

Title (en)

QUADRUPOLE MASS FILTER

Title (de)

QUADRUPOLE-MASSENFILTER

Title (fr)

FILTRE DE MASSE QUADRIPOLAIRE

Publication

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Application

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Priority

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- GB 0317953 A 20030731

Abstract (en)

[origin: GB2390222A] Apparatus and method to improve the filtering action of a quadrupole mass filter by reducing a precursor fault caused by asymmetric electrical field between a pair of opposing electrode rods 13 in a y-axis of the quadrupole mass filter. Processing means for processing detector data determine the filtering action of the quadrupole mass filter by checking for a precursor fault. If a precursor fault is detected the power supply control means 10 introduce an AC potential difference across the electrode rods 13 in the y-axis in order to reduce asymmetry in the electric field in the y-axis. Depending on the success of the provided potential difference, additionally a DC potential difference may also be provided. Such precursor faults may be caused by misalignment of the electrode rods 13 at assembly or during use, or surface charge or contamination of the electrode rods.

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