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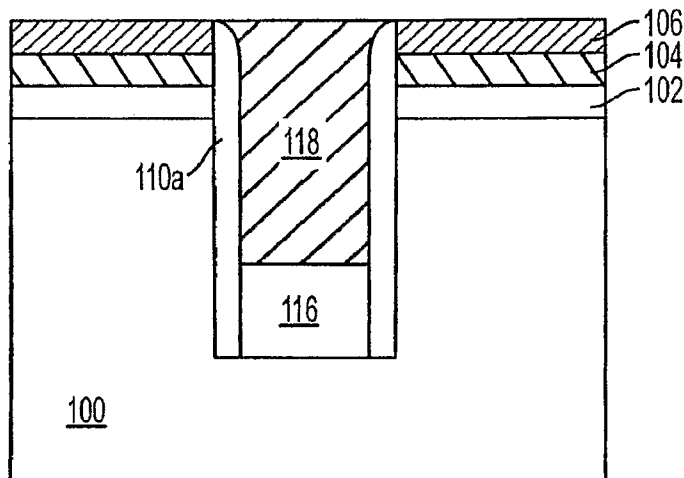
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(54) Title: METHOD OF FILLING A HIGH ASPECT RATIO TRENCH ISOLATION REGION AND RESULTING STRUCTURE



(57) Abstract: A method of filling a high aspect ratio trench isolation region, which allows for better gap-fill characteristics and avoids voids and seams in the isolation region. The method includes the steps of forming a trench, forming an oxide layer on the bottom and sidewalls of the trench, etching the oxide layer to expose the bottom of the trench, providing an epitaxial silicon layer on the bottom of the trench, and providing a high quality oxide chemical vapor deposition layer over the epitaxial silicon layer.

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