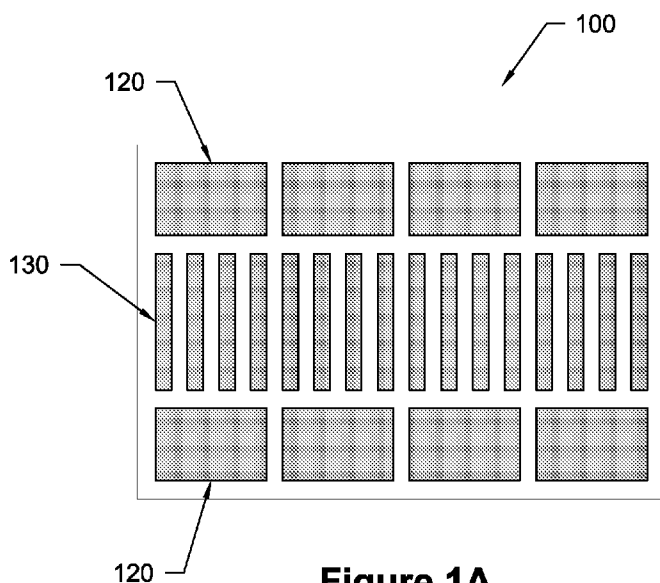




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(54) **Title:** ION MANIPULATION METHOD AND DEVICE**Figure 1A**

(57) **Abstract:** An ion manipulation method and device is disclosed. The device includes a pair of substantially parallel surfaces. An array of inner electrodes is contained within, and extends substantially along the length of, each parallel surface. The device includes a first outer array of electrodes and a second outer array of electrodes. Each outer array of electrodes is positioned on either side of the inner electrodes, and is contained within and extends substantially along the length of each parallel surface. A DC voltage is applied to the first and second outer array of electrodes. A RF voltage, with a superimposed electric field, is applied to the inner electrodes by applying the DC voltages to each electrode. Ions either move between the parallel surfaces within an ion confinement area or along paths in the direction of the electric field, or can be trapped in the ion confinement area.