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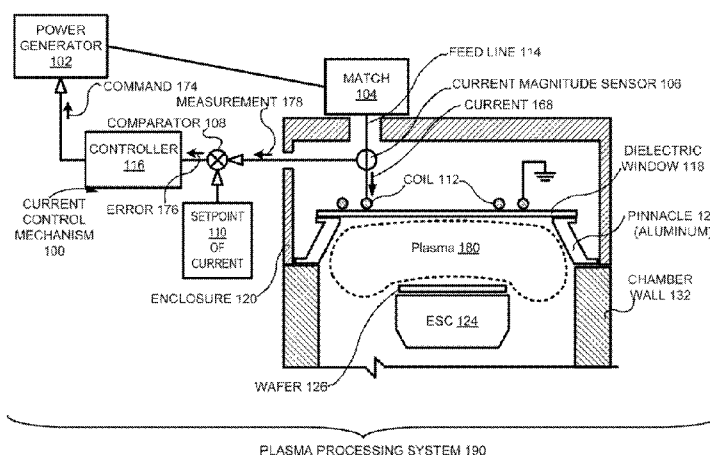


FIG. 1

- (57) Abstract:** A plasma processing system for generating plasma to process at least a wafer. The plasma processing system includes a coil for conducting a current for sustaining at least a portion of the plasma. The plasma processing system also includes a sensor coupled with the coil for measuring a magnitude of a supplied current to provide a magnitude measurement without measuring any phase angle of the supplied current. The supplied current is the current or a total current that is used for providing a plurality of currents (e.g., including the current). The plasma processing system also includes a controller coupled with the sensor for generating a command using the magnitude measurement and/or information derived using the magnitude measurement, without using information related to phase angle measurement, and for providing the command for controlling the magnitude of the supplied current and/or a magnitude of the total current.