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(54) Title: SPIN TORQUE TRANSFER MEMORY CELL STRUCTURES AND METHODS

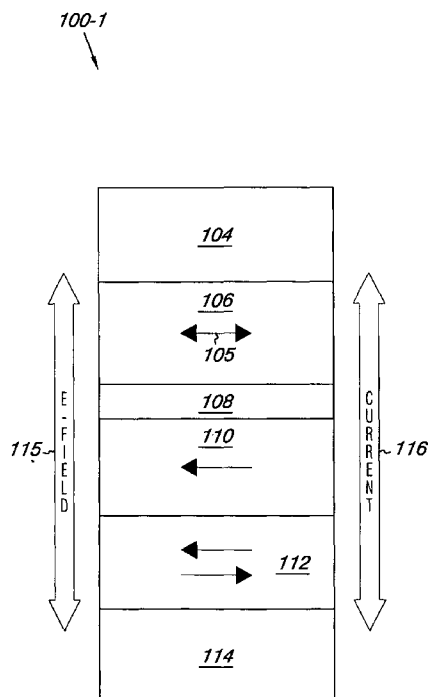


Fig. 1A

(57) Abstract: Spin Torque Transfer (STT) memory cell structures and methods are described herein. One or more STT memory cell structures include a tunneling barrier material positioned between a ferromagnetic storage material and a pinned ferromagnetic material in contact with an anti-ferromagnetic material. The tunneling barrier material is a multiferroic material and the anti-ferromagnetic material, the ferromagnetic storage material, and the pinned ferromagnetic material are positioned between a first electrode and a second electrode.



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