

METHOD AND APPARATUS FOR TRANSMITTING IONS IN A MASS SPECTROMETER MAINTAINED IN A SUB-ATMOSPHERIC PRESSURE REGIME

ABSTRACT OF THE DISCLOSURE

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[0059] A method and apparatus for transmitting ions in a mass spectrometer from an ion source to a mass analyser extracts analyte ions from the ion source in such a manner that the number of extracted analyte ions is maximised. The ions are then transmitted through an ion guide to the mass analyser. The ion guide is filled with an
10 interaction gas and its operating parameters are adjusted so that, as the ions pass through the ion guide, the analyte ion energy distribution width is narrowed and the analyte ions are collimated within the ion guide to improve the resolution and sensitivity of the mass analyser.

Figure 1