

financial service provider at the MFTS, and forwarding the updated account information to the user's mobile device in a passthrough operation.

**[0037]** One exemplary aspect of the invention involves providing a signal or request from the mobile device to the MFTS to indicate a request for updated information, with the MFTS thereafter communicating with the financial service provider or other account entity to obtain updated account information. Another exemplary aspect involves periodically communicating with the financial service provider at predetermined time intervals to obtain updated account information. Yet another exemplary aspect involves a push communication initiated by the financial service provider to provide updated account information.

**[0038]** According to yet another aspect of the present invention, the cached account balances may be stored in a database in the MFTS, representative of the balances in the plurality of user accounts as of a particular date. In another aspect, the cached account balance of each of the plurality of user accounts stored in the mobile device is stored in association with an account identifier. In a related aspect, the account identifier is an account nickname. In another aspect, the account identifier is a coded identifier. The account identifier is also stored in the MFTS in association with authentication information required by a financial service provider associated with each account in order to access information and/or enable transactions with respect to the account.

**[0039]** Another aspect of the invention relates to obtaining real time account balances in a mobile environment. Such aspect involves: (i) providing an account identifier from the mobile device to the MFTS, (ii) at the MFTS, retrieving prestored authentication information required by a financial service provider associated with each account in order to access information and/or make a transaction with respect to the account, (iii) providing the authentication information to the financial service provider with other information required to obtain updated account balance information, and (iv) in response to receipt of the updated account balance information from the financial service provider, providing the updated account balance information to the mobile device in association with the identifier.

**[0040]** In one embodiment, displaying information corresponding to the plurality of user accounts to the user via the mobile device includes displaying an account nickname for each account in association with account balance information. Additionally, the mobile device preferably also displays an "as of" date in association with the account balance information.

**[0041]** Another aspect of the invention relates to providing information to mobile device users with respect to a plurality of financial accounts maintained at a plurality of different financial service providers. Each of the plurality of financial accounts may have its own account balance information providing system. This aspect for real time account balances involves obtaining updated account balance information from each of the plurality of different financial service providers in response to a single action by the user at the user's mobile device.

**[0042]** From the foregoing, those skilled in the art will understand and appreciate that with its various aspects for a mobile device, a mobile financial transaction system, a web interface, and combinations of functionality, a system constructed in accordance with aspects of the inventions pro-

vides mobile device users with unprecedented convenience and flexibility in monitoring bills to pay and other payments to make, information about current account balances provided in real time, and other improved functionality for mobile device users that have heretofore not been possible at reasonable economic cost and convenience.

**[0043]** These and other aspects, features, and benefits of the present invention(s) will become apparent from the following detailed written description of the preferred embodiments taken in conjunction with the following drawings, although variations and modifications therein may be affected without departing from the spirit and scope of the novel concepts of the disclosure.

#### BRIEF DESCRIPTION OF THE DRAWING FIGURES

**[0044]** FIG. 1 is a high level overview of exemplary aspects for a mobile financial transaction system (MFTS) that embodies aspects of the present invention.

**[0045]** FIG. 2 is a more detailed overview of an exemplary mobile financial transaction system (MFTS) according to an exemplary aspect of the invention.

**[0046]** FIG. 3, consisting of FIG. 3A and FIG. 3B, is a computer software architecture diagram illustrating various computer program modules that provide computer-implemented method steps for a cellphone or mobile device application (FIG. 3A) and computer-implemented method steps for operations of the MFTS system (FIG. 3B), in accordance with exemplary aspects of the invention.

**[0047]** FIG. 4 is a flowchart showing the operation of the main program of a mobile financial transaction system (MFTS) constructed according to exemplary aspects of the present invention.

**[0048]** FIG. 5 is a flowchart showing the operation of the main program of a mobile financial transaction system (MFTS) constructed according to exemplary aspects of the present invention.

**[0049]** FIG. 6 illustrates exemplary database schemas (data table layouts) for a mobile financial transaction system (MFTS) user database according to an exemplary aspect of the invention.

**[0050]** FIG. 7 illustrates an exemplary database schema (data table layout) for a mobile financial transaction system (MFTS) transaction database in accordance with exemplary aspects of the invention.

**[0051]** FIG. 8 is a flow chart diagram illustrating computer-implemented method steps of a computer program embodying operations of a mobile device communication interface for the MFTS in accordance with exemplary aspects of the invention.

**[0052]** FIG. 9 is a flow chart diagram illustrating computer-implemented method steps of a computer program embodying operations of a financial service provider (FSP) communications interface for the MFTS in accordance with exemplary aspects of the invention.

**[0053]** FIG. 10 is a flow chart diagram illustrating computer-implemented method steps of a computer program embodying operations of a user web application input/output (I/O) interface for the MFTS in accordance with exemplary aspects of the invention.

**[0054]** FIG. 11 is a flow chart diagram illustrating computer-implemented method steps of a computer program