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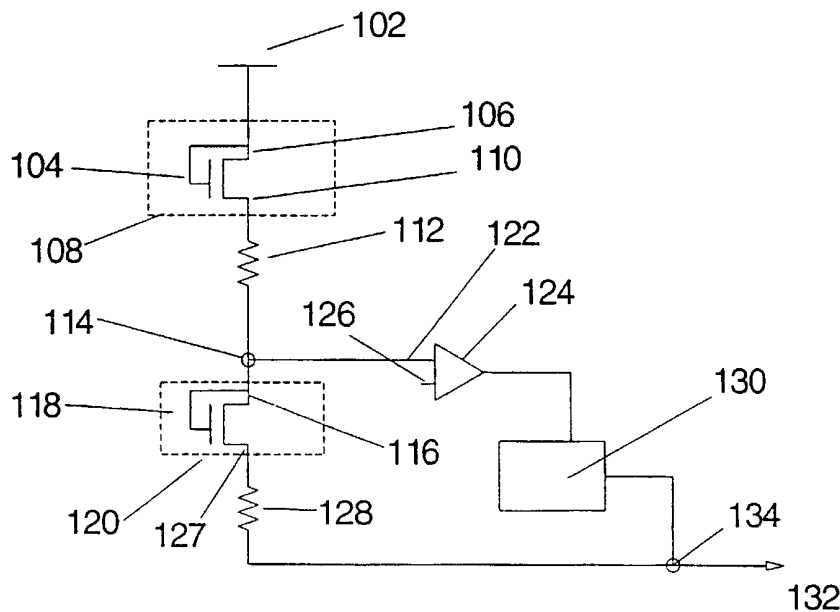
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTI-GENERATOR, PARTIAL ARRAY V<sub>t</sub>, TRACKING SYSTEM TO IMPROVE ARRAY RETENTION TIME



(57) Abstract: Improved transistor array device performance is obtained by use of bias voltage regulation which tracks with a fraction of a monitor transistor threshold voltage. The circuitry and methods are especially useful for improving the performance of transistor array devices such as DRAM and embedded DRAM. These benefits are obtained especially when at least two bias voltages normally supplied to the array are regulated by tracking with a fraction of an actual threshold voltage of at least one monitor transistor. Performance improvements include improved reliability, wider operational bias conditions, reduced power consumption and (in the case of memory cells) improved retention time.



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INTERNATIONAL SEARCH REPORT

Intern. Application No  
PCT/US 01/17267

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G11C5/14 G11C8/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G11C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 397 934 A (MERRILL RICHARD B ET AL) 14 March 1995 (1995-03-14)	1,8-11, 15,19, 20,23
Y	column 4, line 1 -column 8, line 68 ---	10
Y	US 4 142 114 A (GREEN ROBERT S) 27 February 1979 (1979-02-27) the whole document ---	10
A	US 5 055 715 A (INABA HIDEO) 8 October 1991 (1991-10-08) the whole document ---	19,20,23
A	US 5 874 851 A (SHIOTA TETSUYOSHI) 23 February 1999 (1999-02-23) column 3, line 66 -column 5, line 29 --- -/--	1,3, 15-20

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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International Application No  
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 846 998 A (SGS THOMSON MICROELECTRONICS) 10 June 1998 (1998-06-10) column 7, line 42 -column 11, line 25 -----	1-3, 15-20

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Interr.      nal Application No

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