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11/868,675 8 October 2007 (08.10.2007) US(71) Applicant (for all designated States except US): **CISCO TECHNOLOGY, INC.** [US/US]; 170 West Tasman Drive, SJC/10/2/1, San Jose, CA 95134-1706 (US).

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(54) Title: FAST WRITE OPERATIONS TO A MIRRORED VOLUME IN A VOLUME MANAGER

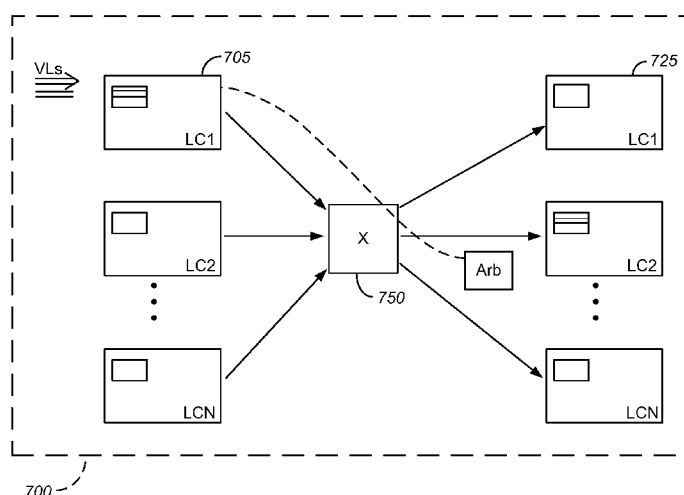


FIG. 7

(57) Abstract: In one embodiment, a method is provided comprising: receiving, at a virtualizer, a write command from an initiator in a storage area network, wherein the storage area network includes the initiator and a plurality of mirrored storages; sending, from the virtualizer, a write command to the plurality of mirrored storages; receiving, at the virtualizer, a transfer ready message from a first of the plurality of mirrored storages; sending a transfer ready message from the virtualizer to the initiator in response to the receiving of the transfer ready message from the first of the plurality of mirrored storages; receiving, at the virtualizer, a data message from the initiator; and sending, from the virtualizer, a data message to the plurality of mirrored storage once transfer ready messages have been received from each of the plurality of mirrored storages.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 08/72180

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 11/00 (2009.01)

USPC - 714/6

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)

USPC - 714/6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC - 714/2, 5-7, 15, 18, 20-21, 25, 41-42, 44, 54, 707, 747, E11.098, E11.101-E11.109, E11.11, E11.118, E11.127-E11.128; 711/100, 112, 124, 162, 165; 711/154, 161-162, 165; 709/219-221; 710/36

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Electronic Databases Searched: DialogWEB; Google

Search Terms Used: virtualizer, processor, unit, initiator, processing, host, storage, memory, space, write, read, ready, status, second, plurality, mirror, buffer, cache, mapping, virtual, logic, unit

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 7,181,578 B1 (GUHA et al.) 20 February 2007 (20.02.2007) entire document, especially Abstract; col 11, ln 32-36, 51-56; col 12, ln 3-12, 55-58; col 13, ln 1-23; col 14, ln 26-31, 36-37, 41-52, 58-61; col 17, ln 57-61.	1-20
A	US 6,898,670 B2 (NAHUM) 24 May 2005 (24.05.2005) entire document	1-20

☐ Further documents are listed in the continuation of Box C.


* Special categories of cited documents:

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

"E" earlier application or patent but published on or after the international filing date

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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