ENHANCED TRANSISTOR PERFORMANCE OF N-CHANNEL TRANSISTORS BY USING AN ADDITIONAL LAYER ABOVE A DUAL STRESS LINER IN A SEMICONDUCTOR DEVICE

ABSTRACT

By forming an additional dielectric material (260), such as silicon nitride, after patterning dielectric liners (230, 240) of different intrinsic stress, a significant increase of performance of N-channel transistors (220A) may be obtained while substantially not contributing to a performance loss of the P-channel transistor (220B)

Figure 2e.