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(54) Title: ESTIMATION OF NON-LINEAR DISTORTION IN MEMORY DEVICES

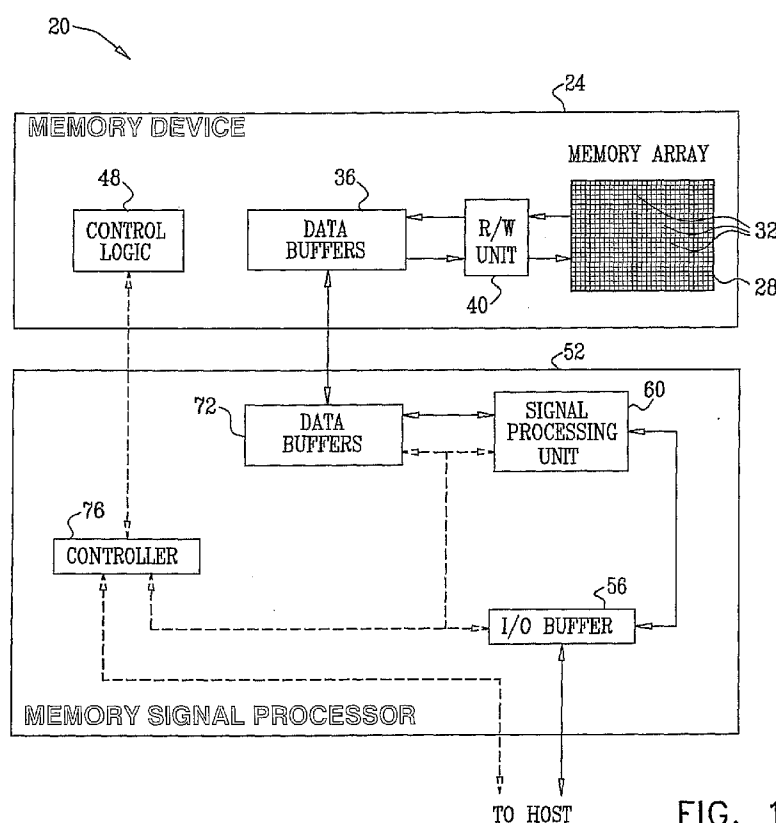


FIG. 1

(57) Abstract: A method for operating a memory (24) includes storing data in analog memory cells (32) of the memory by writing respective analog values to the analog memory cells. Identifying an interfered cell having a distortion that is statistically correlated with the respective analog values of the analog memory cells in a set of the analog memory cells. Determining a mapping between combinations of possible analog values of the analog memory cells in the set and statistical characteristics of composite distortion levels present in the interfered memory cell. The mapping is applied to compensate for the distortion in the interfered memory cell.



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FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
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A. CLASSIFICATION OF SUBJECT MATTER

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USPC: 714/718;365/200

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)

U.S. : 714/718;365/200

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,807,095 B2 (CHEN et al) 19 October 2004 (19.10.2004), entire document.	1-53
X	US 5,867,429 A (CHEN et al) 02 February 1999 (02.02.1999), entire document.	1-53
A	US 6,363,008 B1 (WONG) 26 March 2002 (26.03.2002), entire document.	1-53
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