

Abstract

The present invention provides a device and a method for controlling a DC bias of a RF discharge system. Said device comprises a DC bias detection module (302), a mode selection module (301), a DC bias controlling module (303) and a RF power providing module (304). The mode selection module (301) receives a parameter and a type of the parameter. If the type of the parameter is representative of voltage, the DC bias controlling module (303) calculates a power value according to the voltage-related representative parameter and the detected DC bias value, and the RF power providing module (304) provides power according to the calculated power value. If the type of the parameter is representative of power, the RF power providing module (304) provides power according to the power-related representative parameter.