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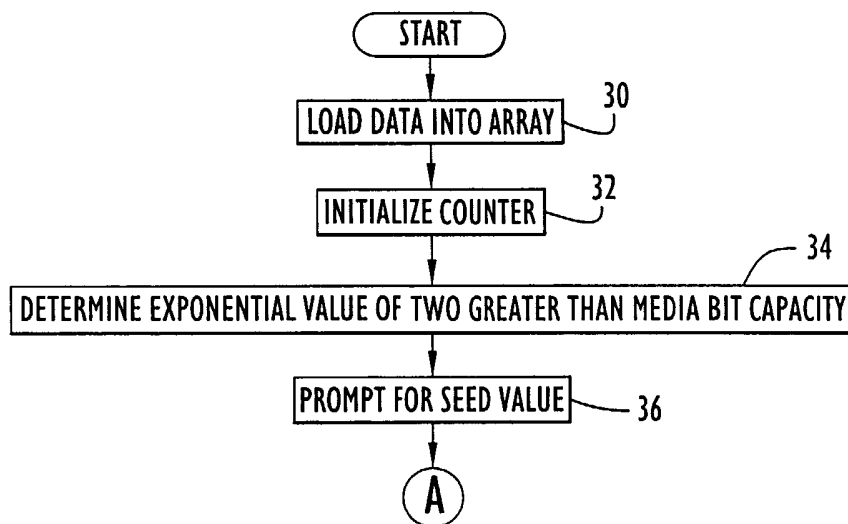
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- (71) Applicant and (88) Date of publication of the international search report:
(72) Inventor: BODEN, Scott, T. [US/US]; 1600 Ludington Lane, LaJolla, CA 92037-6338 (US). 26 February 2004
- (74) Agent: SHAPIRO, Stuart, B.; Epstein, Edell, Shapiro & Finnan, LLC, Suite 400, 1901 Research Boulevard, Rockville, MD 20850 (US). 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: METHOD AND APPARATUS FOR SECURE AND FAULT TOLERANT DATA STORAGE



(57) Abstract: A computer system including software manipulates data prior to storage on media disposed within a system storage device. The data is initially stored sequentially within a first array, while a pseudo-random number sequence is generated in accordance with a seed value to identify storage locations for associated data bits within a second array. The second array is stored sequentially on the media to randomly distribute the data across that media. In order to retrieve the data in original form, the entire contents of the media are retrieved and stored in a third array. The sequence is reproduced in accordance with the seed value, while data bits are retrieved in the order of the sequence and stored in temporary storage to recover the data. The seed value may further serve as a password to maintain the data in a secure fashion.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/08482

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G11B20/18 G06F11/00 G11B20/00

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 G11B G06F

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, WPI Data, PAJ, INSPEC, IBM-TDB, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 535 173 A (CARRE LAURENT ET AL) 9 July 1996 (1996-07-09) abstract; figures 1,2 column 2, line 9 - column 3, line 20 column 3, line 48 - column 4, line 11 claims 1-3,32-36 -----	1,17,26, 35,44 5,48
Y	EP 0 553 841 A (JAPAN BROADCASTING CORP) 4 August 1993 (1993-08-04) column 10, line 12 - line 24 -----	1,2,5, 17,26, 35,44,45
Y	US 6 035 427 A (KWEON OH SANG) 7 March 2000 (2000-03-07) abstract column 1, line 34 - column 2, line 24 claim 1 ----- -/--	1,2,5, 17,26, 35,44,45

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *&* document member of the same patent family

Date of the actual completion of the international search

30 December 2003

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International Application No

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Information on patent family members

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