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(12) United States Patent Varkony

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(54) METHOD AND APPARATUS FOR ACCESSING A NON-VOLATILE MEMORY ARRAY COMPRISING UNIDIRECTIONAL CURRENT FLOWING MULTIPLEXERS

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U.S.C. 154(b) by 576 days.

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Related U.S. Application Data

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(51) **Int. Cl.** *G11C 16/04* (2006.01)

(52) **U.S. Cl.** **365/185.16**; 365/185.23; 365/230.02; 365/230.06

See application file for complete search history.

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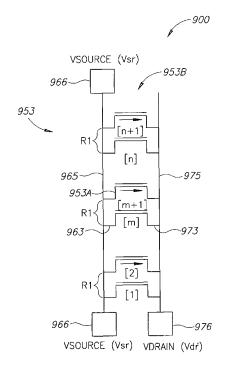
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(57) ABSTRACT

A non-volatile memory (NVM) having an array of memory cells and a unidirectional multiplexer (UMUX), the UMUX may be comprised of two or more address line ports adapted to receive addressing signals corresponding with elements in the memory array, and a set of switching transistors adapted to switch a supply voltage in accordance with the addressing signal such that current only flows into the array.

5 Claims, 18 Drawing Sheets





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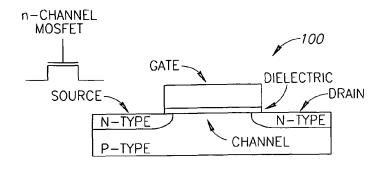
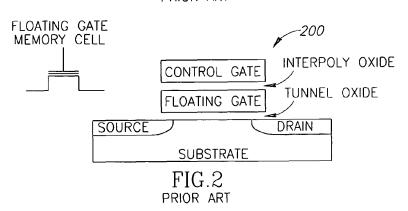
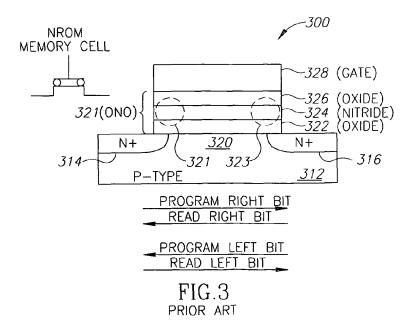
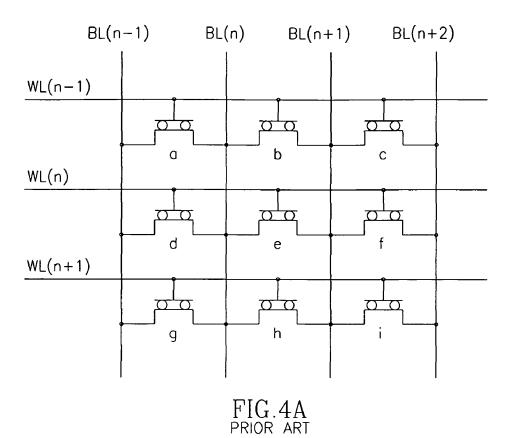


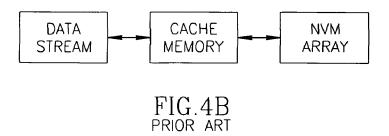
FIG.1 PRIOR ART

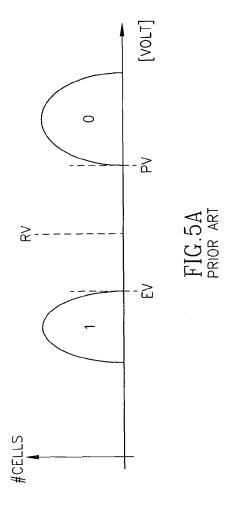


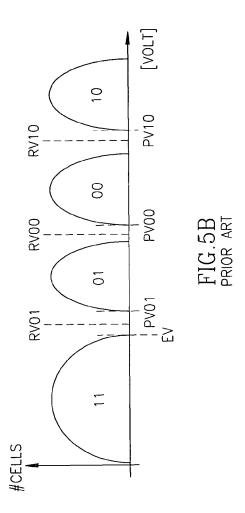


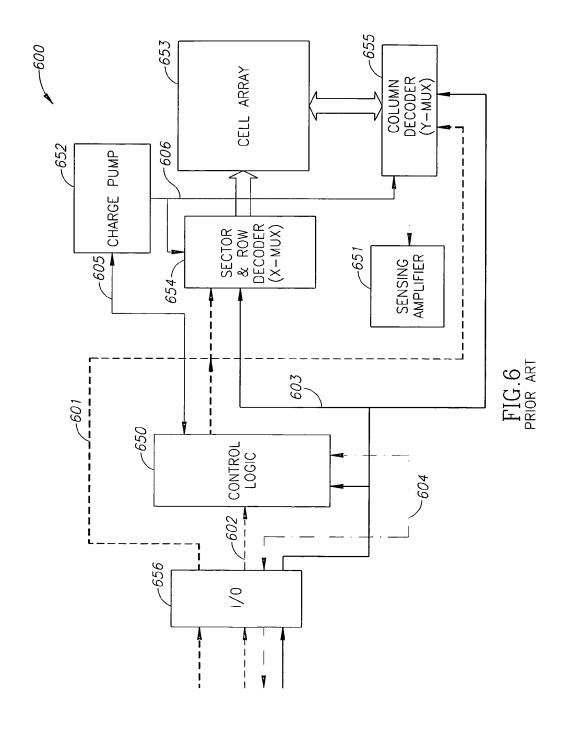














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