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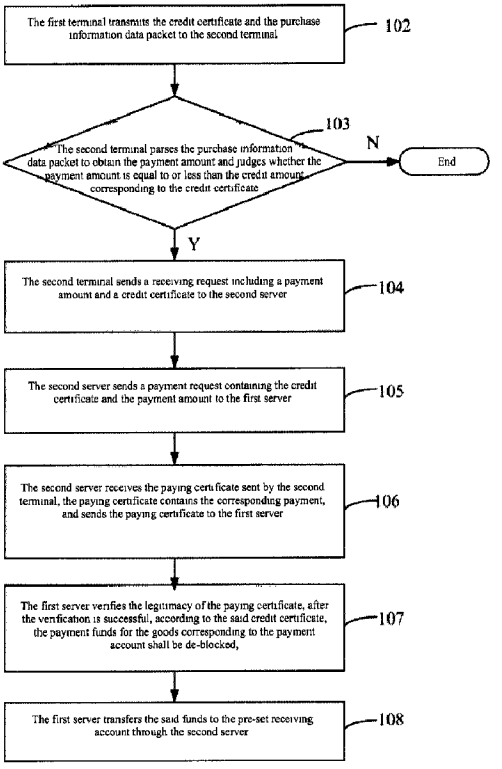
(54) Titre : PROCEDE ET SYSTEME DE PAIEMENT DE TRANSACTION DE RESEAU
(54) Title: NETWORK TRANSACTION PAYMENT METHOD AND SYSTEM



(57) Abrégé/Abstract:
The present invention relates to a network transaction payment method and system. The method comprises: (102) a first terminal sends a credit certificate and a purchase information data packet to a second terminal; (103) the second terminal analyses the

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(57) Abrégé(suite)/Abstract(continued):
purchase information data packet to obtain a paying amount, and determines whether the paying amount is less than or equal to an issuing amount corresponding to the credit certificate; if so determined, (104) the second terminal sends a receiving request including the paying amount and the credit certificate to a second server; (105) the second server sends a paying request including the credit certificate and the paying amount to a first server; (106) the second server receives a paying certificate sent by the second terminal, and sends the paying certificate to the first server; (107) the first server checks the validity of the paying certificate, and upon successful checking, according to the credit certificate, unfreezes funds of a goods payment corresponding to a paying account; (108) the first server transfers the funds to a preset receiving account via the second server. The system and method improve the security of funds of a network transaction.

Abstract

The present invention relates to a network transaction payment method and system. The method comprises: (102) a first terminal sends a credit certificate and a purchase information data packet to a second terminal; (103) the second terminal analyses the purchase information data packet to obtain a paying amount, and determines whether the paying amount is less than or equal to an issuing amount corresponding to the credit certificate; if so determined, (104) the second terminal sends a receiving request including the paying amount and the credit certificate to a second server; (105) the second server sends a paying request including the credit certificate and the paying amount to a first server; (106) the second server receives a paying certificate sent by the second terminal, and sends the paying certificate to the first server; (107) the first server checks the validity of the paying certificate, and upon successful checking, according to the credit certificate, unfreezes funds of a goods payment corresponding to a paying account; (108) the first server transfers the funds to a preset receiving account via the second server. The system and method improve the security of funds of a network transaction.

NETWORK TRANSACTION PAYMENT METHOD AND SYSTEM

Technical Field

[0001] The present invention relates to the field of computer technology, and particularly to a network transaction payment method and system.

Background Technology

[0002] With the development of the Internet, communication between people and the network is becoming more and more closely, e-commerce has gradually become the main trend of Internet economic development. On-line consumption has gradually become a way of life, because merchants and users fail to achieve face-to-face payment settlement, so the most critical part of e-commerce is to reduce the transaction risk of buyers and sellers. At present, the traditional network payment adopts the form of a third party payment company guarantee, the buyer (the payer) will pay the funds to the third party platform which will transfer the funds to the account of the seller (receiving side). However, if the form of third-party payment company guarantee is applied to the payer (the buyer), before the goods are received, the funds have already been paid to the third party payment company, once the third party payment company has problems, the payment side of the funds fail to be guaranteed, the receiving side (the seller) has shipped the goods, the payment for goods fail to be guaranteed, the traditional network payment method leads to the high incidence of network transaction risk of funds.

Summary of the invention

[0003] Based on this, it is necessary to provide a kind of network transaction payment method and system which can reduce the risk of network transaction due to the above technical problems.

[0004] A kind of network transaction payment method includes:

[0005] The first terminal transmits the credit certificate and the purchase information data packet to the second terminal;

[0006] The second terminal parses the purchase information data packet to obtain the payment amount and determines whether the payment amount is less than or equal to the issuance amount corresponding to the said credit certificate, and if so, sends the receiving request including the payment amount and the credit certificate to the second server;

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[0007] The second server sends a payment request containing the credit certificate and the payment amount to the first server;

[0008] The second server receives the paying certificate sent by the second terminal, the paying certificate contains the corresponding payment for goods and sends the paying certificate to the first server;

[0009] The first server verifies the legitimacy of the paying certificate, after the verification is successful, according to the credit certificate, the payment of funds for the goods corresponding to the payment account shall be de-blocked;

[0010] The first server transfers the said funds to the pre-set receiving account through the second server.

[0011] In one of the examples, before the second server receives the paying certificate sent by the second terminal. Also includes:

[0012] The first terminal transmits the confirmed receipt information for the signed goods to the second terminal;

[0013] And the second terminal generates a corresponding paying certificate based on the said confirmed receipt information.

[0014] In one of the examples, before the second server receives the paying certificate sent by the second terminal, the second server also includes:

[0015] The second terminal receives the logistics information corresponding to the merchandise returned by the logistics server and generates the corresponding paying certificate according to the logistics information.

[0016] In one of the examples, before the first terminal transmits the credit certificate and the purchased information data packet to the second terminal, further comprising:

[0017] The first terminal sends the issuing request to the first server, the issuing request includes the payment account number and the issuing amount;

[0018] The first server will freeze the funds of the issuing amount corresponding to the said payment account number; if the freezing is succeeded, the credit certificate corresponding to the issuing amount will be generated, and the said credit certificate shall be returned to the first terminal; if the freezing is failed, the issuing failure information will be generated, and the said issuing failure information shall be returned to the first terminal.

[0019] In one of the examples, after the second server sends a payment request containing the credit certificate and the payment amount to the first server, the second server also includes:

[0020] The first server verifies whether the credit certificate is consistent with the credit certificate returned to the first terminal and, if so, updates the amount of the issuance of the credit certificate to the amount obtained by the amount of the issuing amount minus the payment amount.

[0021] In one of the examples, after the first server updates the issuing amount corresponding to the credit exemption to the amount of the issuing amount minus the payment amount, the first server further includes:

[0022] If the first server fails to receive the paying certificate sent by the second server within the pre-set time range, the issuance amount of the updated credit certificate is restored to the amount of the issuance before the update.

[0023] A kind of network transaction payment method includes:

[0024] The first server receives the first terminal to send the issuing request, and the issuing request includes the payment account number and the issuing amount;

[0025] The first server will freeze the funds of the issuing amount corresponding to the said payment account number; if the freezing is succeeded, the credit certificate corresponding to the issuing amount will be generated, and the said credit certificate shall be returned to the first terminal; if the freezing is failed, the issuing failure information will be generated, and the said issuing failure information shall be returned to the first terminal.

[0026] The first server receives a payment request including a paying certificate and a credit document sent by the second server, the paying certificate includes a corresponding payment;

[0027] The first server verifies the legitimacy of the paying certificate, after the verification is successful, according to the credit certificate, the payment of funds for the goods corresponding to the payment account shall be de-blocked;

[0028] The first server transfers the said funds to the pre-set receiving account through the second server.

[0029] In one of the examples, after the first server receives the steps of the payment request containing the paying certificate and the credit certificate sent by the second server, the first server also includes:

[0030] The first server verifies whether the credit certificate corresponds to the credit certificate returned to the first terminal, if so, the credit certificate corresponded issuing amount will be updated to the amount that the issuing amount minus payment amount.

[0031] In one of the examples, after the first server updates the issuing amount corresponding to the credit certificate to the amount obtained by using the issuing amount minus the payment amount, the first server further includes:

[0032] If the first server fails to receive the paying certificate sent by the second server within the pre-set time range, the issuance amount of the updated credit certificate is restored to the amount of the issuance before the update.

[0033] A kind of network transaction payment system, and the said system comprising:

[0034] The first terminal for transmitting the credit certificate and the purchased information data packet to the second terminal;

[0035] The second terminal for parsing the purchased information data packet to obtain a payment amount and determining whether the payment amount is less than or equal to the issuance amount corresponding to the credit certificate, and if so, sending receiving request including the said payment amount and the said credit certificate to the second server.

[0036] The second server for transmitting a payment request including the said credit certificate and the payment amount to the first server to receive a paying certificate sent by the second terminal, the paying certificate containing a corresponding payment for goods, and based on the payment request, the paying certificate and the credit certificate shall be sent to the first server.

[0037] The first server verifies the legitimacy of the paying certificate, after the verification is successful, according to the credit document, the payment account corresponding to the payment of funds for the goods shall be de-blocked;

[0038] In one of the examples, the first terminal is further configured to transmit the purchase information data packet containing the confirmed receipt information of the signed goods to the second terminal;

[0039] And the second terminal is further configured to generate a corresponding paying certificate based on the confirmation receipt information.

[0040] In one of the examples, the second terminal is further configured for the second terminal to receive the logistics information corresponding to the merchandise returned by the

logistics server and generate the corresponding paying certificate based on the logistics information.

[0041] In one of the examples, the first terminal is further configured to send an issuing request to a first server, the issuing request comprising a payment account number and an issuing amount;

[0042] The first server is also used to freeze the funds corresponding to the payment amount of the payment account, and if the freeze is successful, the credit certificate corresponding to the issuing amount is generated and the credit document is returned to the first terminal. If the freeze fails, the issuing failure message is generated and the issuing failure message is returned to the first terminal.

[0043] In one of the examples, the first server is further configured to verify that the credit certificate coincides with the credit certificate that returned to the first terminal, and if so, the amount of the issuing amount corresponding to the credit certificate is updated to the amount obtained by the issuing amount minus the payment amount.

[0044] In one of the examples, the first server is further configured to restore the issuing amount corresponding to the updated credit certificate to the pre-update issuance amount if the paying certificate sent by the second server is not received within the pre-set time range.

[0045] For above-mentioned network transaction payment method and system, the first terminal corresponds to the buyer, and the buyer has received a credit certificate before purchasing the goods, the credit certificate provides guarantee for the buyer to make payment for the goods, ensures the security of the seller for receipt, and makes the seller of the second terminal be at ease; before the buyer corresponding to the first terminal completes the transaction, the funds in the payment account is not paid, the funds security of the buyer is guaranteed. The network transaction payment between the above-mentioned methods and systems do not rely on third-party payment platform to achieve, and it improves the financial security of on-line transactions.

Brief Description

[0046] Figure 1 is a flowchart of a network transaction payment method in one example;

[0047] Figure 2 is an application scene diagram of a network transaction payment method in one example;

[0048] Figure 3 is a flowchart of a network transaction payment method in one example;

[0049] Figure 4 is a flow chart of a network transaction payment method after a Step in which the first server receives a payment request including a paying certificate and a credit certificate sent by a second server in one example;

[0050] Figure 5 is a schematic diagram of a structure of a network transaction payment system in one example;

Description of the Preferred Examples

[0051] The present invention will be described in further detail with reference to the accompanying drawings and the accompanying examples, so as to describe the invention purposes, technical solutions and advantages more clearly. It is to be understood that the specific examples described herein are merely illustrative of the invention and are not intended to limit the invention.

[0052] One of the innovations of the examples of the present invention is that, in conjunction with the freeze payment of the silver letter of credit, a new payment model is implemented, through which the buyer can contain the seller's transaction progress, and by this setting, the buyer's financial security at the same time to urge the seller to actively deliver, set the conditions in the various stages of payment, reduce the funds to recover the process to solve the problem of the end of the problem, from the system level to ensure that buyers and sellers of the integrity of the transaction.

[0053] As shown in Figure 1, in one example, there is provided a network transaction payment method comprising the steps of:

[0054] In Step 102, the first terminal transmits the credit certificate and the purchase information data packet to the second terminal.

[0055] The first terminal is suitable for the payment party in the payment of the network transaction. The second terminal is suitable for the seller in the network transaction. In one example, the buyers and sellers complete the network transaction through the online shopping platform. The credit certificate is a kind of electronic certificate for handling payment and settlement that the buyer uses the corresponding funds of his payment account to guarantee the payment for goods. Specifically, the credit certificate corresponds to a string of specific serial numbers, which act as unique identifiers of the credit certificate. The payment account includes a bank account number or the third party's payment account.

[0056] The first terminal generates a shopping order based on the merchandise shopping information submitted by the user and calculates the amount of payment required for the purchase of the order item, and further generates the purchase information data packet according to the purchase order and the payment amount. The first terminal sends the purchase information data packet together with the credit certificate to the second terminal to realize the buyer's request to purchase the merchandise from the seller.

[0057] In one example, the network transaction payment method also includes: the first terminal sends an issuing request to the first server before the first terminal transmits the credit certificate and the purchase information data packet to the second terminal in Step 102. The issuing request includes payment account and issuing amount; The first server freeze the funds of the issuing amount corresponding to the payment account, if the freezing is succeeded, the issuing amount corresponded credit certificate will be generated; the credit certificate will be returned to the first terminal; if the freezing is failed, the issuing certificate failure information will be generated, and the issuing certificate failure information will be returned to the first terminal.

[0058] The buyer in advance before the network transaction out of the credit certificate, through the advance payment account corresponding to the funds to show the seller to the buyer has the ability to pay the purchase price. In the present example, the first server is provided with a payment account by the buyer to pay the payment, and the buyer can freeze the payment account corresponding to the payment through the first server and automatically transfer the payment account of the seller to the payment to be paid.

[0059] The amount of credit is the credit limit of the credit certificate, for example, the amount of 5,000 RMB, out of the credit certificate can be used as a purchase of 5,000 RMB of goods credit guarantee. The funds of the credit certificate corresponding to the issuing amount are not diverted before they are unfrozen. To ensure that the seller to recover the security of the purchase price.

[0060] In one example, the first terminal establishes a connection with the first server over the network. The issuing request also contains the user name and user password of the payment account. The first server verifies whether the buyer has permission to open the credit by checking the user name and the user password. In one example, the reason for the failure of the issuance request includes that the amount corresponding to the payment account is less than the amount of the issuing or the legitimacy verification of the first server to the issuing request, etc. If the first

server will not be able to generate the credit certificate, it will issue a failure message to the first terminal to remind the buyer.

[0061] In Step 103, the second terminal parses the purchase information data packet to obtain the payment amount and determines whether the payment amount is less than or equal to the amount of the issuance corresponding to the credit certificate. If so, the process proceeds to Step 104, if not.

[0062] In the present example, the second terminal, after receiving the shopping data packet, further judges whether the buyer has sufficient funds to pay for the purchased goods. In the present example, if it is determined whether or not the payment amount is equal to or less than the amount of the issuance corresponding to the credit certificate, if it is, the buyer's frozen funds are sufficient to pay the purchase of the merchandise network transaction, and the process proceeds to Step 104. If not, then the buyer to freeze the lack of funds to pay for the purchase of goods The network transactions failed, buyers can choose to buy other goods or exit the shopping platform.

[0063] In Step 104, the second terminal transmits a payment request including the payment amount and the credit certificate to the second server.

[0064] The second server is connected with the second terminal through the network, the second server is provided with the receiving account of the buyer, and the second server is used to transfer the payment of the purchased goods paid by the buyer into the receiving account, and in one example, the second server is pre-set with the account number. After the seller receives the buyer's shopping request, further, the second terminal sends a payment request to the second server, and the second server requests payment from the first server to the first server.

[0065] In Step 105, the second server sends a payment request containing the credit certificate and the payment amount to the first server.

[0066] In the present example, when the second server receives the receiving request sent by the second terminal, the second server transmits the payment request to the first server according to the receiving request, that is, to notify that the first server credit certificate corresponded the issuing amount shall be used for payment for goods in on-line transactions. During the course of a network transaction, the funds for the corresponding amount of the credit will not be diverted.

[0067] In one example, on the right of Step 105, the method also includes: whether the first server verifies if the credit certificate is consistent with the credit certificate returned to the first

terminal and, if so, updates the issuing amount corresponding to the credit certificate shall be updated to the amount that the issuing amount minus the payment amount.

[0068] The first server judges whether the credit document sent by the second server is generated by itself, and if so, the credit certificate is legally valid. As the credit card corresponding to the amount of the amount of funds has been partially or all will be used to pay the payment, and further credit card corresponding to the amount of funds to make the appropriate adjustments, by issuing the amount minus the amount of payment to reset the corresponding credit certificate The amount of the buyer to facilitate the next shopping, to avoid buyers after the purchase of credit certificate corresponding to the amount of money to pay all the money.

[0069] In one example, after the first server updates the issuing amount corresponding the credit certificate to the amount that the issuing amount minus the payment amount, the method also includes:

[0070] If the first server fails to receive the paying certificate sent by the second server within the pre-set time range, the issuance amount of the updated credit certificate is restored to the amount of the issuance before the update.

[0071] In the present example, the network transaction process is limited to the pre-set time range, that is, the time from the order of the buyer to the seller to the buyer's receipt is set within the pre-set time range. If the first server does not receive the receipt document sent by the second server within the pre-set time range, the default network transaction has been suspended for some reason. For example, the unqualified buyer refused to sign or the buyer and the seller reached an agreement to cancel the network transaction and other reasons. As the buyer has no obligation to pay the purchase price, in order not to affect the buyer's next shopping credit certificate corresponding to the amount of the amount of recovery back to the amount before the update.

[0072] In Step 106, the second server receives the paying certificate sent by the first terminal, the paying certificate contains the corresponding payment, and sends the paying certificate to the first server.

[0073] In the actual network transaction process, the buyer receives the goods and the seller to send the goods may be different, resulting in the amount of payment payable may be different with the actual amount of payment. For example, the buyer in the seller's shop to buy five cups, but the buyer because of which two cups failed to sign only one of the three cups, paying certificates corresponding to the money should be three cups of money instead of 5 A cup of money. The

second terminal generates the paying certificate based on the information of the network transaction which the buyer and the seller has completed, and sends the paying certificate to the second server, and the second server requests the first server to pay the payment.

[0074] In one example, at Step 106, before the second server receives the paying certificate sent by the second terminal, the method also includes: the first terminal transmits the confirmed receipt information of the signed goods to the second terminal; the second terminal generates the corresponding paying certificate as per the confirmed receipt information.

[0075] In the present example, the buyer may voluntarily send to the seller a receipt information confirming that the goods have been checked, and the buyer, by clicking on the merchandise by the first terminal on the shopping platform, confirms the goods receipt, and further triggering the first terminal and transmits the confirmation receipt information to the second terminal. The second terminal generates the paying certificate based on the confirmation receipt information.

[0076] In another example, at Step 106, the second server receives the paying certificate sent by the second terminal, the method further comprising:

[0077] The second terminal receives the logistics information corresponding to the merchandise returned by the logistics server and generates the corresponding paying certificate according to the logistics information.

[0078] In the present example, when the buyer sends the issuing request through the first terminal, the payment is set by the credit document, and the payment is made in accordance with the logistics information of the merchandise. The merchandise's logistics information will be recorded in the logistics server, for example, when the goods are received by the consignee, the logistics company's staff will be the goods have been signed information into the logistics server, which has signed the information, including the recipient's signature and Sign time and other information.

[0079] The logistics server realizes the logistics information of the goods to the second terminal in real time, and the logistics information obtained by the second terminal conforms to the pre-set condition, that is, the corresponding paying certificate is generated according to the logistics information. For example, the logistics server records the logistics information that the seller completed the delivery task, the generated paying certificate requires the buyer to pay part of the purchase price, when the logistics server records the logistics information that the buyer has

signed the goods, the generated paying certificates need to buy Home to pay the remaining payment.

[0080] The first server according to the logistics information of the goods in batches to pay the credit corresponding to the funds, the goods will be divided into multiple stages of payment, you can encourage the seller to actively fulfil the obligations of the implementation of the contract to ensure that the buyer's funds at the same time urge the seller active Delivery, to achieve the integrity of buyers and sellers transactions.

[0081] In one example, the logistics server sends the logistics number corresponding to the goods after shipment to the first terminal and the second terminal to facilitate the transaction tracking of the buyers and sellers to the purchased goods.

[0082] In Step 107, the first server verifies the legitimacy of the paying certificate, after the verification is successful, according to the credit certificate, the funds for payment of the goods corresponding to the payment account shall be de-blocked.

[0083] In Step 108, the first server transfers the funds to the pre-set receiving account through the second server.

[0084] In the present example, the first server pays the debit amount of the debit amount corresponding to the payment account to the pre-set collection account through the second server, thereby realizing the payment obligation of the buyer to purchase the goods. Completed the network transaction.

[0085] In one example, data packets are tampered with in order to prevent data leakage or encounter hacking. Data such as purchase information data packets, paying certificates and credit certificates are encrypted during the transmission process, that is, the above data packets contain the encryption section. Specifically, the above data contains the encryption section using the MAC algorithm for encryption.

[0086] The above-mentioned network transaction payment method, the first terminal corresponded buyer has already obtained the credit certificate before he purchase the goods, the credit certificate provides guarantee for the buyer to make payment for the goods, ensures seller's gathering security, and makes the seller be ease to make delivery. Before the first terminal corresponded the buyer completes the transaction, the fund of the payment account will not pay out. The security of the buyer is guaranteed. The above method of network transaction payment is achieved without relying on the third-party payment platform, and it improves the funds security

of on-line transactions. At the same time, the payment for goods within the payment account of the buyer does not have to pay in advance, in case the seller did not complete the delivery, the payment for goods can gain interest in the corresponding account of the payment account, which increases the funds gains of the buyer.

[0087] As shown in picture 2. In one example, the buyer A issues an issuing request for a 5,000 RMB credit certificate to the first server 22 through the first terminal 21, and the first server 22 will freeze the deposit amount of 5,000 RMB in the payment account and will generate the credit certificate with a value of 5,000 and return the first terminal 21. On the shopping platform, the buyer A goes into the seller B's e-shop to buy goods, but the purchased goods must be less than or equal to 5,000 RMB so as to achieve the transaction. The payment for goods purchased by the buyer A is guaranteed by the 5,000 RMB credit guarantee. After the buyer and the seller have reached a deal agreement, the seller B arranges the logistics company to send the goods. The logistics company records the logistics information of the merchandise into the logistics server 25, the logistics server 25 returns the logistics information to the second terminal 23, the second terminal 23 generates the corresponding paying certificate, and the second terminal 23 transmits the paying certificate to the second server 24, the second server 24 sends a paying certificate and a credit certificate request payment for goods to the first server 22, the first server 22 de-blocks the funds in the payment account according to the credit certificate, and transfers the funds to the receiving account of the seller B through the second server 24 so as to complete the network transaction payment.

[0088] In one example, as shown in Figure 3, there is provided a network transaction payment method that applies the first server; the method comprises the steps as below:

[0089] In Step 302, the first server receives the first terminal to send the issuing request, and the issuing request includes the payment account number and the issuing amount.

[0090] In Step 304, the first server will freeze the funds corresponding to the issuing amount of the payment account number, and if the freezing is successful, the credit certificate corresponding to the issuing amount is generated and the credit certificate is returned to the first terminal. If the freezing fails, the issuing failure message generates, and the issuing failure message will be returned to the first terminal.

[0091] In Step 306, the first server receives the payment request including the paying certificate and the credit document sent by the second server, and the paying certificate contains the corresponding payment for goods.

[0092] In Step 308, the first server verifies the legitimacy of the paying certificate, after the verification is successful, according to the credit certificate, the funds for payment of the goods corresponding to the payment account shall be de-blocked.

[0093] In Step 310, the first server transfers the funds to the pre-set receiving account through the second server.

[0094] In one example, at Step 310, the first server passes the funds through the second server to the pre-set payment account, the method further comprising: the first server generates a message that the payment was successful and sends the message that the payment was successful to the first terminal.

[0095] As shown in Figure 4, in one example, in Step 306, the first server receives the payment request containing the paying certificate and the credit certificate sent by the second server, further comprising:

[0096] In Step 402, the first server verifies whether the credit certificate corresponds to the credit certificate returned to the first terminal. If so, then go to Step 404, if not, then the end.

[0097] In Step 404, the amount of the card issuance corresponding to the credit is updated to the amount obtained by the amount of the debit amount minus the payment amount.

[0098] In one example, in Step 404, after the first server updates the issuing amount corresponding to the credit certificate to the amount obtained by the issuing amount minus the payment amount, and the method also includes:

[0099] In Step 406, when the first server does not receive the paying certificate sent by the second server within the pre-set time range, the issuance amount corresponding to the updated credit certificate is restored to the amount of the transaction before the update.

[0100] As shown in Figure 5, there is provided a network transaction payment system comprising: a first terminal, a second terminal, a first server, and a second server, wherein the first terminal 11 is connected to the first server 12; the terminal 13 is connected to the second server 14, the first terminal 11 is connected to the second terminal 13, and the first server 12 is connected to the second server 14. The first terminal 12 is connected to the second server 14,

[0101] The first terminal 11 is used for transmitting a credit certificate and a purchase information data packet to the second terminal 13. The first terminal 11,

[0102] The second terminal 13 is used for parsing the payment amount of the purchase information data packet and determining whether or not the payment amount is equal to or less than the issuance amount corresponding to the credit certificate, and if so, sending the payment request including the payment amount and the credit certificate to the second server 14 The

[0103] The second server 14 is used for sending a payment request including a credit certificate and a payment amount to the first server 12, the paying certificate is sent by the second terminal 13, and the paying certificate containing a corresponding payment for goods; in accordance with the payment request, the paying certificate and the credit certificate are sent to the first server 12.

[0104] The first server 12 verifies the legitimacy of the paying certificate, and after the verification is successful, the payment for goods corresponding to the payment account is de-blocked according to the credit certificate, and the funds are transferred to the pre-set receiving account through the second server 14.

[0105] In one example, the first terminal 11 is also used to send the confirmed receipt information to which the goods have been signed to the second terminal 13. In one example,

[0106] The second terminal 13 is also used to generate the corresponding paying certificate based on the confirmation receipt information.

[0107] In one example, the second terminal 13 is also used for the second terminal 13 to receive the logistics information corresponding to the merchandise returned by the logistics server and generate the corresponding paying certificate based on the logistics information.

[0108] In one example, the first server 12 is also used to generate a message that the payment was successful and to send a message that the payment was successful to the first terminal 11. In one example,

[0109] In one example, the second server 14 is also used to generate a message that the payment was successful and send a message that the payment was successful to the second terminal 13. In one example,

[0110] In one example, the first terminal 11 is also used to send the issuing request to the first server 12, which includes the payment account and the issuing amount.

[0111] In one example, the first server 12 is also used to freeze the funds of the payment account corresponding to the issuing amount, and if the freeze is successful, the credit certificate

corresponding to the issuing amount is generated and the credit certificate is returned to the first terminal 11 The freeze fails to generate a fail-off message and returns the issuing failure message to the first terminal 11.

[0112] In one example, the first server 12 is also used to verify that the credit certificates are consistent with the credit certificates returned to the first terminal 11 and, if so, update the issuing amount corresponding to the credit certificate to the issuing amount minus the payment amount after the amount obtained.

[0113] In one example, the first server 12 is further configured to restore the payment amount corresponding to the updated credit certificate to the pre-update issuing amount if the paying certificate sent by the second server 14 is not received within the pre-set time range.

[0114] The ordinary technicians in the field that can understand and implement all or part of the processes in the above mentioned method of the examples which can be accomplished by means of a computer program that can be stored in a computer-readable storage medium. The program may, when executed, include flows of all examples as described above. Among them, said storage medium can be a magnetic disk, an optical disk, a read-only memory (ROM) or a random access memory (RAM), etc.

[0115] The characteristics of technology in the above example can be arbitrarily combined. In order to simplify the description, it does not describe all the possible combinations of the various characteristics of technology in the above examples, however, as long as the combination of these characteristics of technology are not conflict, it should be considered in the scope of this manual records.

[0116] The above-described examples show only a few methods of execution of the present invention, and its descriptions are comparatively specific and detailed, however, it can not to be construed as a limitation of the scope of the invention patent. It should be noted that various modifications and improvements can be made by those skilled in the field without departing from the inventive concept, which belong to the protection scope of the present invention. Accordingly, the protection scope of patent of the present invention should be measured by the appended claims.

CLAIMS:

1. A network transaction payment method includes:

the first terminal transmitting the credit certificate and the purchase information data packet to the second terminal;

the second terminal parsing the purchase information data packet to obtain the payment amount and determining whether the payment amount is less than or equal to the issuance amount corresponding to the said credit certificate, and if so, sending the receiving request including the payment amount and the credit certificate to the second server;

the second server sending a payment request containing the credit certificate and the payment amount to the first server;

the second server receiving the paying certificate sent by the second terminal, the paying certificate containing the corresponding payment for goods and sending the paying certificate to the first server;

the first server verifying the legitimacy of the paying certificate, after the verification is successful, according to the credit certificate, the payment of funds for the goods corresponding to the payment account being de-blocked; and

the first server transferring the said funds to the pre-set receiving account through the second server.

2. The method of claim 1, characterized in that before the second server receives the paying certificate sent by the second terminal, the second server also includes:

the first terminal transmitting the confirmed receipt information for the signed goods to the second terminal; and

the second terminal generating a corresponding paying certificate based on the said confirmed receipt information.

3. The method of claim 1, characterized in that before the second server receives the paying certificate sent by the second terminal, the second server also includes:

the second terminal receiving the logistics information corresponding to the merchandise returned by the logistics server and generating the corresponding paying certificate according to the logistics information.

4. The method of claim 3, wherein the logistics information includes a recipient signature.

5. The method of any one of claims 3-4, wherein the logistics information includes a data stamp associated with the recipient signature.

6. The method of any one of claims 3-5, wherein the logistics information includes a seller delivery information.

7. The method of claim 1, characterized in that before the first terminal transmits the credit certificate and the step of purchasing the information data packet to the second terminal, further comprising:

the first terminal sending the issuing request to the first server, the issuing request including the payment account number and the issuing amount;

the first server being freezing the funds of the issuing amount corresponding

to the said payment account number; if the freezing is succeeded, the credit certificate corresponding to the issuing amount will be generated, and the said credit certificate shall be returned to the first terminal; if the freezing is failed, the issuing failure information will be generated, and the said issuing failure information shall be returned to the first terminal.

8. The method of claim 1, characterized in that after the second server sends the payment request containing the credit certificate and the payment amount to the first server, the second server also includes:

the first server verifying whether the credit certificate corresponds to the credit certificate returned to the first terminal, if so, the credit certificate corresponded issuing amount will be updated to the amount that the issuing amount minus payment amount.

9. The method of claim 8, characterized in that after the first server updates the amount of issuance corresponding to the credit certificate to the amount of money obtained by subtracting the payment amount, the first server also includes:

If the first server fails to receive the paying certificate sent by the second server within the pre-set time range, the issuance amount of the updated credit certificate is restored to the amount of the issuance before the update.

10. The method of claim 1, wherein the purchase information data packet includes a receipt information for goods already received.

11. The method of claim 1, wherein the second terminal is further configured to generate a payment certificate based on the receipt information.

12. The method of claim 1, wherein the second terminal is further configured to receive a logistics information corresponding to a merchandise returned by a logistics server and generate a corresponding payment certificate based on the logistics information.

13. The method of claim 1, wherein the first terminal is further configured to send an issuing request to the first server, the issuing request comprising the payment account and the issuance amount.

14. The method of claim 13, wherein the first server is further configured to freeze the funds corresponding to the payment amount in the payment account.

15. The method of claim 14, wherein the system is further configured to generate the credit certificate corresponding to the issuance amount and return the credit certificate to the first terminal when the freeze is successful.

16. The method of claim 14, wherein the system is further configured to generate an issuing failure message and return the issuing failure message to the first terminal when the freeze is unsuccessful.

17. The method of claim 1, wherein the first server is further configured to verify that a credit certificate data in the credit certificate received from the second server matches the credit certificate data in the credit certificate at the first terminal.

18. The method of claim 17, wherein the first server is further configured to update the issuance amount on the credit certificate to an amount obtained by the issuance amount minus the payment amount once the credit certificate data has been successfully verified.

19. The method of claim 18, wherein the first server is further configured to restore the issuance amount to its previous value when the payment request sent by the second server is not received within a pre-set time range.

20. The method of any one of claims 1-19, wherein the first terminal is adapted for use by a payer.

21. The method of any one of claims 1-20, wherein the second terminal is adapted for use by a seller.

22. The method of any one of claims 1-21, wherein the credit certificate is an electronic certificate for handling payment and settlement.

23. The method of any one of claims 1-22, wherein the credit certificate corresponds to a string of specific serial numbers which act as unique identifiers of the credit certificate.

24. The method of claim 1, wherein the first terminal is further configured to:

generate a shopping order based on merchandise shopping information submitted by a user; and

calculate the payment amount required in order to purchase an item.

25. The method of claim 12, wherein the logistics information includes a recipient signature.

26. The method of claim 25, wherein the logistics information includes a date stamp associated with the recipient signature.

27. The method of claim 12, wherein the logistics information includes seller delivery information.

28. The method of any one of claims 1-27, wherein the credit certificate is encrypted.

29. The method of claim 28, wherein a MAC encryption algorithm is used.

30. The method of any one of claims 1-28, wherein the purchase information data packet is encrypted.

31. The method of claim 30, wherein a MAC encryption algorithm is used.

32. The method of any one of claims 1-29, wherein the payment request is encrypted.

33. The method of claim 32, wherein a MAC encryption algorithm is used.

34. A network transaction payment system, characterized in that the system comprises:

the first terminal for transmitting the credit certificate and the purchased information data packet to the second terminal;

the second terminal for parsing the purchased information data packet to obtain a payment amount and determining whether the payment amount is less than or equal to the issuance amount corresponding to the credit certificate, and if so, sending receiving request including the said payment amount and the said credit certificate to the second server;

the second server for transmitting a payment request including the said credit certificate and the payment amount to the first server to receive a paying certificate sent by the second terminal, the paying certificate containing a corresponding payment for goods, and based on the payment request, the paying certificate and the credit certificate shall be sent to the first server; and

the first server verifying the legitimacy of the paying certificate, after the verification is successful, according to the credit document, the payment account corresponding to the payment of funds for the goods shall be de-blocked.

35. The system of claim 34, wherein the first terminal is further configured to transmit said purchase information data packet containing confirmed receipt information to which the goods have been signed to the second terminal.

36. The system of claim 34, wherein the second terminal is further configured to generate a corresponding paying certificate based on the confirmation receipt information.

37. The system of claim 34, wherein the second terminal is further configured for the second terminal to receive the logistics information corresponding to the merchandise returned by the logistics server and generate a corresponding paying certificate based on the logistics information.

38. The system of claim 34, wherein the first terminal is further configured to send an issuing request to a first server, the issuing request comprising a payment account and an issuance amount.

39. The system of claim 34, wherein the first server is also configured to freeze the funds corresponding to the payment amount of the payment account, and if the freeze is successful, the credit certificate corresponding to the issuing amount is generated and the credit document is returned to the first terminal. If the freeze fails, the issuing failure message is generated and the issuing failure message is returned to the first terminal.

40. The system of claim 34, wherein the first server is further configured to verify that the credit certificate coincides with the credit certificate that returned to the first terminal, and if so, the amount of the issuing amount corresponding to the credit certificate is updated to the amount obtained by the issuing amount minus the payment amount.

41. The system of claim 34, wherein the first server is further configured to restore the issuing amount corresponding to the updated credit certificate to the pre-update issuance amount

if the paying certificate sent by the second server is not received within the pre-set time range.

42. The system of any one of claims 34-41, wherein the payment account is a bank account.

43. The system of any one of claims 34-42, wherein the payment account is a bank account plus a financial institution.

44. The system of any one of claims 34-43, wherein merchandise shopping information is used to initiate a payment and settlement function.

45. The system of claim 44, wherein the payment and settlement function generate a shipping order.

46. The system of any one of claims 44-45, wherein the payment and settlement function generate payment and settlement information.

47. The system of any one of claims 44-46where the payment and settlement information are sent in a data packet to purchase the merchandise.

48. The system of claim 47, wherein the data packet further includes a withholding amount.

49. The system of claim 48 where the withholding amount is calculated from the value of the online transaction.

50. The system of claim 49, wherein the online transaction includes multiple items, and the total funds required to pay for those items is calculated.

51. The system of any one of claims 49-50-, wherein the online transaction includes calculation for items that were selected to be purchased, but not authorized.

52. The system of any one of claims 48-51, wherein the withholding amount additionally includes a calculation of taxes.

53. The system of any one of claims 48-52, wherein the withholding amount includes a calculation for exchange rate.

54. The system of any one of claims 48-53,where if the price of purchased goods is less than the frozen funds, to update the frozen fund amount to an amount equal to the difference.

55. The system of any one of claims 48-54, wherein the withholding amount corresponds to frozen funds.

56. The system of claim 55, wherein the frozen funds are a temporary network transaction process in a pre-set time range.

57. The system of any one of claims 55-56, wherein the frozen funds are conditional on confirmation that the buyer has received the goods.

58. The system of any one of claims 34-57, wherein the receipt of the goods is confirmed by an indication from a logistics company.

59. The system of any one of claims 34-58, wherein the logistics confirmation includes a recipient signature.

60. The system of any one of claims 34-59, wherein the logistics confirmation includes a date stamp associated with the recipient signature.

61. The system of any one of claims 34-60, wherein the logistics information includes seller delivery information.

62. The system of any one of claims 34-61, wherein the purchase information data packet is encrypted.

63. The system of any one of claims 34-57, wherein at least one of the account freezing and account debiting requests is encrypted.

64. The system of any one of claims 34-63, wherein a MAC encryption algorithm is used.

65. The system of any one of claims 34-64, wherein the purchase payment is made in batches.

66. The system of claim 65, wherein the payment for the purchase is divided into multiple stages of payment.

67. The system of claim 34, wherein the purchase information data packet includes a receipt information for goods already received.

68. The system of claim 34, wherein the second terminal is further configured to generate a payment certificate based on the receipt information.

69. The system of claim 34, wherein the second terminal is further configured to receive a logistics information corresponding to a merchandise returned by a logistics server and generate a corresponding payment certificate based on the logistics information.

70. The system of claim 34, wherein the first terminal is further configured to send an issuing request to the first server, the issuing request comprising the payment account and the issuance amount.

71. The system of claim 70, wherein the first server is further configured to freeze the funds corresponding to the payment amount in the payment account.

72. The system of claim 71, wherein the system is further configured to generate the credit certificate corresponding to the issuance amount and return the credit certificate to the first terminal when the freeze is successful.

73. The system of claim 71, wherein the system is further configured to generate an issuing failure message and return the issuing failure message to the first terminal when the freeze is unsuccessful.

74. The system of claim 34, wherein the first server is further configured to verify that a credit certificate data in the credit certificate received from the second server matches the credit certificate data in the credit certificate at the first terminal.

75. The system of claim 74, wherein the first server is further configured to update the issuance amount on the credit certificate to an amount obtained by the issuance amount minus the payment amount once the credit certificate data has been successfully verified.

76. The system of claim 75, wherein the first server is further configured to restore the issuance amount to its previous value when the payment request sent by the second server is not received within a pre-set time range.

77. The system of any one of claims 34-76, wherein the first terminal is adapted for use by a payer.

78. The system of any one of claims 34-77, wherein the second terminal is adapted for use by a seller.

79. The system of any one of claims 34-78, wherein the credit certificate is an electronic certificate for handling payment and settlement.

80. The system of any one of claims 34-79, wherein the credit certificate corresponds to a string of specific serial numbers which act as unique identifiers of the credit certificate.

81. The system of claim 34, wherein the first terminal is further configured to:

generate a shopping order based on merchandise shopping information submitted by a user; and

calculate the payment amount required in order to purchase an item.

82. The system of claim 69, wherein the logistics information includes a recipient signature.

83. The system of claim 82, wherein the logistics information includes a date stamp associated with the recipient signature.

84. The system of claim 69, wherein the logistics information includes seller delivery information.

85. The system of any one of claims 34-84, wherein the credit certificate is encrypted.

86. The system of claim 85, wherein a MAC encryption algorithm is used.

87. The system of any one of claims 34-85, wherein the purchase information data packet is encrypted.

88. The system of claim 87, wherein a MAC encryption algorithm is used.

89. The system of any one of claims 34-86, wherein the payment request is encrypted.

90. The system of claim 89, wherein a MAC encryption algorithm is used.

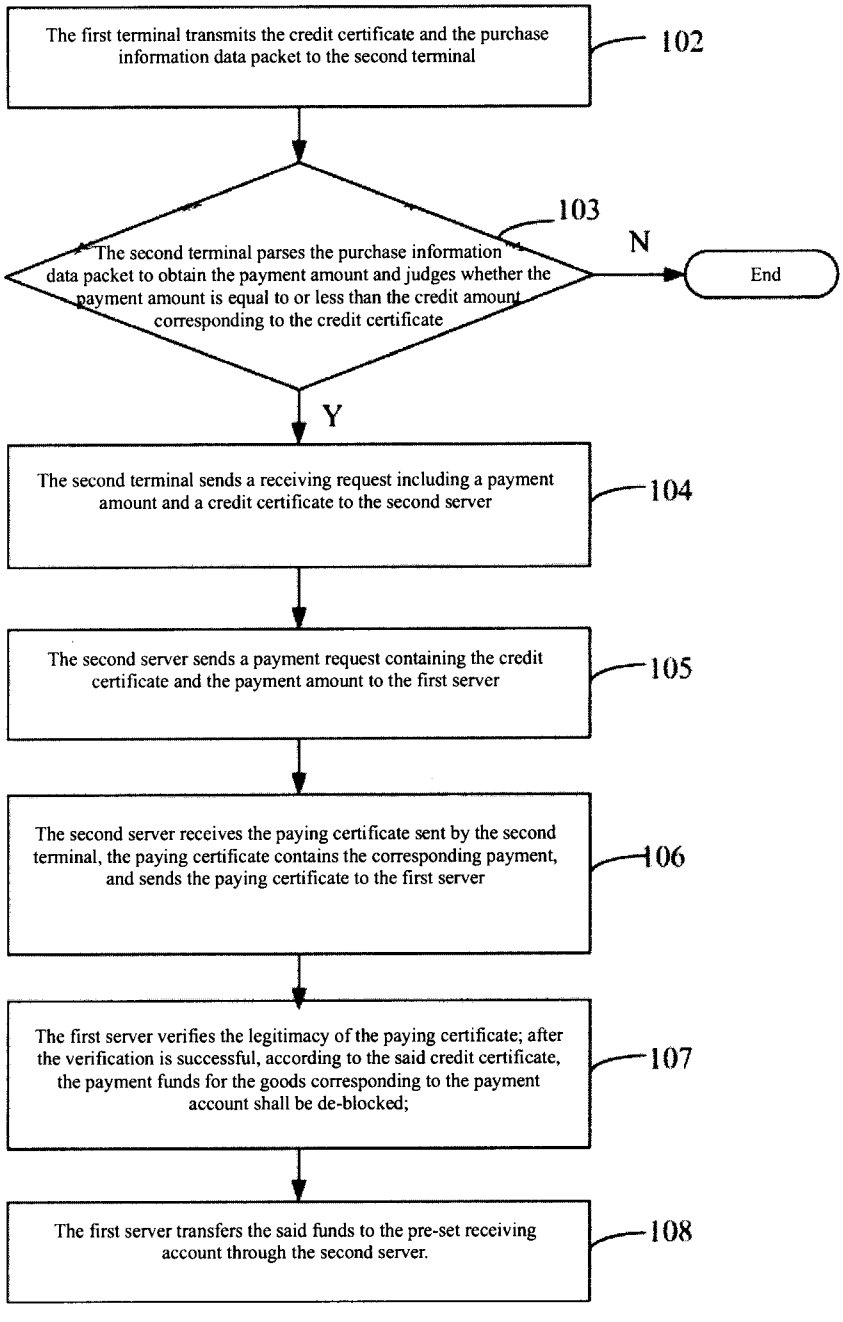
The first terminal transmits the credit certificate and the purchase information data packet to the second terminal
102
103
The second terminal parses the purchase information data packet to obtain the payment amount and judges whether the payment amount is equal to or less than the credit amount corresponding to the credit certificate
N
End
Y
The second terminal sends a receiving request including a payment amount and a credit certificate to the second server
104
The second server sends a payment request containing the credit certificate and the payment amount to the first server
105
The second server receives the paying certificate sent by the second terminal, the paying certificate contains the corresponding payment, and sends the paying certificate to the first server
106
The first server verifies the legitimacy of the paying certificate; after the verification is successful, according to the said credit certificate, the payment funds for the goods corresponding to the payment account shall be de-blocked;
107
The first server transfers the said funds to the pre-set receiving account through the second server.
108

Figure 1

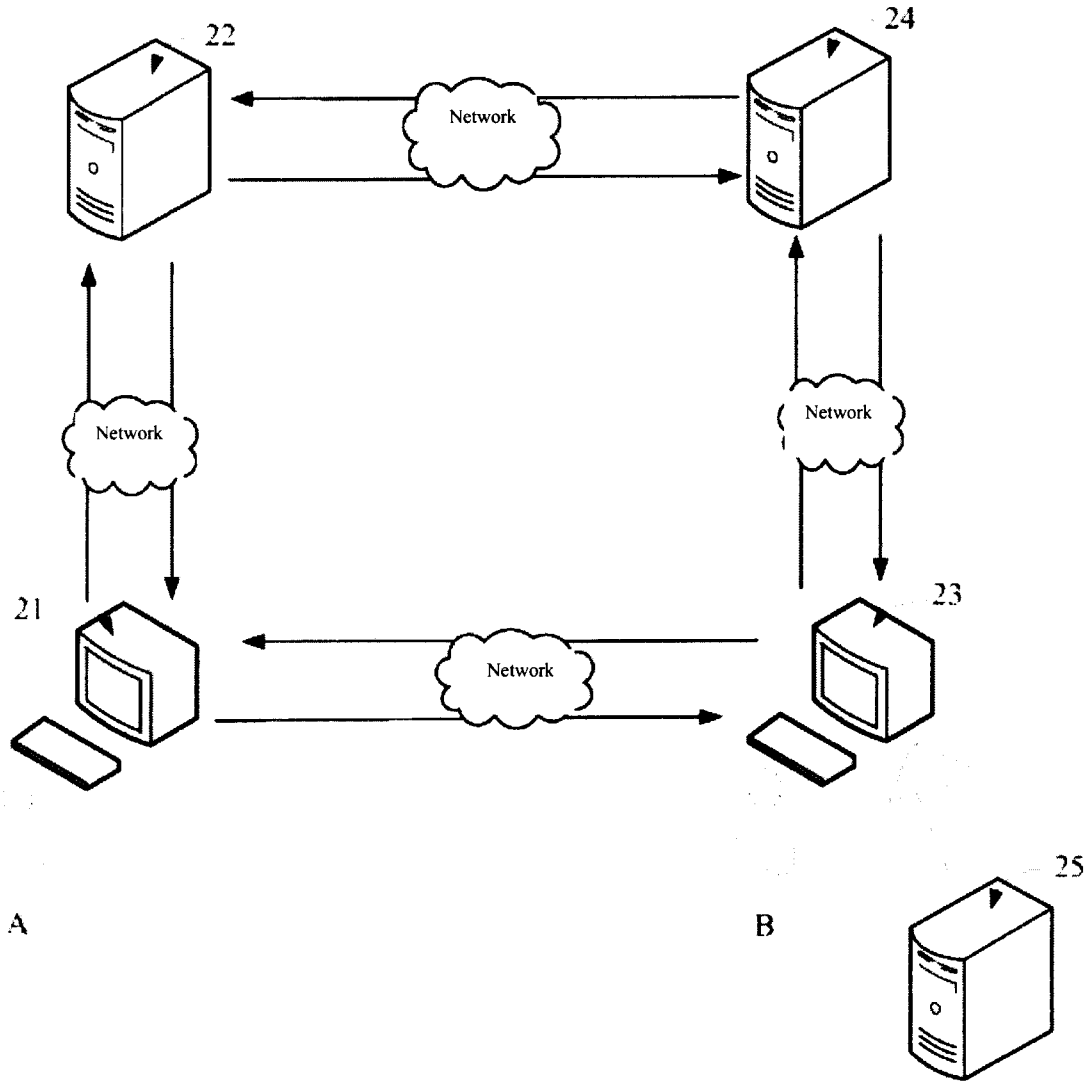

Figure 2

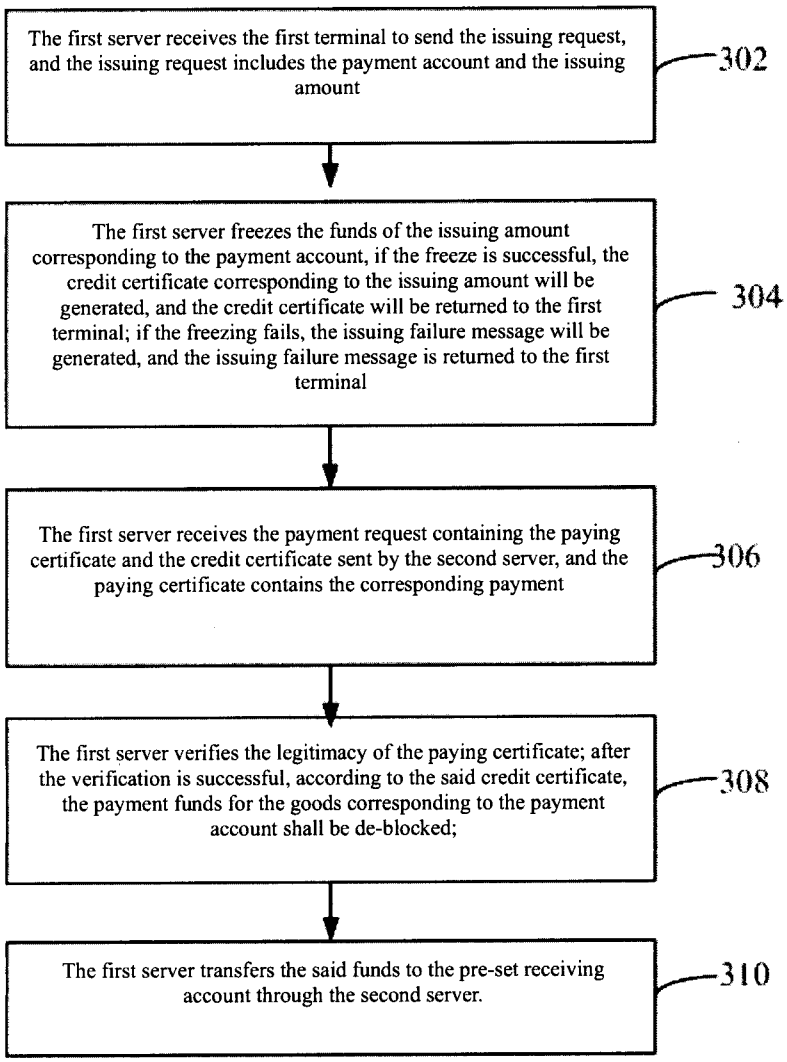
The first server receives the first terminal to send the issuing request, and the issuing request includes the payment account and the issuing amount
302
The first server freezes the funds of the issuing amount corresponding to the payment account, if the freeze is successful, the credit certificate corresponding to the issuing amount will be generated, and the credit certificate will be returned to the first terminal; if the freezing fails, the issuing failure message will be generated, and the issuing failure message is returned to the first terminal
304
The first server receives the payment request containing the paying certificate and the credit certificate sent by the second server, and the paying certificate contains the corresponding payment
306
The first server verifies the legitimacy of the paying certificate; after the verification is successful, according to the said credit certificate, the payment funds for the goods corresponding to the payment account shall be de-blocked;
308
The first server transfers the said funds to the pre-set receiving account through the second server.
310

Figure 3

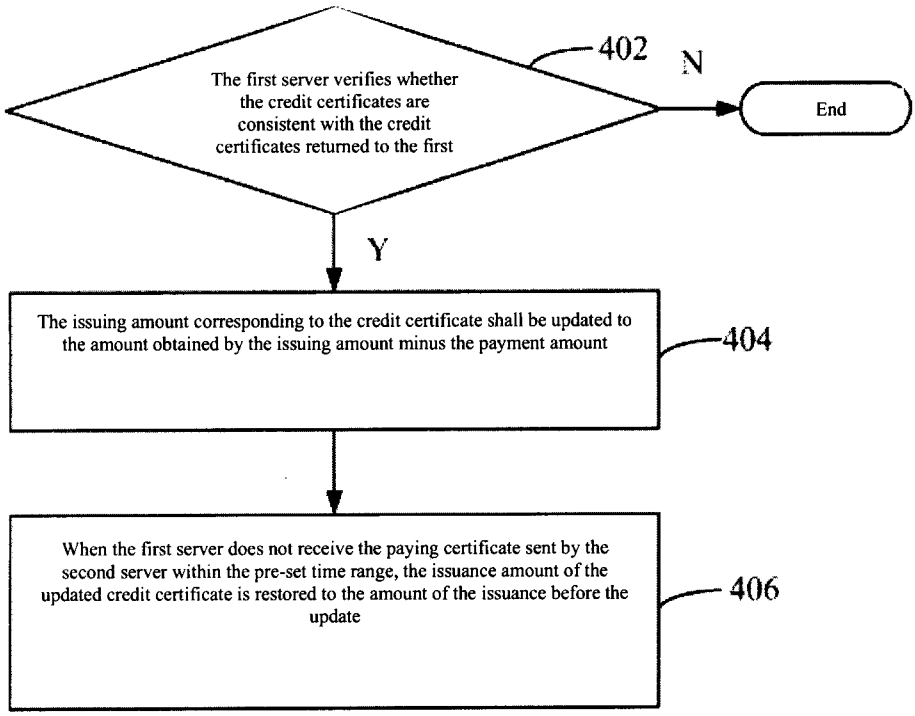

Figure 4

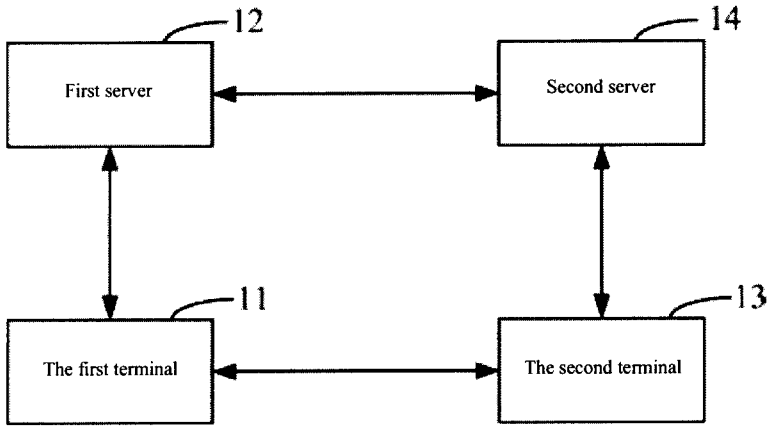

Figure 5