



US 20080265152A1

(19) **United States**

(12) **Patent Application Publication**
Bateman

(10) **Pub. No.: US 2008/0265152 A1**

(43) **Pub. Date: Oct. 30, 2008**

(54) **MASS SPECTROMETER**

(30) **Foreign Application Priority Data**

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Apr. 1, 2005 (GB) 0506665.9

Publication Classification

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(51) **Int. Cl.**
H01J 49/26 (2006.01)

(52) **U.S. Cl.** **250/283; 250/288**

(57) **ABSTRACT**

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A mass spectrometer is disclosed comprising a High Pressure Liquid Chromatography system (10) which is interfaced to a combustion chamber (16) and isotope ratio mass analyser (19) by means of an Electrospray Ionisation ion source (11) and a Field Asymmetric Ion Mobility Spectrometry device (13). Analyte and solvent molecules are ionised by the ion source (11). Desired analyte ions are substantially onwardly transmitted by the Field Asymmetric Ion Mobility Spectrometry device (13) to the combustion chamber (16) whereas undesired solvent ions are substantially attenuated by the Field Asymmetric Ion Mobility Spectrometry device (13).

(21) Appl. No.: **11/909,996**

(22) PCT Filed: **Apr. 3, 2006**

(86) PCT No.: **PCT/GB2006/001207**

§ 371 (c)(1),
(2), (4) Date: **Jun. 20, 2008**

