

**POWER CONTROL METHOD AND DEVICE OF LOWER RADIO FREQUENCY
POWER SUPPLY AND SEMICONDUCTOR PROCESSING EQUIPMENT**

ABSTRACT

The present disclosure provides a power control method and device of a lower RF power supply, and semiconductor process equipment. The method includes, when a processing chamber starts semiconductor processing, with a predetermined power compensation equation and according to a pre-obtained first RF circuit parameter set of a reference chamber and a second RF circuit parameter set of a present processing chamber performing the semiconductor processing, obtaining a power compensation coefficient of the present processing chamber relative to the reference chamber; according to the power compensation coefficient and a power setting value of the lower RF power supply of the present processing chamber, calculating a power compensation value of the present processing chamber relative to the reference chamber, and controlling the lower RF power supply to output the power compensation value. In the technical solution of the present disclosure, processing result consistency of different processing chambers can be improved.

Fig. 3