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Coates

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(54) **FAILOVER ARCHITECTURE FOR A
DISTRIBUTED STORAGE SYSTEM**

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(58) **Field of Classification Search** **707/1-10;**
707/200-206; 709/200-203; 711/161-162;
714/100, 6

See application file for complete search history.

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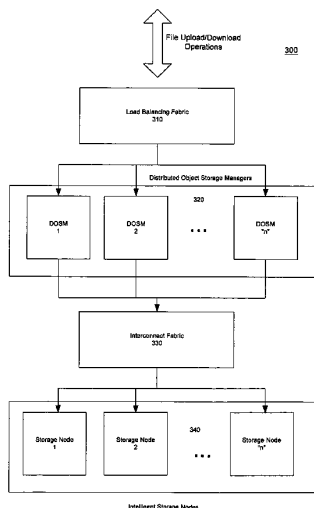
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(57) **ABSTRACT**

A network storage system includes a virtual file system (“VFS”) that manages the files of the network storage system, and a storage center that stores the files. The VFS and the storage center are separated, such that a client accesses the VFS to conduct file system operations and the client accesses the storage center to upload/download files. The client accesses the network storage system through one or more storage ports. The storage center includes a plurality of distributed object storage managers (DOSMs) and a storage cluster that includes a plurality of intelligent storage nodes. The network storage system includes additional storage centers at geographically disparate locations. The network storage system uses a multi-cast protocol to maintain file information at the DOSMs regarding files stored in the intelligent storage nodes, including files stored in disparate storage centers.

29 Claims, 32 Drawing Sheets



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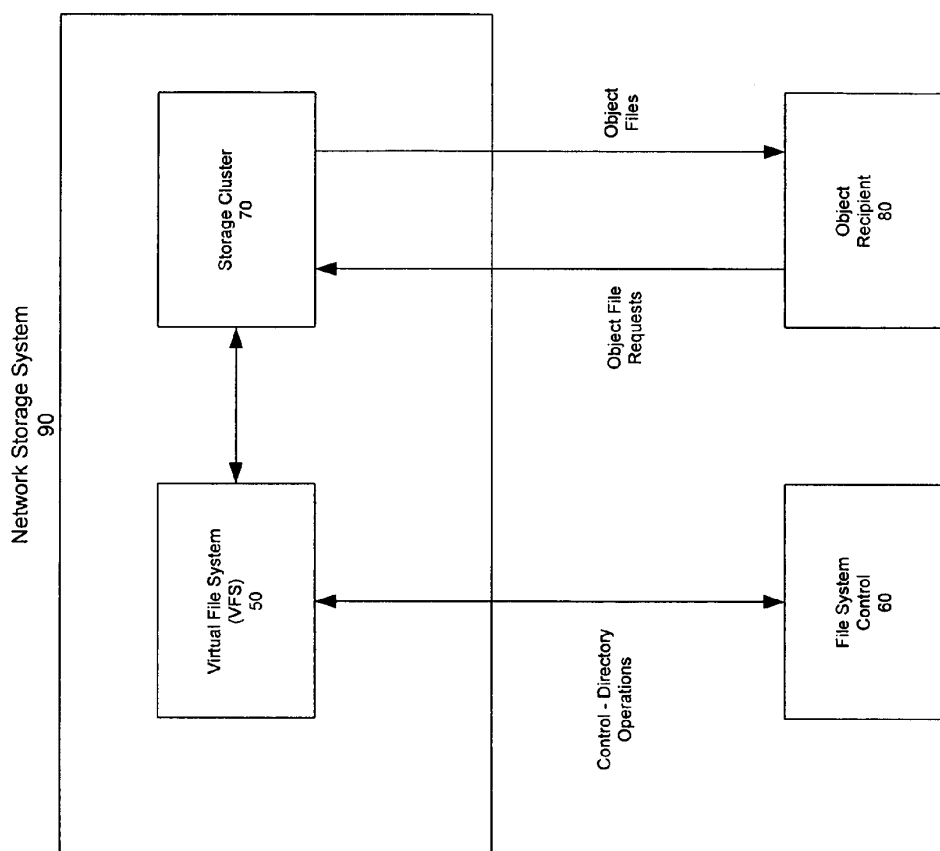
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**Figure 1**

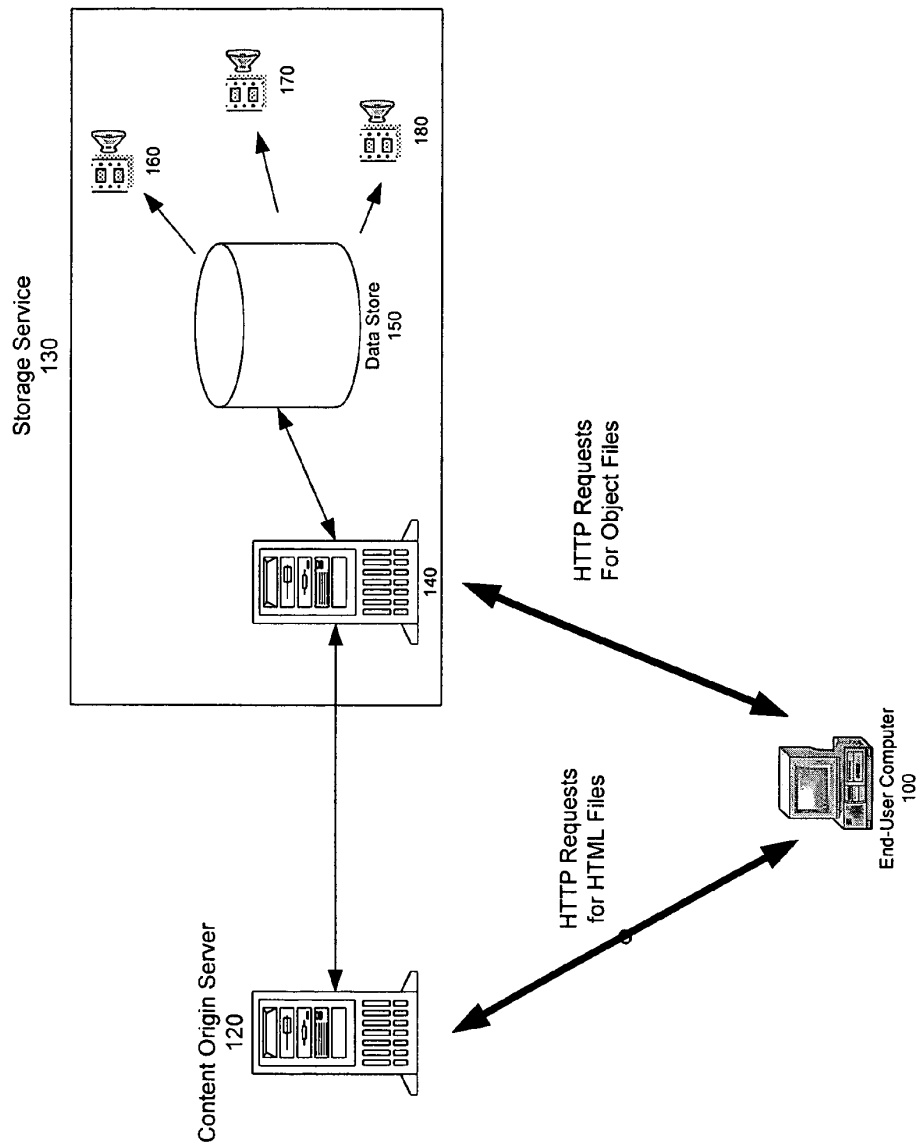
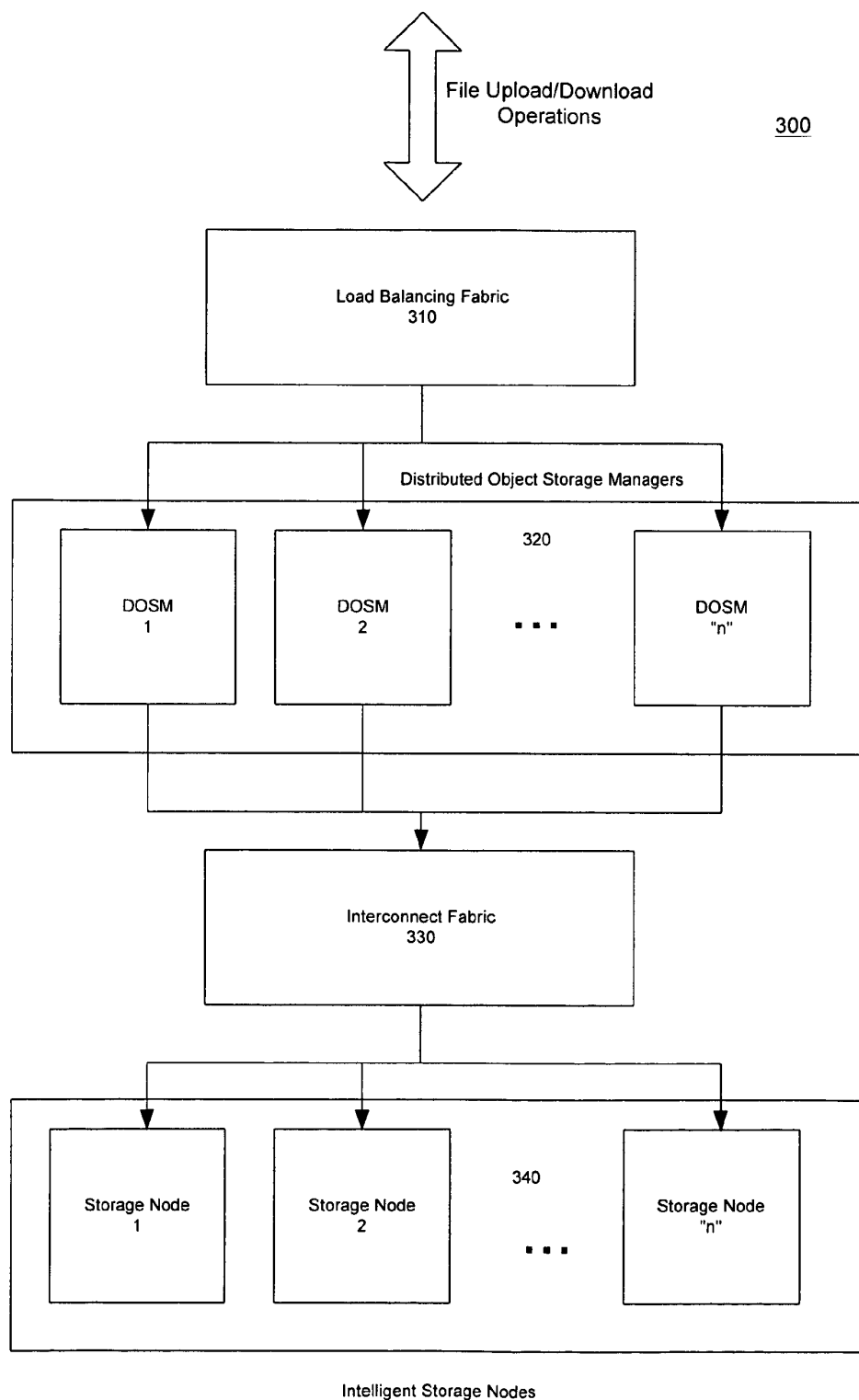


Figure 2

**Figure 3**

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