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Innovation, Science and Economic Development Canada
Canadian Intellectual Property Office

CA 3141034 A1 2017/01/26

(21) 3 141 034

(12) DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION

(13) A1

(22) Date de dépôt/Filing Date: 2015/07/21

(41) Mise à la disp. pub./Open to Public Insp.: 2017/01/26

(62) Demande originale/Original Application: 2 994 878

(51) Cl.Int./Int.Cl. *G06Q 20/38* (2012.01)

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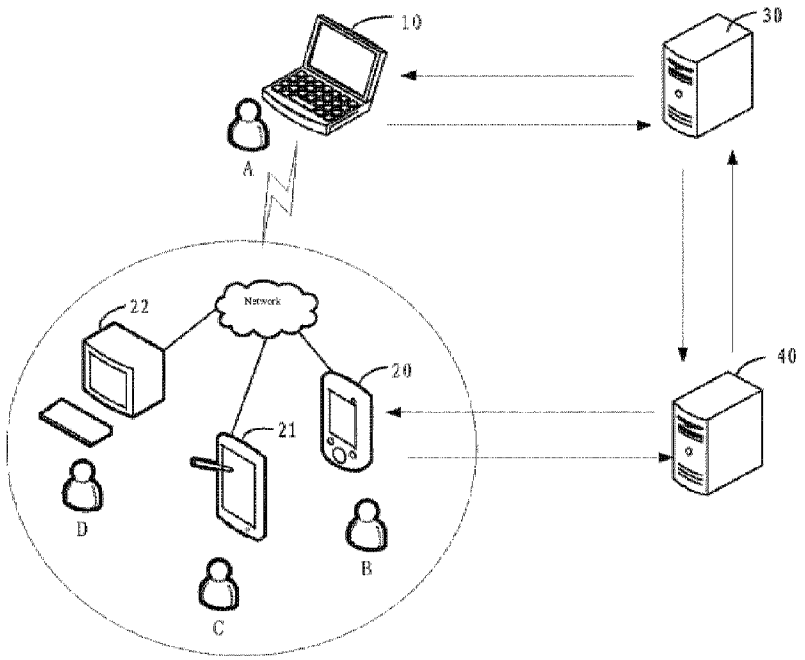
(54) Titre : PROCEDE, DISPOSITIF ET SYSTEME DE DETERMINATION DE DESTINATAIRE DE CERTIFICAT ELECTRONIQUE

(54) Title: METHOD, DEVICE, AND SYSTEM FOR DETERMINING ELECTRONIC CERTIFICATE RECIPIENT



(57) Abrégé/Abstract:
There is provided a computer device for verifying an electronic certificate collector in an electronic transaction, the device including a module configured to receive a request to issue an electronic certificate delivered by a first terminal, wherein the request includes an issuing account and amount of funds; a module configured to generate an electronic certificate by freezing funds in the issuing account, wherein the amount of the frozen funds is equal to the issuing amount; and a module configured to generate a notification for generation of the electronic certificate to deliver the notification to the first terminal.

Abstract

There is provided a computer device for verifying an electronic certificate collector in an electronic transaction, the device including a module configured to receive a request to issue an electronic certificate delivered by a first terminal, wherein the request includes an issuing account and amount of funds; a module configured to generate an electronic certificate by freezing funds in the issuing account, wherein the amount of the frozen funds is equal to the issuing amount; and a module configured to generate a notification for generation of the electronic certificate to deliver the notification to the first terminal.

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METHOD, DEVICE, AND SYSTEM FOR DETERMINING ELECTRONIC CERTIFICATE RECIPIENT

Technical Field

The present invention relates to the field of computer network technology, and in particular, to a method, device, and system for determining a certificate collector for an electronic certificate.

Background

Payment refers to payment of money produced on the basis of economic contracts in the business activities. At present, many banks or enterprises have provided the service of network payment, and the way of network payment provides great convenience for both buyers and sellers. In the existing network payment methods, most of the funds in the buyer's account are allocated directly to the seller's account, or to the third party organization as a guarantee.

The traditional way of online payment, after the buyer's money order is issued, the funds will be transferred directly, the following situations often occur: the buyer has not received the commodity or services provided by the seller, and its funds have been paid to the seller by the bank or the third party organization; or after the seller offers the commodity or services, the buyer is unable to pay the corresponding funds. Or the buyer transfers the money to the wrong account. At this stage there is a certain risk of online payment transactions, which cannot guarantee the interests of both buyers and sellers.

In order to protect the interests of both buyers and sellers, buyers and sellers can complete the online transaction payment through electronic certificate. Since the funds are frozen in the buyer's issuing account until the completion of the transaction, the settlement of the electronic payment through the electronic certificate will protect the interests of both the buyer and the seller. The existing electronic certificate has already specified the seller at the time of issuing the certificate, so that the electronic certificate is only applied to the buyer to determine the seller, and the application scenario is single.

Summary

Based on this, it is necessary to provide a method, a device and a system for verifying a certificate collector of an electronic certificate that can improve the commonality of an electronic

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certificate in view of the above technical problems.

A method for confirming an electronic certificate collector is applied to a second terminal, the method including:

Receive the issuing request transaction information broadcast by the first terminal and an opened certificate of the electronic certificate, where the opened certificate is the first terminal delivering a certificate issuing request to the first Funds-Management server, where the first Funds -Management server generates a corresponding electronic certificate and delivers it to the first terminal;

When the user triggers a certificate collection instruction according to the transaction information, it is determined that the user is an electronic certificate collector, and the certificate is delivered to the second Funds-Management server according to the certificate collection instruction, and the second Funds- The management server receives the electronic certificate delivered by the first Funds-Management server.

A method for verifying a certificate collector in an electronic certificate, wherein the method is applied to a first Funds-Management server, and the method includes:

Receive a card issuing request delivered by a first terminal, where the card issuing request carries a card issuing account and a card issuing amount;

Generating a corresponding electronic certificate by freezing funds of the issuing amount in the issuing account and generating an issuing notification of the electronic certificate;

Deliver the issuing notification to the first terminal.

A method for verifying an electronic certificate collector is applied to a second Funds-Management server, the method including:

Receiving a certificate application containing a card issuing account delivered by a second terminal and generating a certificate collection request including a card issuing account;

Delivering the certificate request to the first Funds-Management server corresponding to the card-issuing account;

Receive the electronic certificate delivered by the first Funds-Management server.

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A confirmation device for the issuer of electronic certificate, which is applied to the second terminal, the device including:

An information receiving module is used to receive the issuing request transaction information broadcast by the first terminal and an opened certificate of the electronic certificate, where the opened certificate is the first terminal delivering a certificate issuing request to the first Funds-Management server, where the first Funds -Management server generates a corresponding electronic certificate and delivers it to the first terminal;

A recipient verification module is used to when the user triggers a certificate collection instruction according to the transaction information, it is determined that the user is an electronic certificate collector, and the certificate is delivered to the second Funds-Management server according to the certificate collection instruction, and the second Funds- The management server receives the electronic certificate delivered by the first Funds-Management server.

An electronic certificate verifier verification device, wherein the device is applied to a first Funds-Management server, and the device includes:

A request receiving module is used to receive an issuing request delivered by a first terminal, where the issuing request carries an issuing account and an opening amount;

A notification generating module is used to generate a corresponding electronic certificate by freezing the funds of the issuing amount in the issuing account and generates an issuing notification of the electronic certificate;

A notification delivering module is used to deliver the opened notification to the first terminal.

A confirmation device for the issuer of electronic certificate, which is applied to the second terminal, the device includes:

A request generation module is used to receive a certificate application that is delivered by a second terminal and includes a card verification account, and generate a certificate verification request that includes a card verification account;

A request delivering module is used to deliver the receipt request to a first Funds-Management server corresponding to the issuing account;

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Electronic certificate receiving module is used to receive the electronic certificate delivered by the first Funds-Management server.

A certification system for a certificate collector of an electronic certificate, the system including:

The first terminal is used to deliver an issuing request to the first Funds-Management server, where the issuing request carries the issuing account and the issuing amount, and receives the issuing notification of electronic certificate delivered by the first Funds-Management server,, broadcast externally the issuing notification of the transaction information and electronic certificate;

A first Funds-Management server is used to generate a corresponding electronic certificate by freezing the funds of the issuing amount in the issuing account and generate an opened certificate of the electronic certificate; and deliver the opened certificate Deliver the opened certificate to the first terminal;

The second terminal is used to receive transaction information broadcast externally by the first terminal and an already-opened notice of the electronic certificate, and when the user triggers a collection instruction according to the transaction information, determine that the user is an electronic certificate receiver The collector delivers a receipt application to the second Funds-Management server according to the receipt instruction; when the user triggers a removal instruction according to the transaction information, clear the issuing certificate and the transaction information according to the removal instruction;

A second Funds-Management server is used to receive an acceptance application containing a verification account and delivered by a second terminal, and generate a verification request including a verification account; and deliver the verification request to the verification account corresponding first Funds-Management server;

Receive the electronic certificate delivered by the first Funds-Management server.

The method, device and system for determining the electronic certificate collector as mentioned above should be applied to the electronic certificate of the unspecified certificate collector, the first terminal for outwardly broadcasting the transaction information and the opened certificate of the electronic certificate, so that the received transaction information and the second terminal

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that has already opened the notification is a terminal corresponding to the unspecified user. When the user has an intention to the transaction information to trigger the receiving instruction, it can be determined as the certificate collector. Since electronic certificate is not generated for a specific recipient, the commonality of electronic certificate is improved.

Brief Description of the Drawings

In order to specifically illustrate the examples of the invention or the technical solutions in the current technology, the following drawings, which are to be used in the description of the examples or the current technology, will be briefly described, and it will be apparent that the following accompanying drawings, which are merely exemplary of the invention, may be made by those of ordinary skill in the art in view of the accompanying drawings, in which the drawings of other examples may be obtained without departing from the inventive work.

Figure 1 is a schematic diagram of the structure of a system for confirming the electronic certificate receiving person in one example.

Figure 2 is a schematic flow chart of a method for verifying a certificate recipient in one example.

Figure 3 is a schematic flow chart of a method for verifying a certificate recipient in one example.

Figure 4 is a schematic flow chart of a method for verifying a certificate recipient in one example.

Figure 5 is a flow chart of a method for confirming an electronic certificate collector after a step of delivering an opened certificate to a first terminal in one example;

Figure 6 is a schematic flow chart of a method for verifying a certificate recipient in one example.

Figure 7 is a schematic structural diagram of a device for confirming the certification of the electronic certificate in an example;

Figure 8 is a schematic structural diagram of a device for confirming the certification of the electronic certificate in an example;

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Figure 9 is a schematic structural diagram of a device for confirming the certification of the electronic certificate in an example;

Figure 10 is a schematic structural diagram of a device for confirming the certification of the electronic certificate in an example;

Figure 11 is a schematic structural diagram of a device for confirming the certification of the electronic certificate in one example.

Detailed Description

In order to make the purpose, the technical solution and advantages of the invention more clearly understood, the following explanations further explain the invention according to the attached drawings and examples. It should be understood that the specific example described herein are merely to illustrative the invention and is not intend to limit the invention.

In the examples of the present invention, the Funds-Management server is a server of the funds management institution and the funds management institution refers to an organization capable of supporting the flow of funds, including but not limited to banks and other financial institutions (such as securities institutions, third-party payment platforms etc.), that is, Funds-Management server includes a bank server or other financial institution server.

In this example of the present invention, an electronic certificate refers to a payment certificate of electronic Funds-Management server that is opened on the application of a licensee to freeze funds or credit lines and is opened in the name of a fund management institution and commit to settle the payment credit of electronic credit commitment according to the agreed conditions.

In the example of the present invention, the issuer (usually the buyer) is the entity applying for the establishment of the electronic certificate to the fund management institution, which may be a natural person, a legal person or other organization, and the issuer is the terminal held by the issuer.

In the example of the present invention, the payer, as the issuer's request, acts as the paying person of the electronic certificate, and with its account funds or credit limit as guaranty, an electronic certificate can provide a guaranty for the issuer. It can be a natural person, a legal person or his organization, and the payment terminal is a terminal held by the payer.

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In this example of the present invention, the basic business process of the electronic certificate is: Funds management institution establish electronic certificate in accordance with the amount of funds required to freeze the applicant's application, when agreed to meet the conditions for the settlement, the fund management institution will be paid to settle payment settlement. Details as follows:

1. After the transaction body to form an order, the issuer (such as the buyer) applies for issuing the certificate to the issuing institution (i.e., the fund management institution that opens an electronic certificate, such as an issuing bank). (Of course, the issuer can apply for issuing a certificate when forming a specific transaction order, or the issuer can voluntarily apply for issuing a certificate when the transaction order is not formed.)

2. After the issuing agency accepts, open electronic certificate and freeze the corresponding amount of funds or credit line.

3. The recipient (such as the seller) applies to the receiving authority (such as the receiving bank) for a certificate.

4. After the certification body to verify the information to be certified, electronic certificate enters into the compliance period, and the certificate collector performs the performance (for example, the merchant delivers the commodity and can be regarded as performing the contract).

5. After receiving the certificate of compliance, the electronic certificate to obtain compliance information, change the status of the Bank Credit Certificate, electronic certificate into the receipt period, waiting for the delivery of commodity, and receive the commodity.

6. When the issuer to sign the commodity, that is the after receiving the transaction conditions of electronic certificate according to the payment terms of electronic certificate, the receiving issuing apply to the issuing agency for payment.

7. Issuing agency discharges the funds from the opening of the account, transfer the funds to the collection agencies, collection agencies will transfer funds to the collector's account.

It should be understood that the above is only a way to use electronic certificate, it also can be used to purchase electronic services. In the purchase of services, such as living in the hotel transaction scenario, the hotel reservation is successful, that is, the hotel undertook a

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performance.

Of course, electronic certificate can also be used to allocate funds. In different situations, the understanding of performance and receipt also changed. In other words, when a merchant provides a commodity or service, the status of the electronic certificate may directly flow through both the compliance period and the receipt period, directly entering the solution, such as face-to-face transactions.

As shown in Figure 1, in one example, a system for verifying a certificate collector of electronic certificates is provided. The system includes:

The first terminal 10 is used to deliver an issuing request to the first Funds-Management server 30, where the issuing request carries the issuing account and the issuing amount, and receives the issuing notification of electronic certificate delivered by the first Funds-Management server 30, broadcast externally the issuing notification of the transaction information and electronic certificate.

Specifically, the first terminal 10 refers to a terminal corresponding to an issuer (buyer). Transaction information refers to the transaction content disclosed by the buyer to the seller. Issued notification is used to prove that the buyer has the ability to pay for the transaction information containing the commodity or services. For example, if the user wants to purchase a commodity, the transaction information refers to the description of the commodity by the user including the related transaction content such as price, model and style. Outbound broadcast transaction information and issuing notification means that the buyer gives the unspecified seller an offer to wait for the seller to accept the offer and trade with it. In order to ensure the security, the data carried in the issuing request are all encrypted.

In one example, the buyer may select an object to be broadcast outwards according to his / her own transaction information. The first terminal 10 may also select multiple sellers matching the transaction information as the objects for outward broadcast. For example, the transaction information is to buy a pair of leather shoes, the object of the broadcast is to sell the terminal corresponding to the leather shoes seller.

It should be noted that the above is only a list of transaction information, transaction information in addition to the sale of commodity include: transfer of funds, provision of services and

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mortgage guarantees and so on. The issuer and certificate collector herein are not limited to buyers and sellers.

A first Funds-Management server 30 is used to generate a corresponding electronic certificate by freezing the funds of the issuing amount in the issuing account and generate an opened certificate of the electronic certificate; and deliver the opened certificate to the first terminal 10.

The first Funds-Management server30 is the server used to generate the electronic certificate. For example, if the issuer's credit card account is a CCB account, the first Funds-Management server30 is the server used by the construction bank for fund management. The funds that are equal to the issuing amount in the opening account are frozen to generate the corresponding electronic certificate, and the issuer has no authority to control the funds frozen by electronic certificate. The frozen funds can be used by the issuer to engage in various activities such as buying and selling commodities, mortgages and other economic activities.

The status of the electronic certificate in the transaction process includes: Issued State, Receipt Status, Receipt Status, Status to be Settled, and Settlement Status. For example, after the electronic certificate is generated, the first Funds-Management server 30 updates the state of the electronic certificate to the opened state; after the electronic certificate is received, the state of the electronic certificate is updated to be released. After the electronic certificate is generated, further, the issuing certificate of the electronic certificate is generated. Issued Notification is used to inform the issuer that the status of electronic certificate is opened. Make the issuer can grasp the issuance of electronic certificate. The opened notice is forwarded in the form of data message, and the forwarding party delivers the first terminal 10 corresponding to the issuer for the first Funds-Management server30.

The second terminal 20 is used to receive transaction information broadcast externally by the first terminal 10 and an already-opened notice of the electronic certificate, and when the user triggers a collection instruction according to the transaction information, determine that the user is an electronic certificate receiver. The collector delivers a receipt application to the second Funds-Management server 40 according to the receipt instruction; when the user triggers a removal instruction according to the transaction information, clear the issuing certificate and the transaction information according to the removal instruction.

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The second terminal refers to the terminal corresponding to the certificate collector (seller). Since the first terminal 10 is the object to be broadcast to the outside is uncertain, the terminals of the plurality of sellers (the terminals 20, 21 and 22) receive the transaction information and issuing notification at the same time. The seller will determine whether to accept the offer according to the transaction information. If yes, the second terminal 20 may trigger the receiving instruction to receive the electronic certificate.

The second Funds-Management server 40 is the server corresponding to the certificate receiving account. The second terminal 20 delivers an application for receiving the certificate and applies for the second Funds-Management server40 to deliver the receipt request to the first Funds-Management server 30. If the seller receives the transaction information and the notifying seller has no intention to trade with the buyer, the received information can be ignored. Specifically, the certificate collector may trigger a clear instruction on the second terminal 20, and delete the opened certificate and the transaction information by clearing the instruction.

The second Funds-Management server 40 is used to receive an application for receiving a certificate including a card issuing account delivered by the second terminal 20 and generate a certificate collection request that includes the card issuing account; and deliver a receipt request to a Funds-Management server 30; receives the electronic certificate delivered by the first Funds-Management server 30.

The second Funds-Management server 40 refers specifically to the Funds-Management server corresponding to the credit card account used by the seller to receive funds. After the user triggers the receiving instruction on the second terminal 20, the second terminal 20 delivers the receipt application to the second Funds-Management server 40 and the second Funds-Management server 40 completes the reception of the certificate to the first Funds-Management server 30.

The electronic certificate receiving system for determining the electronic certificate collector as mentioned above should be applied to the electronic certificate of the unspecified certificate collector, the first terminal for outwardly broadcasting the transaction information and the opened certificate of the electronic certificate, so that the received transaction information and the second terminal that has already opened the notification is a terminal corresponding to the unspecified user. When the user has an intention to the transaction information to trigger the

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receiving instruction, it can be determined as the certificate collector. Since electronic certificate is not generated for a specific recipient, the commonality of electronic certificate is improved. Since the electronic certificate is not generated for a specific recipient, the electronic certificate does not need to be reissued when the recipient is replaced. Therefore, a certificate can be used multiple times to improve the payment and settlement efficiency of network transactions.

As shown in Figure 2, in one example, a method for verifying an electronic certificate collector is provided, where the method is applied to a second terminal. The method includes the following steps:

Step 201: Receive the transaction information broadcasted by the first terminal and an issuing notification of the electronic certificate. In this example, the noticed notification is that the first terminal delivers an issuing request to the first Funds-Management server, and generates a corresponding electronic certificate by the first Funds-Management server and delivers the corresponding electronic certificate to the first terminal.

Step 202: When the user triggers a certificate collection instruction according to the transaction information, it is determined that the user is the electronic certificate collector, and the certificate application is delivered to the second Funds-Management server according to the certificate collection instruction. In this example, the second Funds-Management server receives the electronic certificate delivered by the first Funds-Management server.

As shown in Figure 3, in one example, the method for confirming the certificate of electronic certificate further includes:

Step 203, when the user triggers a clear instruction according to the transaction information, clear the issuing notification and the parental custody according to the clear instruction.

As shown in Figure 4, in one example, a method for verifying an electronic certificate collector is provided, where the method is applied to a first Funds-Management server. The method includes the following steps:

Step 401: Receive a card issuing request delivered by the first terminal. In this example, the issuing request carries the issuing account and the issuing amount.

Step 402: Generate a corresponding electronic certificate by freezing the funds of the issuing

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amount in the issuing account, and generate the issuing certificate of the electronic certificate.

Step 403: Delivering an opened notification to the first terminal.

As shown in Figure 5, in an example, the electronic certificate includes a payment settlement condition. After the delivering of the negotiated notification to the first terminal in step 403, the method further includes:

Step 501: Obtain the electronic certificate delivered by the second Funds-Management server and the payment certificate.

The issuer and the recipient receive settlement through electronic certificate. After confirming the seller who receives the electronic certificate, the seller is obliged to deliver the commodity or services and the buyer has the obligation to deliver the electronic certificate to the seller. The second terminal delivers a certificate receiving request to the second Funds-Management server, and the second Funds-Management server completes the certificate collecting task. After the second Funds-Management server obtains the electronic certificate, when the second Funds-Management server receives the commodity receipt information delivered by the logistics server or the confirmation receipt information delivered by the buyer through the first terminal. The second Funds-Management server generates the corresponding payment certificate according to the commodity receipt information or confirmation receipt information.

In this example, the payment solution condition refers to a condition that needs to be satisfied for the funds of the electronic certificate to transition from the frozen state to the unfrozen state. Payment certificate refers to the electronic certificate for the payment and settlement of the buyer and the buyer. Payment certificate includes payment terms and payment amount.

Step 502, it is verified whether the electronic certificate is valid. If so, then go to Step 503, if not, then the end.

Step 503: Determine whether the payment condition meets the payment condition. If so, then go to Step 504, if not, then the end.

In order to ensure the safety of funds, the first Funds-Management server needs to verify whether the electronic certificate was generated by itself. Specifically, it is determined whether the electronic certificate is valid by verifying whether the electronic signature of the user on the

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electronic certificate matches the issuer's signature. If legal, further determine whether the payment terms meet the conditions of settlement. When the payment conditions satisfy the solution payment conditions that the transaction has been completed, the buyer needs to perform the payment obligation, that is, the first Funds-Management server enters the payment procedure.

Step 504: Release the fund corresponding to the payment amount of the electronic certificate and deliver the funds to the second Funds-Management server, where the funds are transferred by the second Funds-Management server into the preset certificate collection account.

Receivable account means the receiver sets up an account for accepting funds transferred to the issuing account. The receiving and issuing account can be a bank account or a third-party payment platform account. In one example, the first Funds-Management server and the second Funds-Management server refer to the same server when the issuing and collecting accounts are the same type of accounts. For example, when the issuing and collecting accounts are both CCB's accounts, both the first Funds-Management server and the second Funds-Management server refer to the Funds-Management server of the Construction Bank. When the issuing account and the collecting account are not the same type of account, the first Funds-Management server and the second Funds-Management server are different servers.

As shown in Figure 6, in one example, a method for verifying an electronic certificate collector is provided, where the method is applied to a second Funds-Management server. The method includes the following steps:

Step 601: Receive a certificate application that is delivered by a second terminal and includes a card verification account, and generate a certificate collection request that includes a card verification account.

Step 602: Deliver a certificate collection request to a first Funds-Management server corresponding to a verification account.

Step 603: Receive the electronic certificate delivered by the first Funds-Management server.

As shown in Figure 7, in one example, an electronic certificate verifier authentication device is provided, which is applied to a second terminal. The device includes the following modules:

The information receiving module 70 is used to receive the transaction information broadcasted

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by the first terminal and a noticed certificate of the electronic certificate. In this example, the noticed notification is that the first terminal delivers an issuing request to the first Funds-Management server, and generates a corresponding electronic certificate by the first Funds-Management server and delivers the corresponding electronic certificate to the first terminal.

The recipient verification module 71 is used to when the user triggers a certificate collection instruction according to the transaction information, it is determined that the user is the electronic certificate collector, and the certificate application is delivered to the second Funds-Management server according to the certificate collection instruction. In this example, the second Funds-Management server receives the electronic certificate delivered by the first Funds-Management server.

As shown in Figure 8, in an example, the verification device of the electronic certificate collector further includes:

The information clearing module 72 is used to clear the issuing notification and the transaction information according to the clearing instruction when the user triggers the clearing instruction according to the transaction information.

As shown in Figure 9, in one example, an electronic certificate verifier is provided, which is applied to a first Funds-Management server. The device includes the following modules:

The request receiving module 80 is used to receive the issuing request delivered by the first terminal, where the issuing request carries the issuing account and the issuing amount.

The notification generating module 81 is used to generate a corresponding electronic certificate by freezing the funds of the issuing amount in the issuing account, and generate an issuing notice of the electronic certificate.

The notification delivering module 82 is used to deliver the opened notification to the first terminal.

As shown in Figure 10, in one example, the electronic certificate includes a payment settlement condition; and the verification device of the electronic certificate caller further includes:

The information acquisition module 83 is used to obtain the electronic certificate delivered by

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the second Funds-Management server and the payment certificate. In this example, the payment certificate includes the payment condition and the payment amount.

The fund payment module 84 is used to check whether the electronic certificate is valid, if yes, further determine whether the payment condition meets the payment condition, if yes, release the fund corresponding to the electronic certificate and deliver the funds to the second Funds -Management server, the funds are transferred from the second Funds-Management server into the preset collection account.

As shown in Figure 11, in one example, an electronic certificate verifier is provided, which is applied to a second Funds-Management server. The device includes the following modules:

The request generating module 90 is used to receive a certificate application that is delivered by a second terminal and includes a card verification account, and generate a certificate verification request that includes a card verification account.

The request delivering module 91 is used to deliver a certificate collection request to the first Funds-Management server corresponding to the card issuing account.

Electronic certificate receiving module 92 is used to receive the electronic certificate delivered by the first Funds-Management server.

The ordinary technicians in the field can understand and implement all or part of the processes in the above mentioned method of the example which can be completed by means of a computer program that can be stored in a computer-readable storage medium. When the program is executing, it may include all the above-mentioned process in the example. Among them, the storage medium can be a magnetic disk, CD, a read-only memory (ROM) and other non-volatile storage media or random access memory (RAM), etc.

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

The above example only express several examples of the invention, and its descriptions are more

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specific and detailed, however, it cannot to be considered as a limitation of the scope of the invention patent. It should be noted that various modifications and improvements can be made by those skilled technicians in the field without departing from the inventive concept, which belonged to the protection scope of the invention. Therefore, the protection scope of patent in the invention should be subject to the attached claims.

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Claims:

1. A computer device for verifying an electronic certificate collector in an electronic transaction, applied a first Funds-Management server, the device comprising:

a request receiving module configured to receive a request for issuing electronic certificate delivered by a first terminal, wherein the request for issuing electronic certificate includes an issuing account and an issuing amount of funds;

a notification generating module configured to generate a corresponding electronic certificate by freezing amount of funds in the issuing account, wherein the frozen amount of funds is equal to the issuing amount of funds; and

a notification delivering module configured to generate a notification for generation of the electronic certificate to deliver the notification for the generation of the electronic certificate to the first terminal.

2. The device of claim 1 further includes an information acquisition module.

3. The device of claim 2, wherein the information acquisition module is configured to obtain the electronic certificate and a payment certificate delivered by a second Funds-Management server when the user triggers a certificate collection instruction according to the transaction information.

4. The device of claim 3, wherein the payment certificate includes a payment condition.

5. The device of any one of claims 3 to 4, wherein the payment certificate includes a payment amount.

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6. The device of claim 1 further include a fund payment module.

7. The device of claim 6, wherein the fund payment module is configured to judge whether the payment condition meets a payment settlement condition.

8. The device of claim 7, wherein the fund payment module is further configured to, where if the payment condition meets a payment settlement condition, release the frozen amount of funds corresponding to the payment amount of the electronic certificate to deliver the released amount of funds to a preset account for collecting electronic certificate through a second Funds-Management server.

9. The device of any one of claims 1 to 8, wherein the electronic certificate collector may be a seller.

10. The device of any one of claims 1 to 9, wherein the first terminal is a terminal held and controlled by a buyer.

11. The device of claim 9, wherein the first terminal is a terminal held and controlled by the seller.

12. A computer device for verifying an electronic certificate collector in an electronic transaction, applied a second Funds-Management server, the device comprising:

a request generation module configured to receive an application for collecting electronic certificate including an issuing account from a second terminal to generate a request for collecting electronic certificate including the issuing account when the user triggers a certificate collection instruction according to the transaction information;

a request delivering module configured to deliver the request for collecting electronic certificate to a first Funds-Management server corresponding to the issuing account; and

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an electronic certificate receiving module configured to receive the electronic certificate from the first Funds-Management server.

13. The device of claim 12, wherein the electronic certificate collector may be a seller.

14. The device of claim 13, wherein the first terminal is a second terminal held and controlled by the seller.

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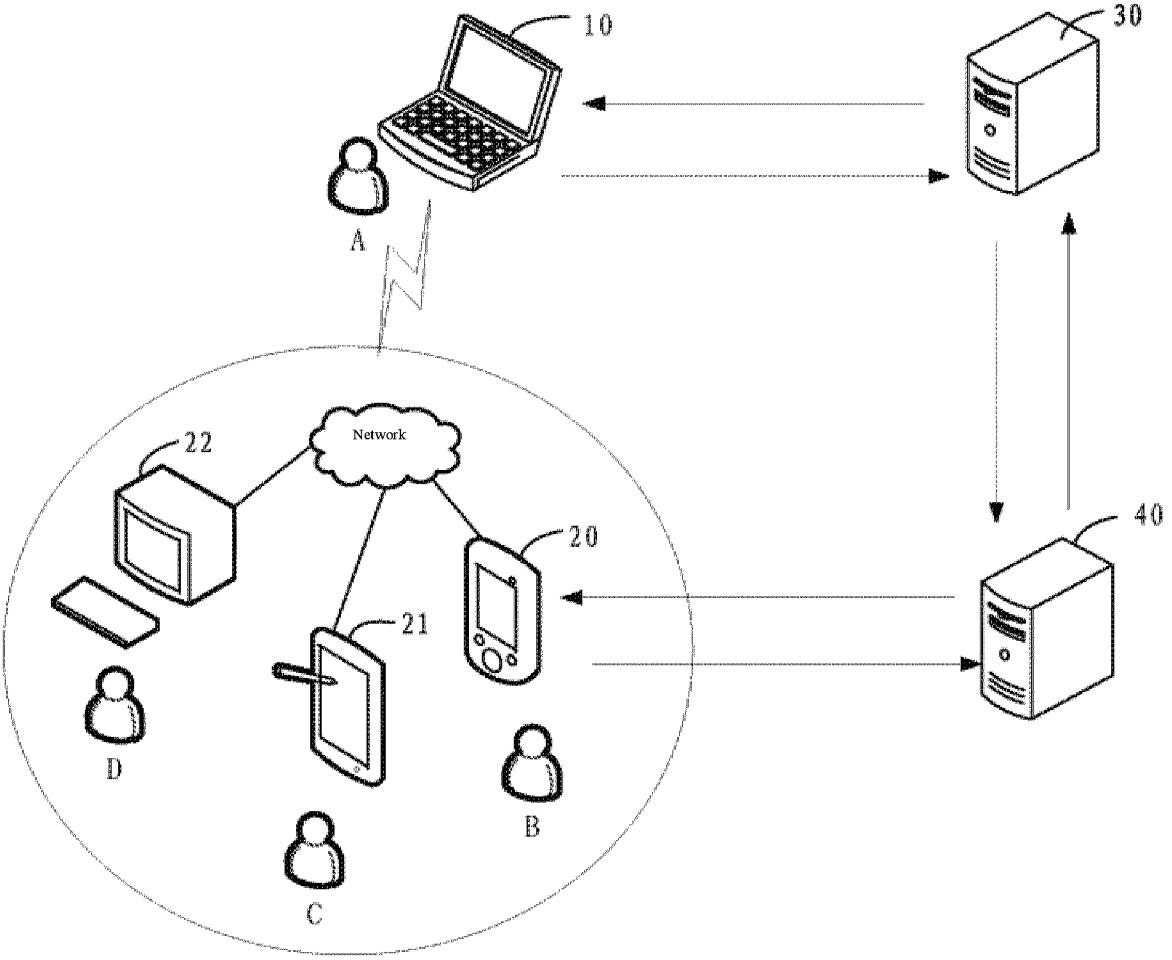

Figure 1

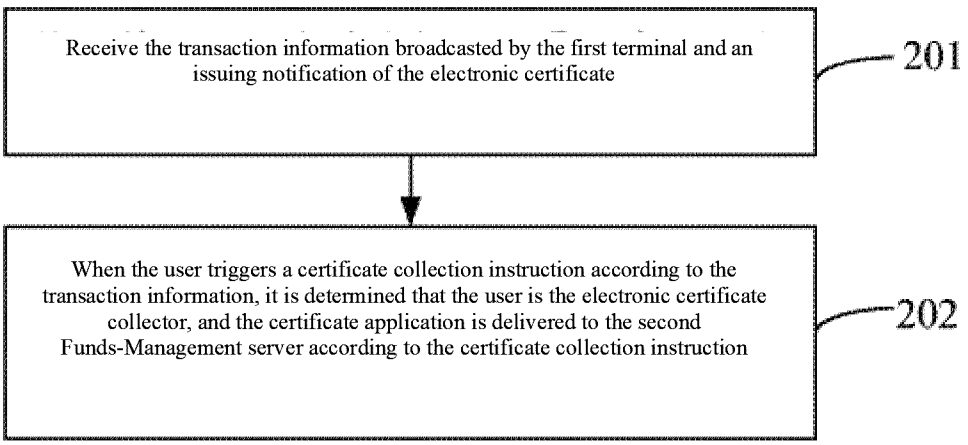

Figure 2

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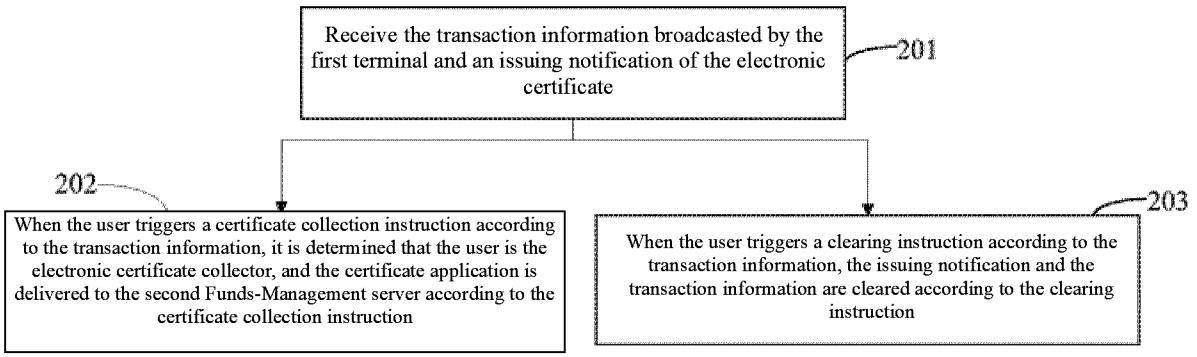

Figure 3

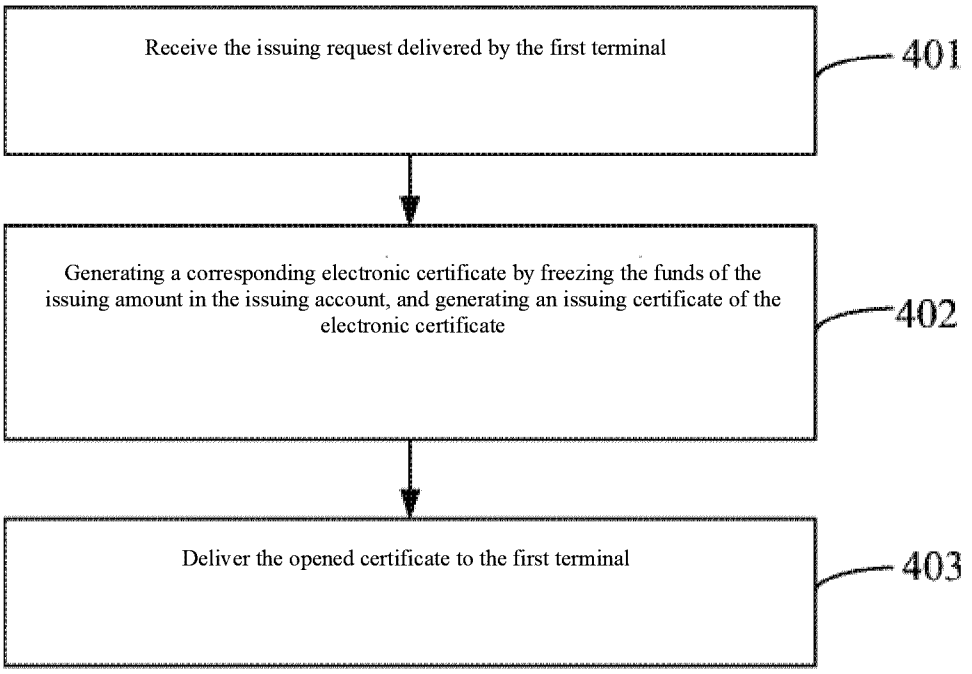

Figure 4

Date reçue / Date received 2021-12-03

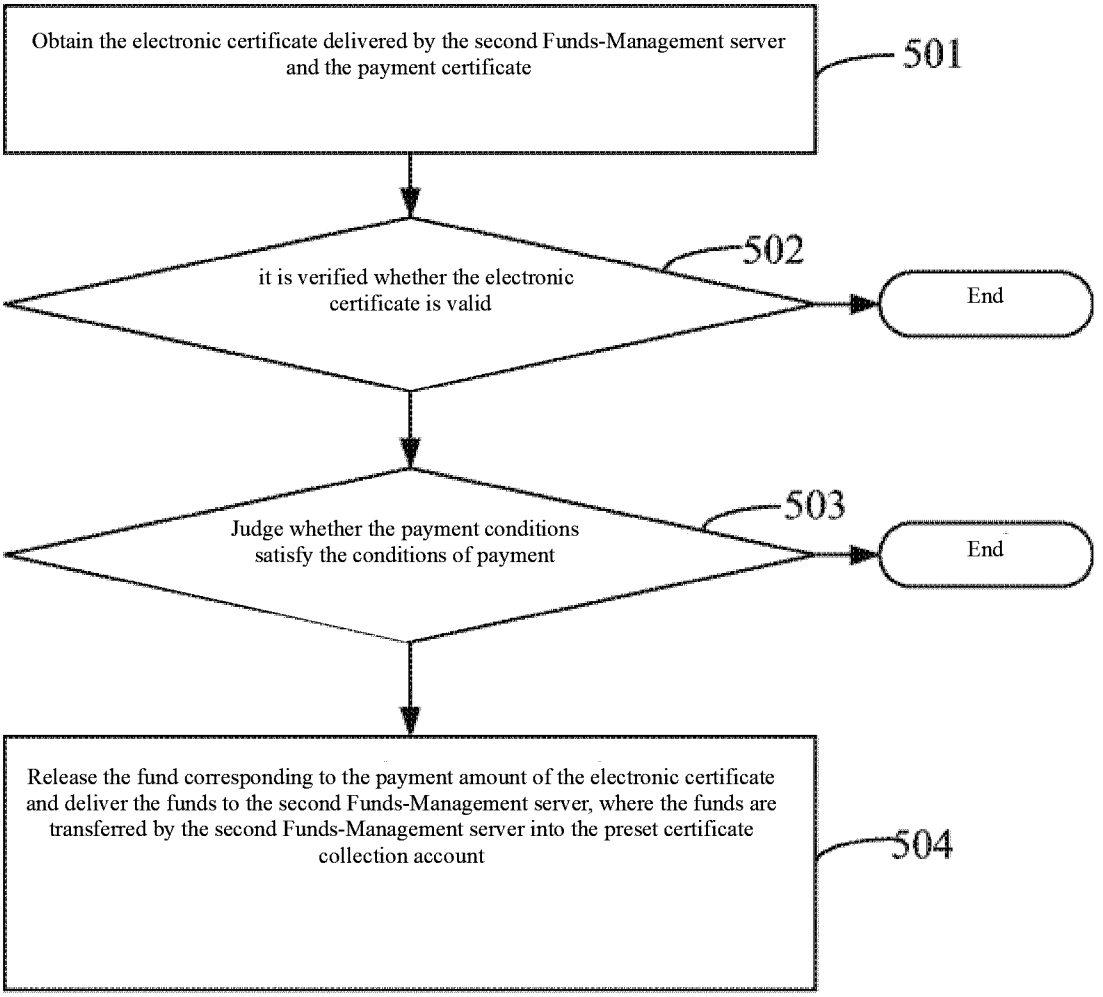

Figure 5

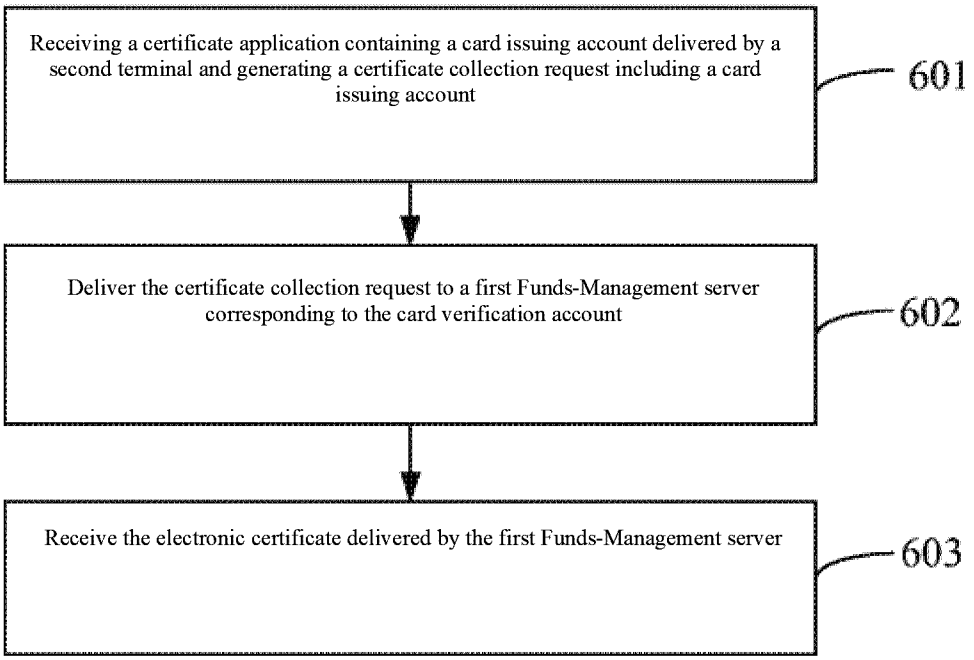

Figure 6

Date reçue / Date received 2021-12-03

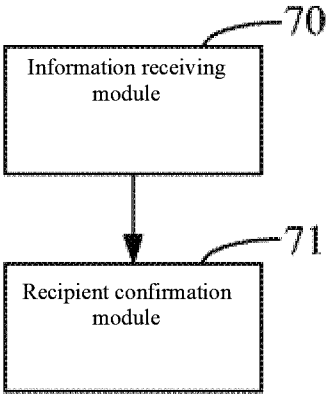

Figure 7

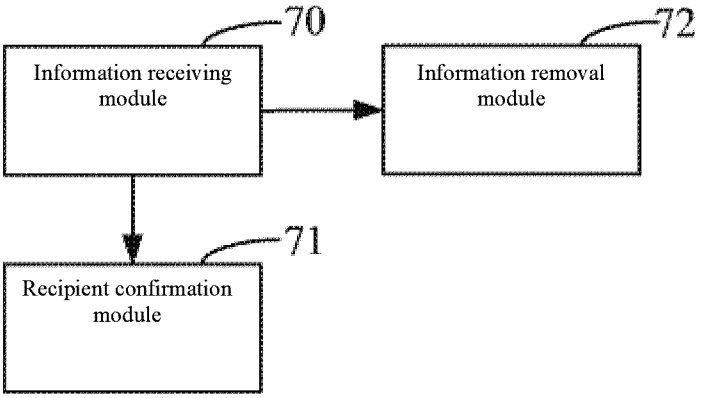

Figure 8

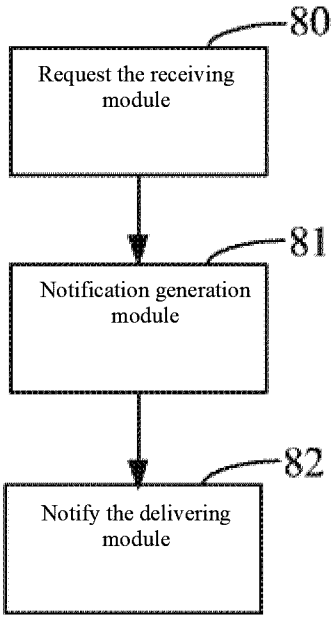

Figure 9

Date reçue / Date received 2021-12-03

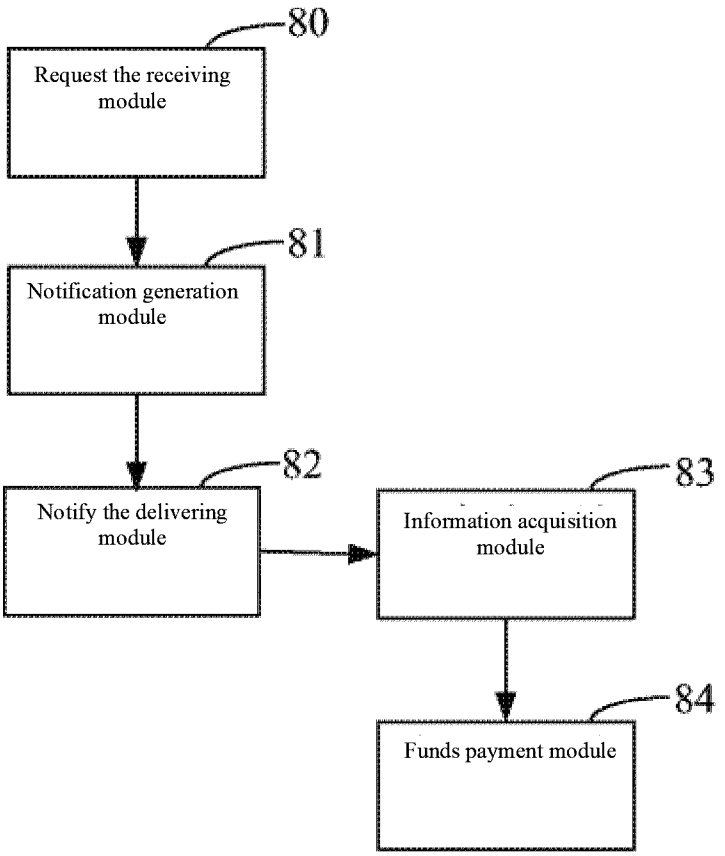

Figure 10

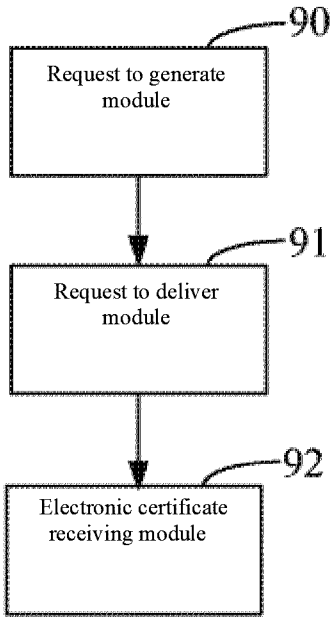

Figure 11

Date reçue / Date received 2021-12-03