

LENS FREE COLLISION CELL WITH IMPROVED EFFICIENCY

ABSTRACT OF THE DISCLOSURE

5 An ion collision cell is fabricated by four semi-circular profile elements, all of
which are attach to the same reference plate. Consequently, all four elements
remain aligned to the same reference plate. The four elements form a semi-
circular channel with semi-circular quad electrodes. The quad electrodes receive
10 electrical potential to form the field required to focus and maintain the ions at the
centre of the channel. Semi-circular insulators are provided on all sides of the
channel so as to seal the channel over its length from the interior of the mass
spectrometer.

15 Figure 3a