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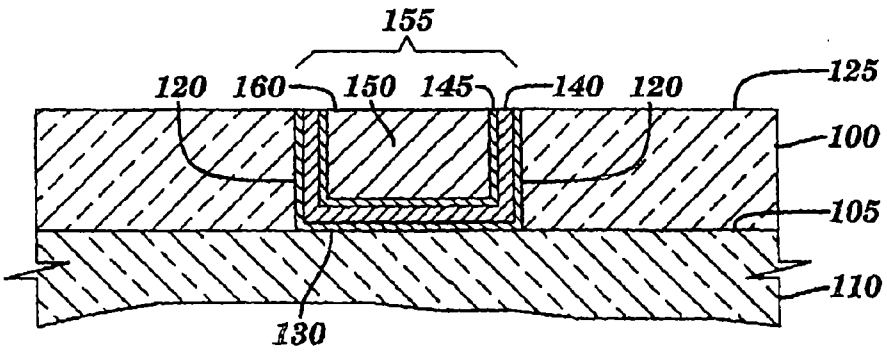
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(54) Title: SEMICONDUCTOR DEVICE INTERCONNECT



(57) Abstract: A method of fabricating an interconnect for a semiconductor device is disclosed. The method comprises: forming a dielectric layer on a semiconductor substrate; forming a trench in the dielectric layer; placing the semiconductor substrate in a plasma deposition chamber having a tantalum target; initiating a plasma in the presence of nitrogen in the plasma deposition chamber; and depositing an ultra-thin layer comprising tantalum and nitrogen in the trench.

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