

EXHIBIT 5



US008671132B2

(12) **United States Patent**
Carlson et al.

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(54) **SYSTEM, METHOD, AND APPARATUS FOR POLICY-BASED DATA MANAGEMENT**

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(51) **Int. Cl.**
G06F 15/16 (2006.01)

(52) **U.S. Cl.**
USPC 709/201; 709/203; 709/208

(58) **Field of Classification Search**
USPC 707/1; 709/208, 207
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,755,928 A	7/1988	Johnson et al.	364/200
5,519,865 A *	5/1996	Kondo et al.	707/1
6,154,776 A	11/2000	Martin	709/226
6,167,445 A	12/2000	Gai et al.	709/223
6,212,562 B1	4/2001	Iluang	709/227
6,594,689 B1 *	7/2003	Nowatzki et al.	709/208

* cited by examiner

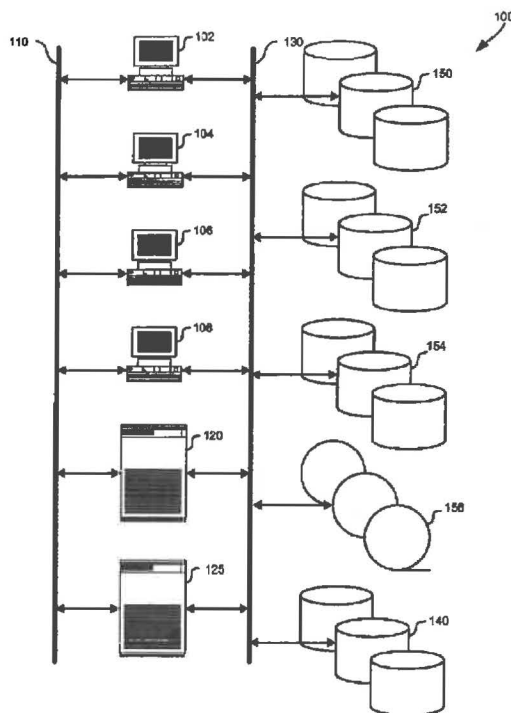
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(57) **ABSTRACT**

A policy-based data management system, method, and apparatus are disclosed. The system, method, and apparatus are configured to operate over a distributed storage system such as a storage area network (SAN). Files to be stored on the network are each assigned a service class and a storage pool based on the application of policies to file attributes such as file name, type, user, etc. The service class and storage pool designations are stored as metadata. Files may be retrieved using the metadata to identify the storage pool where the file is stored, and the service class listed within the metadata may be used to control the manner in which the file is handled. A metadata server may be utilized to provide the appropriate service class of files in response to requests from remote clients that may be of different computing platforms.

27 Claims, 8 Drawing Sheets



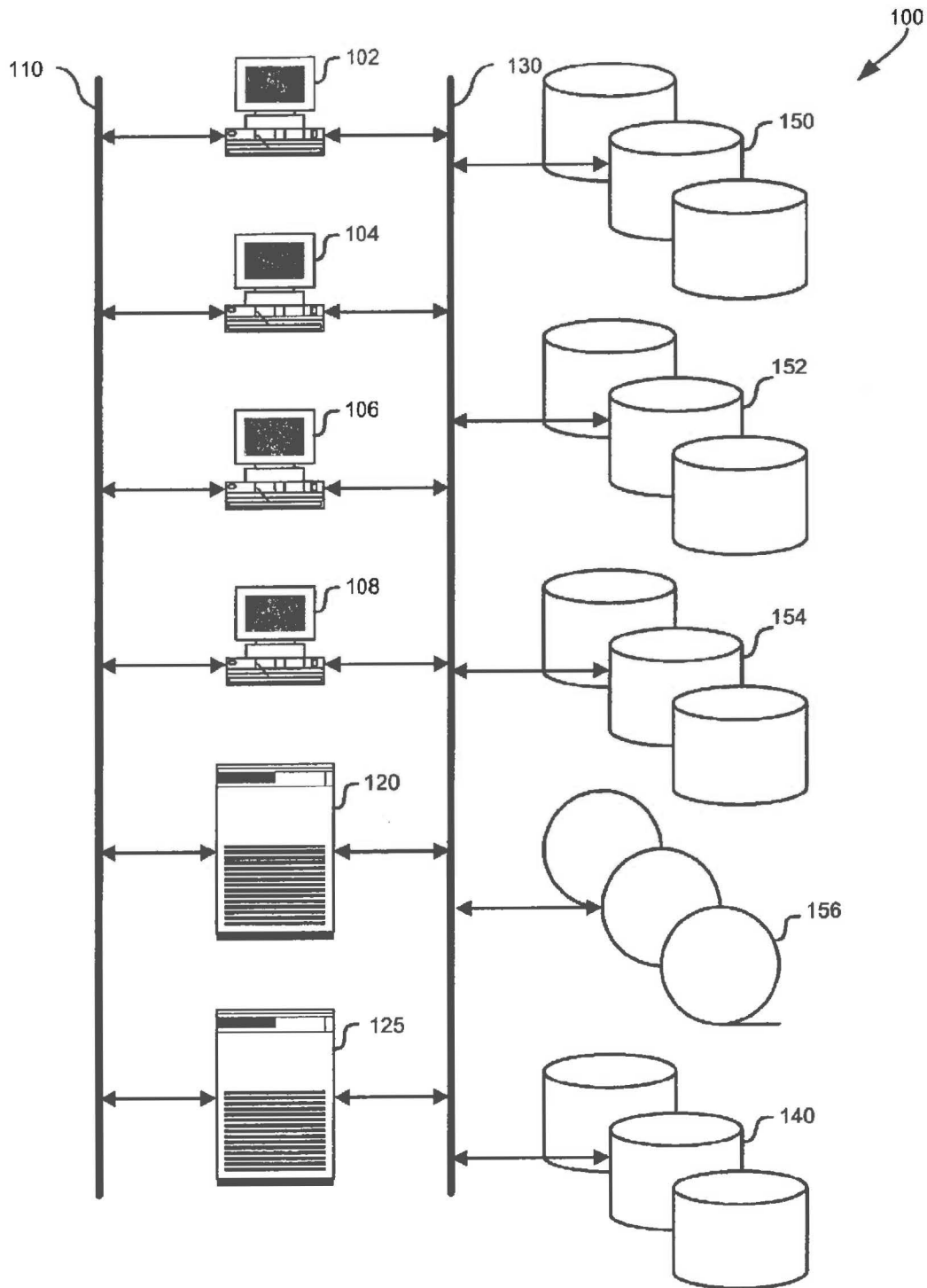


Fig. 1

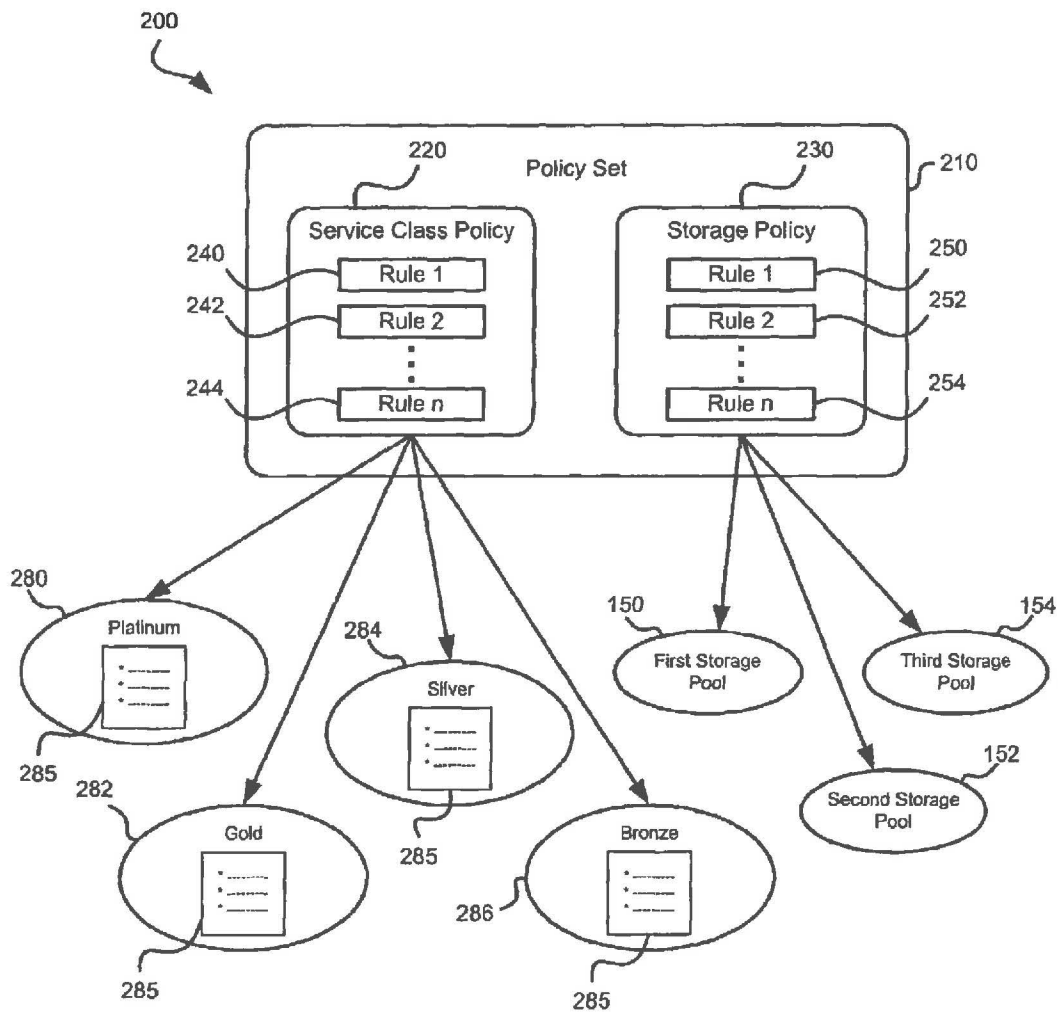


Fig. 2

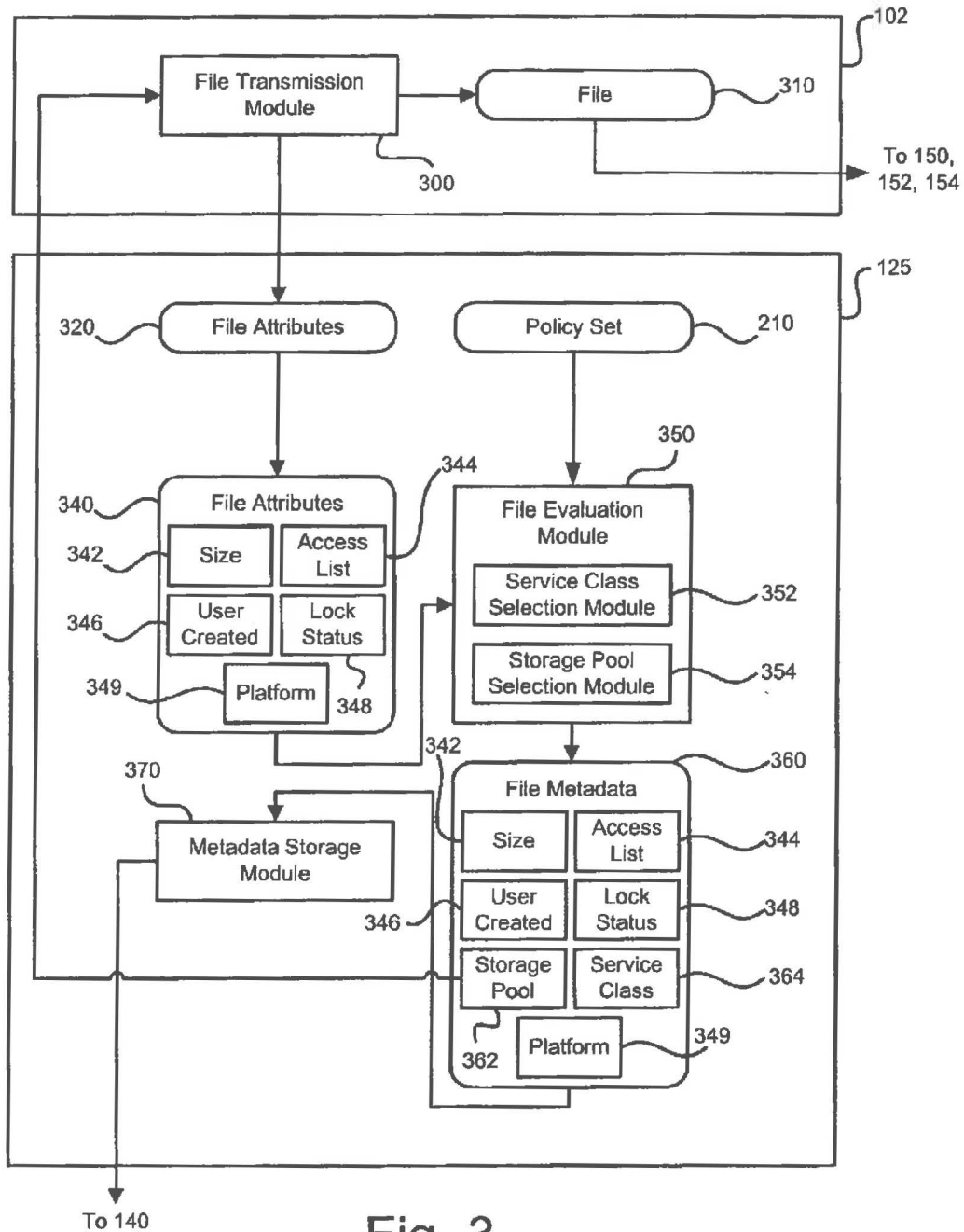


Fig. 3

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