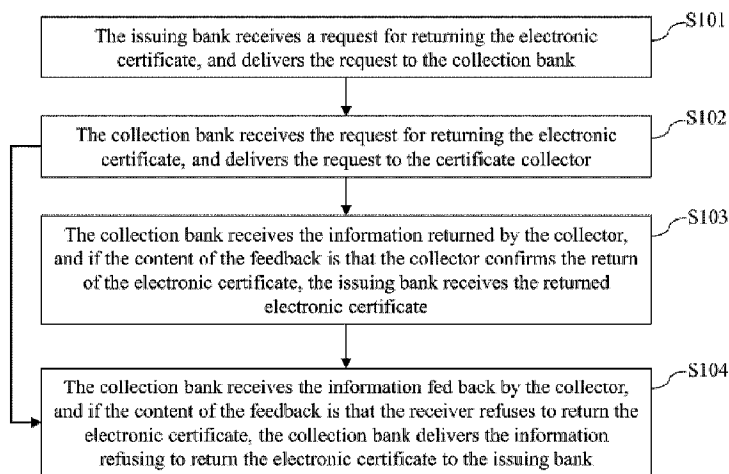




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(54) Titre : PROCÉDE POUR RENVOYER UN CERTIFICAT ELECTRONIQUE ET SYSTEME DE PAIEMENT ELECTRONIQUE
 (54) Title: METHOD FOR RETURNING ELECTRONIC CERTIFICATE AND ELECTRONIC PAYMENT SYSTEM



(57) **Abrégé/Abstract:**

Provided is a system for returning an electronic certificate comprising: a certificate issuing bank receives an electronic certificate return request and transmits the request to a certificate receiving bank; the certificate receiving bank receives the request and transmits the request to a certificate recipient; the certificate receiving bank receives feedback from the recipient, and if the feedback information is to return an electronic certificate, then the certificate issuing bank receives the electronic certificate returned by the certificate receiving bank. When the electronic certificate is received by the recipient, a certificate issuer may apply for the electronic certificate to be returned, and if the certificate recipient agrees, then the system returns the electronic certificate to the certificate issuer according to details negotiated by both parties; both parties can reach an agreement through negotiation at anytime to return the electronic certificate, simplifying operation and facilitating both parties to the transaction.

Abstract

Provided is a system for returning an electronic certificate comprising: a certificate issuing bank receives an electronic certificate return request and transmits the request to a certificate receiving bank; the certificate receiving bank receives the request and transmits the request to a certificate recipient; the certificate receiving bank receives feedback from the recipient, and if the feedback information is to return an electronic certificate, then the certificate issuing bank receives the electronic certificate returned by the certificate receiving bank. When the electronic certificate is received by the recipient, a certificate issuer may apply for the electronic certificate to be returned, and if the certificate recipient agrees, then the system returns the electronic certificate to the certificate issuer according to details negotiated by both parties; both parties can reach an agreement through negotiation at anytime to return the electronic certificate, simplifying operation and facilitating both parties to the transaction.

Method For Returning Electronic Certificate And Electronic Payment System

Technical Field

- [0001] The present invention relates to the field of electronic commerce, in particular to an electronic certificate return method and an electronic payment system.
- [0002]
- [0003] Background Technology
- [0004] In the process of E-commerce transactions, people through the third-party payment tools or online banking payment to complete the transaction, after the transaction is completed, if the buyer wants to get the payment funds again, he can only get it through the return application or private consultation with the merchant, the two methods are relatively more complicated.
- [0005] In today's daily activities, transfers usually arrive in real time. If users deliver wrong accounts, they can't get money back in time, so they need to remit their money to their accounts, which makes it hard to ensure the safety of users' funds.
- [0006]
- [0007] Summary of the Invention
- [0008] The present invention provides a method for returning an electronic certificate, including: the issuing bank receives the returned electronic certificate request, delivering the request to a collection bank; and collection the electronic certificate request by the issuing bank, the request is delivered to the receiver; the receiver receives information fed back by the receiver, and if the content of the feedback information is that the receiver confirms the return of the electronic certificate, the issuing bank receives the electronic certificate returned by the collection bank.
- [0009] The present invention provides an electronic certificate return method, including:
- [0010] The issuing bank receives a request for returning the electronic certificate, and delivers the request to the collection bank;
- [0011] The collection bank receives the request for returning the electronic certificate, and delivers the request to the certificate collector.
- [0012] The collection bank receives the information returned by the collector, and if the content of the feedback is that the collector confirms the return of the electronic certificate, the issuing bank receives the returned electronic certificate.
- [0013] The present invention provides an issuing bank information processing method, including:

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- [0014] The issuing bank receives a request for returning the electronic certificate, and delivers the request to the collection bank;
- [0015] The issuing bank receives the returned electronic certificate.
- [0016] The present invention provides an issuing bank information processing method, including:
- [0017] The collection bank receives the request for returning the electronic certificate, and delivers the request to the collector;
- [0018] The collection bank receives the feedback information of determining to return the electronic certificate or refuse to return the electronic certificate, and delivers the feedback information to the issuing bank.
- [0019] The present invention provides an electronic payment system, including an issuing bank server and a receiving bank server:
- [0020] The issuing bank server includes:
- [0021] The issuing bank terminal withdrawal request collection device is used to receive the return electronic certificate request and receive the returned electronic certificate;
- [0022] An issuing device is used to deliver the returned electronic certificate request to the collection bank.
- [0023] The collecting terminal server includes:
- [0024] The collection device is used for collection the returned electronic certificate request.
- [0025] A collection terminal request delivering device is used to deliver the returned electronic certificate request to the collector.
- [0026] The collection bank terminal feedback information processing device is used for collection the feedback information for confirming the return of the electronic certificate and returning the electronic certificate to the issuing bank.
- [0027] The present invention provides an issuing bank server, including:
- [0028] The issuing bank terminal withdrawal request collection device is used to receive the return electronic certificate request and receive the returned electronic certificate;
- [0029] An issuing device is used to deliver the returned electronic certificate request to the collection bank.
- [0030] The present invention provides a collecting bank terminal server, including:
- [0031] The collection device is used for collection the returned electronic certificate request.
- [0032] A collection terminal request delivering device is used to deliver the returned electronic certificate request to the collector.
- [0033] The collection bank terminal feedback information processing device is used to receive the feedback information for confirming the return of the electronic certificate, and deliver the feedback information to the issuing bank.

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- [0034] According to the above example, after collection the certificate, the issuer may apply to the certificate collector to return the electronic certificate. If the certificate collector refuses to return the electronic certificate, the system returns the electronic certificate to the issuer according to the negotiation contents of the two parties. The two parties can return electronic certificate at any time through negotiation, which simplifies the operation and facilitates both parties.
- [0035]
- [0036] Brief Description
- [0037] Figure 1 is a flowchart of a first example of a method for withdrawing an electronic certificate according to the present invention;
- [0038] Figure 2 is a flowchart of a method for processing information of an issuing bank according to a first example of the present invention;
- [0039] Figure 3 is a flow chart of a first example of a receiving bank information processing method of the present invention;
- [0040] Figure 4 is a schematic structural view of an electronic payment system of the first example of the present invention;
- [0041] Figure 5 is a schematic structural diagram of a first example of the issuing bank server according to the present invention;
- [0042] Figure 6 is a schematic structural diagram of a collection issuing bank server according to the first example.
- [0043]
- [0044] Description of the Preferred Examples
- [0045] In order to explain on the technical content, construction characteristics, the purpose and effect of the invention, the following combination of the attached drawings and the embodiment of the invention are explained in detail.
- [0046] In this example of the present invention, after collection the certificate, the issuer may apply to the certificate collector to return the electronic certificate. If the certificate collector refuses to return the electronic certificate, the system returns the electronic certificate to the issuer according to the negotiation contents of the two parties.
- [0047] The following definitions of terms are used to explain the basic meaning of the related terms in the examples of the present invention, but the actual meaning is not limited to the following definitions, there should be a reasonable extension.
- [0048] Fund freezing: the issuing bank freezes the amount of the account in order to generate electronic certificate according to the issuing request of the issuer. The amount of the frozen amount can be all funds or part of the funds, or the credit limit of the account (credit

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card amount), or the combination of funds and credit limits. The frozen funds are still in the user's account, just freeze their state of control.

- [0049] Issuer: apply for the establishment of electronic certificate users.
- [0050] Issuing Bank: According to the issuer to open an electronic certificate bank.
- [0051] Electronic certificate: it refers to the bank, in accordance with the application of the opening issuing, freeze the funds or use the credit line and open it in the name of the bank, and commit to make the payment certificate of electronic credit commitment in accordance with the agreed conditions.
- [0052] Credit Limit: it refers to the bank credit limit that is controlled by the user's account.
- [0053] collection Bank: The bank collection the electronic certificate is entrusted by the receivers.
- [0054] Receivers: The user receiving electronic certificate.
- [0055] Bank server: bank electronic certificate business server system.
- [0056] Client system: Electronic certificate client system
- [0057] As shown in Figure 1, which is a flowchart of a method for returning an electronic certificate according to the present invention includes:
- [0058] S101, the issuing bank receives a request for returning the electronic certificate, and delivers the request to the collection bank;
- [0059] The returned electronic certificate request from the issuer;
- [0060] S102: the collection bank receives a request for returning the electronic certificate, and delivers the request to the certificate collector.
- [0061] S103. The collection bank receives the information fed back by the collector, and if the content of the feedback information indicates that the collector determines to return the electronic certificate, the issuing bank receives the returned electronic certificate.
- [0062] S104. The collection bank receives the information fed back by the collector, and if the content of the feedback is that the receiver refuses to return the electronic certificate, the collection bank delivers the information refusing to return the electronic certificate to the issuing bank.
- [0063] According to the above technical solution, after collection the certificate, the issuer may apply to the certificate collector to return the electronic certificate. If the certificate collector refuses to return the electronic certificate, the system returns the electronic certificate to the issuer according to the negotiation contents of the two parties. The two parties can return electronic certificate at any time through negotiation, which simplifies the operation and facilitates both parties. In some cases, the issuer may remit the electronic certificate, re-select an account, or re-set the remittance amount by negotiating with the other party or reposting the wrong amount.

- [0064] In this example, the issuing bank delivers the request for returning the electronic certificate to the collector for confirmation. In fact, the collecting bank may also deliver the request for returning the electronic certificate to the collector for confirmation instead of directly return of the electronic certificate operation.
- [0065] In this example, the issuer initiates a request for returning the electronic certificate through the issuing bank. In fact, the entity that initiated the request for returning the electronic certificate may also be another subject, for example:
- [0066] 1, In this case, the collection bank may deliver the request of the electronic certificate back to the collector for confirmation, or it may not be delivered to the collector for confirmation.
- [0067] 2, collection bank initiated, this situation is usually pre-set some conditions, when these conditions are satisfied, it can be concluded that the transaction cannot be completed, and then the operation of electronic certificate can be returned automatically. In this case, the collection bank may deliver back the request of electronic certificate to the collector for confirmation, or it may not be delivered to the collector for confirmation.
- [0068] As shown in Figure 2, which is a flowchart of Example 1 of an information processing method for an issuing bank according to the present invention includes:
- [0069] S201, the issuing bank receives a request for returning the electronic certificate, and delivers the request to the collection bank;
- [0070] The returned electronic certificate request comes from the issuer; after collection the request, the collection bank will forward the request to the collector and request the certificate collector to provide feedback;
- [0071] S202, the issuing bank receives the returned electronic certificate.
- [0072] As shown in Figure 3, which is a flowchart of Example 1 of an information processing method for an issuing bank according to the present invention includes:
- [0073] S301, the collection bank receives a request for returning the electronic certificate, and delivers the request to the certificate collector;
- [0074] The returned electronic certificate request comes from the issuing bank that receives the electronic certificate return request from the issuer;
- [0075] S302: the collection bank receives the feedback information of determining to return the electronic certificate or refuse to return the electronic certificate, and delivers the feedback information to the issuing bank.
- [0076] The feedback information comes from the collector.
- [0077] Figure 4 is a schematic structural diagram of Example 1 of an electronic payment system according to the present invention, which includes an issuing bank server 41 and a

receiving bank server 42:

- [0078] The issuing bank server 41 includes:
- [0079] The issuing bank terminal withdrawal request collection device 411 is used to receive the return electronic certificate request and receive the returned electronic certificate;
- [0080] An issuing device 412 is used to deliver the returned electronic certificate request to the collection bank.
- [0081] The receipt bank server 42 includes:
- [0082] The collection device 421 is used for collection the returned electronic certificate request.
- [0083] A collection terminal request 422 delivering device is used to deliver the returned electronic certificate request to the collector.
- [0084] The collection bank terminal feedback information processing device 423 is used for collection the feedback information for confirming the return of the electronic certificate and returning the electronic certificate to the issuing bank.
- [0085] In this example, the issuing bank terminal withdrawal request delivering unit 422 delivers a request for returning the electronic certificate to the collector for confirmation. Actually, the collector terminal withdrawal request delivering unit 422 may not return electronic certificate request delivered to the recipient to confirm but directly to the subsequent return of the electronic certificate operation.
- [0086] In this example, the issuer initiates a request for returning the electronic certificate through the issuing bank. In fact, the entity that initiated the request for returning the electronic certificate may also be another subject, for example:
- [0087] 1, In this case, the collection bank may deliver the request of the electronic certificate back to the collector for confirmation, or it may not be delivered to the collector for confirmation.
- [0088] 2, collection bank initiated, this situation is usually pre-set some conditions, when these conditions are satisfied, it can be concluded that the transaction cannot be completed, and then the operation of electronic certificate can be returned automatically. In this case, the collection bank may deliver back the request of electronic certificate to the collector for confirmation, or it may not be delivered to the collector for confirmation.
- [0089] As shown in Figure 5, which is a schematic structural diagram of Example 1 of an issuing bank server, which includes:
- [0090] The issuing bank terminal withdrawal request collection device 411 is used to receive the return electronic certificate request and receive the returned electronic certificate;
- [0091] An issuing device 412 is used to deliver the returned electronic certificate request to the collection bank.

[0092] As shown in Figure 6, which is a schematic structural diagram of Example 1 of a collecting bank server, which includes:

[0093] The collection device 421 is used for collection the returned electronic certificate request.

[0094] A collection terminal request 422 delivering device is used to deliver the returned electronic certificate request to the collector.

[0095] The collection bank terminal feedback information processing device 603 is used to receive the feedback information for confirming the return of the electronic certificate, and deliver the feedback information to the issuing bank.

[0096] According to the above technical solutions and examples provided by the present invention, it can be seen that through the various technical solutions and examples of the present invention, after collection the certificate, the issuer may apply to the certificate collector to return the electronic certificate. If the certificate collector refuses to return the electronic certificate, the system returns the electronic certificate to the issuer according to the negotiation contents of the two parties. The two parties can return electronic certificate at any time through negotiation, which simplifies the operation and facilitates both parties. It may be understood by those skilled in the art that all or part of the steps of the various methods in the foregoing examples may be implemented by a program instructing relevant hardware. The program may be stored in a computer-readable storage medium, and the storage medium may include: a read-only memory, random access memory, magnetic disk or optical disk, etc.

[0097] The above is only an example of the present invention and is not intended to limit the scope of the invention as a matter of limitation, either by way of equivalent construction or equivalent process transformation using the present specification and the accompanying drawings, directly or indirectly used in other related technical fields, which are included in the scope of the patent protection of the present invention.

Claims:

1. A computer implemented system for returning electronic certificate in an electronic transaction, the system comprising:

a bank server for issuing electronic certificate includes:

a device for receiving request in an issuing bank terminal configured to receive a request for returning electronic certificate and a returned electronic certificate respectively; and

a device for delivering request in the issuing bank terminal configured to deliver request for returning electronic certificate to a bank server for receiving electronic certificate, to negotiate withdrawal of the electronic certificate;

the bank server for receiving electronic certificate includes:

a device for receiving request in a receiving bank terminal configured to receive the request for returning electronic certificate from the bank server for issuing electronic certificate;

a device for delivering request in a receiving bank terminal configured to deliver the request for returning the electronic certificate to a recipient;

a device for process feedback information in a receiving bank terminal configured to receive feedback information sent by the recipient to return the electronic certificate to the bank server for receiving electronic certificate, wherein the feedback information includes an approval for the request from the recipient; and

wherein the electronic certificate is the bank server commitment to pay a frozen funds amount accordance with agreed conditions.

2. The system of claim 1, wherein the device for process feedback information in a receiving bank terminal is further configured to receive feedback information with a refusal for the request sent by the recipient to deliver a message for refusing to return the electronic certificate to the bank server for receiving electronic certificate.

3. A computer implemented method for returning electronic certificate in an electronic transaction, the method comprising:

a bank server for issuing electronic certificate delivers a request for returning electronic certificate to a bank server for receiving electronic certificate when receiving the request from a user for withdrawing the electronic certificate;

the bank server for receiving electronic certificate delivers the request for returning the electronic certificate to a recipient when receiving the request; and

the bank server for receiving electronic certificate receives feedback information sent by the recipient to determine whether the content of the feedback information is that the request is approved;

the bank server for issuing electronic certificate receives the electronic certificate returned by the bank server for receiving electronic certificate when the request is approved by the recipient according to the feedback information; and

wherein the electronic certificate is the bank server commitment to pay a frozen funds amount accordance with agreed conditions.

4. The method of claim 3 further includes that the bank server for issuing electronic certificate receives a message for refusing to return the electronic certificate from the bank server for receiving electronic certificate, when the request is refused by the recipient according the feedback information.

5. An information process method for an issuing bank, applied in a bank server for issuing electronic certificate, the method comprising:

delivering a request for returning the electronic certificate to a bank server for receiving electronic certificate when receiving the request from a user for withdrawing the electronic certificate;

receiving the electronic certificate returned by the bank server for receiving electronic certificate when the request is approved by the recipient according to feedback information; and

wherein the electronic certificate is the bank server commitment to pay a frozen funds amount accordance with agreed conditions.

6. The method of claim 5 further includes receiving a message for refusing to return the electronic certificate from the bank server for receiving electronic certificate, when the request is refused by the recipient according the feedback information.

7. An information process method for a receiving bank, applied in a bank server for receiving electronic certificate, the method comprising:

delivering a request for returning the electronic certificate to a recipient when receiving the request from a bank server for issuing electronic certificate;

receiving feedback information sent by the recipient to return the electronic certificate to the bank server for issuing electronic certificate when the request is approved by the recipient according to the feedback information; and

wherein the electronic certificate is the bank server commitment to pay a frozen funds amount accordance with agreed conditions.

8. The method of claim 7 further includes deliver a message for refusing to return the electronic certificate to the bank server for issuing electronic certificate, when the request is refused by the recipient according the feedback information.

9. A bank server for issuing electronic certificate, the server comprising:

a device for receiving a request in an issuing bank terminal configured to receive a request for returning an electronic certificate and a returned electronic certificate respectively;

a device for delivering a request in the issuing bank terminal configured to deliver the request for returning the electronic certificate to a bank server for receiving the electronic certificate; and

wherein the electronic certificate is the bank server commitment to pay a frozen funds amount accordance with agreed conditions.

10. The server of claim 9, wherein the device for receiving request in the issuing bank terminal is further configured to receive the electronic certificate returned by the bank server for receiving electronic certificate, when the request is approved by the recipient according to feedback information.

11. The server of claim 9, wherein the device for receiving request in the issuing bank terminal configured to receive a message for refusing to return the electronic certificate from the bank server for receiving electronic certificate, when the request is refused by the recipient according to the feedback information.

12. A bank server for receiving electronic certificate comprising:

a device for receiving request in a receiving bank terminal configured to receive a request for returning electronic certificate from a bank server for issuing electronic certificate;

a device for delivering request in a receiving bank terminal configured to deliver the request for returning the electronic certificate to a recipient;

a device for process feedback information in a receiving bank terminal configured to receive feedback information sent by the recipient to return the electronic certificate to the bank server for receiving electronic certificate, wherein the feedback information includes an approval for the request from the recipient; and

wherein the electronic certificate is the bank server commitment to pay a frozen funds amount accordance with agreed conditions.

13. The server of claim 12, wherein the device for processing feedback information in a receiving bank terminal is further configured to deliver a message for refusing to return the electronic certificate to the bank server for issuing electronic certificate, when the request is refused by the recipient according the feedback information.

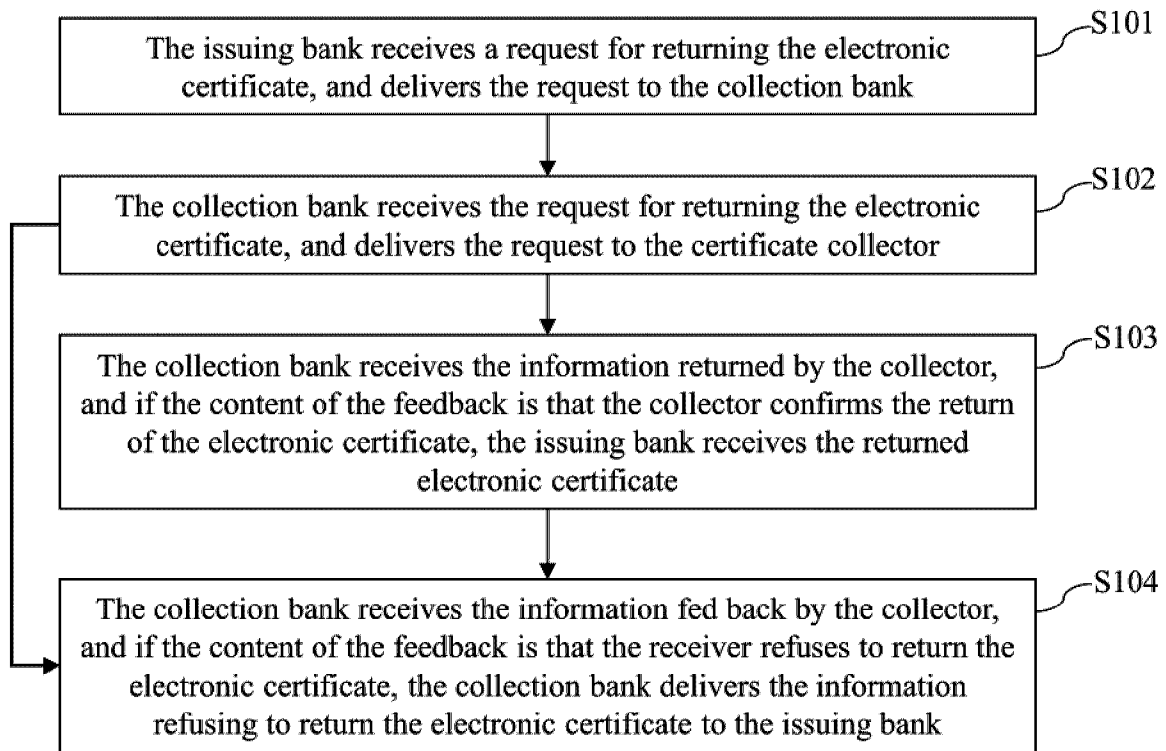


Figure 1

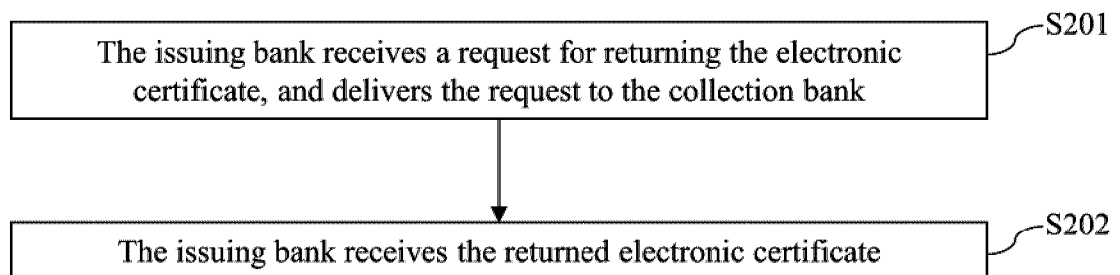


Figure 2

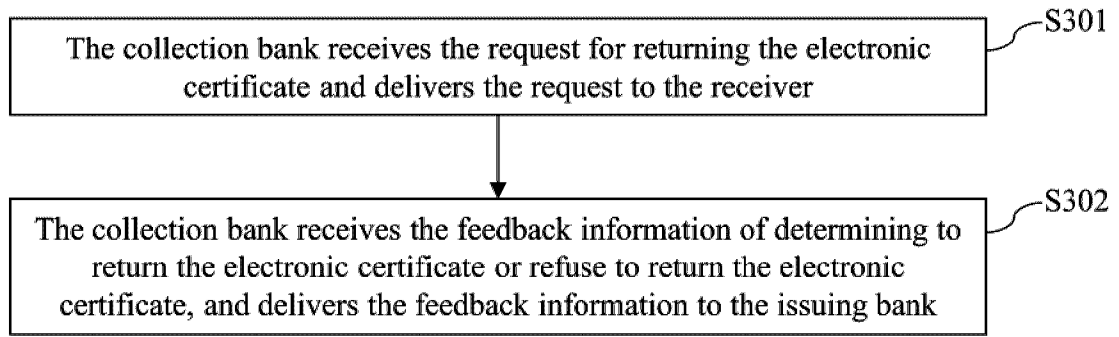


Figure 3

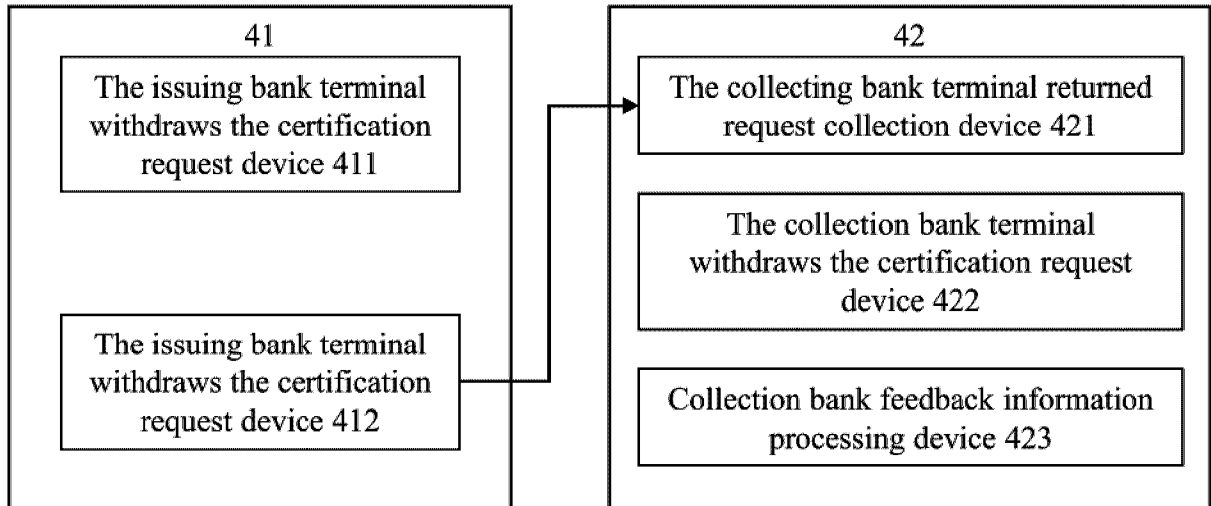


Figure 4

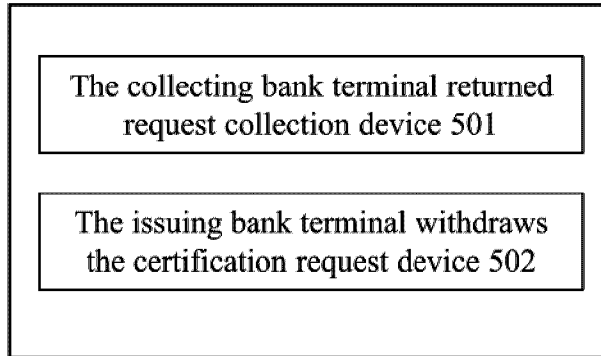


Figure 5

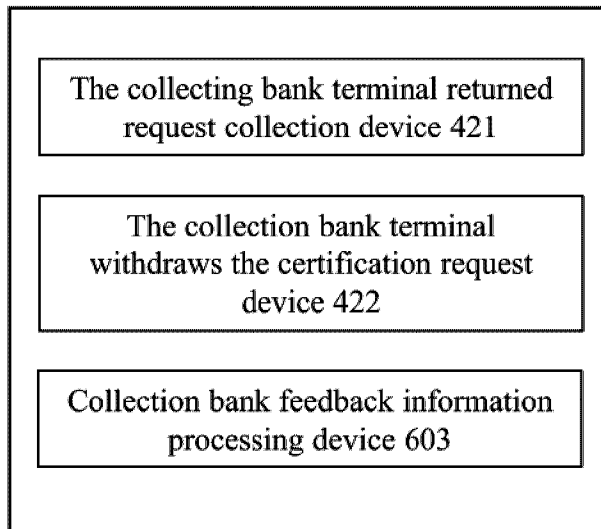


Figure 6

