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[54] **METHOD AND SYSTEM FOR MAINTAINING AND UPDATING COMPUTERIZED MEDICAL RECORDS**

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[52] **U.S. Cl.** **707/104**; 707/8; 707/10; 705/3

[58] **Field of Search** 370/477, 235; 395/76, 800, 608, 768, 615, 203, 601, 200.18, 200.09, 202, 769, 238; 340/825.54; 379/221; 707/8, 10, 202, 104; 705/40, 3; 382/380; 445/466

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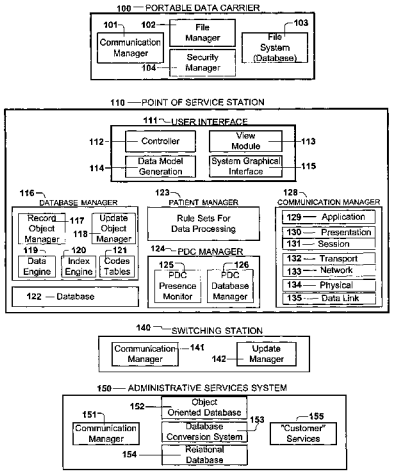
[57] **ABSTRACT**

A distributed database architecture stores medical information in a self-updating system that employs point-of-service stations disposed at convenient medical service locations. Each patient carries a portable data carrier such as a smart card that contains the patient's complete medical history. Interaction between the portable data carriers and the point-of-service stations effects a virtual communication link that ties the distributed databases together without the need for online or live data connections. The point-of-service stations are also interconnected over a communications network through a switching station that likewise does not rely on online, live communication. The database system uses an object-oriented update object to distribute data that has been generated when a portable data carrier is not physically present and to automatically distribute data without the necessity of accessing a masterfile.

76 Claims, 12 Drawing Sheets