PLASMA PROCESSING APPARATUS, POWER SUPPLY SYSTEM, CONTROL METHOD, PROGRAM, AND STORAGE MEDIUM

ABSTRACT

In a plasma processing apparatus, electrical bias energy is provided from a bias power supply to a substrate support. Source radio-frequency power is provided from a radio-frequency power supply to a radio-frequency electrode. The radio-frequency power supply selects, from a plurality of frequency groups, an initial frequency group corresponding to a specified process. The radio-frequency power supply uses, in a first period, a plurality of frequencies included in the initial frequency group as a plurality of source frequencies of the source radio-frequency power for a respective plurality of phase periods in a waveform cycle of the electrical bias energy. The radio-frequency power supply adjusts, in a second period, the plurality of source frequencies of the source radio-frequency power for the respective plurality of phase periods in a waveform cycle of the electrical bias energy.

Figure 2