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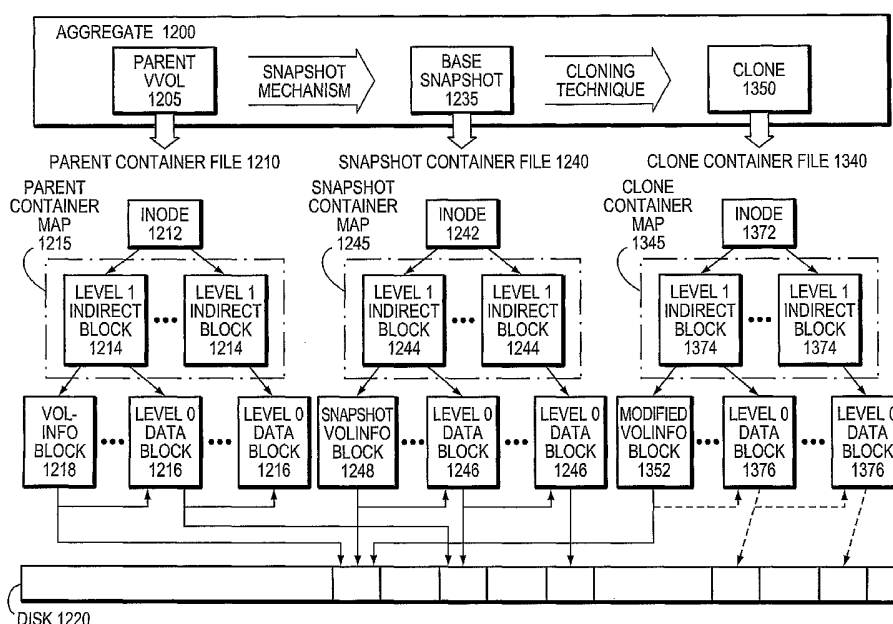
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(54) Title: ONLINE CLONE VOLUME SPLITTING TECHNIQUE



(57) Abstract: A clone splitting technique enables efficient online splitting of blocks shared between a parent virtual volume (vvol) and a clone in accordance with a shared block splitting procedure executing on a storage system. Online splitting of shared blocks denotes allowing execution of read/write operations directed to the clone, as well as to the parent vvol, as the shared blocks are split. The clone splitting technique removes any connection between a clone and its parent vvol, thereby allowing the clone to be used as a first-class volume. Moreover, the technique removes such connection while allowing both the clone and parent vvol to remain available online and writeable (accessible) to clients during the shared block splitting procedure.

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2005/013414

A. CLASSIFICATION OF SUBJECT MATTER

INV. G06F17/30

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/024961 A1 (COCHRAN ROBERT A ET AL) 5 February 2004 (2004-02-05)	1,8,17, 19
Y	abstract; figures 9A-12E paragraph [0012] - paragraph [0016] paragraph [0037] - paragraph [0052] -----	2-7, 9-16,18, 20
Y	EP 1 349 088 A (NETWORK APPLIANCE, INC) 1 October 2003 (2003-10-01)	2-7, 9-16,18, 20
A	the whole document	1,8,17, 19
A	US 6 311 193 B1 (SEKIDO KAZUNORI) 30 October 2001 (2001-10-30) column 1, line 4 - column 3, line 40 ----- -/--	1-20



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8 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 2002/083037 A1 (LEWIS BLAKE ET AL) 27 June 2002 (2002-06-27) cited in the application the whole document -----	1-20

INTERNATIONAL SEARCH REPORT

Information on patent family members

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