(54) **INTERNET-BASED CHECK ORDERING SYSTEM**

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     G06Q 40/00   (2012.01)
(52) **U.S. Cl.**
     USPC **705/42**; 705/35; 705/70
(58) **Field of Classification Search**
     USPC 705/35, 42, 70
     See application file for complete search history.

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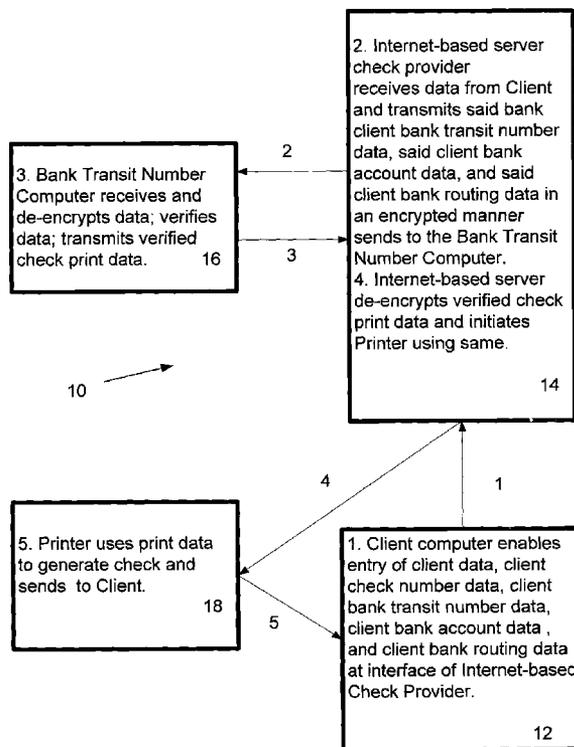
* cited by examiner

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(57) **ABSTRACT**

An Internet-based check ordering system includes an Internet-based server having a check order entry user interface, a bank transit number computer system in operable communication with the Internet-based server computer system, a client computer system in operable communication with the Internet-based server computer system and a printing system in operable communication with the Internet-based server computer system to print the ordered checks.
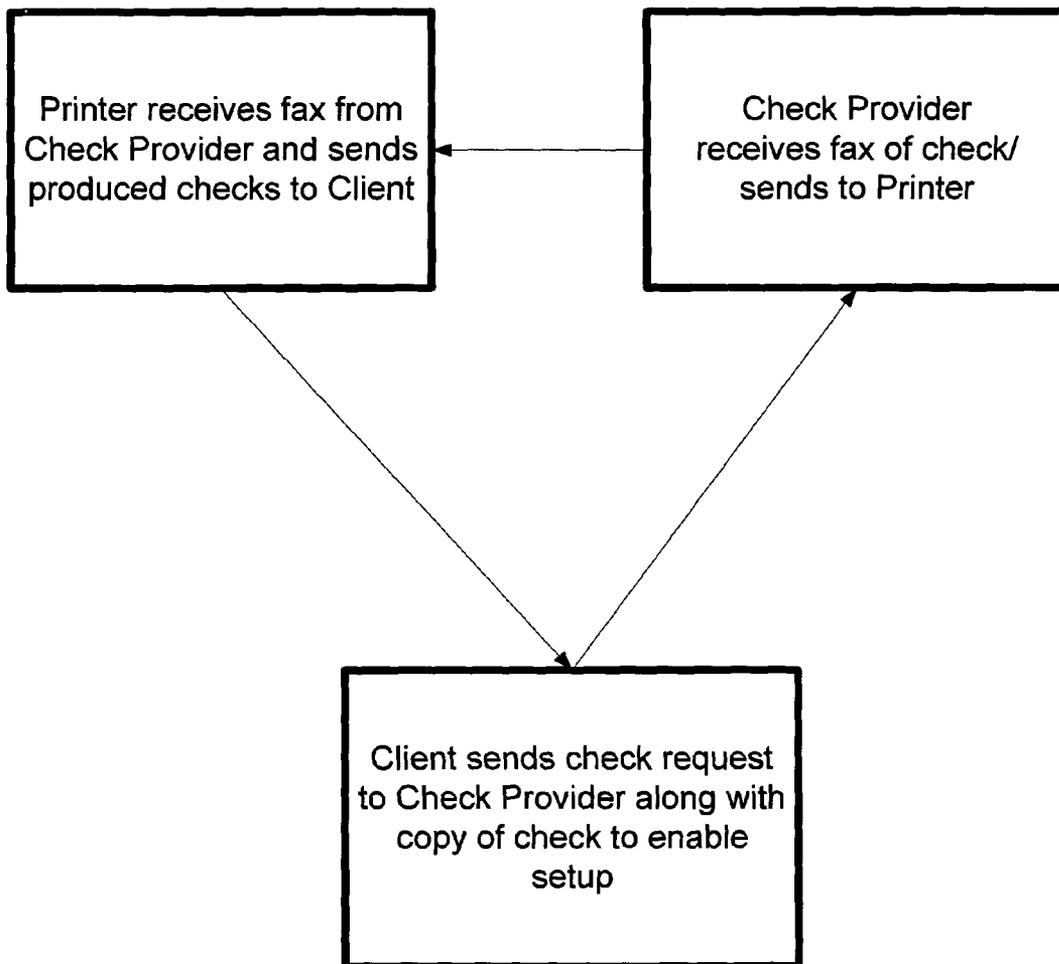
14 Claims, 3 Drawing Sheets

Amended

Amended
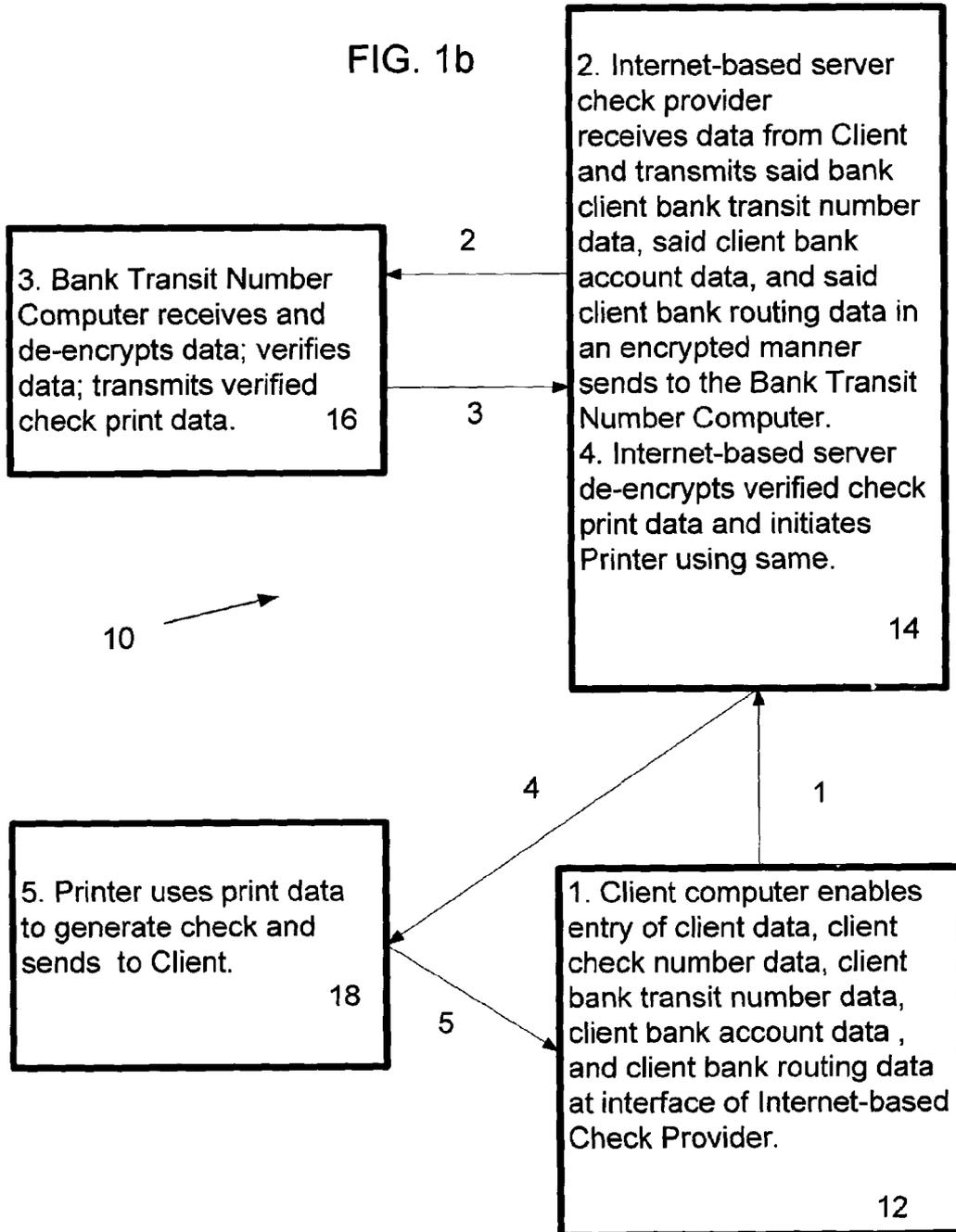
FIG. 1a
(Prior Art)

Printer receives fax from Check Provider and sends produced checks to Client

Check Provider receives fax of check/ sends to Printer

Client sends check request to Check Provider along with copy of check to enable setup

Amended

FIG. 1b

2. Internet-based server check provider
receives data from Client and transmits said bank client bank transit number data, said client bank account data, and said client bank routing data in an encrypted manner sends to the Bank Transit Number Computer.
4. Internet-based server de-encrypts verified check print data and initiates Printer using same.

14

2

3

3. Bank Transit Number Computer receives and de-encrypts data; verifies data; transmits verified check print data.   16

10

4

1

5. Printer uses print data to generate check and sends to Client.   18

5

1. Client computer enables entry of client data, client check number data, client bank transit number data, client bank account data , and client bank routing data at interface of Internet-based Check Provider.

12

Amended

100

104

106

2768

ABC, INC.
1 East, St.
Newton, MA 02022
508 222 2222

First National Bank
Newton MA 02022
85022/1000 01

Pay to the order
of

Dollars

108   112   110

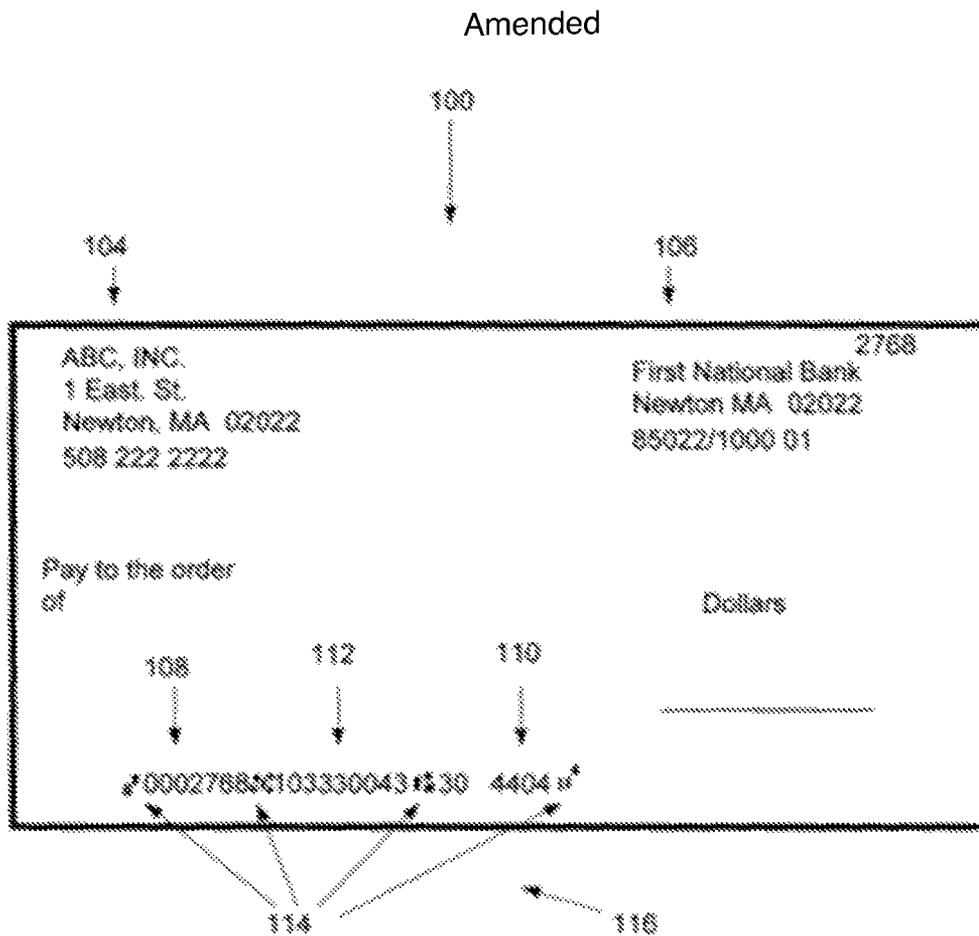⑈0002768⑈C103330043⑈30 4404 ⑈⑈

114   116

FIG. 2

INTERNET-BASED CHECK ORDERING SYSTEM

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a method and system for ordering checks. More particularly, the invention relates to an Internet-based check ordering system including an Internet-based server having a check order entry user interface, a bank transit number computer system in operable communication with the Internet-based server computer system, a client computer system in operable communication with the Internet-based server computer system and a printing system in operable communication with the Internet-based server computer system to print the ordered checks.

2. Related Art

There exist a number of systems for remotely ordering business checks. The more automated systems generally relate to the reordering of checks. However, a problem remains with the initial ordering of checks in that a copy of the client/prospective customer's check is required to be sent to the printer.

Thus, producing checks for a new customer is not easily accomplished and currently still requires that the two parties actually communicate and partake in manual tasks, as opposed to a more automated system which requires only the input of data. Some systems provide partial automated solutions to obtain checks once the client is in their system, thus enabling reordering of checks. However, these systems fail to provide an adequate total solution for ordering checks.

This problem is due to the fact that ordering of checks is a sensitive task. Each check includes certain bank transit data, account data and routing information which is oriented in a particular manner of the issuing bank branch to maintain validity of the check produced. The prior semi-automated systems do not provide for this when making an initial order.

Accordingly, there remains a need to provide a solution to enable initial ordering as well as reordering of checks over the Internet. The present invention provides such a solution and overcomes the deficiency in the art.

BRIEF SUMMARY OF THE INVENTION

It is an object of the invention to improve the check ordering process.

It is another object of the invention to enable initial or new checks to be ordered over an Internet-based system.

Accordingly, the invention is directed to an Internet-based check ordering system. The system includes a client computer system and an Internet-based server having a check order entry user interface remote from and in operable communication with the client computer system, wherein the Internet-based server includes software for enabling input at the interface of client data, client check number data, client bank transit number data, client bank account data, and client bank routing data at the check order user interface and has means for transmitting the bank client bank transit number data, the client bank account data, and the client bank routing data in an encrypted manner. A bank transit number computer system remote from and is in operable communication with

the Internet-based server computer system and has software for receiving the client bank transit number data, client bank account data, and client bank routing data from the Internet-based server and de-encrypting the client bank transit number data, the client bank account data, and the client bank routing data and comparing at least the client bank transit number data with a data listing corresponding to transit number data for a plurality of banks within a database therein to verify that the client bank transit number corresponds to bank transit data in the database. The bank transit number computer system software transmits to the Internet-based server verified check print data which includes the client bank transit number data, client bank account data, client bank routing data in a predetermined printing orientation for printing. A printing station is in operable communication with the Internet-based server computer system to print checks bearing the data thereon in the orientation.

Other objects and advantages will be readily apparent to those skilled in the art upon viewing the drawings and reading the detailed description hereafter.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1a is a schematic of the state of the prior art.

FIG. 1b is a schematic of the present invention.

FIG. 2 is a front view of a check used in to illustrate part of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings, the Internet-based check ordering system of the present invention is generally designated by the numeral **10**. The Internet-based check ordering system **10** includes a client computer system **12**, an Internet-based server **14** operably connected to the client computer system **12**, a bank transit number computer system **16** operably connected to the Internet-based server **14** and a printing system **18** operably connected to the Internet-based server **14**.

The Internet-based server **14** has a check order entry user interface, wherein the Internet-based server **14** includes software for enabling input at the interface of receiving client data, client check number data, client bank transit number data, client bank account data (e.g., checking or savings, etc.), and client bank routing data. In addition, the user interface is programmed to generate a price corresponding to check order and is further equipped with billing information capturing means, as is known in the art, to enable the client to be billed for the ordered checks via the Internet. The software on the Internet-based server is equipped to transmit the bank client bank transit number data, the client bank account data, and the client bank routing data in an encrypted manner.

The bank transit number computer system **16** is in operable communication with the Internet-based server computer system **14** and has software for receiving the client bank transit number data, the client bank account data, and the client bank routing data from the Internet-based server **14** and de-encrypting the client bank transit number data, the client bank account data, and the client bank routing data. The software on the bank transit number computer system **16** compares at least the client bank transit number data with a data listing corresponding to transit number data for a plurality of banks stored within a database operably associated with the bank transit number computer system **16** to verify that the client bank transit number corresponds to bank transit data in the database. The transit number data for the banks on the bank transit number computer system **16** correspond to federal reserve approved banks, for example, and have been given a

unique transit number and MICR data **116** described herein-after. The software on bank transit number computer system **16** transmits to the Internet-based server **14** verified check print data which includes the client bank transit number data, the client bank account data, and the client bank routing data in a predetermined printing orientation i.e., MICR data **116**, in an encrypted manner. The Internet-based server **14** receives and de-encrypts the verified check print data in orientation to enable a printing system **18** in operable communication with the Internet-based server computer system **14** to print the ordered checks **100**. The printing system **18** can include a computer which is operably connected to the Internet-based server **14** (either locally or remotely) in a manner to receive the client data, client check number data, client bank transit number data, client bank account data, client bank routing data, the verified check print data in an encrypted form and de-encrypt the data to enable printing of the checks.

It will be helpful in understanding the usefulness of the invention to discuss the construction of a typical blank bank check **100**. FIG. **2** illustrates a front side **102** of check **100**.

The check **100** includes bank client's data **104**, which can include the client's name, address, phone number, etc. The check **100** also includes bank name transit data **106**, which includes the branch name and address and branch number. Finally, critical indicia on the check **100** includes check num-ber data **108**, client bank account number data **110**, and client bank routing number data **112** which includes both humanly-readable and machine-readable information. The data pre-sented on the check **100** contains information for purposes of processing, such as the bank on which the document is drawn, a routing/transit number, the account number of the person who wrote or made out the check, and a transaction code indicating the type of document, i.e., indicating it to be a check or deposit ticket. The check number data **108**, client bank account number data **110**, and client bank routing num-ber data **112** are usually part of well known MICR (Magnetic Ink Character Recognition) data which includes computer readable indicia **114** and all of which are referred to herein as MICR data **116**.

By banking convention, the MICR data **116** must be printed at a precise distance from the right edge of the check with proper symbols and in a given orientation to place the MICR characters in the proper field site. Absent this, and the check **100** is not capable of being validated. It is thus essential that the encoded MICR data **116** be verifiable after printing to assure their accuracy. The MICR data **116** imprinted upon each check extend to each edge on the left and right of the check to within a predetermined given amount.

Once known the printer system **18** is provided with the verified check print data, it is known in the art that a MICR print head of the system **18** can employ the printing sequence at the proper position for such data. It is important to stress that, should the printed characters fail to be in correct and in proper sequence, the check is unable to be validated since it cannot be read by the bank's check processing equipment. Thus, it is imperative that the MICR data **116** be provided correctly. The instant invention enables this to occur upon initial orders without the need of the client faxing in a copy of their check.

The Internet-based server **14** is further operably associated with a database which contains and stores the client data (i.e., name, address, telephone number, billing address informa-tion, credit card information data), client check number data, client bank transit number data, client bank account data and client bank routing data as well as associating the received verified check information data from the bank transit number computer system **16** therewith. In this regard, user interface is

equipped to recognize the client upon subsequent accessing the Internet-based server **14** for reordering check and can retrieve such stored information for such client for purposes of printing additional check orders.

The above described embodiment is set forth by way of example and is not for the purpose of limiting the present invention. It will be readily apparent to those skilled in the art that obvious modifications, derivations and variations can be made to the embodiment without departing from the scope of the invention. Accordingly, the claims appended hereto should be read in their full scope including any such modifi-cations, derivations and variations.

What is claimed is:

1. An Internet-based check ordering and reordering sys-tem, including:

a client computer system;

an Internet-based server having a check order entry user interface remote from and in operable communication with said client computer system, wherein said Internet-based server includes software for enabling input at said interface of client data, client check number data, client bank transit number data including bank branch name, address and branch number, client bank account data, and client bank routing data at said check order user interface and has means for transmitting said bank client bank transit number data, said client bank account data, and said client bank routing data in an encrypted man-ner;

a bank transit number computer system remote from and in operable communication with the Internet-based server computer system having software for receiving at least said client bank transit number data, said client bank account data, and said client bank routing data from said Internet-based server and de-encrypting said client bank transit number data, said client bank account data, and said client bank routing data, and comparing at least said client bank transit number data with a data listing cor-responding to transit number data for a plurality of banks within a database of said bank transit number computer system to verify that said client bank transit number corresponds to bank transit data in said database, and transmits to said Internet-based server verified check print data which includes said client bank transit number data, said client bank account data, and said client bank routing data and a predetermined printing orientation; and

a printing station in operable communication with said Internet-based server computer system to print checks bearing said data thereon and a blank amount field.

2. The Internet-based check ordering and reordering sys-tem of claim **1**, wherein software on said Internet based server includes means for billing a client at said user interface using said system.

3. The Internet-based check ordering and reordering sys-tem of claim **1**, wherein said Internet-based server is operably associated with a database which contains and stores said client data, said client check number data, said client bank transit number data, said client bank account data and said client bank routing data.

4. The Internet-based check ordering and reordering sys-tem of claim **3**, wherein said Internet-based server is further equipped to associate and store said received verified check information data from said bank transit number computer system with said client data, said client check number data, said client bank transit number data, said client bank account data and said client bank routing data.

5. The Internet-based check ordering and reordering system of claim **3**, wherein said printing station includes a computer which is operably connected to said Internet-based server in a manner to receive said client data, said client check number data, said client bank transit number data, said client bank account data, said client bank routing data and said verified check print data in an encrypted form and de-encrypts said data to enable printing of said checks.

6. An Internet-based check ordering and reordering system, including:

   a client computer;

   an Internet-based server remote from and in operable communication with said client computer having software which enables a check order entry user interface for enabling inputting of client data, client bank account data and at least one of client bank transit number data and client bank routing number data from which said client bank transit number data can be obtained, and for transmitting said at least one of said client bank routing number data and said client bank transit number data in an encrypted manner; and

   a bank transit number data database in operable communication with the Internet-based server and software for comparing said client bank transit number data with a data listing in said database corresponding to transit number data for a plurality of federal reserve banks to verify that said client bank transit number data corresponds to bank transit number data in said database.

7. The Internet-based check ordering and reordering system of claim 6, wherein said bank transit number data database is on a computer having software for receiving in an encrypted form said one of said client bank routing number data and said client bank transit number data from said Internet-based server and de-encrypting said one of said bank client routing number data and said client bank transit number data.

8. The Internet-based check ordering and reordering system of claim 6, wherein verified check print data is generated which includes at least said one of said client bank routing

number data and said client bank transit number data and wherein said system includes a printing station in operable communication with said Internet-based server to print checks bearing said client data, said client bank account data, and said one of said client bank routing number data and said client bank transit number data.

9. The Internet-based check ordering and reordering system of claim 8, wherein said check order entry user interface further enables input of client check number data.

10. The Internet-based check ordering and reordering system of claim 6, wherein said client bank transit number data includes data corresponding to at least one of bank branch name, address and branch number.

11. The Internet-based check ordering and reordering system of claim 6, wherein software on said Internet based server includes means for billing a client at said user interface using said system.

12. The Internet-based check ordering and reordering system of claim 6, wherein said Internet-based server is operably associated with a database which contains and stores said client data, said client bank account data and said at least one of said client bank transit number data and said client bank routing number data.

13. The Internet-based check ordering and reordering system of claim 9, wherein said Internet-based server is operably associated with a database which contains and stores said client data, said client check number data, and at least one of said client bank transit number data and said client bank routing number data.

14. The Internet-based check ordering and reordering system of claim 13, wherein said printing station includes a computer which is operably connected to said Internet-based server in a manner to receive in an encrypted form and to de-encrypt said client data, said client check number data, said client bank account data, and at least one of said client bank transit number data and said client bank routing number data to enable printing of said checks.

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