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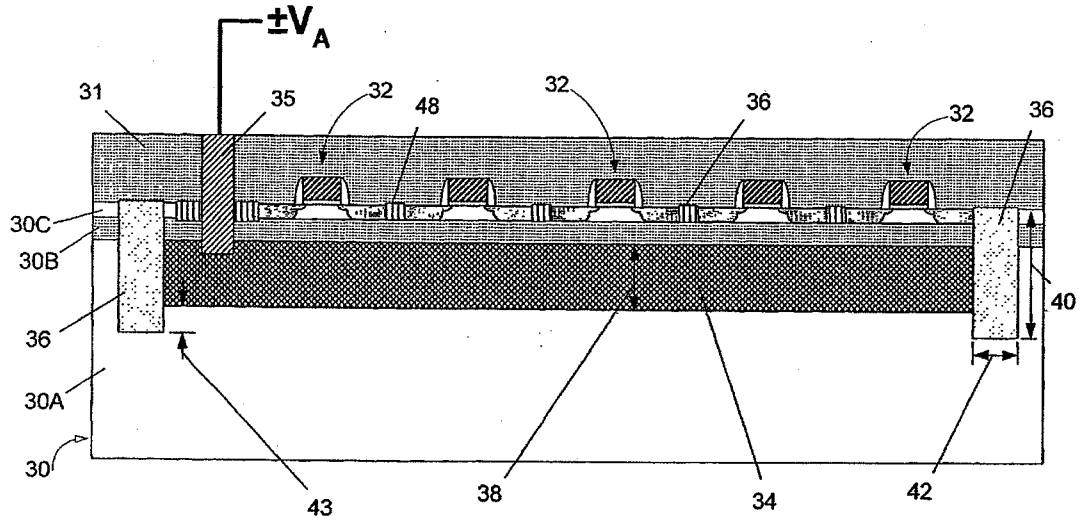
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(54) Title: DOPEN REGION IN AN SOI SUBSTRATE



(57) Abstract: In one illustrative embodiment, the method comprises providing an SOI substrate (30) comprises of an active layer (30C), a buried insulation layer (30B) and a bulk substrate (30A), forming a doped region (34) in the bulk substrate (30A) under the active layer, forming a plurality of transistors (32) above the SOI substrate in an area above the doped region (34) and applying a voltage to the doped region to vary a threshold voltage of at least one of the plurality of transistors. In another illustrative embodiment, the method comprises providing a consumer product comprised of at least one integrated circuit product (64), the integrated circuit product being comprised of a plurality of transistors (32) formed in an active layer (30C) of an SOI substrate (30) above a doped region (34) formed in a bulk substrate (30A) of the SOI substrate, the doped region (34) being formed under the active layer, sensing an activity level of the integrated circuit product (64) and applying a voltage of magnitude and a polarity to the doped region, the magnitude and polarity of the applied voltage being determined based upon the sensed activity level of the integrated circuit product (64).

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