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(71) Applicant (for all designated States except US): **DENSBITS TECHNOLOGIES LTD.** [IL/IL]; Building 30, Flr 3, Matam Industrial Park, P.O.Box 15111, 31015 Haifa (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WEINGARTEN, Hanan** [IL/IL]; Hayarden 2, 46377 Herzliya (IL). **LEVY, Shmuel** [IL/IL]; 9 Fish Street, 36025 Tivon (IL). **KATZ, Michael** [IL/IL]; 75 Moriah Ave., 34616 Haifa (IL).

(74) Agent: **PEARL COHEN ZEDEK LATZER**; 5 Shenkar Street, P.O. Box 12704, Herzlia 46733 (IL).

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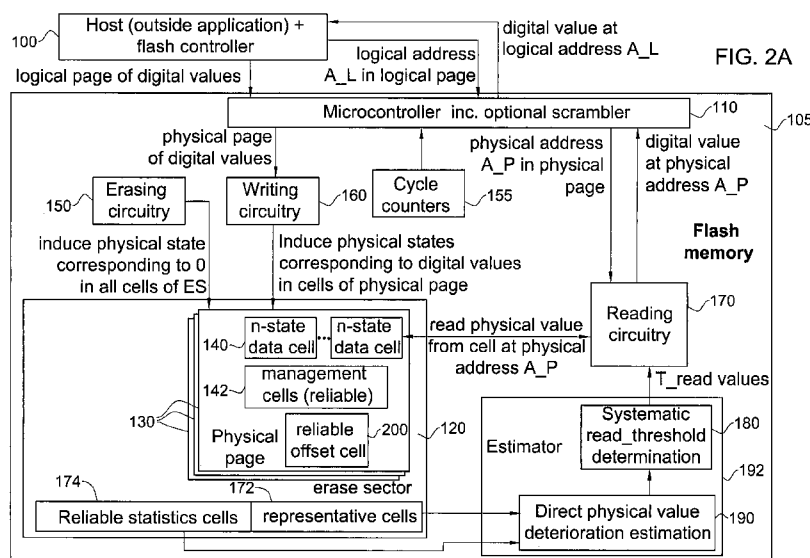
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Previous Correction:

see Notice of 3 September 2009

(54) Title: FLASH MEMORY DEVICE WITH PHYSICAL CELL VALUE DETERIORATION ACCOMMODATION AND METHODS USEFUL IN CONJUNCTION THEREWITH



(57) Abstract: A method for determining thresholds useful for converting cell physical levels into cell logical values in an array of digital memory cells storing physical levels which diminish over time, the method comprising determining extent of deterioration of the physical levels and determining thresholds accordingly for at least an individual cell in said array; and reading the individual cell including reading a physical level in the cell and converting the physical level into a logical value using the thresholds, wherein the determining comprises storing predefined physical levels rather than data-determined physical levels in each of a plurality of cells and computing extent of deterioration by determining deterioration of the predefined physical levels.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL 08/01239

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 9/26 (2009.01)

USPC - 711/200

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)

USPC - 711/200

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 711/100, 200, 202, 208-209

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Dialog Classic (Chinese Pat Abstr; Derwent Index, EPFT, French Pat, Jap Abstr, USPFT, WIPO/PCT PFT); Google Scholar; Terms searched: AMOUNT, AMPLITUDE, ARRAY, CALIBRATION, CELL, CONVERT, DECLIN, DECREAS, DIMINISH, DURATION, FALL, LEVEL, LOGIC, MEASUREMENT, MEMORY, PHYSICAL, PREDEFIN, READ, STORE, THRESHOLD, TIME

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,982,659 A (Irrinki et al.) 09 November 1999 (09.11.1999); entire document, especially: col 2, ln 32-42, 58-63; col 3, ln 10-12, 47-57; col 3, ln 62 to col 4, ln 2; col 4, ln 35-39, 43; col 5, ln 15-18; col 6, ln 14-31	1-5, 8-11, 13-15, 17-19, 24-25, 27, 31, 33 and 37
Y		6-7, 12, 16, 20-23, 26, 28-30, 32 and 34-36
Y	US 2006/0203587 A1 (Li et al.) 14 September 2006 (14.09.2006); entire document, especially: para [0014]	6-7, 12, 23, 29 and 35-36
Y	US 6,038,634 A (Ji et al.) 14 March 2000 (14.03.2000); entire document, especially: (col 3, ln 35-40)	16, 22, 26, 28, 30 and 32
Y	US 4,463,375 A (Macovski) 31 July 1984 (31.07.1984); entire document, especially: col 2, ln 18-35	20
Y	US 6,915,477 B2 (Gollamudi et al.) 05 July 1984 (05.07.1984); entire document, especially: col 2, ln 8-42	21 and 34

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201

Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774