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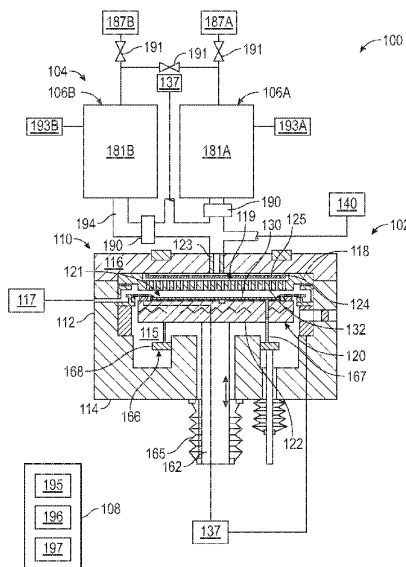


FIG. 1

(57) Abstract: Embodiments of the disclosure provided herein include systems and methods for increasing tensile stress in tungsten layers in a semiconductor device manufacturing scheme. The system includes a processing chamber defining a processing volume, a gas delivery system fluidly coupled to the processing chamber, and a controller having instructions stored thereon for performing a method of processing a plurality of substrates when executed by one or more processors. The method includes cleaning the processing chamber, seasoning the processing chamber with a non-oxygen containing gas, receiving a substrate into the processing volume of the processing chamber fluidly coupled to the gas delivery system, performing a pre-treatment process on the substrate within the processing chamber, and depositing a tungsten-containing layer onto the substrate.

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