

Title (en)

Mass spectrometer and method of mass spectrometry

Title (de)

Massenspektrometer und massenspektrometrisches Verfahren

Title (fr)

Spectromètre de masse et méthode associée

Publication

EP 1215711 A2 20020619 (EN)

Application

EP 01310018 A 20011129

Priority

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- GB 0108187 A 20010402

Abstract (en)

A way of increasing the dynamic range of a mass spectrometer which incorporates a time to digital converter such as commonly used with a time of flight mass analyser 9 is disclosed. A z-lens 4 upstream of the analyser 9 can be switched between a high sensitivity mode wherein a beam of ions 2 passing therethrough is substantially focused on to the entrance slit 10 of the analyser 9, and a low sensitivity mode wherein the beam of ions 2 is defocused so that the diameter of the beam substantially exceeds that of the entrance slit 10 of the analyser 9. Obtaining data in the low sensitivity mode in combination with obtaining data in the high sensitivity mode enable an order of magnitude increase in the dynamic range to be obtained.
<IMAGE>

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H01J 49/06 (2006.01); **H01J 49/40** (2006.01)

CPC (source: EP)

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Cited by

EP1365437A3; US6878929B2; CN109767971A; DE102010006731B4; US7683314B2; GB2413006A; GB2413006B; US8642973B2; US8680481B2; US6894275B2; US7095015B2; US7038197B2; WO2012080268A1; DE102010006731A1; US8084751B2

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