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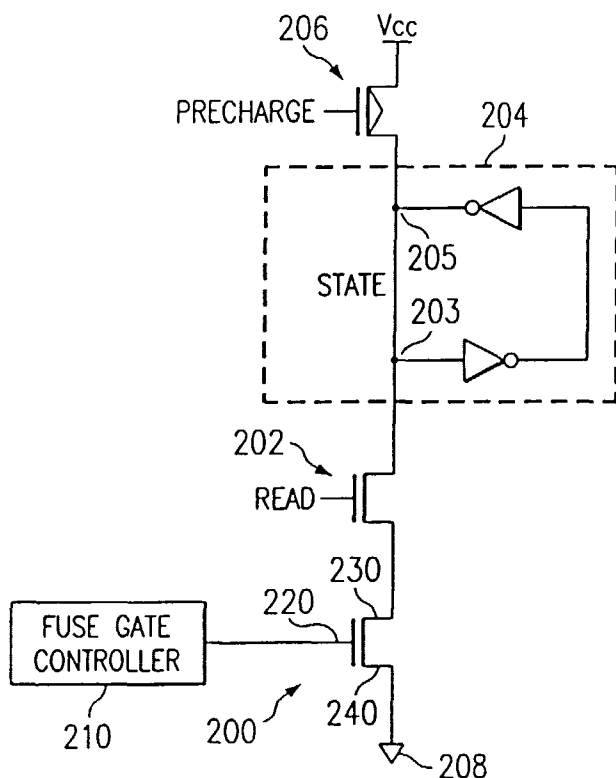
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(54) Title: EVALUATION CIRCUIT FOR AN ANTI-FUSE



(57) Abstract: The present invention provides for evaluating a programmable anti-fuse element. For a programmable transistor anti-fuse, the gate of the anti-fuse is precharged with a predetermined voltage and/or current and the anti-fuse is subsequently evaluated. In one embodiment a precharge voltage sufficient to turn ON a transistor is provided to the gate. Here, an intact (unblown) transistor remains ON over a period of time and a damaged (blown) transistor dissipates the charge voltage and turns OFF. The status of the transistor is subsequently determined by evaluating the resistance between the drain and source. A high resistance indicates a blown condition and a low resistance indicates an unblown condition. In another embodiment, a small current is provided to the gate in which the small current is greater than a leakage current for an intact transistor and is less than a leakage current for a damaged transistor. An intact transistor charges to an ON state over a period of time but a damaged transistor does not because its leakage current is greater than the small current provided to the gate. Again, the status of the transistor anti-fuse is subsequently determined by evaluating the resistance between the drain and source.



WO 03/058705 A1



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