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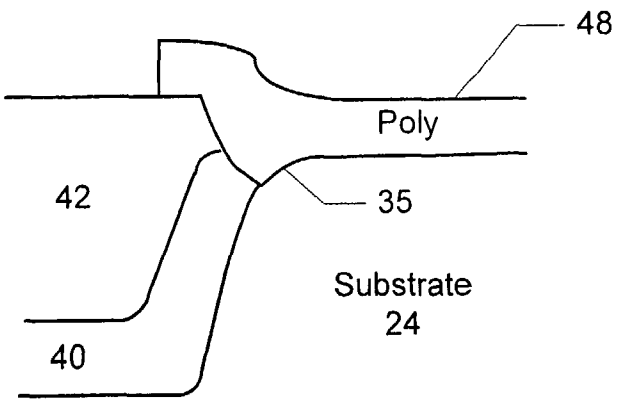
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(54) Title: METHOD FOR FORMING A SHALLOW TRENCH ISOLATION STRUCTURE WITH IMPROVED CORNER ROUNDING



(57) Abstract: A method for performing shallow trench isolation during semiconductor fabrication that improves trench corner rounding is disclosed. The method includes etching trenches into a silicon substrate (24) between active regions, and performing a double liner oxidation process and on the trenches. The method further includes performing a double sacrificial oxidation process and on the active regions, wherein corners (35) of the trenches are substantially rounded by the four oxidation processes.

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