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Dimitroff et al.

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(54) **SYSTEM AND METHOD FOR MANAGING DATA FLOW AND MEASURING SERVICE IN A STORAGE NETWORK**

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(52) U.S. Cl. **709/217; 709/213; 709/224; 707/10**

(58) Field of Search **709/226, 224, 709/201, 213, 217; 707/201, 10, 8, 5, 2**

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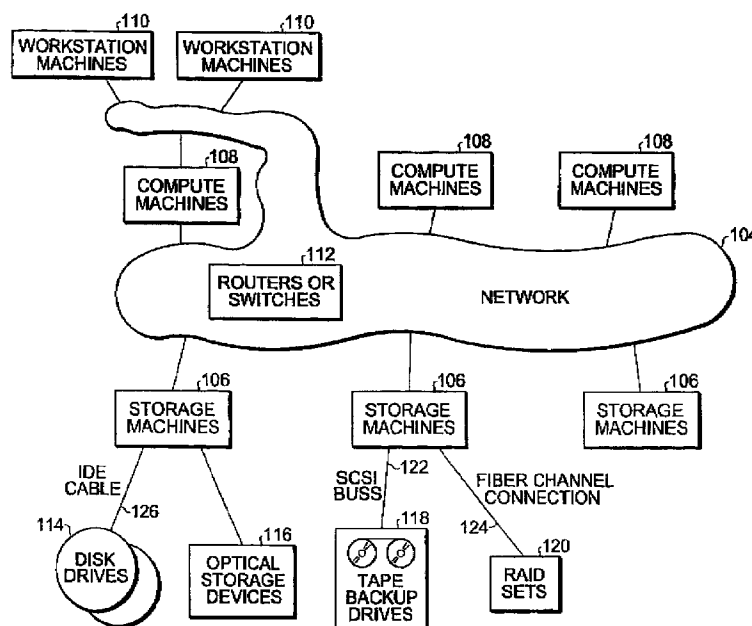
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(57) **ABSTRACT**

A computer network has several machines, including machines having storage systems, and communication resources for communicating between the machines. A metadata registry having information about data stored on the network is distributed on two or more machines of the network, and local copies of part of this metadata registry reside on a compute machine of the network. The metadata registry has a command object that comprises network address information about at least some of the machines of the computer network that participate in a first communication. An agent monitors communications between the machines of the computer network for communications relevant to the command object, the agent modifies the command object by adding network address information of additional machines of the computer network that should participate in the first communication between said machines to maintain coherency of the metadata registry and local copies thereof.

10 Claims, 12 Drawing Sheets



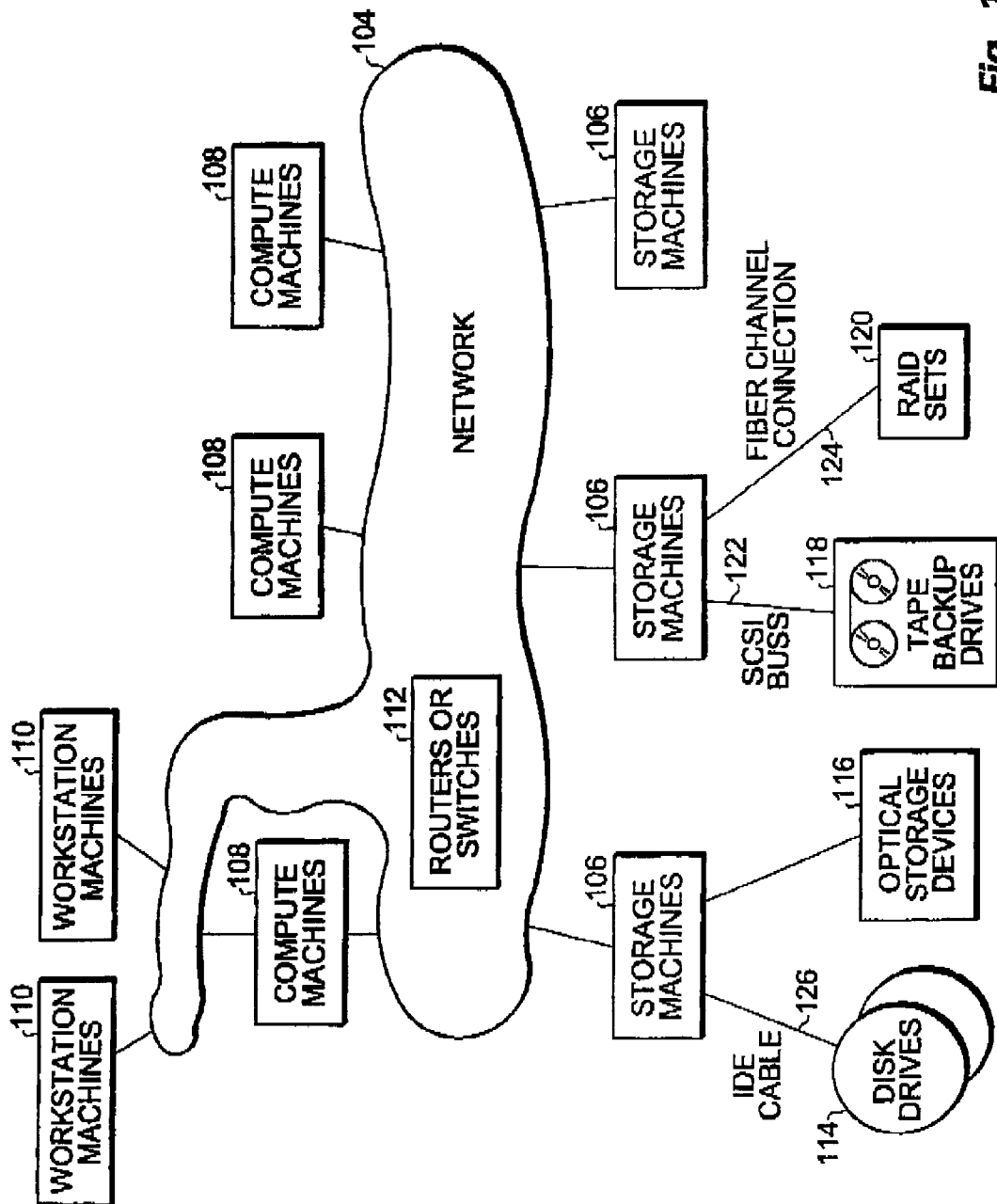
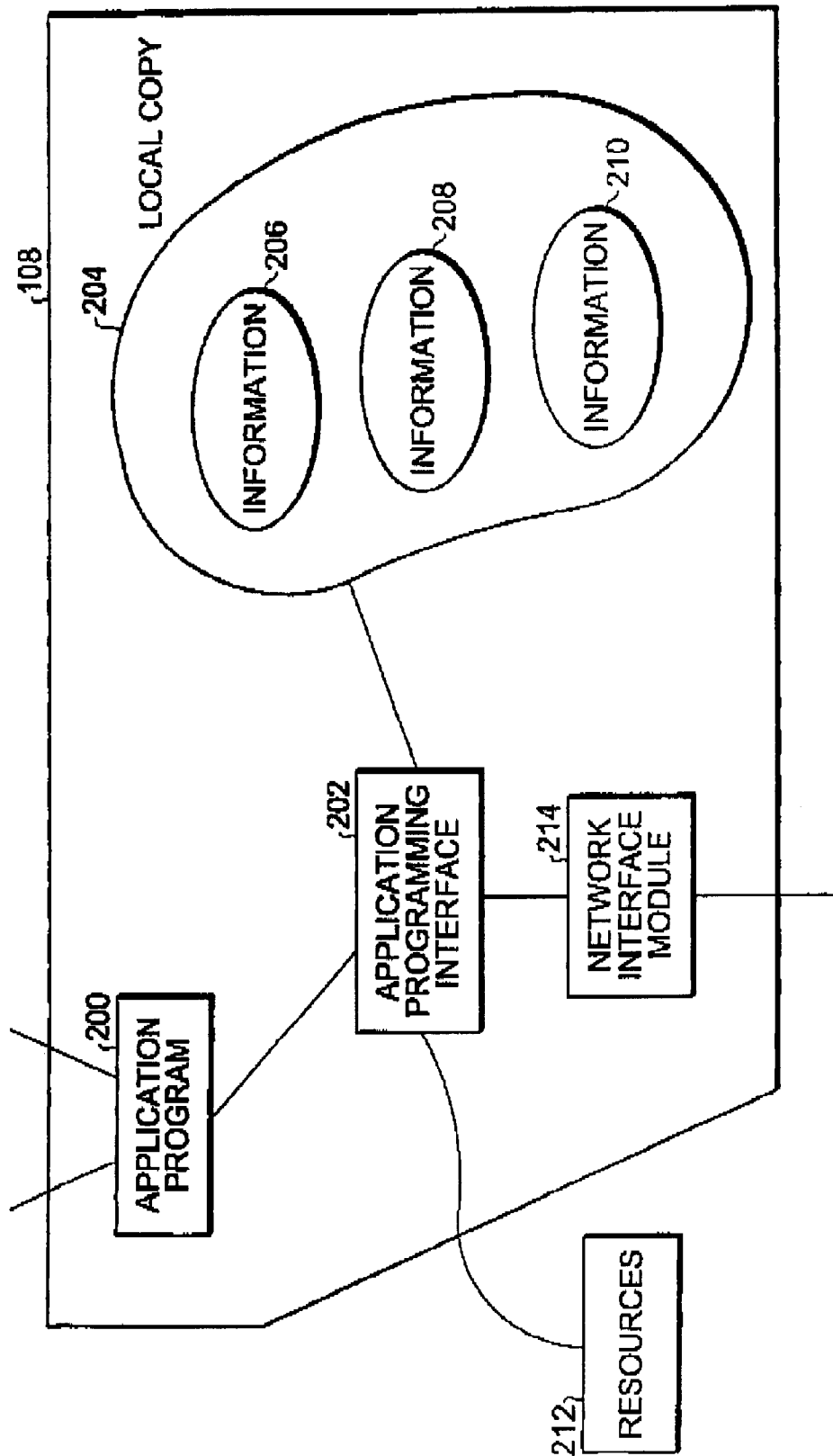
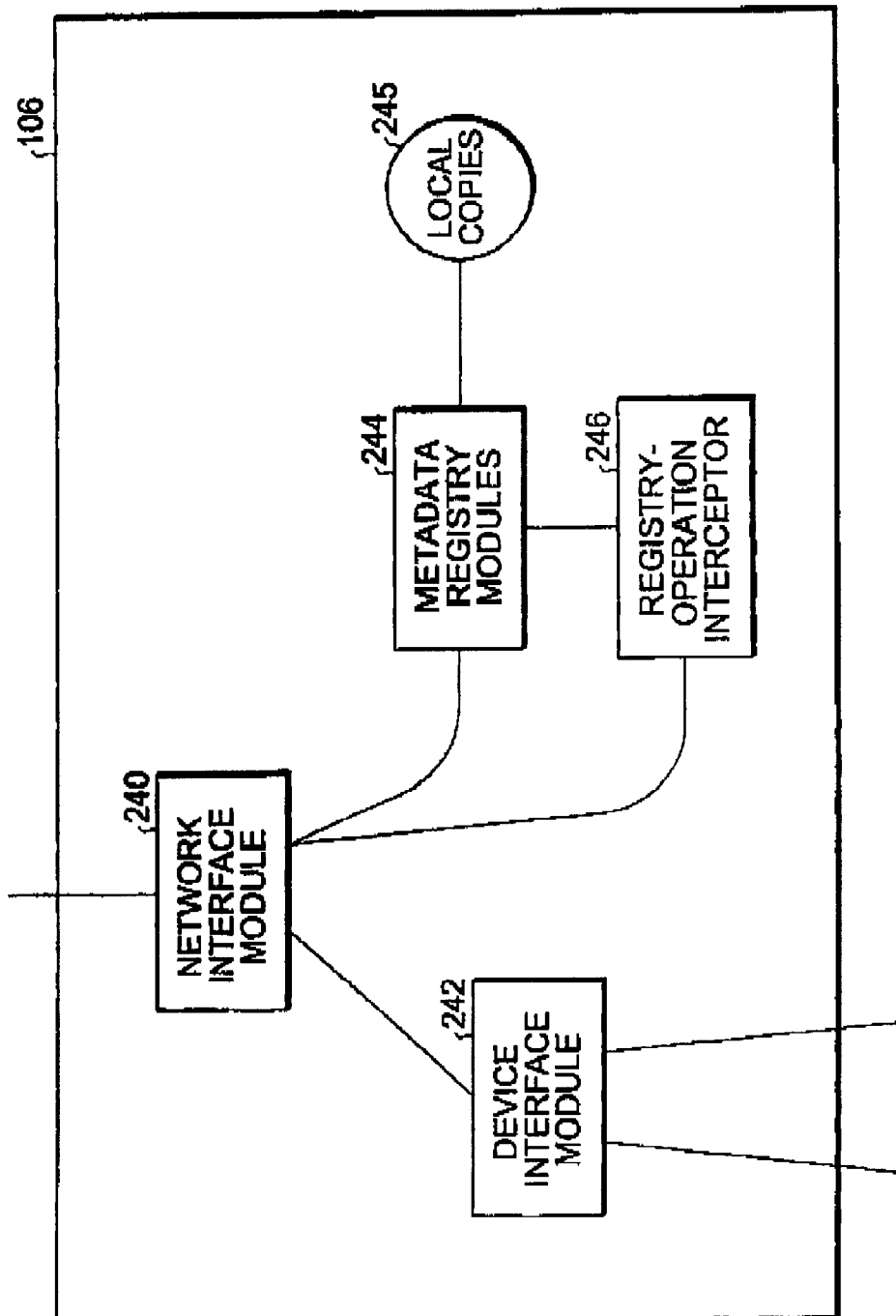
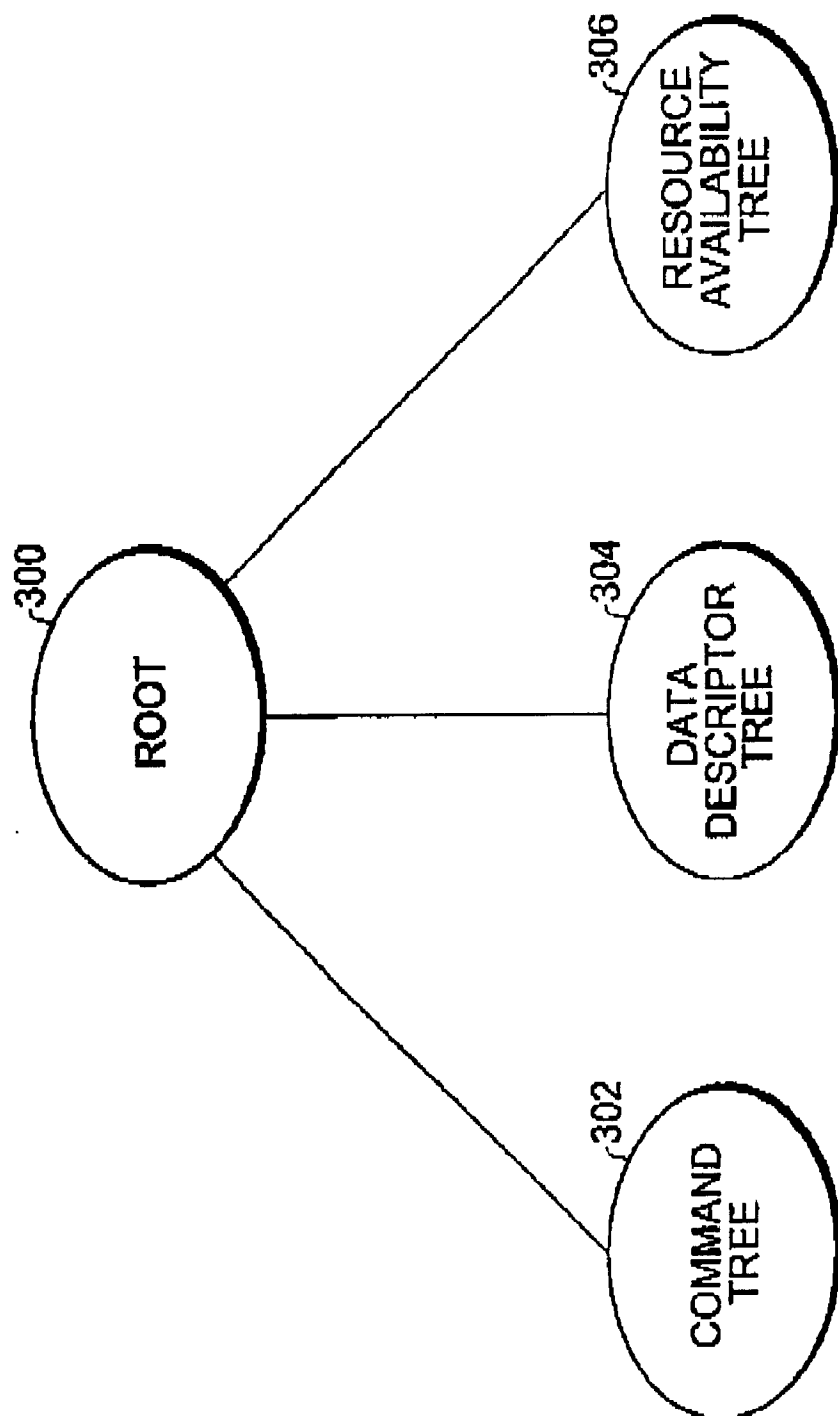


Fig. 1

**Fig. 2**

**Fig. 2A**

**Fig. 3**

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