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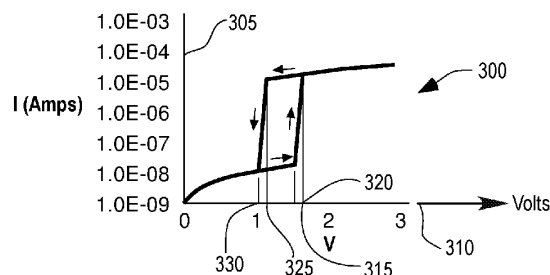
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(54) Title: SEMICONDUCTOR DEVICES USING INSULATOR-METAL PHASE CHANGE MATERIALS

Fig. 3



(57) Abstract: An exemplary semiconductor incorporates phase change material $\text{MoxW}_{1-x}\text{Te}_2$ that may be the semiconducting channel or may be part of a control terminal/gate of the semiconductor. The phase change material selectably being in one of metal and insulator phases depending on whether a voltage field greater than a predetermined phase change field is present at the phase change material. The properties of the semiconductor are varied depending on the phase of the phase change material.

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