

## Abstract

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[Object] To improve step coverage of a coating film

[Solving Means] A deposition apparatus that

5 includes a first electrode, a second electrode, a first power supply source, a second power supply source, and a phase adjuster is used. The first power supply source includes a first high-frequency power source and a first matching circuit, the first high-frequency power source outputting first high-frequency power, the first matching circuit being connected between the first high-frequency power source and the first electrode. The second power supply source includes a second matching circuit that outputs second high-frequency power, the second high-frequency power having the same period as the first high-frequency power and being lower than the first high-frequency power. A second high-frequency power source is caused to output the second high-frequency power and the phase adjuster is caused to operate to provide a phase difference  $\theta$  between a phase of the first high-frequency power and a phase of the second high-frequency power. A voltage value  $V_{pp}$  of the second high-frequency power and a capacitance value  $C_1$  of a first variable capacitor that correspond to the phase difference  $\theta$  in a state where output impedance of the second high-frequency power

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source and load-side impedance connected to the second high-frequency power source match are detected. The voltage value  $V_{pp}$  and the capacitance value  $C_1$  are selected in combination in a predetermined range of the phase difference  $\theta$ .

Fig. 1