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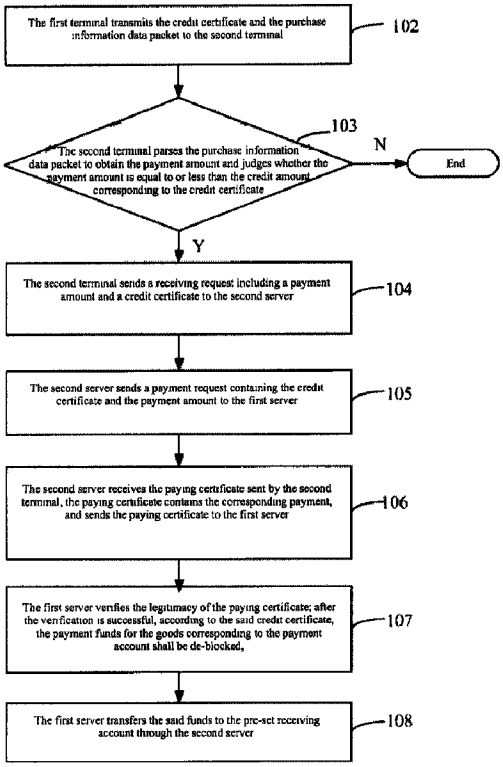
(54) **Titre : PROCEDE ET SYSTEME DE PAIEMENT DE TRANSACTION DE RESEAU**
(54) **Title: NETWORK TRANSACTION PAYMENT METHOD AND SYSTEM**



(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 closer and closer, and 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. 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 in which 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 will have already been paid to the third party payment company. Therefore, once the third-party payment company encounters difficulties, the payment side of the funds may fail to be guaranteed. In this situation, the receiving side (the seller) will have shipped the goods but the payment for goods will fail to be guaranteed, and so the traditional network payment method leads to a high incidence of network transaction risk of funds.

Summary of the invention

[0003] Based on the foregoing, it is necessary to provide a kind of network transaction payment method and system that can reduce the risk of network transactions 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;

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

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[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, the method further 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, the method further includes:

[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.

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[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, and 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 including 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, and if so, the credit certificate corresponding issuing amount will be updated to the amount of 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:

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[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, and 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 including 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 including 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 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.

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[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; the funds are not paid before the buyer corresponding to the first terminal completes the transaction, , and so 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; and

[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 verify 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 technical problem hereinabove identified, from the system level to ensure that buyers and sellers enjoy 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.

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[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 that 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 to the payment account of the seller 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

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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.

[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, 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 so, 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 transaction has failed, and the buyer 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, the second terminal further 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 corresponding to 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 credit will not be diverted.

[0067] In one example, on the right of Step 105, the method also includes: the first server verifies whether 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 to the amount of the issuing amount minus the payment amount.

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[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 will be entirely 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 update the corresponding credit certificate by the amount of the buyer to facilitate the next shopping, to avoid buyers disposing of all the money after the purchase of the credit certificate.

[0069] In one example, after the first server updates the issuing amount corresponding to the credit certificate to the amount of the issuing amount minus the payment amount, the method further 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 still other reasons. As the buyer has no obligation to pay the purchase price, in order not to affect the buyer's next shopping, the credit certificate corresponding to the amount of the amount of recovery is restored 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 including the corresponding payment, and sends the paying certificate to the first server.

[0073] In the actual network transaction process, the buyer to receive the goods and the seller to send the goods may be different, resulting in the amount of payment payable being different to the actual amount of payment. For example, the buyer in the seller's shop would buy five cups, but the buyer fails to sign for 2 of the cups, and so the paying certificates corresponding to the money should be for three cups instead of for 5 cups. 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

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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, further triggering the first terminal and transmitting 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 including:

[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 submit information that the goods have been signed 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 buyer needs to make the remaining payment by the generated paying certificates

[0080] The first server according to the logistics information of the goods in batches pays the credit corresponding to the funds. The goods will be divided into multiple stages of payment. The seller can be encouraged 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 to complete 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.

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[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 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 modified 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] In the above-mentioned network transaction payment method, the first terminal corresponding to the buyer has already obtained the credit certificate before purchasing the goods. The credit certificate provides a guarantee for the buyer to make payment for the goods, ensures seller's security, and makes the seller comfortable to make delivery. The funds of the payment account will not be paid before the first terminal corresponding to the buyer has completed the transaction. Accordingly, the security of the buyer may advantageously be guaranteed. The above method of network transaction payment is achieved without relying on a third-party payment platform and 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 be made in advance. In case the seller does not complete the delivery, the payment for goods can gain interest in the corresponding the payment account, which increases the funds and the funds security of the buyer.

[0087] As shown in Figure 2, in an embodiment, 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 same to 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 for 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

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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 includes the steps as below:

[0089] In Step 302, the first server receives an instruction from 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 freezes 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 sent to the first terminal. If the freezing fails, the issuing failure message generates, and the issuing failure message is sent 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 includes the corresponding payment for goods.

[0092] In Step 308, the first server verifies the legitimacy of the paying certificate, and after the verification is successful, according to the credit certificate, the funds for payment of the goods corresponding to the payment account are 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 including: 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 including the paying certificate and the credit certificate sent by the second server, further including:

[0096] In Step 402, the first server verifies whether the credit certificate corresponds to the credit certificate sent 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, the method further includes:

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[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 including: 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.

[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.

[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 includes 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.

[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 to receive the logistics information corresponding to the merchandise sent 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.

[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.

[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.

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[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 sent to the first terminal 11. If the freeze fails, then an issuing failure message is generated and sent 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 certificate sent 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 persons of ordinary skill in the art 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), 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 do not conflict, same should be considered to be in the scope of this description.

[0116] The above-described examples show only a few methods of execution of the present invention, and its descriptions are comparatively specific and detailed, but should not be construed as a limitation of the scope of the present invention. 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 modifications and improvements belong to the protected scope of the present invention. Accordingly, the scope of patent protection of the present invention should be measured by the appended claims.

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CLAIMS:

1. A method of monitoring the progress of a transaction, the steps comprising

generating a shopping order based on merchandise shopping information submitted by a buyer;

determining the logistics information stages for the shopping order;

calculating an incentive fee for completion of each of the logistics information stages, at least one of the logistics information stages comprising delivery of the shopping order;

receiving indication that a seller has completed at least one of the logistics information stages; and

paying the incentive fee to the seller upon receipt of the indication of completion of at least one of the logistics information stages.

2. The method of claim 1, wherein the incentive fee is updated on a credit certificate by the incentive fee minus a payment amount once each logistics information stage has been completed.

3. The method of claim 1, wherein the incentive fee is debited from a payment account once each logistics information stage has been completed.

4. The method of claim 1, wherein the shopping order is referenced by a string of specific serial numbers and is unique within a single online shopping platform

5. The method of claim 1, wherein the shopping order is referenced by string of specific serial numbers and is unique within a plurality of online shopping platforms.

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6. The method of claim 1, wherein the incentive fee is paid from a bank account.

7. The method of claim 1, wherein the incentive fee is paid from a bank account plus a credit overdraft limit.

8. The method of claim 1, wherein the merchandise shopping information is used to initiate a payment and settlement function.

9. The method of claim 8, wherein the payment and settlement function generates the shopping order.

10. The method of any of claims 8-9, wherein the payment and settlement function generates payment and settlement information.

11. The method of any of claims 8-10, wherein the payment and settlement information is sent in a data packet to purchase the shopping order.

12. The method of claim 11, wherein the data packet further comprises a withholding amount.

13. The method of claim 12, wherein the withholding amount is calculated from a value of the transaction.

14. The method of claim 13, wherein the transaction comprises multiple items, and total funds required to pay for the multiple items are calculated.

15. The method of any of claims 13-14, wherein the transaction comprises calculation for items that were selected to be purchased, but not authorized.

16. The method of any of claims 12-15, wherein the withholding amount further comprises a calculation of taxes.

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17. The method of any of claims 12-16, wherein the withholding amount comprises a calculation for exchange rate.

18. The method of any of claims 12-17, wherein if a price of the shopping order is less than frozen funds, to update a frozen fund amount to an amount equal to the difference between the price of the shopping order and the frozen funds.

19. The method of claim 18, wherein the withholding amount corresponds to the frozen funds.

20. The method of any of claims 18-19, wherein the frozen funds are a temporary network transaction process in a pre-set time range.

21. The method of any of claims 18-20, wherein the frozen funds are conditional on confirmation that the buyer has received the shopping order.

22. The method of any of claims 18-21, wherein receipt of the shopping order is confirmed by an indication from a logistics company.

23. The method of claims 22, wherein the indication comprises a signature of the buyer.

24. The method of any of claims 22-23, wherein the indication comprises a date stamp associated with the buyer signature.

25. The method of any of claims 22-24, wherein the indication comprises seller delivery information.

26. The method of any of claims 1-25, wherein the merchandise shopping information is encrypted.

27. The method of claim 26, wherein a MAC encryption algorithm is used.

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28. The method of any of claims 1-27, wherein at least one of account freezing and account debiting requests is encrypted.

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

30. The method of any of claims 1-29, wherein a purchase payment is made in batches.

31. The method of any one of claims 1-29, wherein purchase payment is divided into multiple stages of payment.

32. The method of any of claims 1-26, wherein at least information packet for the logistics information stages is encrypted.

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

34. The method of claim 1 further comprising:

    Cancelling further incentive fee amounts when notification of at least one of the logistics information stage completions is not received within a pre-set time range.

35. The method of any one of claims 1-34, wherein the method is implemented via a computer program.

36. The method of claim 35, wherein the computer program is stored on a computer-readable storage medium.

37. The method of claim 36, wherein the computer-readable storage medium is a magnetic disk.

38. The method of claim 36, wherein the computer-readable storage medium is an optical disk.

39. The method of claim 36, wherein the computer-readable storage medium is read-only memory.

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40. The method of claim 36, wherein the computer-readable storage medium is random access memory.

41. The method of claim 1, wherein paying the incentive fee to the seller upon receipt of the indication of completion of at least one of the logistics information stages is paid based on a pre-set condition.

42. A method of managing partial payments for incomplete deliveries, the method comprising:

generating a shopping order based on merchandise shopping information submitted by a buyer;

determining logistics information stages for the shopping order;

determining a logistics number for each logistics stage of the shopping order;

calculating a value for completion of each of the logistics numbers;

receiving indication that a seller has completed delivery of at least one of the logistics numbers;

paying the value to the seller upon receipt of the indication of completion of at least one of the logistics numbers.

43. The method of claim 42, wherein the merchandise shopping information is used to initiate a payment and settlement function.

44. The method of claim 43, wherein the payment and settlement function generates the shopping order.

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45. The method of any one of claims 43-44, wherein the payment and settlement function generates payment and settlement information.

46. The method of claim 45, wherein the payment and settlement information is sent in a data packet to purchase the shopping order.

47. The method of claim 46, wherein the data packet further comprises a withholding amount.

48. The method of claim 47, wherein the withholding amount is calculated from a value of the shopping order.

49. The method of claim 47, wherein the shopping order comprises multiple items, and total funds required to pay for the multiple items are calculated.

50. The method of any one of claims 48-49, wherein the shopping order comprises calculation for items that were selected to be purchased, but not authorized.

51. The method of any one of claims 47-50, wherein the withholding amount further comprises a calculation of taxes.

52. The method of any one of claims 47-51, wherein the withholding amount comprises a calculation for exchange rate.

53. The method of any one of claims 47-52, wherein if a price of the shopping order is less than frozen funds, to update a frozen fund amount to an amount equal to a difference between the price of the shopping order and the frozen funds.

54. The method of claim 53, wherein the withholding amount corresponds to the frozen funds.

55. The method of any one of claims 53-54, wherein the frozen funds are a temporary network transaction process in a pre-set time range.

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56. The method of any one of claims 53-55, wherein the frozen funds are conditional on confirmation that the buyer has received the logistics numbers.

57. The method of any one of claims 53-56, wherein receipt of the logistics numbers is confirmed by an indication from a logistics company.

58. The method of claim 57, wherein the indication comprises a signature of the buyer.

59. The method of claim 58, wherein the indication comprises a date stamp associated with the signature of the buyer.

60. The method of claim 57, wherein the indication comprises seller delivery information.

61. The method of any one of claims 46-47, wherein the data packet is encrypted.

62. The method of any one of claims 47-61, wherein at least one of account freezing and account debiting requests is encrypted.

63. The method of any one of claims 47-62, wherein a MAC encryption algorithm is used.

64. The method of any one of claims 42-63, wherein a purchase payment is made in batches.

65. The method of any one of claims 42-63, wherein purchase payment is divided into multiple stages of payment.

66. A method of minimizing capital outlay for a purchasing account, the method comprising

generating a shopping order based on merchandise shopping information;

determining shipping stages for the shopping order;

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calculating a value for completion of each of the shipping stages;

receiving indication that the seller has completed at least one of the shipping stages; and

paying the value associated with the completed shipping stage to the seller only upon receipt of the indication of the completion of each shipping stage.

67. The method of claim 66, wherein the merchandise shopping information is used to initiate a payment and settlement function.

68. The method of claim 67, wherein the payment and settlement function generates the shopping order.

69. The method of any one of claims 67-68, wherein the payment and settlement function generates payment and settlement information.

70. The method of claim 69, wherein the payment and settlement information is sent in a data packet to purchase the shopping order.

71. The method of claim 70, wherein the data packet further comprises a withholding amount.

72. The method of claim 71, wherein the withholding amount is calculated from a value of a transaction.

73. The method of claim 72, wherein the transaction comprises multiple items, and total funds required to pay for the items is calculated.

74. The method of any one of claims 72-73, wherein the transaction comprises calculation for items that were selected to be purchased, but not authorized.

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75. The method of any one of claims 71-74, wherein the withholding amount further comprises a calculation of taxes.

76. The method of any one of claims 71-75, wherein the withholding amount comprises a calculation for exchange rate.

77. The method of any one of claims 71-76, wherein if a price of the shopping order is less than frozen funds, to update a frozen fund amount to an amount equal to a difference between the price of the shopping order and the frozen funds.

78. The method of claim 77, wherein the withholding amount corresponds to the frozen funds.

79. The method of any of claims 77-78, wherein the frozen funds are a temporary network transaction process in a pre-set time range.

80. The method of any one of claims 77-79, wherein the frozen funds are conditional on confirmation that a buyer has received the shopping order.

81. The method of claim 80, wherein receipt of the shopping order is confirmed by an indication from a logistics company.

82. The method of claim 80, wherein partial receipt of the shopping order is confirmed by an indication from a logistics company.

83. The method of any one of claims 81-82, wherein failure of the buyer to sign for the shopping order is confirmed by an indication from a logistics company.

84. The method of any one of claims 81-82, wherein the indication comprises a signature of the buyer.

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85. The method of claim 84, wherein the indication comprises a date stamp associated with the signature of the buyer.

86. The method of any one of claims 81-85, wherein the indication comprises seller delivery information.

87. The method of any one of claims 70-71, wherein the data packet is encrypted.

88. The method of any one of claims 66-87, wherein a MAC encryption algorithm is used.

89. The method of any one of claims 66-88 , wherein at least one of account freezing and account debiting requests is encrypted.

90. The method of any one of claims 66-89, wherein purchase payment is made in batches.

91. The method of any one of claims 66-89, wherein purchase payment is divided into multiple stages of payment.

92. A method of tracking the completion of an online transaction the method comprising:

generating a shopping order based on merchandise shopping information submitted by a buyer;

determining the logistics information stages for the shopping order;

calculating an incentive fee for completion of each of the logistics information stages, at least one of the logistics information stages comprising delivery of the shopping order;

receiving indication that a seller has completed at least one of the logistics information stages; and

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paying the incentive fee to the seller upon receipt of the indication of completion of at least one of the logistics information stages.

93. The method of claim 92, wherein the merchandise shopping information is used to initiate a payment and settlement function.

94. The method of claim 93, wherein the payment and settlement function generates the shopping order.

95. The method of claim 93, wherein the payment and settlement function generates payment and settlement information.

96. The method of claim 95, wherein the payment and settlement information is sent in a data packet to purchase the merchandise.

97. The method of claim 96, wherein the data packet further comprises a withholding amount.

98. The method of claim 97, wherein the withholding amount is calculated from the value of the online transaction.

99. The method of claim 98, wherein the online transaction comprises multiple items, and total funds required to pay for the multiple items is calculated.

100. The method of any one of claims 98-99, wherein the online transaction comprises calculation for items that were selected to be purchased, but not authorized.

101. The method of any one of claims 97-100, wherein the withholding amount further comprises a calculation of taxes.

102. The method of any one of claims 97-101, wherein the withholding amount comprises a calculation for exchange rate.

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103. The method of any one of claims 97-102, wherein if a price of the shopping order is less than frozen funds, to update a frozen fund amount to an amount equal to a difference between the price of the shopping order and the frozen funds.

104. The method of claim 103, wherein the withholding amount corresponds to the frozen funds.

105. The method of claim 104, wherein the frozen funds are a temporary network transaction process in a pre-set time range.

106. The method of claim 104, wherein the frozen funds are conditional on confirmation that the buyer has received the shopping order.

107. The method of any one of claims 92-106, wherein receipt of the shopping order is confirmed by an indication from a logistics company.

108. The method of any one of claims 92-106, wherein partial receipt of the shopping order is confirmed by an indication from a logistics company.

109. The method of any one of claims 107-108, wherein failure of the buyer to sign for the shopping order is confirmed by the indication from a logistics company.

110. The method of any one of claims 92-109, wherein a paying certificate for the shopping order is adjusted to be based on the shopping order as received by the buyer.

111. The method of any one of claims 107-110, wherein the logistics confirmation comprises a signature of the buyer.

112. The method of any one of claims 107-111, wherein the logistics confirmation comprises a date stamp associated with the signature of the buyer.

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113. The method of any one of claims 107-112, wherein the logistics information comprises seller delivery information.

114. The method of any one of claims 96-97, wherein the data packet is encrypted.

115. The method of any one of claims 92-106, wherein at least one of account freezing and account debiting requests is encrypted.

116. The method of any one of claims 92-115, wherein a MAC encryption algorithm is used.

117. The method of any one of claims 92-116, wherein purchase payment is made in batches.

118. The method of claim 92-116, wherein purchase payment is divided into multiple stages of payment.

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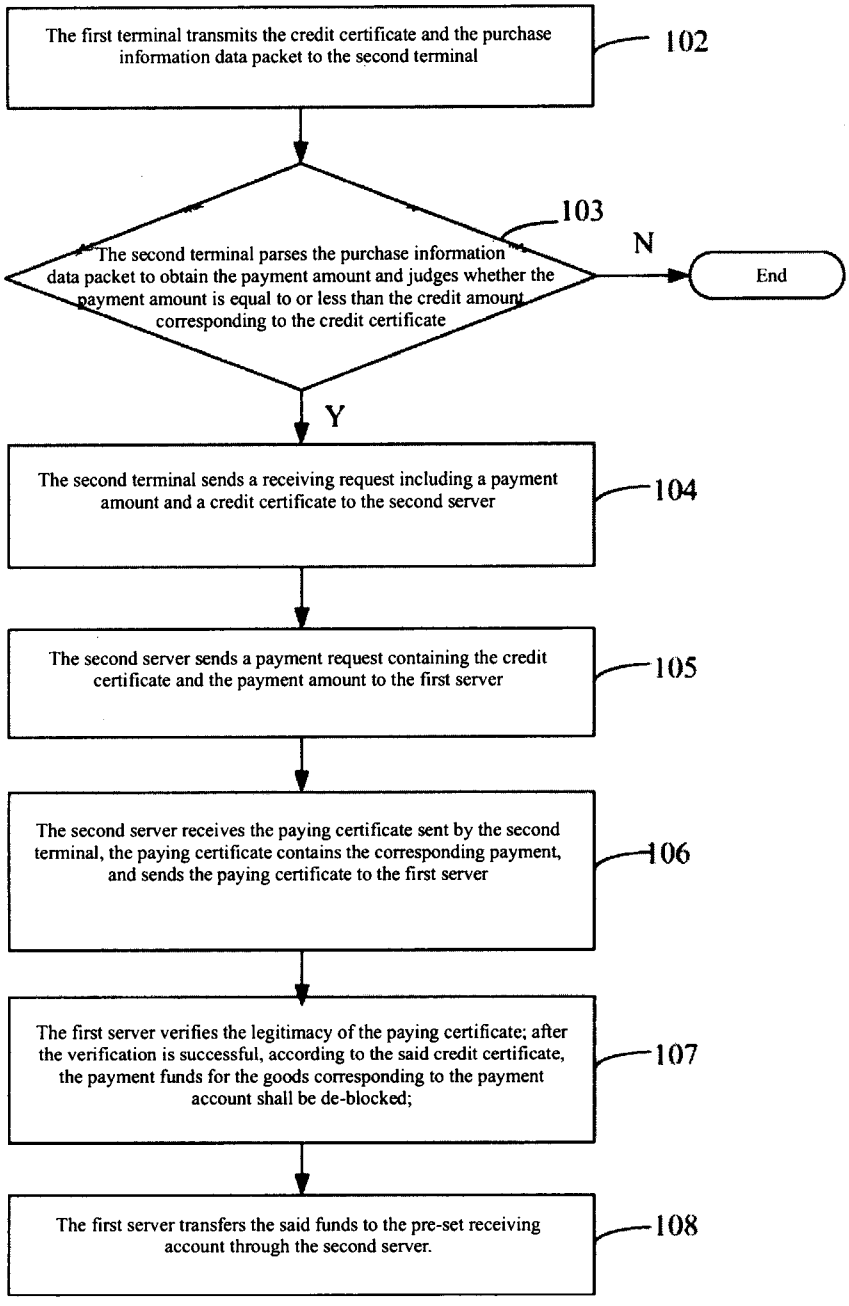

The first terminal transmits the credit certificate and the purchase information data packet to the second terminal
102
103
The second terminal parses the purchase information data packet to obtain the payment amount and judges whether the payment amount is equal to or less than the credit amount corresponding 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

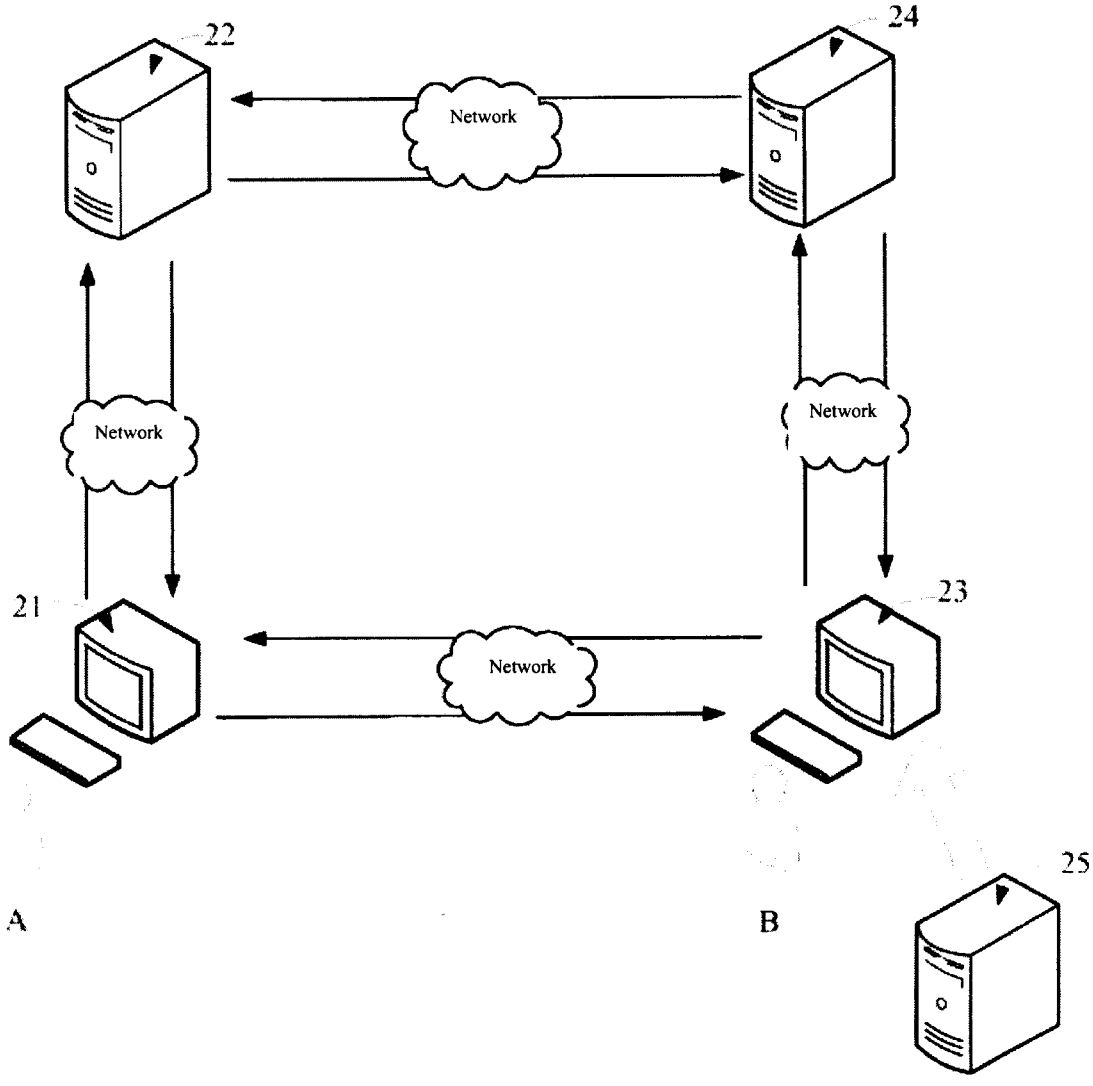


Figure 2

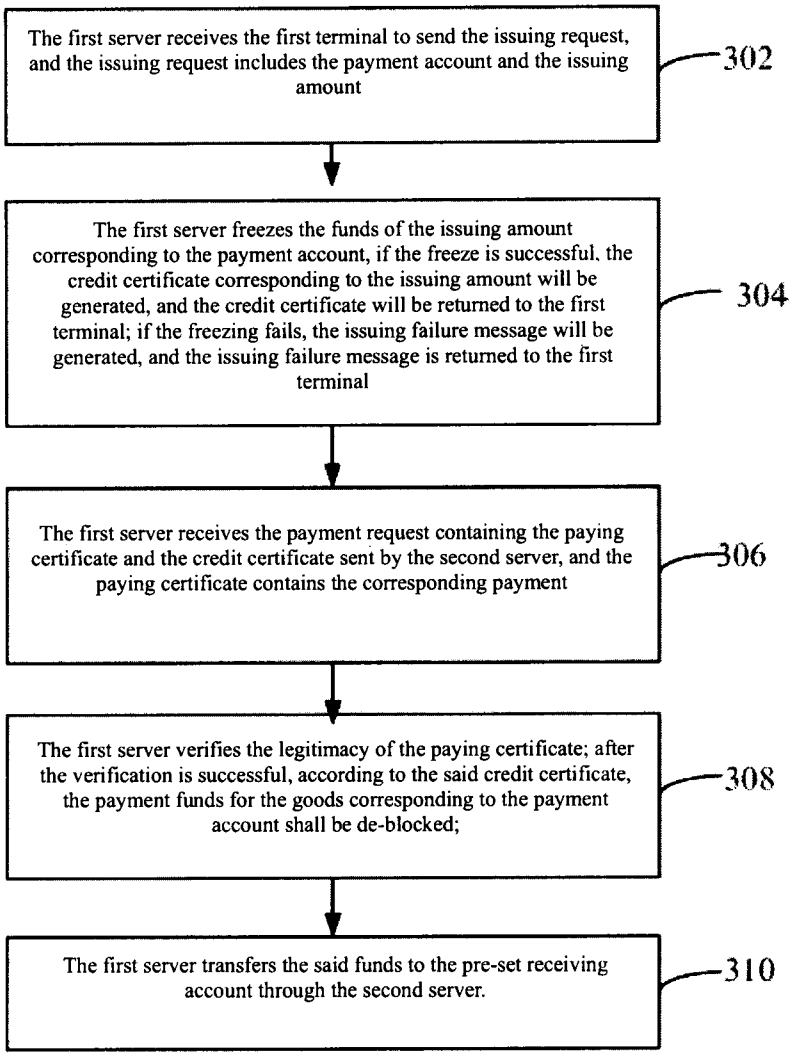

The first server receives the first terminal to send the issuing request, and the issuing request includes the payment account and the issuing amount
302
The first server freezes the funds of the issuing amount corresponding to the payment account, if the freeze is successful, the credit certificate 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

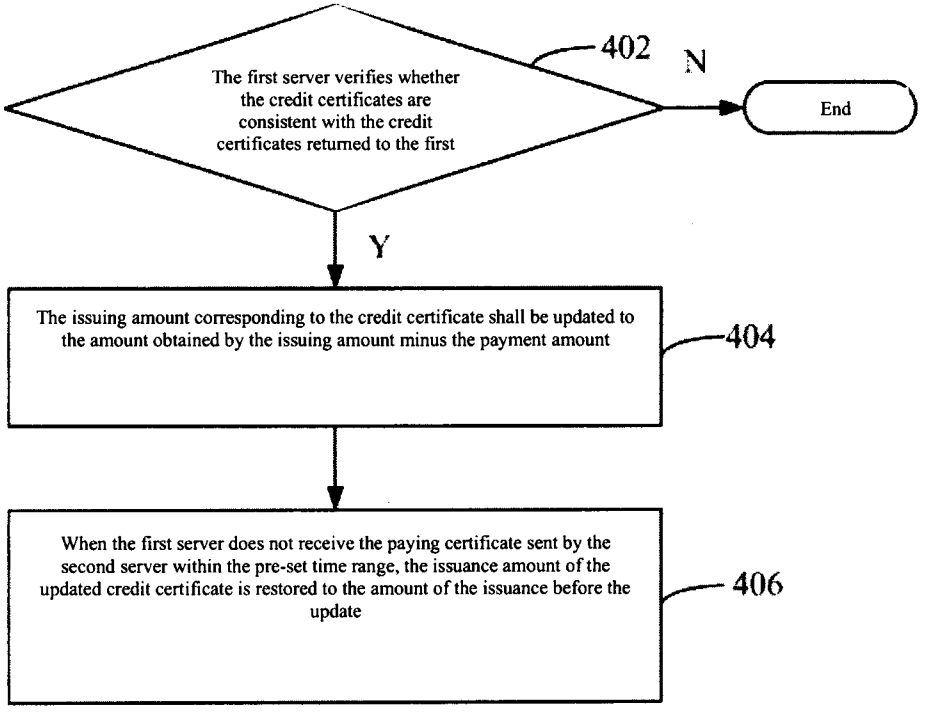


Figure 4

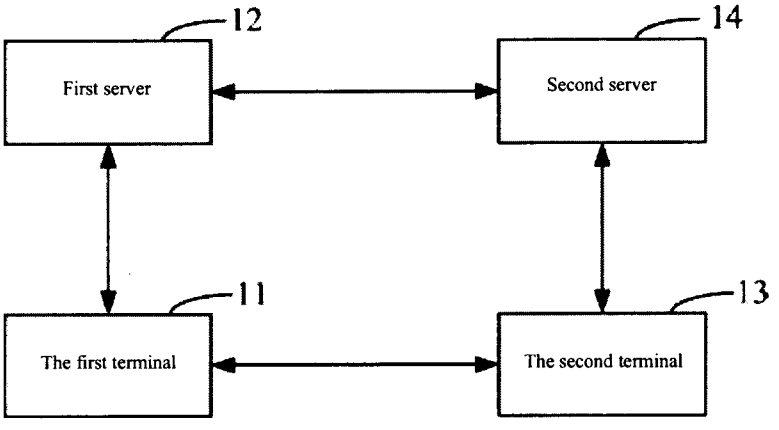
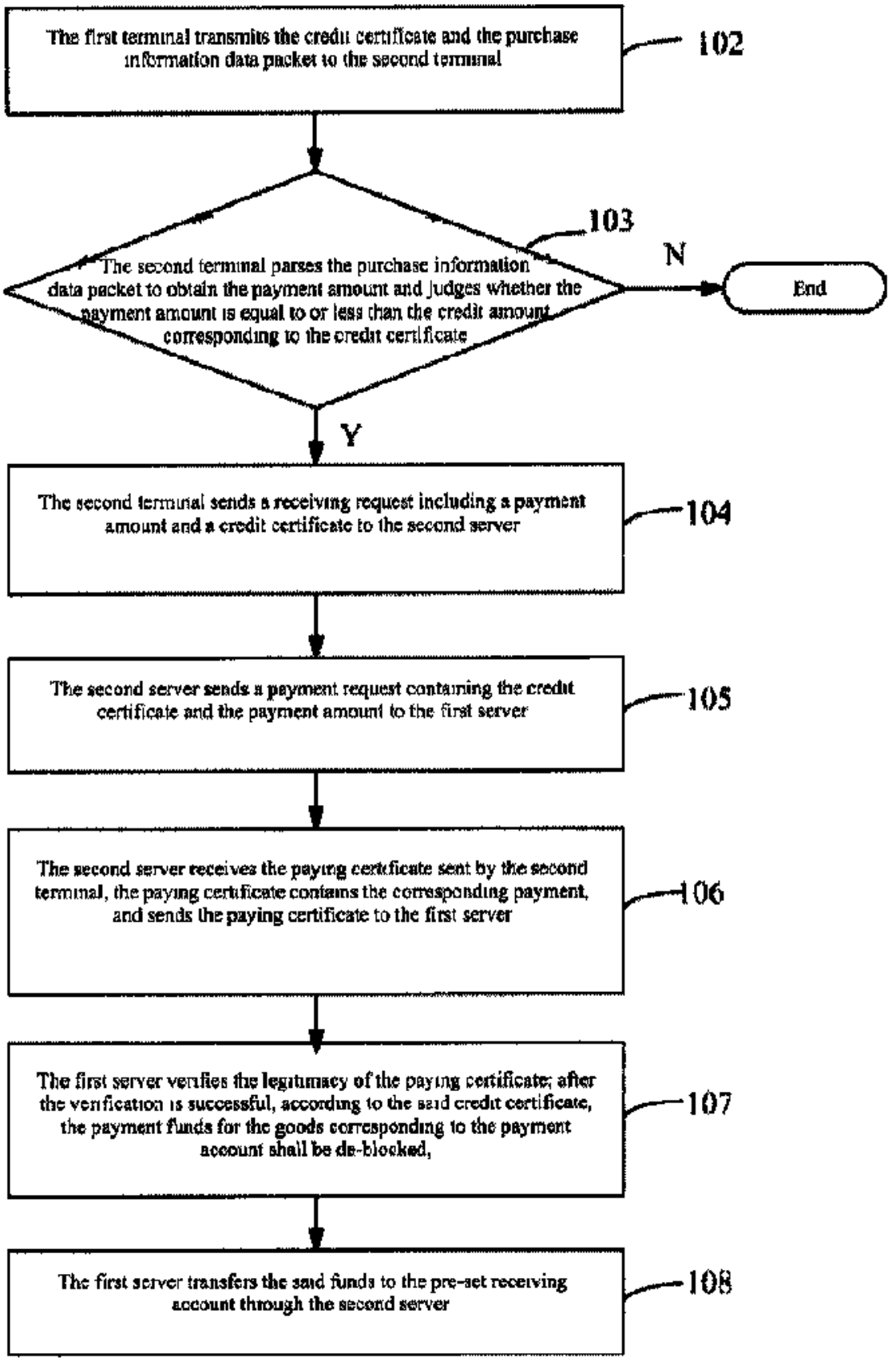


Figure 5


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