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(54) Title: HIGH DUTY CYCLE ION STORAGE/ION MOBILITY SEPARATION MASS SPECTROMETER

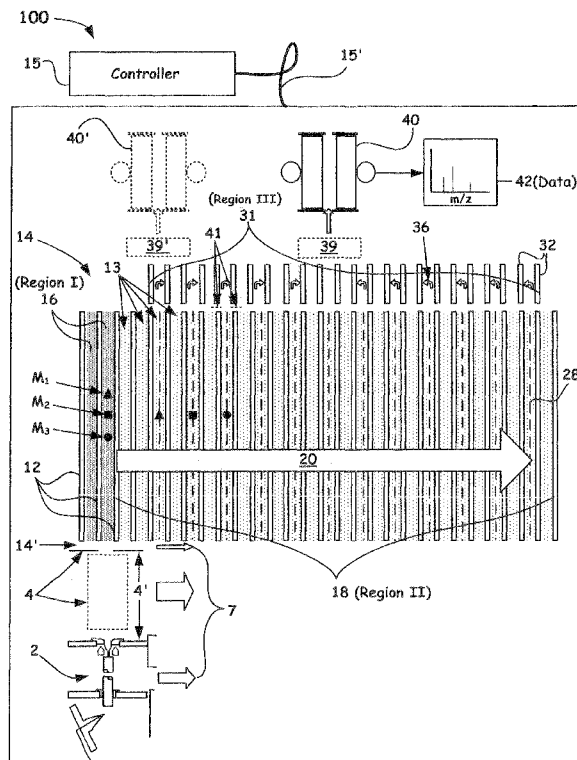


FIG. 1

(57) Abstract: A novel high ion storage/ ion mobility separation mass spectrometer that provides for a high duty cycle of operation is presented herein. In particular, the example embodiments, as disclosed herein, provides for a high ion storage/ ion mobility instrument that beneficially includes a two-dimensional (2D) plurality of adjacently arranged ion confinement channels to provide a high storage bank of a desired mass range of ions. Such ions, via ion mobility transport, are separated into smaller fractions of an overall mass window into desired confinement regions of the disclosed 2D confinement channels and thereafter transferred out in a manner so as to enable the aforementioned novel high-duty cycle of sequential operation.



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ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 2006/289747 A1 (SCHULTZ J A [US] ET AL SCHULTZ J ALBERT [US] ET AL) 28 December 2006 (2006-12-28) the whole document ----- -/--	1-20

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See patent family annex.

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Date of the actual completion of the international search 30 November 2012	Date of mailing of the international search report 07/12/2012
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Loiseleur, Pierre
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