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(54) **DATA TRANSFER AND SYNCHRONIZATION SYSTEM**

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707/749; 709/223, 254, 228, 248  
See application file for complete search history.

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(57) **ABSTRACT**

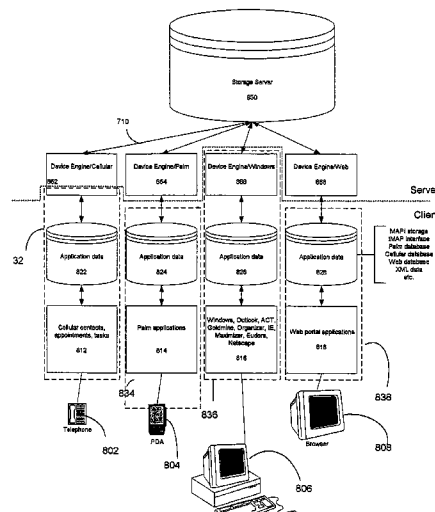
A data transmission system and method which optimizes transfer and updates of information between systems by providing difference information between the systems is disclosed. A system includes a differencing transmitter transmitting at least one set of difference transactions and a differencing receiver receiving said at least one set of difference transactions. A method for synchronizing at least a first file and a second file resident on a first and a second systems, respectively, is provided. The method comprises the steps of: determining difference data resulting from changes to a first file on the first system; transmitting the difference information to a second system; applying the difference information to generate change data for the second file; and updating the second file on the second system with the difference data.

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**11 Claims, 13 Drawing Sheets**



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