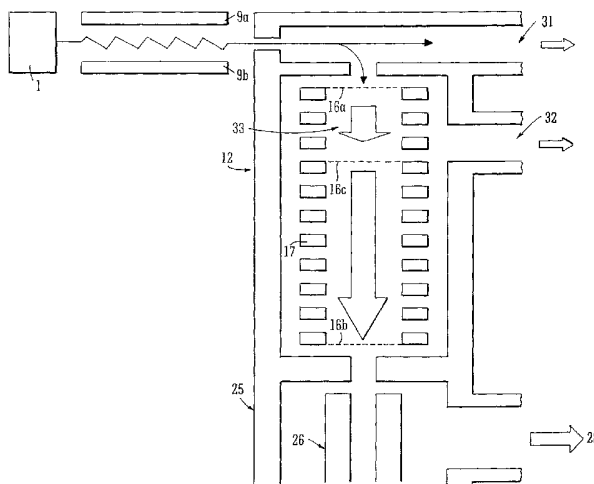
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
2 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: MASS SPECTROMETER



(57) Abstract: A mass spectrometer is disclosed comprising a FAIMS device comprising two parallel electrodes (9a, 9b) in series with an ion mobility separator (12) forming part of a mass spectrometer. Ions are separated in the FAIMS device (9a, 9b) according to their rate of change of ion mobility with electric field strength. The ions which are onwardly transmitted from the FAIMS device (9a, 9b) are then passed to an ion separator device (12) comprising a plurality of electrodes (12) and an optional ion trapping region (33). Ions are radially confined with the ion separator by application of an AC or RF voltage to the electrodes (12) and ions are separated according to their ion mobility by applying an axial DC voltage gradient which may remain constant as a function of time or which may vary with time.

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INTERNATIONAL SEARCH REPORT

tional application No
PCT/GB2005/001488

A. CLASSIFICATION OF SUBJECT MATTER
 INV. H01J49/42 H01J49/40 G01N27/64

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)
 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, COMPENDEX, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Date of the actual completion of the international search
25 August 2006

Date of mailing of the international search report
07/09/2006

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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2005/001488

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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

International application No

PCT/GB2005/001488

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