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- (54) Title:** MULTI-NEEDLE MULTI-PARALLEL NANOSPRAY IONIZATION SOURCE

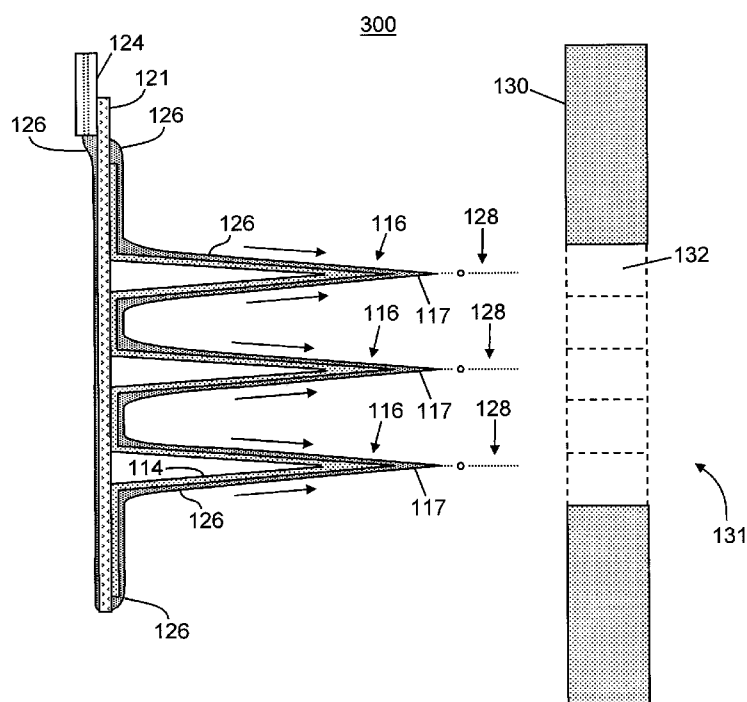


FIG. 9

- (57) Abstract:** An electrospray ion source for a mass spectrometer includes an electrode comprising at least a first plurality of protrusions protruding from a base, each protrusion of the at least a first plurality of protrusions having a respective tip; a conduit for delivering an analyte-bearing liquid to the electrode; and a voltage source, wherein, in operation of the electrospray ion source, the analyte-bearing liquid is caused to move, in the presence of a gas or air, from the base to each protrusion tip along a respective protrusion exterior so as to form a respective stream of charged particles emitted towards an ion inlet aperture of the mass spectrometer under application of voltage applied to the electrode from the voltage source.

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