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(54) Title: ION MOBILITY SPECTROMETER

(57) Abstract: An ion mobility spectrometer is described having an ion filter in the form of at least one ion channel having a plurality of electrodes. A time-varying electric potential applied to the conductive layers allows the filter to selectively admit ion species. The electric potential has a drive and a transverse component, and in preferred embodiments each of the electrodes is involved in generating a component of both the drive and transverse fields. The device may be used without a drift gas flow, Microfabrication techniques are described for producing microscale spectrometers, as are various uses of the spectrometer.



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