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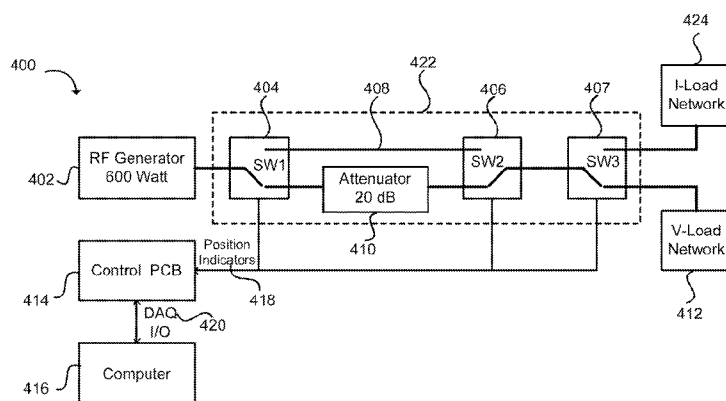


Fig. 4

(57) Abstract: A diagnostic tool for performing electrical measurements to calibrate a plasma processing chamber probe is provided. The diagnostic tool includes an RF generator. The diagnostic tool also includes a first impedance circuit. The first impedance circuit is a voltage-load network, configured to deliver RF voltage outputs from the RF generator for voltage measurements when RF power from the RF generator is delivered to the first impedance circuit. The diagnostic tool further includes a second impedance circuit. The second impedance circuit is a current-load network, configured to deliver RF current outputs from the RF generator for current measurements when the RF power from the RF generator is delivered to the second impedance circuit. The diagnostic tool further includes a coaxial switch network arrangement configured to provide switchable RF delivery paths to deliver the RF power from the RF generator to one of the first impedance circuit and the second impedance circuit.