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(22) Filed: Feb. 9, 2000

(51) **Int. Cl.**<sup>7</sup> ..... **G06F 15/16**

(52) **U.S. Cl.** ..... **709/219; 709/206**

(58) **Field of Search** ..... 709/206, 201,  
709/217–219, 207, 203; 707/1, 10, 201

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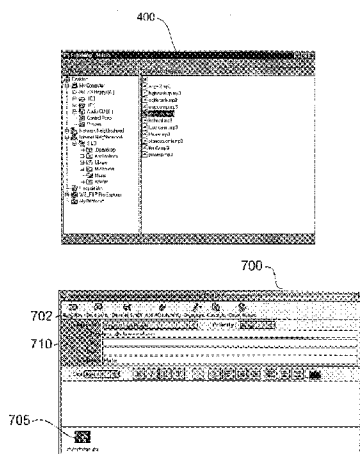
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(57) **ABSTRACT**

A data storage system is described that provides seamless access to remote data storage areas via a global computer network. The data storage system includes one or more storage servers coupled to one or more storage devices. The storage devices provide a plurality of virtual storage areas, where each virtual storage area is assigned to a user. Access to the virtual storage areas is fully integrated with an operating system executing on a client computer such that the user, or software applications executing on the client computer, can seamlessly access the corresponding virtual storage area using standard file management routines provided by the operating system. In addition, the invention provides a wide range of other remote access methods to the virtual data storage areas including access via electronic mail.

**24 Claims, 8 Drawing Sheets**



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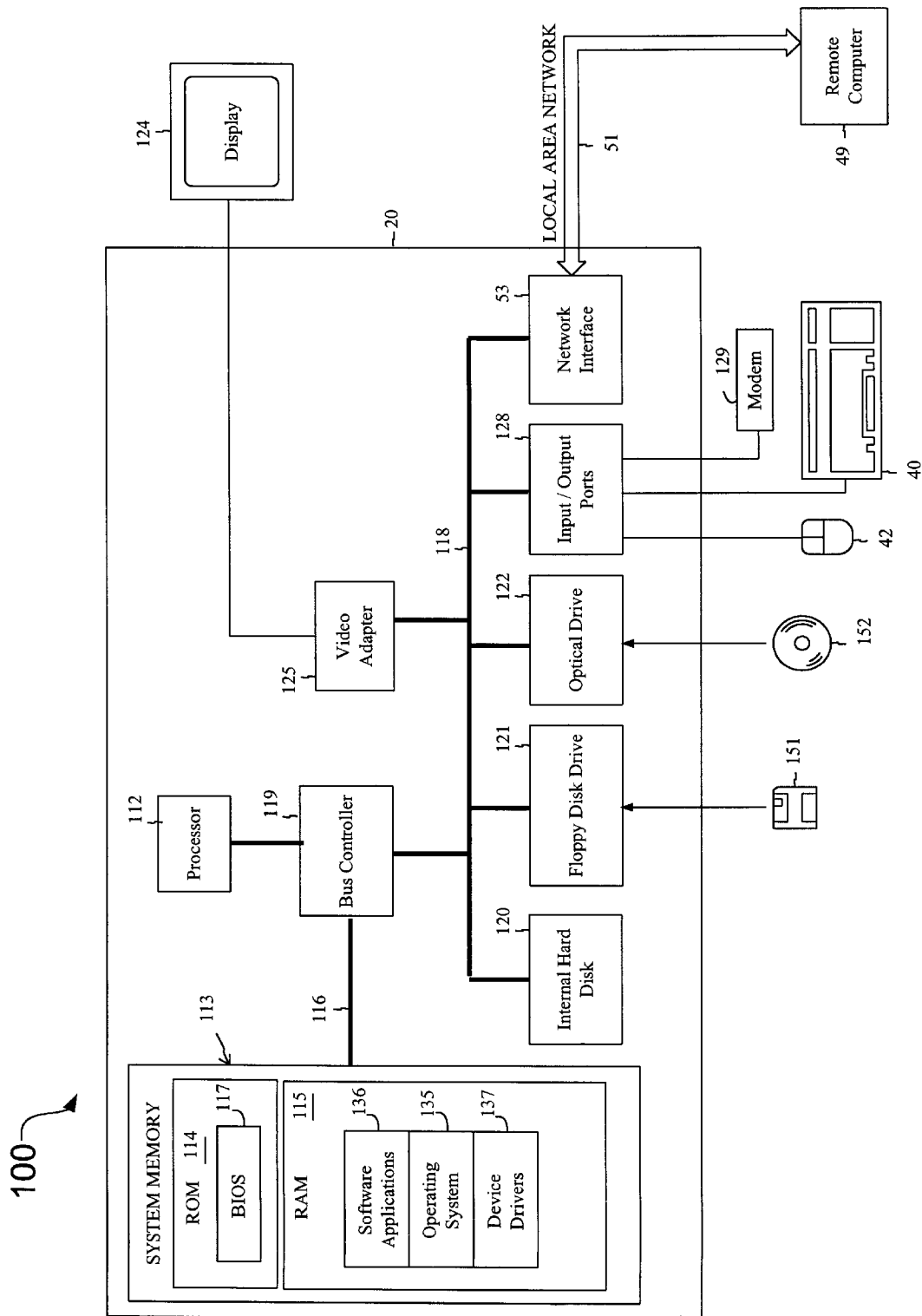


FIG. 1

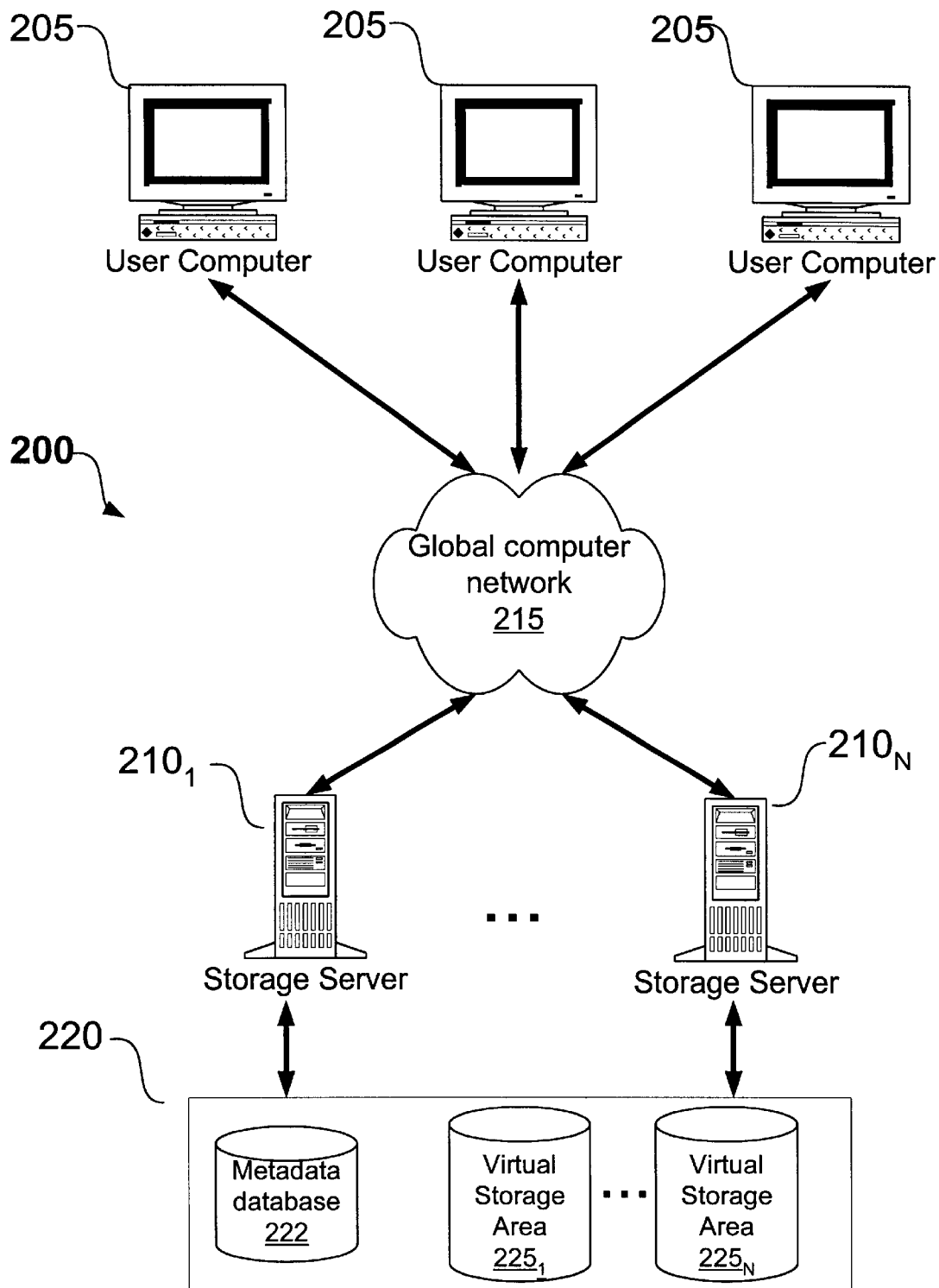


FIG. 2

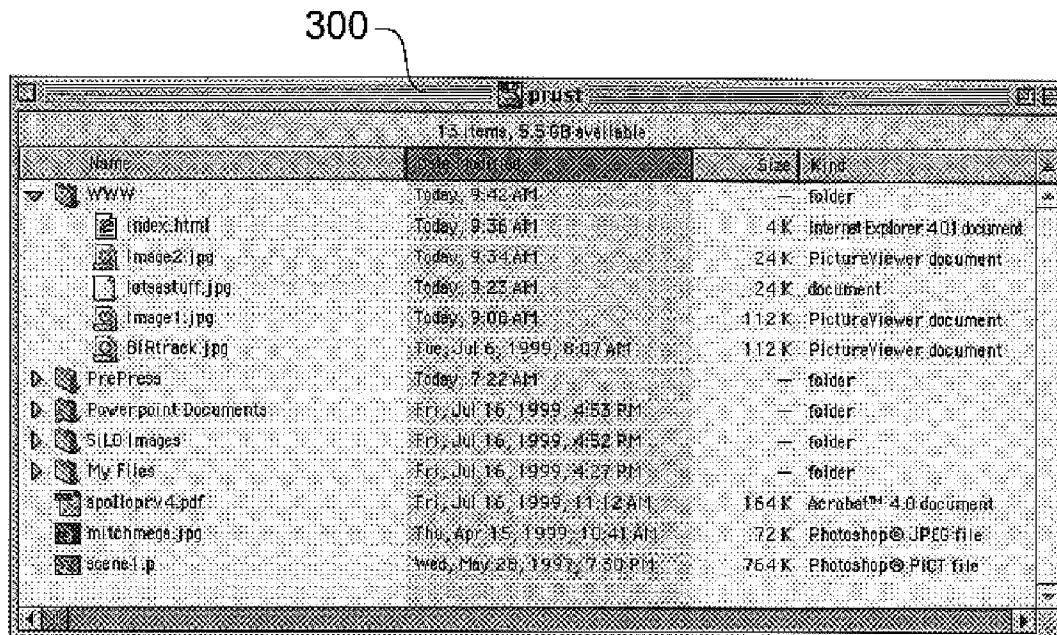


FIG. 3

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