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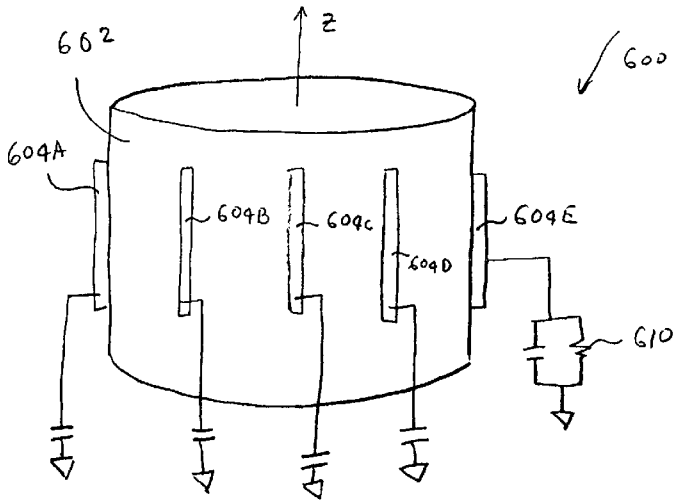
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(54) Title: APPARATUS AND METHODS FOR MINIMIZING ARCING IN A PLASMA PROCESSING CHAMBER



(57) Abstract: A plasma processing chamber for processing a substrate to form electronic components thereon is disclosed. The plasma processing chamber includes a plasma-facing component (602) having a plasma-facing surface oriented toward plasma in the plasma processing chamber during processing of the substrate, the plasma-facing component being electrically isolated from a ground terminal. The plasma processing chamber further includes a grounding arrangement (600) coupled to the plasma-facing component, the grounding arrangement including a first resistance circuit (610) disposed in a first current path between the plasma-facing component and the ground terminal. The grounding arrangement further includes a RF filter arrangement (604, 610) disposed in at least one other current path between the plasma-facing component and the ground terminal, wherein a resistance value of the first resistance circuit is selected to substantially eliminate arcing between the plasma and the plasma-facing component during the processing of the substrate.

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