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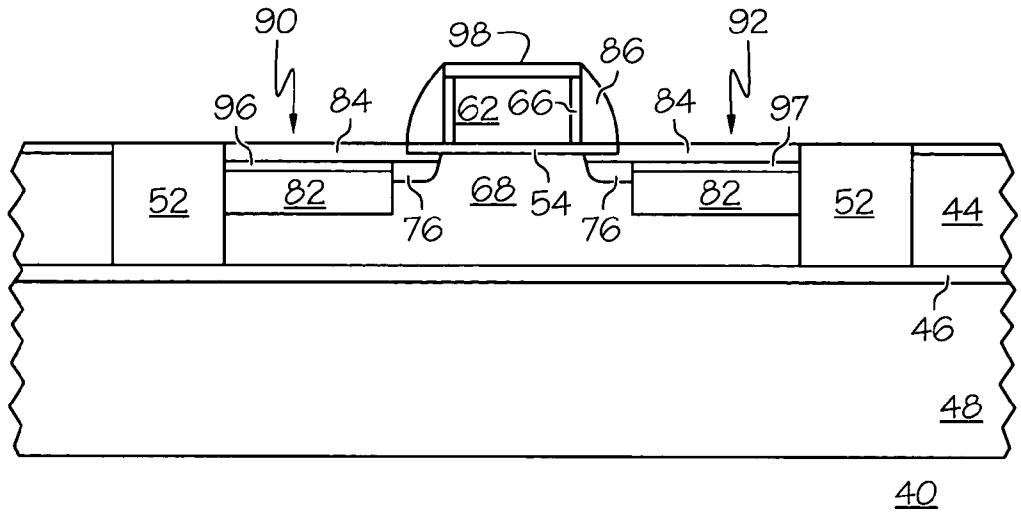
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(54) **Title:** STRESSED FIELD EFFECT TRANSISTOR AND METHODS FOR ITS FABRICATION



(57) **Abstract:** A stressed field effect transistor (40) and methods for its fabrication are provided. The field effect transistor (40) comprises a silicon substrate (44) with a gate insulator (54) overlying the silicon substrate. A gate electrode (62) overlies the gate insulator and defines a channel region (68) in the silicon substrate underlying the gate electrode. A first silicon germanium region (76) having a first thickness is embedded in the silicon substrate and contacts the channel region. A second silicon germanium region (82) having a second thickness greater than the first thickness and spaced apart from the channel region is also embedded in the silicon substrate.

WO 2008/042140 A1

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