

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2023/0230806 A1 LIN et al.

### Jul. 20, 2023 (43) **Pub. Date:**

### (54) METHODS AND APPARATUS FOR PROCESSING A SUBSTRATE

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(21) Appl. No.: 17/568,836

Filed: Jan. 5, 2022 (22)

#### **Publication Classification**

(51) Int. Cl. H01J 37/32 (2006.01) (52) U.S. Cl.

CPC ...... H01J 37/32183 (2013.01); B23K 15/0006 (2013.01); H01J 2237/327 (2013.01)

#### (57)**ABSTRACT**

Methods and apparatus for processing a substrate are provided herein. For example, an RF power delivery compensation circuit comprises a first input configured to receive an RF forward power from an RF power source connected to a processing chamber and a second input configured to receive an RF delivered power from a matching network connected between the RF power source and the processing chamber. The RF power delivery compensation circuit calculates an RF forward power compensation factor based on the RF forward power and the RF delivered power for adjusting the RF forward power delivered to the processing chamber during operation.

