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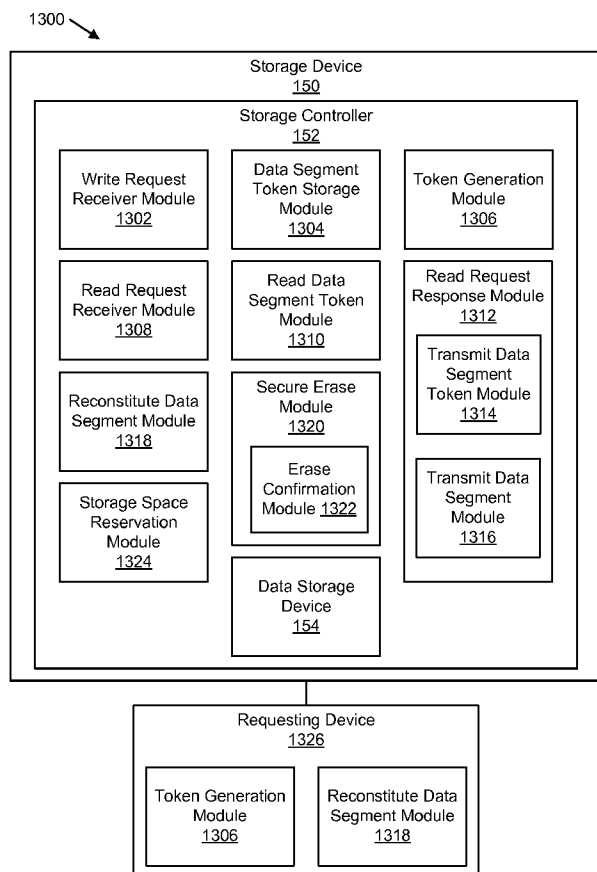
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[Continued on next page]

(54) Title: APPARATUS, SYSTEM, AND METHOD FOR MANAGING DATA IN A STORAGE DEVICE WITH AN EMPTY DATA TOKEN DIRECTIVE



(57) Abstract: An apparatus, system, and method are disclosed for managing data with an empty data segment directive at the storage device (150). The apparatus, system, and method for managing data include a write request receiver module (1302) and a data segment token storage module (1304). The write request receiver module (1302) receives a storage request from a requesting device (1326). The storage request includes a request to store a data segment in a storage device (150). The data segment includes a series of repeated, identical characters or a series of repeated, identical character strings. The data segment token storage module (1304) stores a data segment token in the storage device (150). The data segment token includes at least a data segment identifier and a data segment length. The data segment token is substantially free of data from the data segment.

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A. CLASSIFICATION OF SUBJECT MATTER
 INV. G06F3/06 G06F12/00 G11C16/16 G11B5/024

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)

G06F G11C G11B

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/062511 A. (TEAC AEROSPACE TECHNOLOGIES IN [US]; JENSEN PETER [US]) 15 June 2006 (2006-06-15) paragraph [0006] paragraphs [0023] - [0030] figure 1A paragraphs [0035], [0036] paragraphs [0044] - [0050] figure 3 claims -----	1-30
X	US 2002/181134 A1 (BUNKER KEITH G [US] ET AL BUNKER KEITH G [US] ET AL) 5 December 2002 (2002-12-05) paragraphs [0026] - [0028] paragraphs [0029] - [0031] figures 3A, 3B, 3C ----- -/--	1-10, 14-19, 24-30

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

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

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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	US 6 658 438 B1 (MOORE CHRISTOPHER S [US] ET AL) 2 December 2003 (2003-12-02) column 1, lines 62-65 figure 1 column 2, line 58 - column 3, line 5 figure 2 column 3, lines 6-24 figures 3a,3b,3c -----	1,24,27
A	GUTMANN P: "Secure Deletion of Data from Magnetic and Solid-State Memory" PROCEEDINGS OF THE USENIX SECURITY SYMPOSIUM, XX, XX, 22 July 1996 (1996-07-22), page 14COMPLETE, XP002190890 the whole document -----	1,24,27

INTERNATIONAL SEARCH REPORT

Information on patent family members

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