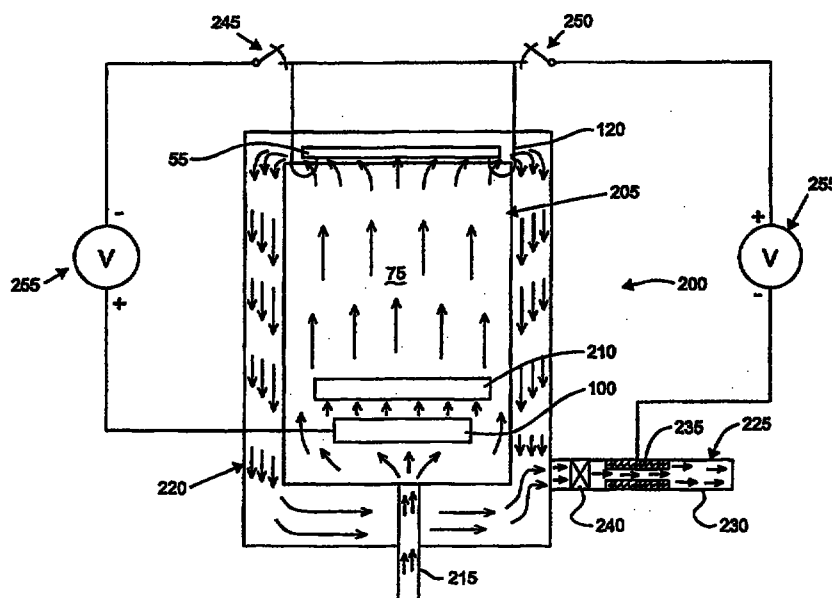




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(54) Title: ELECTROPLATING SYSTEM HAVING AUXILIARY ELECTRODE EXTERIOR TO MAIN REACTOR CHAMBER FOR CONTACT CLEANING OPERATIONS



(57) Abstract

A system for electroplating a semiconductor wafer which comprises a first electrode in electrical contact with the semiconductor wafer (55) and a second electrode. The first electrode and semiconductor wafer (55) form a cathode. The second electrode forms an anode (100). A reaction cup (205) defines a processing chamber (75). An external electrode (235) is disposed exterior to the reaction cup and positioned for contacting solution exiting the reaction cup. A power supply (255) system is connected to supply to the first and second electrodes and is further connected to render the first electrode an anode and the external electrode a cathode.