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(54) Title: MAGNETICALLY COUPLED RF FILTER FOR SUBSTRATE PROCESSING CHAMBERS

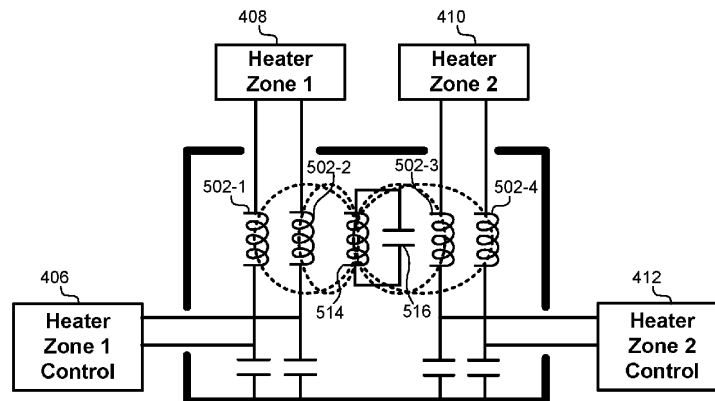


FIG. 5A

(57) Abstract: A semiconductor processing chamber for processing semiconductor substrates may include a pedestal to support a substrate with a heater zones and a wire mesh configured to deliver a Radio Frequency (RF) signal to a plasma. The chamber may also include heater zone controls that deliver current to the heater zones and a filter circuit between the heater zone controls and the heater zones. The filter circuit may include inductors on leads from the heater zones and a resonant circuit with a resonant inductor that is magnetically coupled to the lead inductors. The resonant circuit may produce a resonant peak that filters the RF signal delivered to the wire mesh from the leads from the heater zones to prevent the RF signal from reaching the heater zone controls.

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