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(54) Title: APPARATUS AND METHOD FOR FIELD ASYMMETRIC ION MOBILITY SPECTROMETRY COMBINED WITH MASS SPECTROMETRY.

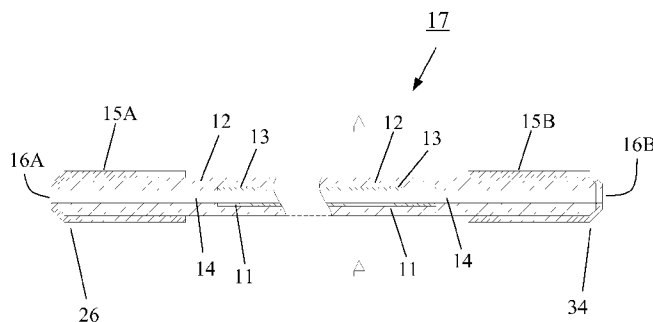


FIG. 3A

(57) Abstract: In a system for analyzing samples by mass spectrometry, analyte ions are analyzed first by field asymmetric ion mobility spectrometry (FAIMS) before being analyzed by a mass analyzer. The analyte ions are produced in an ion source operating at near atmospheric pressure and transferred via a dielectric capillary into the vacuum system of the mass analyzer. While passing through the capillary, the ions are analyzed by FAIMS via electrodes on the interior wall of the capillary.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B01D 59/44 (2008.01)

USPC - 250/281

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) - B01D 59/44 (2008.01)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPTO WEST System (US, USPG-PUB, EPO, DERWENT), MicroPatent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0168268 A1 (LIN et al) 14 November 2002 (14.11.2002) entire document	1-21
Y	US 2005/0006578 A1 (ROCKWOOD et al) 13 January 2005 (13.01.2005) entire document	1-21
Y	US 2002/0134932 A1 (GUEVREMONT et al) 26 September 2002 (26.09.2002) entire document	4-6
Y	US 2005/0258360 A1 (WHITEHOUSE et al) 24 November 2005 (24.11.2005) entire document	9
Y	US 2006/0163471 A1 (ZAPATA et al) 27 July 2006 (27.07.2006) entire document	10-11
Y	US 7,098,449 B1 (MILLER et al) 29 August 2006 (29.08.2006) entire document	12
Y	US 2006/0186333 A1 (HILL, JR et al) 24 August 2006 (24.08.2006) entire document	13-15
Y	US 6,777,672 B1 (PARK) 17 August 2004 (17.08.2004) entire document	16-20

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