

Title (en)  
TIME OF FLIGHT MASS SPECTROMETER

Publication  
**EP 0378281 A3 19920311 (FR)**

Application  
**EP 90200379 A 19850228**

Priority  
FR 8403127 A 19840229

Abstract (en)  
[origin: US4694168A] The spectrometer includes an ion source, an ion mirror receiving the ions issued from the source, a first detector placed so as to receive the ions reflected by the mirror and a second detector disposed behind the mirror, all these components forming an assembly of axial symmetry. A reflex spectrum of the ions reflected by the mirror and received by the first detector can be obtained in parallel with a spectrum of the neutral species which may have appeared as a result of in flight decompositions of metastable ions and which are received by the second detector. This arrangement is particularly adapted to the study of metastable ions, processing means being provided for producing correlated reflex spectra where the contributions of ion fragments corresponding to received neutral fragments is enhanced.

IPC 1-7  
**H01J 49/40**

IPC 8 full level  
**G01N 27/62** (2006.01); **H01J 49/02** (2006.01); **H01J 49/14** (2006.01); **H01J 49/40** (2006.01)

CPC (source: EP US)  
**H01J 49/142** (2013.01 - EP US); **H01J 49/405** (2013.01 - EP US)

Citation (search report)  
• [AD] INTERNATIONAL JOURNAL OF MASS SPECTROMETRY AND ION PHYSICS. vol. 20, no. 1, Mai 1976, AMSTERDAM NL pages 77 - 88; R.IGERSHEIM ET AL.: 'Spectrometres de masse à temps de vol avec guides de particule'  
• [AD] INTERNATIONAL JOURNAL OF MASS SPECTROMETRY AND ION PHYSICS. vol. 52, no. 2/3, Septembre 1983, AMSTERDAM NL pages 223 - 240; H.DANIGEL ET AL.: 'A 252Cf fission fragment-induced desorption mass spectrometer:design,operation and performance'  
• [AD] NUCLEAR INSTRUMENTS AND METHODS. no. 188, 1981, AMSTERDAM NL pages 99 - 104; E.FESTA ET AL.: 'A multistop time-to-digital converter'  
• [A] NUCLEAR INSTRUMENTS AND METHODS. vol. 163, no. 2/3, Juillet 1979, AMSTERDAM NL pages 359 - 362; E.WEISSENBERGER: 'Compact time-zero detector for heavy ions'

Cited by  
FR2895833A1; WO2007077245A1

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