Abstract: A telecommunication airtime trading system for customers comprises a selling trader (14) database (22) for storing airtime possession for the trading transactions, a selling trader (14) server (22) in communication with said database (22) for receiving order for sale of said airtime, a banker (13) database (21) for collecting and storing transaction data and the airtime possession on behalf of the customer (12), a banker (13) server (17) in communication with said database (21) and said selling trader (14) server (22) to confirm order and pay for said airtime received, a buying trader (15) database (23) for receiving sold airtime possession for said trading transactions, and a buying trader (15) server (19) in communication with said database and said banker (13) server (17) to confirm the settlement of the trade.
A Telecommunication Airtime Trading System

Field of Invention

The present invention relates generally to a financial transaction systems and more particularly to a telecommunication airtime trading system and the method thereof.

Background of the Invention

In money markets, money flows freely between investors and borrowers, and buyers and sellers. In investments, the money market is "liquid" meaning that they can be bought and sold and therefore converted to cash rapidly. Borrowers, lenders, sellers and buyers in these markets conduct their transactions with dealers or traders. The dealers or traders will quote prices that they are willing to buy the commodities they deal in, as well as prices they are willing to sell the commodities.

There are a lot of means to trade commodities. For years, it was a simple matter for traders and their customers (the buyers, sellers, lenders and borrowers) would negotiate, execute, confirm and settle the transaction deals using a manual system by meeting face to face and consummate a sale.
As commerce became more complex, it became necessary for institutions, such as banks and third parties such as agents to facilitate the buying and selling. The manual systems have been found to be too slow and inefficient to keep up with market requirements.

People are aware that a need exists for a transaction facilitation network which is implemented over a wireless communication network as most economically active way as manual systems do not always provide adequate access to the people and transaction records and to deal with the financial risks associated with engaging in these transactions.

In particular a need for the facilitation of sales transactions, especially for financial services has been identified.

An objective of the present invention is to provide a system with total ability for a customer to purchase or sell commodities directly with no delay.

A further objective of the present invention is to provide the system in which the transaction is automatically secured to insure the trust of all the participants in the trade.
Yet another objective of the present invention is to provide an automated commodities trading system and method in which a large number of transactions can be completed rapidly and economically.

Still another objective of the present invention is to provide a system in which the commodities are readily available to a potential buyer or seller.

Another objective of the present invention is to provide a system which facilitates and beneficial to Islamic banking.

Other objects of this invention will become apparent on the reading of this entire disclosure.

Summary of the Invention

The present invention is a telecommunication airtime trading system for customers comprises of a selling trader database for storing airtime possession for the trading transactions, a selling trader server in communication with the database for receiving order for sale of the airtime, a banker database for collecting and storing transaction data and the airtime possession on behalf of the customer, a banker server in communication with the database and the selling trader server to confirm order and pay for the airtime received, a buying
trader database for receiving sold airtime possession for the trading transactions, and a buying trader server in communication with the database and the banker server to confirm the settlement of the trade.

A method of trading telecommunication airtime on a trading system, the method comprising the steps of placing an order to buy airtime from a selling trader by a banker on behalf of a customer, obtaining an acceptance from the customer by the banker, generating settlement to the selling trader by the banker, receiving the airtime by the banker, sending command to a buying trader by the banker on behalf of the customer, generating settlement to the banker by the buying trader, and transferring the airtime to the buying trader by the banker.

**Brief Description of the Drawings**

Other objects, features, and advantages of the invention will be apparent from the following description when read with reference to the accompanying drawings. In the drawings, wherein like reference numerals denote corresponding parts throughout the several views:

Fig. 1 shows a block diagram of the network architecture of a trading system of the present invention;
Fig. 2 shows a flowchart of the steps of sending purchase order from banker to selling trader;

Fig. 3 depicts a flowchart of the steps of receiving invoice from selling trader;

Fig. 4 illustrates a flowchart of the steps of sending payment commitment to the selling trader;

Fig. 5 shows a flowchart of the steps of receiving deliver order from the selling trader;

Fig. 6 is a flowchart of the steps of sending sms notification to the customer;

Fig. 7 is a flowchart of the steps of receiving customer reply; and

Fig. 8 shows a flowchart of the steps of selling commodity.

**Detailed Description of the Preferred Embodiments**

In the following detailed description, numerous specific details are set forth in order to provide a thorough understanding of the invention. However, it will be understood by those of ordinary skill in the art that the invention may
be practiced without these specific details. In other instances, well-known methods, procedures and/or components have not been described in detail so as not to obscure the invention. Reference will now be made in detail to the preferred embodiments of the present invention, examples of which are illustrated in the accompanying drawings.

Figure 1 shows a block diagram of a network architecture system (10) for performing commodities trading configured to operate in accordance with the present invention. The system (10) includes a server (11) with a plurality of users (12, 13, 14 and 15) being connected to the server (11) to execute trades. The server (11) also manages orders, portfolios, status and transaction reports to system users (12, 13, 14 and 15). The users include customer (12), banker (13), traders (14, 15), etc, where each having a computing means (25) or other similar means of accessing the server (11). The connection between the users (12, 13, 14 and 15) and server (11) may be provided by secure telephone line or via the Internet.

Each user (12, 13, 14 and 15) includes a user server (16, 17, 18 and 19) and a user database (20, 21, 22 and 23). The banker (13) of the present invention may be any financial institution, islamic bank, etc. The commodity trading in the present invention as an example is the telecommunication
airtime, and the trader (14) that sells this commodity is an electronic prepaid reload provider such as E-Pay. Dealing in airtime trading transaction attracts fewer charges compared with other commodities. The trader (15) that buys the commodity which acts as a ready buyer for the present invention is a content provider such as Sedania Media Group.

Before accessing the trading system (10) of the present invention, the banker (13) will obtain the transaction documents from the customer (12) which include but not limited to the letter of offer, letter of authorization for the banker (13) to act on behalf of the customer (12), purchase order from the customer (12) and invoice and delivery order to the buying trader (15). Then a trade can be started by accessing the trading system (10) of the present invention using the computing means (25) where the banker (13) with assigned identification name and password with assigned authorization level to log into the system (10). The information provided by the banker (13) is checked by the system (10) by comparing the information stored at the banker database (21). Only registered banker (13) is allowed to access the system (10).

The banker (13) then creates a new transaction for the customer (12) by keying in the customer details with the necessary information such as identification number, name, address, contact number, facility amount, profit share and
facility period. The customer information provided is also checked before the banker (11) is allowed to access for further transaction. The banker (13) then proceeds to purchase an airtime commodity from the selling trader (14) and the system (10) automatically generates a purchase order (41) to be digitally delivered to the selling trader's (14) server (18) as shown in S1 in Figure 2. A dropdown button is also provided on the screen of the computing means (25) to view and print the purchase order.

The selling trader (14) then responds the order by digitally sending an invoice (42) to the banker's (13) server (17) and the selling trader's server (18) will allocate respective airtime for this transaction as shown in S2 in Figure 3. The system (10) will then show the status of the transaction to "awaiting payment". The banker (13) who received the invoice then verifies the transaction and processing payment (43) to the selling trader (14) as shown in S3 in Figure 4. A payment button is provided for the banker (13) to update the payment status to the system (10). When payment is received in an Escrow account, the "awaiting payment" status will be automatically changed to "proceed" status.

The selling trader (14) then transfers the airtime commodity to the banker's (13) database (21) by clicking the "proceed" button to send the allocated airtime assigned to the
customer (12) then access the airtime stock list with two available options to choose, namely the first option is to click "No" to cancel purchase of stocks and the second option is to first click "Yes" to confirm purchase but then click "No" on the selling of the airtime stocks when the customer wants to keep the airtime stock. Once the customer confirmation is received, the customer (12) will receive a confirmation message via SMS or from the system (10) depending on confirmation channel.

If the customer (12) has accepted the purchase, the banker's server (17) will then generate an invoice and the banker (13) will then request confirmation from the customer (12) to sell the airtime commodity. Once the sell confirmation is received from the customer (12), the banker (13) will act as the appointed sale agent for the customer (12) to sell the commodity to the buying trader (15) by accessing the trading system (10).

The trading system (10) will then generate a quotation (47) and Performa invoice to be digitally delivered to the buying trader's (15) server (19) as shown in S7 in Figure 8. The buying trader (15) then responds to the invoice received by verifying the transaction details. Once completed, the buying trader (15) will click the "make payment" button to issue purchase order and payment instruction to the escrow account.
respective invoice via delivery order (44) to the banker (13) as shown in S4 in Figure 5. Once the airtime commodity is received, the banker (13) then informs the customer (12) by sending a short message service (SMS) (45) to the customer (12) to confirm purchase as shown in S5 in Figure 6. The banker (13) sells this airtime commodity to the customer (12) at banker's selling price with the principal amount together with profit on deferred term. The customer (12) may then responds to the banker (13) by responding to the received SMS (46) as shown in S6 in Figure 7 or access to the trading system (10).

If customer (12) chose to response via the system (10), the customer (12) will need to log into the system (10) by keying in the identification name and password given. The customer (12) then access the airtime stock list and confirm to proceed. Once the customer confirmation is received, the customer will receive a confirmation message via SMS or from the system (10) depending on confirmation channel. If the customer (12) would like to reject the transaction, the customer may then responds to the banker (13) by responding to the received SMS or access to the trading system (10).

If customer (12) chose to response via the system (10), the customer (12) will need to log into the system (10) by first keying in the identification name and password given. The
When the banker (13) confirmed receipt of purchase order and valid payment instruction, the banker (13) will then update the status by clicking the "received payment" button and a delivery order will be digitally delivered to the buying trader's (15) server (19). The airtime possession will also be transferred into the buying trader's (15) database (23) and the transaction is completed. Once completed, the status button of the trading system (10) will change to "completed" (48).

By having this trading system, the customer can buy the commodity from the bank on a deferred payment plan and thereafter, sells it to the market to raise instant funds. Once the customer has applied for this trading system (10), the transactions between E-Pay, banker, customers and Sedania is paperless.

As will be readily apparent to those skilled in the art, the present invention may easily be produced in other specific forms without departing from its essential characteristics. The present embodiments is, therefore, to be considered as merely illustrative and not restrictive, the scope of the invention being indicated by the claims rather than the foregoing description, and all changes which come within therefore intended to be embraced therein.
Claims

1. A telecommunication airtime trading system (10) for customers comprising:
   a selling trader (14) database (22) for storing airtime possession for the trading transactions;
   a selling trader (14) server (22) in communication with said database (22) for receiving order for sale of said airtime;
   a banker (13) database (21) for collecting and storing transaction data and the airtime possession on behalf of the customer (12);
   a banker (13) server (17) in communication with said database (21) and said selling trader (14) server (22) to confirm order and pay for said airtime received;
   a buying trader (15) database (23) for receiving sold airtime possession for said trading transactions; and
   a buying trader (15) server (19) in communication with said database and said banker (13) server (17) to confirm the settlement of the trade.

2. The telecommunication airtime trading system (10) as claimed in claim 1, wherein said system (10) further comprising a customer (12) database (20) for storing transaction data; and a customer (12) server (16) in communication with said database and said system to display
said order and for receiving purchase confirmation from said customer (12).

3. The telecommunication airtime trading system (10) as claimed in claim 2, wherein said customer (12) database (20) will receive the airtime possession from said banker (13) server (17) when said customer chose to keep said airtime.

4. The telecommunication airtime trading system (10) as claimed in claim 3, wherein said customer (12) may choose to response for the purchase confirmation via short message service (SMS) received from said banker (13) server (17).

5. A method of trading telecommunication airtime on a trading system (10), said method comprising the steps of: placing an order to buy airtime from a selling trader (14) by a banker (13) on behalf of a customer (12); obtaining an acceptance from said customer (12) by said banker (13); generating settlement to said selling trader (14) by said banker (13); receiving said airtime by said banker (13); sending command to a buying trader (15) by said banker (13) on behalf of said customer (12); generating settlement to said banker (13) by said buying trader (15); and
transferring said airtime to said buying trader (15) by said banker (13).

6. The method of trading telecommunication airtime on a trading system (10) as claimed in claim 5, wherein said step of obtaining acceptance from said customer (12) is done via said trading system (10).

7. The method of trading telecommunication airtime on a trading system (10) as claimed in claim 5, wherein said step of obtaining acceptance from said customer (12) is done via short message service (SMS) received by said customer (12) from said banker (13).

8. The method of trading telecommunication airtime on a trading system (10) as claimed in claim 5, wherein said method further comprising the step of generating settlement to said banker (13) from said customer (12) on a deferred payment plan and said customer (12) receiving instant funds from said buying trader (15).
S1

- After in minutes?
  - Read application status with "Approved" status

- "Approved" Status?
  - Read Sys TXID, financing amount

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- Generate PO no

- Write CSV file

- Send CSV file to Epay

Figure 2
Figure 5
Figure 8