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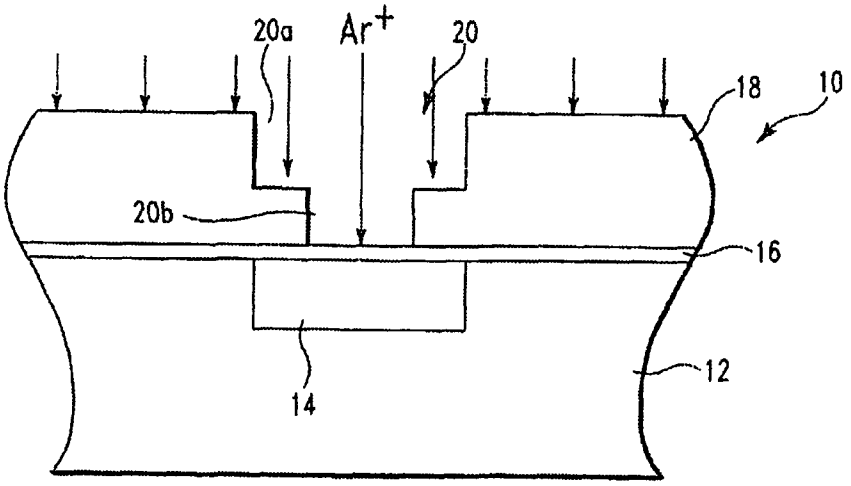
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(54) Title: A METHOD FOR DEPOSITING A METAL LAYER ON A SEMICONDUCTOR INTERCONNECT STRUCTURE HAVING A CAPPING LAYER



(57) Abstract: Disclosed is a method for depositing a metal layer on an interconnect structure for a semiconductor wafer. In the method, a metal conductor (14) is covered by a capping layer (16) and a dielectric layer (18). The dielectric layer is patterned so as to expose the capping layer. The capping layer is then sputter etched to remove the capping layer and expose the metal conductor (14). In the process of sputter etching, the capping layer is redeposited (22) onto the sidewall of the pattern. Lastly, at least one layer is deposited into the pattern and covers the redeposited capping layer.

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