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(54) Mass spectrometer with ion fragmentation by reaction with electrons

(57) The invention relates to a mass spectrometer, in particular a time-of-flight mass spectrometer, with fragmentation of pre-selected molecule ions for the acquisition of daughter ion spectra.

The invention consists in an instrument with devices

for generating multiply charged ions of the molecule of interest, for selecting a multiply charged ion species by a mass filter, for fragmenting the selected ions by allowing them to react with low energy electrons in an RF ion guide system, and for analyzing the fragment ions in a mass analyzer.

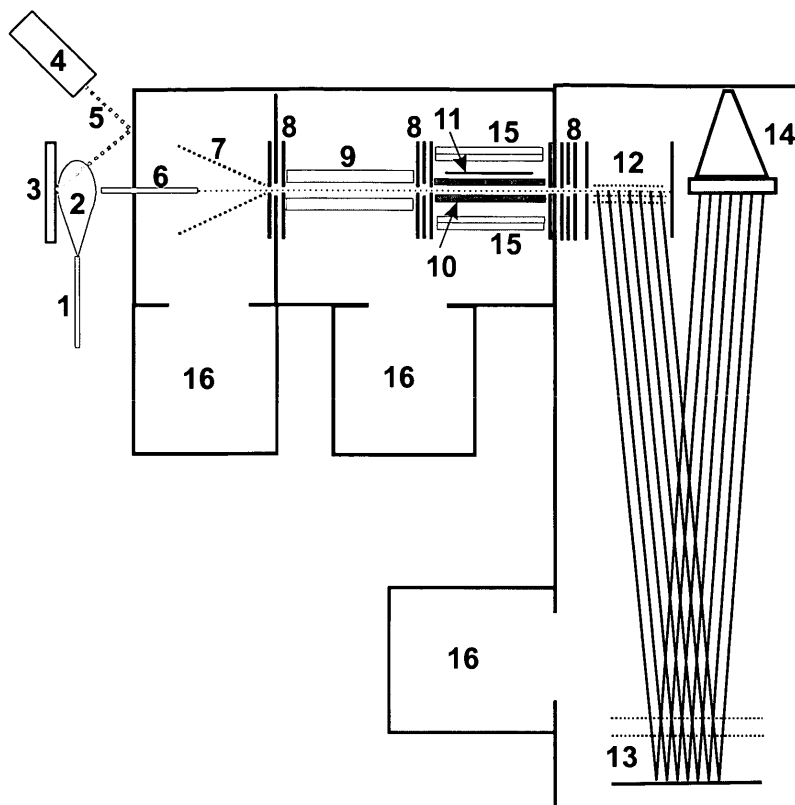


Figure 1

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EUROPEAN SEARCH REPORT

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 October 2006	Examiner Hulne, Serge
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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