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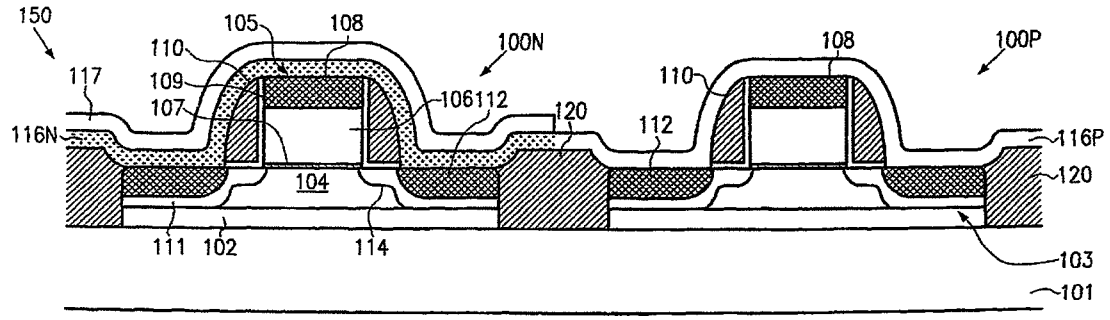
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(54) Title: TECHNIQUE FOR CREATING DIFFERENT MECHANICAL STRESS IN DIFFERENT CHANNEL REGIONS BY FORMING AN ETCH STOP LAYER HAVING DIFFERENTLY MODIFIED INTRINSIC STRESS



(57) Abstract: By providing a contact etch stop layer (116), the stress in channel regions of different transistor types (100N), (100P) may be effectively controlled, wherein tensile and compressive stress portions of the contact etch stop layer (116) may be obtained by well-established processes, such as wet chemical etch, plasma etch, ion implantation, plasma treatment and the like. Hence, a significant improvement in transistor (100N), (100P) performance may be obtained while not significantly contributing to process complexity.

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