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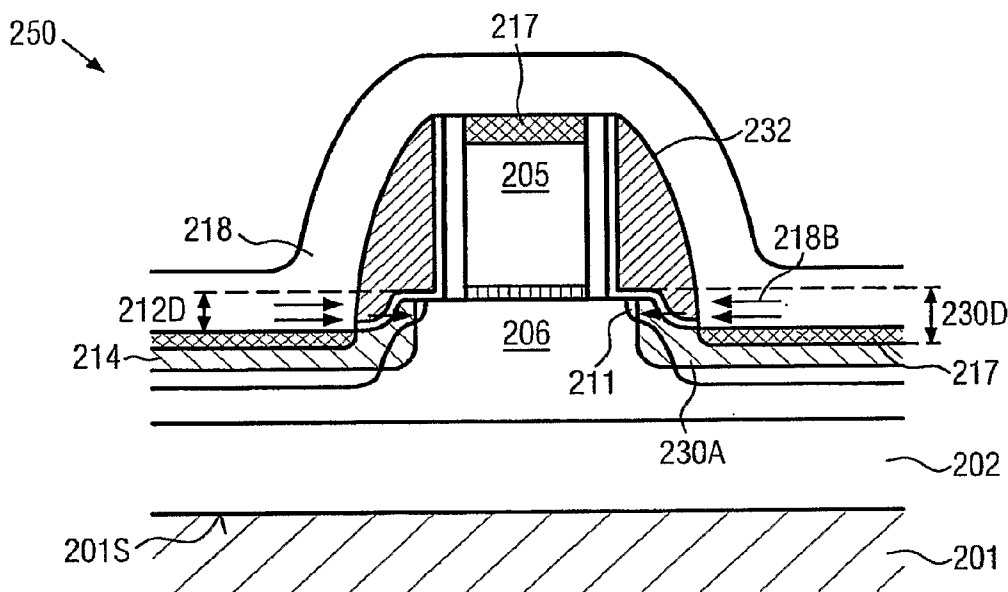
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(54) Title: TECHNIQUE FOR PROVIDING STRESS SOURCES IN TRANSISTORS IN CLOSE PROXIMITY TO A CHANNEL REGION BY RECESSING DRAIN AND SOURCE REGIONS



(57) Abstract: By recessing (112D, 212D) drain and source regions (114, 214), a highly stressed layer (118, 218), such as a contact etch stop layer, may be formed in the recess (112, 212) in order to enhance the strain generation in the adjacent channel region (104, 204) of a field effect transistor (100, 200). Moreover, a strained semiconductor material (230) may be positioned in close proximity to the channel region (104, 204) by reducing or avoiding undue relaxation effects of metal suicides (217), thereby also providing enhanced efficiency for the strain generation. In some aspects, both effects may be combined to obtain an even more efficient strain-inducing mechanism.

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