

Title (en)

METHOD OF MASS SPECTROMETRY

Title (de)

MASSENSPEKTROMETRISCHES VERFAHREN

Title (fr)

PROCEDE DE SPECTROMETRIE DE MASSE

Publication

EP 1454337 B1 20151202 (EN)

Application

EP 02785654 A 20021212

Priority

- GB 0205628 W 20021212
- GB 0129693 A 20011212
- GB 0215626 A 20020705
- GB 0217217 A 20020725
- US 40151702 P 20020807

Abstract (en)

[origin: WO03050843A2] A method of mass spectrometry is disclosed wherein ions are trapped for a period of time T within an AC or RF ion guide maintained at a pressure P wherein the product P x T is at least 1 mbar-ms. The effect of trapping the ions according to a preferred embodiment is that singly charged ions which may, for example, comprise unwanted background ions are substantially lost from the trap whereas multiply charged analyte ions are maintained within the ion trap and can then be released for subsequent mass analysis.

IPC 8 full level

H01J 49/42 (2006.01)

CPC (source: EP)

H01J 49/062 (2013.01)

Citation (examination)

- TOLMACHEV A V ET AL: "Radial stratification of ions as a function of mass to charge ratio in collisional cooling radio frequency multipoles used as ion guides or ion traps", RAPID COMMUNICATIONS IN MASS SPECTROMETRY, JOHN WILEY & SONS, GB, vol. 14, no. 20, 1 January 2000 (2000-01-01), pages 1907 - 1913, XP002370070, ISSN: 0951-4198, DOI: 10.1002/1097-0231(20001030)14:20<1907::AID-RCM111>3.0.CO;2-M
- SHIRKOV G D ET AL: "A classical model of ion confinement and losses in ECR ion sources", PLASMA SOURCES SCIENCE AND TECHNOLOGY, INSTITUTE OF PHYSICS PUBLISHING, BRISTOL, GB, vol. 2, no. 4, 1 November 1993 (1993-11-01), pages 250 - 257, XP020070446, ISSN: 0963-0252, DOI: 10.1088/0963-0252/2/4/004

Cited by

US11114290B1; US11581179B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GR IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03050843 A2 20030619; WO 03050843 A3 20031016; CA 2468142 A1 20030619; CA 2468142 C 20110517; EP 1454337 A2 20040908;
EP 1454337 B1 20151202

DOCDB simple family (application)

GB 0205628 W 20021212; CA 2468142 A 20021212; EP 02785654 A 20021212