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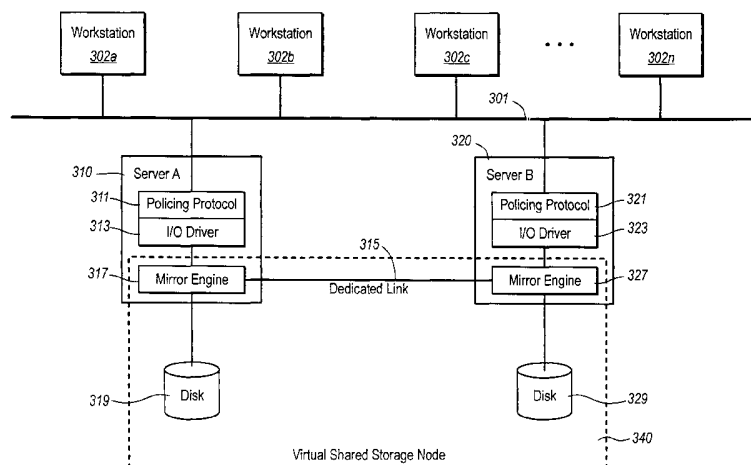
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ning of each regular issue of the PCT Gazette.

(54) Title: MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK



(57) Abstract: Mirroring data to provide a virtual storage area network (340) using policing protocols (311, 321) and mirror engines (317, 327) without a physical shared storage node. The mirror engines (317, 327) are found at each server computer (310, 320) in the network (301) in order to mirror the data between mass storage devices (319, 329) of the servers (310, 320) as the servers receive and execute write operations, which results in each mass storage device containing the same stored data. The policing protocols (311, 321) prevent data corruption by not allowing more than one server (310, 320) at a time write to a file of data. If one server (310, 320) experiences failure and is incapable of providing access to network data, the other server or servers can service all read requests, since all network data is accessible by all servers. Unlike conventional storage area networks, there is no physical shared storage node and, accordingly, the costs of obtaining and operating the virtual storage area network (340) are relatively small.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/30; H02H 3/05

US CL : 707/1, 10, 100, 104.1, 200, 206; 714/ 4, 6, 15

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)

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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)

WEST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,600 A (BISSETT et al) 4 February 1997 (see entire document) <i>5600 784</i>	1-27
X	US 4,792,896 A (MACLEAN et al) 20 December 1988 (see entire document)	1-27
Y	US 5,455,932A (MAJOR et al) 3 October 1995 (see entire document)	1-27
Y	US 5,555,371 A (DUYANOVICH et al) 10 September 1996 (see entire document)	1-27

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

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