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BOULT, WADE & TENNANT 27 Furnival Street
London EC4A 1PQ(GB)(54) **Quadrupole mass filter.**

(57) An unbalanced radio frequency voltage is supplied between two pairs of conductive rods (10a, 10c; 10b, 10d) of a quadrupole mass filter of a mass spectrometer system. Means (S2) are provided for d.c. voltage polarity reversal for monitoring positive and negative ions. The d.c. voltage is derived by rectification of the radio frequency voltage.

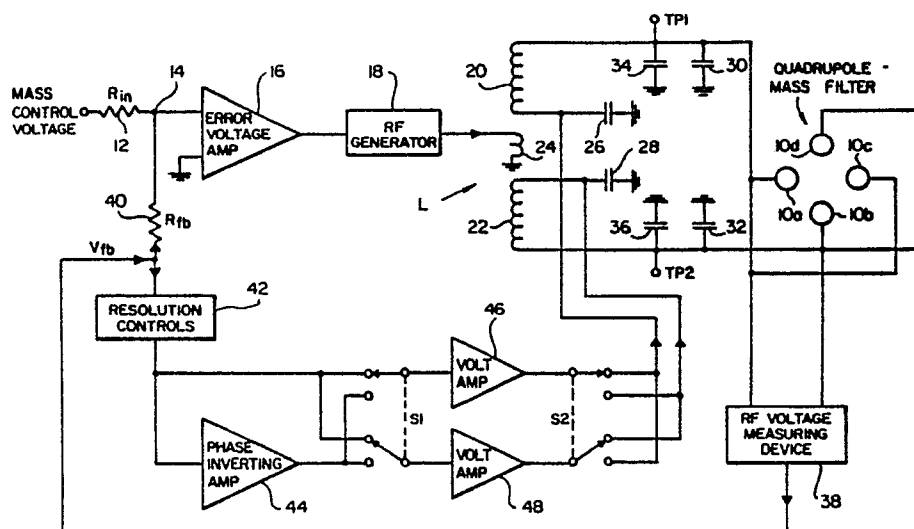


FIG. 1

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	US-A-3 617 736 (E.F. BARNETT et al.) * Column 4, lines 27-55; abstract; figure 4 * ---	1	H 01 J 49/42
A	US-A-3 783 279 (W.M. BRUBAKER) * Column 3, line 42 - column 4, line 16; abstract; figure 2 * ---	1	
A	PATENT ABSTRACTS OF JAPAN, vol. 8, no. 247 (E-278)[1684], 13th November 1984; & JP-A-59 123 155 (NIPPON DENSHI K.K.) 16-07-1984 -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			H 01 J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 26-11-1987	Examiner WINKELMAN, A.M.E.
CATEGORY OF CITED DOCUMENTS 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 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			

