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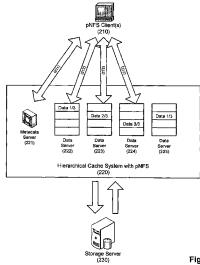


Fig. 2

(57) Abstract: A method implements a hierarchical cache system with a parallel Network File System (pNFS) configuration for a storage system. Upon receiving a request by the hierarchical cache system to access data stored in the storage system, the method divides the data into a plurality of data segments and distributes the plurality of data segments to a plurality of cache servers of the cache system. The method responds to the request a metadata layout for the plurality of data segments distributed among the plurality of cache servers. Based on the metadata layout, the plurality of data segments can be concurrently retrieved from the plurality of cache servers.



International application No. **PCT/US2009/068300** 

#### A. CLASSIFICATION OF SUBJECT MATTER

#### G06F 15/16(2006.01)i, G06F 12/08(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

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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

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eKOMPASS(KIPO internal) & Keywords: metadata, server, eache, distribute, concurrently, retrieve;

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2007-0294422 A1 (GAL ZUCKERMAN et al.) 20 December 2007 See the abstract, claims 1-20 and figures 1-34.	1,11 2-10,12-24
X	KR 10-2004-0024625 A (ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE. ) 22 March 2004	18
А	See the abstract, claims 1-8 and figures 1-7.	1-17,19-24
X A	US 6330652 B1 (TERENCE A. ROBB) 11 December 2001 See the abstract, claims 1-21 and figures 1-5.	22 1-21,23-24
A	US 2007-0276838 A1 (SAMY KHALIL ABUSHANAB et al.) 29 November 2007 See the abstract, claims 1-33 and figures 1-8.	1-24

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

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Information on patent family members

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