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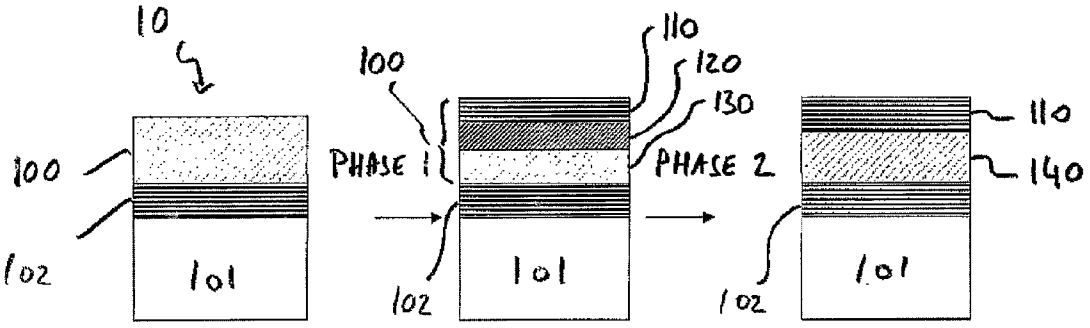
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(54) Title: THERMAL OXIDATION OF A SIGE LAYER AND APPLICATIONS THEREOF



(57) Abstract: The invention concerns a method for oxidizing a surface region of a SiGe layer, comprising an oxidizing thermal treatment of the SiGe layer for oxidizing said surface region, characterized in that it comprises two phases: A first phase of oxidizing thermal treatment, carried out directly on said SiGe layer, so as to obtain an oxidized region which is: thick enough for forming a capping oxide which can protect the underlying SiGe from pitting during the subsequent second phase, and thin enough for keeping the thickness of the oxidized surface region under a threshold thickness range, corresponding to the generation of dislocations within the SiGe layer, and a second phase of high temperature annealing in an inert atmosphere which is carried out on said SiGe layer after said first phase, said SiGe layer being capped with said oxidized region created during said first phase, said high temperature annealing allowing the diffusion of Ge from a Ge-enriched region into the underlying part of said SiGe layer.

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