IMPEDANCE-BASED ADJUSTMENT OF POWER AND FREQUENCY

ABSTRACT

Systems and methods for impedance-based adjustment of power and frequency are described. A system includes a plasma chamber for containing plasma. The plasma chamber includes an electrode. The system includes a driver and amplifier coupled to the plasma chamber for providing a radio frequency (RF) signal to the electrode. The driver and amplifier is coupled to the plasma chamber via a transmission line. The system further includes a selector coupled to the driver and amplifier, a first auto frequency control (AFC) coupled to the selector, and a second AFC coupled to the selector. The selector is configured to select the first AFC or the second AFC based on values of current and voltage sensed on the transmission line.

Fig. 1



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