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[Continued on next page]

(54) Title: FILING SYSTEM AND METHOD FOR DATA FILES STORED IN A DISTRIBUTED COMMUNICATIONS NETWORK

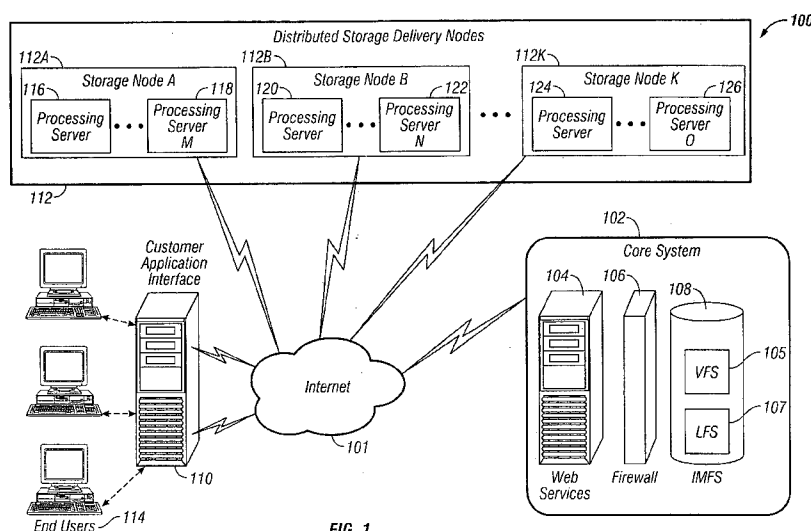


FIG. 1

(57) Abstract: A computer-implemented method for accessing a file stored in memory, includes: receiving a request to access the file, the request comprising a virtual file path name associated with the requested file; correlating the virtual file path name with a logical file identification (LFID); and identifying a physical location of the file in the memory using the LFID.



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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2008/074524****A. CLASSIFICATION OF SUBJECT MATTER****G06F 15/16(2006.01)i, G06F 17/40(2006.01)i**

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: G06F

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

Korean Utility models and applications for Utility models since 1975  
Japanese Utility models and applications for Utility models since 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
eKIPASS(KIPO internal) "Keywords: multi-layered file system, virtual and/or logical file system, unique file identification and similar terms"**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                            | Relevant to claim No. |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A         | US 2006-294163 A1 (ARMANGAU et al.) 28 December 2006<br>See the abstract, figures 1-2 and 4, and paragraphs [0024]-[0070].                                                                                    | 1-37                  |
| A         | US 6,952,737 B1 (COATES et al.) 04 October 2005<br>See the abstract, figures 1, 3-4 and 6-7, and col. 5 line 35 - col. 6 line 29,<br>col. 6 line 58 - col. 10 line 31, and col. 10 line 62 - col. 10 line 56. | 1-37                  |
| A         | US 6,754,696 B1 (KAMATH, et al.) 22 June 2004<br>See the abstract, figures 2-3 and col. 4 line 33 - col. 8 line 2.                                                                                            | 1-37                  |
| A         | US 5,893,086 A (SCHMUCK et al.) 06 April 1999<br>See the abstract and col. 2 line 10 - col. 5 line 9.                                                                                                         | 1-37                  |

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Information on patent family members

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| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s)                                                                                                   | Publication<br>date                                                                            |
|-------------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| US 2006-294163 A1                         | 28.12.2006          | EP 1894127 A1<br>JP 2008-544397 A                                                                                            | 05.03.2008<br>04.12.2008                                                                       |
| US 6952737 B1                             | 04.10.2005          | AU 2001-241921 A8<br>AU 2001-41921 A1<br>AU 4192101 A<br>EP 1410247 A2<br>EP 1410247 B1<br>JP 2004-500660 A<br>US 7203731 B1 | 17.09.2001<br>17.09.2001<br>17.09.2001<br>21.04.2004<br>25.06.2008<br>08.01.2004<br>10.04.2007 |
| US 6754696 B1                             | 22.06.2004          | None                                                                                                                         |                                                                                                |
| US 5893086 A                              | 06.04.1999          | KR 10-1999-0013792 A                                                                                                         | 25.02.1999                                                                                     |