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(54) **Title:** PULSED VOLTAGE BOOST FOR SUBSTRATE PROCESSING

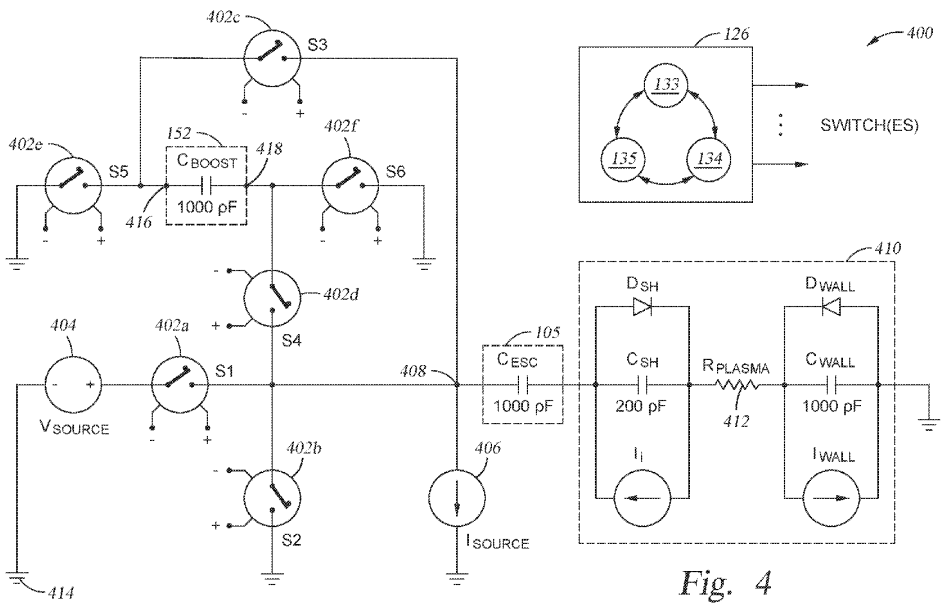


Fig. 4

(57) **Abstract:** Embodiments provided herein generally include apparatus, plasma processing systems and methods for boosting a voltage of an electrode in a processing chamber. An example plasma processing system includes a processing chamber, a plurality of switches, an electrode disposed in the processing chamber, a voltage source, and a capacitive element. The voltage source is selectively coupled to the electrode via one of the plurality of switches. The capacitive element is selectively coupled to the electrode via one of the plurality of switches. The capacitive element and the voltage source are coupled to the electrode in parallel. The plurality of switches are configured to couple the capacitive element and the voltage source to the electrode during a first phase, couple the capacitive element and the electrode to a ground node during a second phase, and couple the capacitive element to the electrode during a third phase.

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