extends. In other words, the windings of the two or more coils included in each of the plurality of coil groups are arranged in a multilayered manner in the axial direction and spirally provided about the central axis. The plurality of coil groups are provided coaxially with the central axis. A pitch between the respective turns of the two or more coils of any one coil group among the plurality of coil groups is larger than a pitch between the respective turns of the two or more coils of the coil group provided inside the one coil group among the plurality of coil groups.

[0007a] In another aspect, there is provided a plasma processing apparatus comprising a chamber main body; a stage provided in the chamber main body and having a lower electrode and a plurality of heaters; a high-frequency power source electrically connected to the lower electrode; a heater controller configured to provide electric power to the plurality of heaters; and the filter device as claimed herein, wherein each of the plurality of coils of the filter device is electrically connected between the heater controller and a corresponding heater among the plurality of heaters

[0008] The foregoing summary is illustrative only and is not intended to be in any way limiting. In addition to the illustrative aspects, embodiments, and features described above, further aspects, embodiments, and features will become apparent by reference to the drawings and the following detailed description

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 is a view schematically illustrating a plasma processing apparatus according to an exemplary embodiment.

[0010] FIG. 2 is an enlarged cross-sectional view of a stage of the plasma processing apparatus illustrated in FIG. 1.

[0011] FIG. 3 is a view illustrating a circuit configuration of filters according to the

exemplary embodiment, together with a plurality of heaters and a heater controller.

[0012] FIG. 4 is a perspective view of a plurality of coils of a filter device according to the exemplary embodiment.

[0013] FIG. 5 is a cross-sectional view of the plurality of coils illustrated in FIG. 4.

[0014] FIG. 6 is a cross-sectional view illustrating a portion of the plurality of coils illustrated in FIG. 4 in an enlarged scale.

[0015] FIG. 7 is a cross-sectional view illustrating a portion of a coil group used for