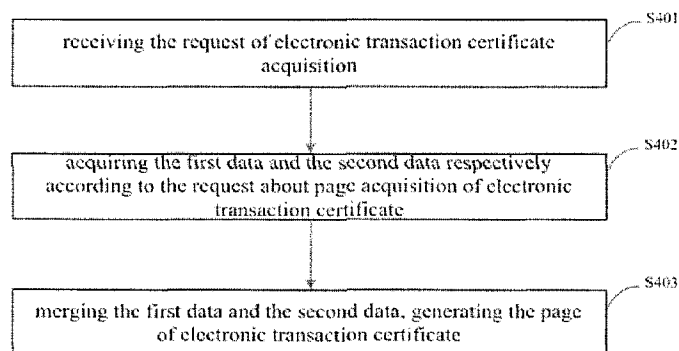




(86) Date de dépôt PCT/PCT Filing Date: 2015/04/30  
(87) Date publication PCT/PCT Publication Date: 2016/11/03  
(45) Date de délivrance/Issue Date: 2023/01/31  
(85) Entrée phase nationale/National Entry: 2018/10/30  
(86) N° demande PCT/PCT Application No.: CN 2015/077931  
(87) N° publication PCT/PCT Publication No.: 2016/172910

(51) Cl.Int./Int.Cl. *G06Q 30/00* (2023.01),  
*G06F 16/953* (2019.01)  
(72) Inventeur/Inventor:  
ZHANG, YI, CN  
(73) Propriétaire/Owner:  
10353744 CANADA LTD., CA  
(74) Agent: HINTON, JAMES W.

(54) Titre : PROCEDE ET DISPOSITIF DE GENERATION DE PAGE DE CERTIFICAT DE TRANSACTION ELECTRONIQUE, ET SUPPORT D'INFORMATIONS  
(54) Title: METHOD AND DEVICE FOR GENERATING ELECTRONIC TRANSACTION CERTIFICATE PAGE, AND STORAGE MEDIUM



(57) **Abrégé/Abstract:**

The present invention is applied to the field of computer networks. Provided are a method and device for generating an electronic transaction certificate page, and storage medium. The method comprises: receiving an electronic transaction certificate page acquisition request; acquiring first data and second data of a corresponding electronic transaction certificates; merging the first data and the second data, and generating an electronic transaction certificate page. The certificate at least includes transaction target, manufacturer information, settlement account information and transaction rule information. The amount of data of the first data is less than the second data, and the confidentiality level of the first data is higher than the second data. In the present invention, the first data and the second data are queried and acquired separately, the data acquisition speed is increased, performing further processing on the data is convenient, and the speed of generating the certificate page is increased.

## **Abstract**

The present invention is applied to the field of computer networks. Provided are a method and device for generating an electronic transaction certificate page, and storage medium. The method comprises: receiving an electronic transaction certificate page acquisition request; acquiring first data and second data of a corresponding electronic transaction certificates; merging the first data and the second data, and generating an electronic transaction certificate page. The certificate at least includes transaction target, manufacturer information, settlement account information and transaction rule information. The amount of data of the first data is less than the second data, and the confidentiality level of the first data is higher than the second data. In the present invention, the first data and the second data are queried and acquired separately, the data acquisition speed is increased, performing further processing on the data is convenient, and the speed of generating the certificate page is increased.

# METHOD AND DEVICE FOR GENERATING ELECTRONIC TRANSACTION CERTIFICATE PAGE, AND STORAGE MEDIUM

## Technical Field

- [1] The present invention relates to the field of Internet, and more particularly to methods, devices and a storage medium of generating the page of the electronic transaction certificate.

## Background Technology

- [2] E-commerce refers to the activities related to transaction or service as an electronic transaction method on the Internet based on the information network technology. It made every part of the conventional commerce activities electronically and network-based. In the open Internet, e-commerce is applied on basis of the browser/server, and can achieve the activities related to online shopping for consumers, online transaction between merchants, online payment and so on.
- [3] In the current E-commerce system, the product or service is traded on Internet, they are shown as pictures, texts, audios and videos in the third-party E-commerce trade platform. Users usually can access to the server of third-party E-commerce trade platform, search and query the information of product or service stored wherein the database, click the picture/text/audio/video of product/service, acquire available product or service's information, and click to purchase the product/service. To achieve the purchasing process, the information page of the product/service for the user is generated after acquiring the picture or text data wherein the database from the third-party E-commerce trade platform.
- [4] The problems based on foregoing method wherein the current E-commerce system are showed as below:
1. The querying speed is running slowly due to the all the pictures/text data of product/service stored wherein the database of trade platform;

2. The data transmission speed is running slowly. The reason is all the data will be processed when the part of data is required to process only. For example, encrypted process or transmission by more secure channel.

### Technical Problems

- [5] The example of the present invention provides a method for generating a page of electronic transaction certificate. This method resolves the problem about slow data acquisition and process speed, and slow page generation.

### Solutions of Problem

#### Technical Solutions

- [6] The example of the present invention provides a method for page generation of electronic transaction certificate. This method includes the following steps:  
receiving the request of electronic transaction certificate acquisition, acquiring the identified tag of electronic transaction certificate wherein the request of foregoing electronic transaction certificate;  
and  
querying the first data and the second data of electronic transaction certificate corresponding to the identified tag of electronic transaction certificate; and  
sending foregoing the first data and the second data.

It is noted that the volume of the first data is less than the volume of the second data, as well as the security classification level of foregoing first data is higher than that of the second data.

- [7] The example of the present invention provides another method for page generation of electronic transaction certificate. This method includes the following steps:  
receiving the request for page acquisition of electronic transaction certificate; and  
acquiring the first data and the second data of electronic transaction certificate according to the request for page acquisition of electronic transaction certificate; and  
merging foregoing the first data and the second data and generating the page of electronic transaction certificate.

It is noted that the volume of the first data is less than the volume of the second data, as well as the security classification level of foregoing first data is higher than that of the second data.

- [8] The example of the present invention provides a device for order generation of electronic

transaction. This device comprises the following parts:

the receiving unit for acquiring the request of electronic transaction certificate, is used to receive the request of electronic transaction certificate acquisition, which includes the identified tag of electronic transaction certificate; and

the data query unit, is used to query the first data and the second data of electronic transaction certificate corresponding to the identified tag of electronic transaction certificate; and

the data sending unit, is used to send foregoing the first data and second data.

It is noted that the volume of the first data is less than the volume of the second data, as well as the security classification level of foregoing first data is higher than that of the second data.

[9] The example of the present invention provides another device for order generation of electronic transaction. This device comprises the following parts:

the receiving request unit for page acquisition of electronic transaction certificate, is used to receive the request of electronic transaction certificate's page acquisition; and

the acquisition unit for electronic transaction certificate, is used to acquire the first data and the second data of electronic transaction certificate according to the request for page acquisition of electronic transaction certificate; and

the page generation unit, is used to merge foregoing the first data and the second data and generating the page of electronic transaction certificate.

It is noted that the volume of the first data is less than the volume of the second data, as well as the security classification level of foregoing first data is higher than that of the second data.

[10] The example of the present invention provides a kind of computer storage medium, wherein the computer storage medium comprises a program. This program is executed, the following steps are included:

receiving the request of electronic transaction certificate acquisition, acquiring the identified tag of electronic transaction certificate wherein the request of foregoing electronic transaction certificate; and

querying the first data and the second data of electronic transaction certificate corresponding to the identified tag of electronic transaction certificate; and

sending foregoing the first data and the second data;

It is noted that the volume of the first data is less than the volume of the second data, as well as the security classification level of foregoing first data is higher than that of the second data.

[11] The example of the present invention provides another kind of computer storage medium, wherein the computer storage medium comprises a program. This program is executed, the following steps are included:

receiving the request for page acquisition of electronic transaction certificate; and  
acquiring the first data and the second data of electronic transaction certificate according to the request for page acquisition of electronic transaction certificate; and  
merging foregoing the first data and the second data and generating the page of electronic transaction certificate; and

It is noted that the volume of the first data is less than the volume of the second data, as well as the security classification level of foregoing first data is higher than that of the second data.

#### Beneficial Effect

[12] In the example of the present invention, identifying the data of electronic transaction certificate as the first data and the second data based on the security classification level and the difference of data volume, querying and acquiring the first data and the second data respectively. It is helpful to increase the speed of data transmission and simplify the data process. So that the volume of data process is reduced and the speed of page generation tend to increase.

#### Brief Description

[13] Figure 1 is a structural diagram of page generation system for electronic transaction certificate applied by the example of the present invention;

[14] Figure 2 is an implementation flow chart of the method for generating the page of electronic transaction provided by the first example of the present invention;

[15] Figure 3 is an implementation flow chart of encrypting the first data provided by the first example of the present invention;

[16] Figure 4 is an implementation flow chart of the method for generating the page of electronic transaction provided by the second example of the present invention;

[17] Figure 5 is an implementation flow chart of deciphering the first data provided by the second example of the present invention;

[18] Figure 6 is a structural diagram of page generation device for electronic transaction certificate

applied by the third example of the present invention;

[19] Figure 7 is a structural diagram of the encrypted module for encrypting the first data provided by the third example of the present invention;

[20] Figure 8 is a structural diagram of page generation device for electronic transaction certificate applied by the forth example of the present invention;

[21] Figure 9 is a structural diagram of the deciphering module for deciphering the encrypted first data provided by the forth example of the present invention.

## Examples of the present invention

### Description of the Preferred Examples

[22] For a clearer understanding of the objectives, technical solutions, and advantages of the present invention, the specific examples of the present invention will be described in detail with reference to the accompanying drawings. These specific examples described herein are applied to explain the present invention only but not limited the present invention.

[23] In the example of the present invention, identifying the data of electronic transaction certificate as the first data and the second data based on the security classification level and the difference of data volume, querying and acquiring the first data and the second data respectively when acquiring the data of electronic transaction certificate, then merging the first data and the second data and generating the page of electronic transaction certificate. In this way, it is helpful to increase the speed of data transmission and simplify the data process.

[24] Figure 1 is a structural diagram of page generation system for electronic transaction certificate applied by the example of the present invention. For ease of description, shown here are the parts related to the examples of the present invention only.

[25] The generating device of electronic transaction certificate 1 can be configured as a single terminal, a single application software (APP), and a single software system, or, a plug-in or a module integrated into other terminals, application software (APP), and software system.

[26] In the examples of the present invention, the transaction object comprises commodity or service etc. The commodity can be physical or virtual. The provider of transaction object may be a commodity producer, a service provider, or other agency or individual authorized by the

commodity manufacturer and service provider, such as an agent, a seller, and so on.

- [27] In the examples of the present invention, the electronic transaction certificate comprises information related to attributes, manufacturer, settlement accounts and transaction rules of the electronic transaction at least in order to guarantee the information truly and originally. One electronic transaction certificate corresponds to one transaction object or that of the same category. The information of attributes wherein input data should include relevant description information of a transaction object, such as the size, weight, production date, expiry date, price, name and so on.
- [28] The manufacturer's information should include manufacturer's relevant description information of a transaction object, such as name, address, contact information and so on. The information of transaction rules wherein input data is from both buyers and sellers, such as payment method, refund policy, maintenance guarantee, and so on.
- [29] In the example of the present invention, the electronic transaction certificate is a writable electronic file. The user can get the generated page of transaction object directly based on this electronic transaction certificate, no longer need to rely on traditional methods such as telephones, physical stores, or online stores, third-party trading platforms, etc.
- [30] As an example of the present invention, the electronic transaction certificate can be generated through inputting the information of transaction object wherein the generating device of electronic transaction certificate 1. As an example of the present invention, the information of transaction object can be inputted manually wherein the generating device of electronic transaction certificate 1. As another example of the present invention, the information of transaction object can be imported through data information system. For example, transaction object information is imported by batch processing in ERP system into the generating device 1 of electronic transaction certificate.
- [31] As a preferred example of the present invention, electronic transaction certificate may include the transactional interactive graphic object and the order information related to this transactional interactive graphic object in order to generate transactional order easily and conveniently. As another example of the present invention, the information of a transaction object wherein input data includes logistics attributes and insurance information. The information of logistics attributes comprises relevant logistics information of transaction object wherein input data, such as the name of logistics provider, contact information, shipment time, and so on. The information of insurance attributes is related to insurance for items, such as contract number of insurances, underwriter, and so on. As a preferred example of the present invention, to ensure the stability, reliability, veracity of the

electronic transaction certificate and avoid being tempered with the electronic transaction certificate in the network circulation, the electronic signature of a transaction object provider is written wherein the electronic transaction certificate.

- [32] The generating device of electronic transaction certificate 1 sends the generated electronic transaction certificate to the stored data server of electronic transaction certificate 2. The data of electronic transaction certificate is sent over the Internet and queried by the users. The user can click the link or button to send the request of the corresponding electronic transaction certificate to client terminal 3 when the user looks through the data of electronic transaction certificate online such as pictures, videos or texts. The stored data server of electronic transaction certificate 2 receives the request of the corresponding electronic transaction certificate and queries the corresponding electronic transaction certificate and return the results to client terminal 3. Client terminal 3 receives this data of electronic transaction certificate and generates the page of electronic transaction certificate. To increase the speed of data transmission and simplify the data process, the data of electronic transaction certificate comprises the first data and the second data. The security classification level of foregoing first data is higher than that of the second data as well as the volume of the first data is less than the volume of the second data. The security classification level is used to require the data security, the higher security classification level is, the higher security requirement is.
- [33] As an example of the present invention, the generating device of electronic transaction certificate 1 may send the first data and second data to the same stored data server, also send the first data and second data to different stored data server respectively.
- [34] Figure 2 is an implementation flow chart of the method for generating the page of electronic transaction provided by the first example of the present invention, details are described as below:
- [35] In the step S201, receiving the request of electronic transaction certificate acquisition.
- [36] In the example of present invention, the identified tag of electronic transaction certificate is wherein the request of foregoing electronic transaction certificate.
- [37] In the step S202, querying the first data and the second data of electronic transaction certificate corresponding to the identified tag of electronic transaction certificate.
- [38] In the example of present invention, the stored data server of electronic transaction certificate receives the request of the corresponding electronic transaction certificate and analyze the identified tag. In this way, the first data and the second data can be queried. In the example of present invention,

to process the part of high security level data conveniently, simplify the data process, the data of electronic transaction certificate comprises the first data and the second data. The security classification level of foregoing first data is higher than that of the second data as well as the volume of the first data is less than the volume of the second data. The security classification level is used to require the data security, the higher security classification level is, the higher security requirement is.

[39] As an example of present invention, to guarantee the transaction object from original source and the security of settlement and increase the information truly and originally, the first data comprises the manufacturers' information of transaction object or settlement accounts or logistics attributes or insurance attributes or transaction rules or groups of that. As an example of present invention, to reduce the further volume of data process, the second data comprises large volume of data, such as pictures, videos, to increase the speed of page generation.

[40] In the step S203, sending the first data and the second data.

[41] In the example of present invention, the queried first data and second data are sent to client terminal by the stored data server of electronic transaction certificate.

[42] As an example of present invention, reference to Figure 3, to increase the level of data security and guarantee the transaction object from original source, encrypting the first data before sending, the encrypted process is detailed as below:

[43] In the step S301, encrypting the first data through symmetric key and obtaining the first encrypted data. Preferably, the symmetric-key is applied through Advanced Encryption Standard(AES).

[44] In the step S302, encrypting symmetric key through asymmetric-key and obtaining the second encrypted data. Preferably, the asymmetric-key is applied through Elliptic Curves Cryptography(ECC).

[45] In the example of present invention, completing the encryption, sending the first encrypted data and the second encrypted data as the first data to client terminal.

[46] In the example of present invention, identifying the data of electronic transaction certificate as the first data and the second data based on the security classification level and the difference of data volume, querying and acquiring the first data and the second data and sending the first data and the second data respectively. It is helpful to increase the speed of data query and simplify the data process and increase the speed of page generation.

- [47] Figure 4 is an implementation flow chart of the method for generating the page of electronic transaction provided by the second example of the present invention. Details are described as below:
- [48] In the step S401, receiving the request of electronic transaction certificate acquisition.
- [49] In the example of present invention, the user can click the link or button to send the request of the corresponding electronic transaction certificate when the user looks through the data of electronic transaction certificate online such as pictures, videos or texts. Client terminal 3 receives the request about page acquisition of electronic transaction certificate.
- [50] In the step S402, acquiring the first data and the second data respectively according to the request about page acquisition of electronic transaction certificate.
- [51] In the example of present invention, after receiving the request about page acquisition of electronic transaction certificate, client terminal should send the request of electronic transaction certificate acquisition to the stored data server of electronic transaction certificate. The stored data server of electronic transaction certificate can analyze the identified tag. In this way, the first data and the second data can be queried and sent to client terminal.
- [52] In the example of present invention, to process the part of high security level data conveniently, simplify the data process, the data of electronic transaction certificate comprises the first data and the second data. The security classification level of foregoing first data is higher than that of the second data as well as the volume of the first data is less than the volume of the second data. The security classification level is used to require the data security, the higher security classification level is, the higher security requirement is.
- [53] As an example of present invention, to guarantee the transaction object from original source and the security of settlement and increase the information truly and originally, the first data comprises the manufacturers' information of transaction object or settlement accounts or logistics attributes or insurance attributes or transaction rules or groups of that. As an example of present invention, to reduce the further volume of data process, the second data comprises large volume of data, such as pictures, videos, to increase the speed of data query.
- [54] As an example of present invention, reference to Figure 5, when the first data is encrypted, the first encrypted data and the second encrypted data can be deciphered only after acquiring the first encrypted data and the second encrypted data. The details of decipherable process is described as below:

- [55] In the step S501, the second encrypted data is deciphered by asymmetric-key and obtained the symmetric-key.
- [56] In particular, the second data can be encrypted by the public key of asymmetric-key. Then the second encrypted data is deciphered by the private key of asymmetric-key when receiving the second encrypted data.
- [57] In the step S502, the first encrypted data can be deciphered by symmetric-key and obtained the first data.
- [58] In the step S403, merging the first data and the second data and generating the page of electronic transaction certificate.
- [59] In an example of present invention, merging the first data and the second data and generating the page of electronic transaction certificate, which is used to provide the details of transaction object wherein the page of electronic transaction certificate for users.
- [60] In an example of present invention, after receiving the request about page acquisition of electronic transaction certificate, identifying the data of electronic transaction certificate as the first data and the second data based on the security classification level and the difference of data volume, acquiring and merging the first data and the second data and generating the page of electronic transaction certificate. It is helpful to increase the speed of data acquisition and simplify the data process, reduce the volume of data process and increase the speed of page generation.
- [61] Technician in this field can be able to understand and achieve all of the foregoing examples, or parts of them can be achieved by hardware, or related hardware is commanded by a program. The program for executing foregoing steps can be stored in a readable storage media, which can be a ROM/RAM, CD-ROM, disk or flash memory, and so on.
- [62] Figure 6 is a structural diagram of page generation device for electronic transaction certificate applied by the third example of the present invention. For ease of description, shown here are the parts related to the examples of the present invention only.
- [63] The receiving unit for acquiring the request of electronic transaction certificate 61, is used to receive the request of electronic transaction certificate acquisition, which includes the identified tag of electronic transaction certificate.
- [64] The data query unit 62, is used to query the first data and the second data of electronic transaction certificate corresponding to the identified tag of electronic transaction certificate. In the

example of present invention, the data query unit 62 receives the request of electronic transaction certificate and analyze the identified tag of electronic transaction certificate, as well as query the first data and the second data.

- [65] In the example of present invention, to process the part of high security level data conveniently, simplify the data process, the data of electronic transaction certificate comprises the first data and the second data. The security classification level of foregoing first data is higher than that of the second data as well as the volume of the first data is less than the volume of the second data. The security classification level is used to require the data security, the higher security classification level is, the higher security requirement is.
- [66] As an example of present invention, to guarantee the transaction object from original source and the security of settlement and increase the information truly and originally, the first data comprises the manufacturers' information of transaction object or settlement accounts or logistics attributes or insurance attributes or transaction rules or groups of that.
- [67] As an example of present invention, to reduce the further volume of data process, considering large volume of data as the second data, such as pictures, videos, the pictures, to increase the speed of page generation.
- [68] The data sending unit 63, is used to send foregoing the first data and second data. In the example of present invention, the data sending unit 63 sends the queried first data and second data to the client.
- [69] As an example of present invention, reference to Figure 7, to increase the level of data security and guarantee the transaction object from original source, the encrypting module 631 should encrypt the first data before sending this first data out. This encrypting module includes the first encrypting submodule 6311 and the second encrypting submodule 6312.
- [70] The first encrypting submodule 6311 is used to encrypt the first data through symmetric key and obtain the first encrypted data. Preferably, the symmetric-key is applied through Advanced Encryption Standard(AES).
- [71] The second encrypting submodule 6312 is used to encrypt symmetric key through asymmetric-key and obtain the second encrypted data. Preferably, the asymmetric-key is applied through Elliptic Curves Cryptography(ECC).
- [72] In the example of present invention, sending the first encrypted data and the second encrypted data to the client after completing the data encryption.

- [73] In the example of the present invention, identifying the data of electronic transaction certificate as the first data and the second data based on the security classification level and the difference of data volume, querying and sending the first data and the second data respectively when acquiring the request of electronic transaction certificate acquisition. In this way, it is helpful to increase the speed of data query and simplify the data process, reduce the volume of data process and increase the speed of page generation.
- [74] Figure 8 is a structural diagram of page generation device for electronic transaction certificate applied by the forth example of the present invention. For ease of description, shown here are the parts related to the examples of the present invention only.
- [75] The receiving request unit for page acquisition of electronic transaction certificate 81, is used to receive the request of electronic transaction certificate's page acquisition.
- [76] In the example of the present invention, the user can click the link or button to send the request of electronic transaction certificate's page acquisition when the user looks through the data of electronic transaction certificate online such as pictures, audios, videos or texts. The receiving request unit for page acquisition of electronic transaction certificate 81 can receive the request of electronic transaction certificate's page acquisition.
- [77] The acquisition unit for electronic transaction certificate 82, is used to acquire the first data and the second data of electronic transaction certificate according to the request for page acquisition of electronic transaction certificate.
- [78] In the example of the present invention, the client receives the request for page acquisition of electronic transaction certificate and sends the request of electronic transaction certificate acquisition to the stored data server. The acquisition unit for electronic transaction certificate 82 analyzes the identified tag of electronic transaction certificate, queries the first data and second data of electronic transaction certificate and sends the first data and the second data to the client.
- [79] In the example of the present invention, to process the part of high security level data conveniently and reduce the volume of data process, the data of electronic transaction certificate comprises the first data and the second data. The security classification level of foregoing first data is higher than that of the second data as well as the volume of the first data is less than the volume of the second data. The security classification level is used to require the data security, the higher security

classification level is, the higher security requirement is.

- [80] As an example of the present invention, to guarantee the transaction object from original source and the security of settlement and increase the information truly and originally, the first data comprises the manufacturers' information of transaction object or settlement accounts or logistics attributes or insurance attributes or transaction rules or groups of that.
- [81] As an example of present invention, to reduce the further volume of data process , the second data comprises large volume of data, such as pictures, videos , to increase the speed of page generation.
- [82] In the example of present invention, reference to Figure 9, when the first data is encrypted, the first encrypted data and the second encrypted data can be deciphered by deciphering module 821 after acquiring the first encrypted data and the second encrypted data.
- [83] The first deciphering submodule 8211 is used to decipher the second encrypted data through asymmetric key and obtain the symmetric key. In particular, the second data can be encrypted by the public key of asymmetric-key. Then the second encrypted data is deciphered by the private key of asymmetric-key when receiving the second encrypted data.
- [84] The second deciphering submodule 8212 is used to decipher the first encrypted data through symmetric key and obtain the first data.
- [85] The page generation unit 83, is used to merge foregoing the first data and the second data and generating the page of electronic transaction certificate.
- [86] In the example of present invention, the page generation unit 83 is used to merge the first data and the second data of electronic transaction certificate and generate the page of electronic transaction certificate in order to provide the detailed information of transaction object for users.
- [87] In the example of present invention, identifying the data of electronic transaction certificate as the first data and the second data based on the security classification level and the difference of data volume, acquiring and merging the first data and the second data and generating the page of electronic transaction certificate in order to provide the detailed information of transaction object for users. It is helpful to increase the speed of data acquisition and simplify the further data process, reduce the volume of data process and increase the speed of page generation.
- [88] In the example of present invention, the stored data server receives the request of electronic transaction certificate acquisition, queries the first data and the second data respectively according

to the identified tag of electronic transaction certificate, then sends the first data and the second data to the client respectively. The client merges the first data and the second data after receiving them and generating the page of electronic transaction certificate in order to provide the detailed information of transaction object for users. This method, which is identifying the first data and the second data and querying them respectively, is on the basis of the security classification level and the difference of data volume. In this way, the speed of data acquisition is increased as well as the further data process is simplified, volume of data process is reduced and speed of page generation is increased.

[89] The foregoing descriptions are merely preferred examples of the present invention but not to limit the present invention. Any modification, equivalent replacement, and improvement made within the spirit and principle of the present invention shall be included in the protection of the present invention.

Claims:

1. A method for generating an electronic transaction certificate page in an ecommerce transaction, the method comprising:

generating the electronic transaction certificate through inputting information of a transaction object, wherein the electronic transaction certificate includes the information related to attributes, manufacturer, settlement accounts and transaction rules of the ecommerce transaction, wherein the manufacturer's information includes manufacturer's relevant description information of the transaction object, including a name, address, contact information, wherein the transaction rules include a payment method, refund policy, maintenance guarantee;

querying a first data and a second data of an electronic transaction certificate corresponding to an identified tag of the electronic transaction certificate from a data server when receiving a request of an electronic transaction certificate acquisition, wherein the request includes the identified tag of the electronic transaction certificate, wherein the first data and second data are sorted from the entire transaction data based on various encryption levels of data during a page generation process of the transaction object in the ecommerce transaction, wherein the electronic transaction certificate is a writeable electronic file, wherein one electronic transaction certificate corresponds to one transaction object as a commodity / service, and wherein a provider of the transaction object is a commodity / service producer or an authorized provider;

sending the first data and the second data, wherein the first and the second data is sent to different locations, wherein the volume of the first data is less than the volume of the second data, and an encryption level of the first data is higher than the encryption level of the second data of the transaction object in the ecommerce transaction; and

obtaining a page of the transaction object from the electronic transaction certificate.

2. The method of claim 1, wherein the first data includes manufacturers' information of the transaction object.
3. The method of any one of claims 1 to 2, wherein the first data includes settlement account information of the transaction object.
4. The method of any one of claims 1 to 3, wherein the first data includes logistics attributes information of the transaction object.
5. The method of any one of claims 1 to 4, wherein the first data includes insurance attributes information of the transaction object.
6. The method of any one of claims 1 to 5, wherein the first data includes transaction rules of the transaction object.
7. The method of claim 1, wherein the second data includes picture information of the transaction object.
8. The method of any one of claims 1 and 7, wherein the second data includes video information of the transaction object.
9. The method of any one of claims 1 and 7, wherein the second data includes the combination information of pictures and videos of the transaction object.
10. The method of claim 1 further includes encrypting the first data.
11. The method of claim 10, wherein encrypting the first data includes:  
  
encrypting the first data through a symmetric key to obtain a first encrypted data; and  
  
encrypting symmetric key through an asymmetric key to obtain a second encrypted data.

12. The method of any one of claims 1 to 11, wherein when a user selects a link or button, the request of electronic transaction certificate's page acquisition is sent.

13. The method of any one of claims 1 to 12, wherein a client receives the request for page acquisition of electronic transaction certificate and sends a request of electronic transaction certificate acquisition.

14. A method for generating an electronic transaction certificate page in an ecommerce transaction, the method comprising:

generating the electronic transaction certificate through inputting information of a transaction object, wherein the electronic transaction certificate includes the information related to attributes, manufacturer, settlement accounts and transaction rules of the ecommerce transaction, wherein the manufacturer's information includes manufacturer's relevant description information of the transaction object, including a name, address, contact information, wherein the transaction rules include a payment method, refund policy, maintenance guarantee;

acquiring a first data and a second data of an electronic transaction certificate according to a request for acquiring the electronic transaction certificate page from a data server when receiving the request for acquiring the electronic transaction certificate page, wherein the first data and second data are sorted from the entire transaction data based on various encryption levels of data during a page generation process of the transaction object in the ecommerce transaction, wherein the electronic transaction certificate is a writeable electronic file, wherein one electronic transaction certificate corresponds to one transaction object as a commodity / service, and wherein a provider of the transaction object is a commodity / service producer or an authorized provider;

merging the first data and the second data to generate the electronic transaction certificate page, wherein the volume of the first data is less than the volume of the second data, and an encryption level of the first data is higher than the encryption level of the second data of the transaction object in the ecommerce transaction; and

obtaining a page of the transaction object from the electronic transaction certificate.

15. The method of claim 14, wherein the first data includes manufacturers' information of the transaction object.
16. The method of any one of claims 14 to 15, wherein the first data includes settlement account information of the transaction object.
17. The method of any one of claims 14 to 16, wherein the first data includes logistics attributes information of the transaction object.
18. The method of any one of claims 14 to 17, wherein the first data includes insurance attributes information of the transaction object.
19. The method of any one of claims 14 to 18, wherein the first data includes transaction rules of the transaction object.
20. The method of claim 14, wherein the second data includes picture information of the transaction object.
21. The method of any one of claims 14 and 20, wherein the second data includes video information of the transaction object.
22. The method of any one of claims 14 and 20, wherein the second data includes the combination information of pictures and videos of the transaction object.

23. The method of claim 14 further includes deciphering the encrypted first data.
24. The method of claim 23, wherein deciphering the encrypted first data includes:
- deciphering the second encrypted data through an asymmetric key to obtain a symmetric key; and
- deciphering the first encrypted data through the symmetric key to obtain the first data.
25. The method of any one of claims 14 to 24, wherein when a user selects a link or button, the request of electronic transaction certificate's page acquisition is sent.
26. The method of any one of claims 14 to 25, wherein a client receives the request for page acquisition of electronic transaction certificate and sends a request of electronic transaction certificate acquisition.
27. A device for generating an electronic transaction certificate page in an ecommerce transaction, the device comprising:
- a receiving unit for a request of an electronic transaction certificate acquisition from a data server, configured to receive the request of the electronic transaction certificate acquisition, wherein the request includes the identified tag of the electronic transaction certificate, wherein the electronic transaction certificate is generated through inputting information of a transaction object, wherein the electronic transaction certificate includes the information related to attributes, manufacturer, settlement accounts and transaction rules of the ecommerce transaction, wherein the manufacturer's information includes manufacturer's relevant description information of the transaction object, including a name, address, contact information, wherein the transaction rules include a payment method, refund policy, maintenance guarantee;

a data query unit configured to query a first data and a second data of the electronic transaction certificate corresponding to the identified tag of the electronic transaction certificate from a data server, wherein the first data and second data are sorted from the entire transaction data based on various encryption levels of data during a page generation process of the transaction object in the ecommerce transaction, wherein the electronic transaction certificate is a writeable electronic file, wherein one electronic transaction certificate corresponds to one transaction object as a commodity / service, and wherein a provider of the transaction object is a commodity / service producer or an authorized provider; and

a data sending unit configured to send the first data and the second data, wherein the first and the second data is sent to different locations, wherein the volume of the first data is less than the volume of the second data, and an encryption level of the first data is higher than the encryption level of the second data of the transaction object in the ecommerce transaction; wherein a page of the transaction object is obtained from the electronic transaction certificate.

28. The device of claim 27, wherein the first data includes manufacturers' information of the transaction object.
29. The device of any one of claims 27 to 28, wherein the first data includes settlement account information of the transaction object.
30. The device of any one of claims 27 to 29, wherein the first data includes logistics attributes information of the transaction object.
31. The device of any one of claims 27 to 30, wherein the first data includes insurance attributes information of the transaction object.
32. The device of any one of claims 27 to 31, wherein the first data includes transaction rules of the transaction object.

33. The device of claim 27, wherein the second data includes picture information of the transaction object.
34. The device of any one of claims 27 and 33, wherein the second data includes video information of the transaction object.
35. The device of any one of claims 27 and 34, wherein the second data includes the combination information of pictures and videos of the transaction object.
36. The device of claim 27, wherein the data sending unit further includes an encrypting module for encrypting the first data.
37. The device of claim 36, wherein the encrypting module includes:
- a first encrypting submodule configured to encrypt the first data through a symmetric key to obtain a first encrypted data; and
  - a second encrypting submodule configured to encrypt the symmetric key through an asymmetric key to obtain a second encrypted data.
38. The device of any one of claims 27 to 37, wherein when a user selects a link or button, the request of electronic transaction certificate's page acquisition is sent.
39. The device of any one of claims 27 to 38, wherein a client receives the request for page acquisition of electronic transaction certificate and sends a request of electronic transaction certificate acquisition.
40. A device for generating an electronic transaction certificate page in an ecommerce transaction, the device comprising:

a receiving unit for a request of page acquisition of the electronic transaction certificate from a data server, configured to receive a request for acquiring the electronic transaction certificate page, wherein the electronic transaction certificate is generated through inputting information of a transaction object, wherein the electronic transaction certificate includes the information related to attributes, manufacturer, settlement accounts and transaction rules of the ecommerce transaction, wherein the manufacturer's information includes manufacturer's relevant description information of the transaction object, including a name, address, contact information, wherein the transaction rules include a payment method, refund policy, maintenance guarantee;

an acquisition unit for the electronic transaction certificate, configured to acquire a first data and a second data of an electronic transaction certificate according to a request for acquiring the electronic transaction certificate page, wherein the first data and second data are sorted from the entire transaction data based on various encryption levels of data during a page generation process of the transaction object in the ecommerce transaction, wherein the electronic transaction certificate is a writeable electronic file, wherein one electronic transaction certificate corresponds to one transaction object as a commodity / service, and wherein a provider of the transaction object is a commodity / service producer or an authorized provider; and

a page generation unit is used to merging the first data and the second data to generate the electronic transaction certificate page, wherein the volume of the first data is less than the volume of the second data, and an encryption level of the first data is higher than the encryption level of the second data of the transaction object in the ecommerce transaction, wherein a page of the transaction object is obtained from the electronic transaction certificate.

41. The device of claim 40, wherein the first data includes manufacturers' information of the transaction object.

42. The device of any one of claims 40 to 41, wherein the first data includes settlement account information of the transaction object.
43. The device of any one of claims 40 to 42, wherein the first data includes logistics attributes information of the transaction object.
44. The device of any one of claims 40 to 43, wherein the first data includes insurance attributes information of the transaction object.
45. The device of any one of claims 40 to 44, wherein the first data includes transaction rules of the transaction object.
46. The device of claim 45, wherein the second data includes picture information of the transaction object.
47. The device of any one of claims 40 and 46, wherein the second data includes video information of the transaction object.
48. The device of any one of claims 40 and 46, wherein the second data includes the combination information of pictures and videos of the transaction object.
49. The device of claim 40, wherein the acquisition unit for electronic transaction certificate further includes a deciphering module for deciphering the encrypted first data.
50. The device of claim 49, wherein the deciphering module includes:
- a first deciphering submodule configured to decipher the second encrypted data through an asymmetric key to obtain a symmetric key; and
- a second deciphering submodule configured to decipher the first encrypted data through the symmetric key to obtain the first data.

51. The device of any one of claims 40 to 50, wherein when a user selects a link or button, the request of electronic transaction certificate's page acquisition is sent.
52. The device of any one of claims 40 to 51, wherein a client receives the request for page acquisition of electronic transaction certificate and sends a request of electronic transaction certificate acquisition.
53. A computer readable storage medium in an ecommerce transaction, comprising a memory with statements and instructions stored thereon for execution by a computer to carry out, including:

a program, configured to:

query a first data and a second data of an electronic transaction certificate corresponding to an identified tag of the electronic transaction certificate from a data server when receiving a request of an electronic transaction certificate acquisition, wherein the request includes the identified tag of the electronic transaction certificate, wherein the first data and second data are sorted from the entire transaction data based on various encryption levels of data during a page generation process of a transaction object in the ecommerce transaction, wherein the electronic transaction certificate is a writeable electronic file, wherein one electronic transaction certificate corresponds to one transaction object as a commodity / service, and wherein a provider of the transaction object is a commodity / service producer or an authorized provider;

wherein the electronic transaction certificate is generated through inputting information of the transaction object, wherein the electronic transaction certificate includes the information related to attributes, manufacturer, settlement accounts and transaction rules of the ecommerce transaction, wherein the manufacturer's information includes manufacturer's relevant description information of the transaction object, including a name, address, contact information, wherein the transaction rules include a payment method, refund policy, maintenance guarantee;

and

send the first data and the second data, wherein the first and the second data is sent to different locations, wherein the volume of the first data is less than the volume of the second data, and an encryption level of the first data is higher than the encryption level of the second data of the transaction object in the ecommerce transaction wherein a page of the transaction object is obtained from the electronic transaction certificate.

.

54. The computer readable storage medium of claim 53, wherein the first data includes manufacturers' information of the transaction object.
55. The computer readable storage medium of any one of claims 53 to 54, wherein the first data includes settlement account information of the transaction object.
56. The computer readable storage medium of any one of claims 53 to 55, wherein the first data includes logistics attributes information of the transaction object.
57. The computer readable storage medium of any one of claims 53 to 56, wherein the first data includes insurance attributes information of the transaction object.

58. The computer readable storage medium of any one of claims 53 to 57, wherein the first data includes transaction rules of the transaction object.
59. The computer readable storage medium of claim 58, wherein the second data includes picture information of the transaction object.
60. The computer readable storage medium of any one of claims 53 and 59, wherein the second data includes video information of the transaction object.
61. The computer readable storage medium of any one of claims 53 and 59, wherein the second data includes the combination information of pictures and videos of the transaction object.
62. The computer readable storage medium of any one of claims 53 to 61, wherein when a user selects a link or button, the request of electronic transaction certificate's page acquisition is sent.
63. The computer readable storage medium of any one of claims 53 to 62, wherein a client receives the request for page acquisition of electronic transaction certificate and sends a request of electronic transaction certificate acquisition.
64. A computer readable storage medium in an ecommerce transaction, comprising a memory with statements and instructions stored thereon for execution by a computer to carry out, including:
- a program, configured to:

acquire a first data and a second data of an electronic transaction certificate from a data server according to a request for acquiring the electronic transaction certificate page, when receiving the request for acquiring the electronic transaction certificate page wherein the first data and second data are sorted from the entire transaction data based on various encryption levels of data during a page generation process of a transaction object in the ecommerce transaction, wherein the electronic transaction certificate is a writeable electronic file, wherein one electronic transaction certificate corresponds to one transaction object as a commodity / service, and wherein a provider of the transaction object is a commodity / service producer or an authorized provider;

wherein the electronic transaction certificate is generated through inputting information of the transaction object, wherein the electronic transaction certificate includes the information related to attributes, manufacturer, settlement accounts and transaction rules of the ecommerce transaction, wherein the manufacturer's information includes manufacturer's relevant description information of the transaction object, including a name, address, contact information, wherein the transaction rules include a payment method, refund policy, maintenance guarantee;

and

merge the first data and the second data to generate the electronic transaction certificate page, wherein the volume of the first data is less than the volume of the second data, and an encryption level of the first data is higher than the encryption level of the second data of the transaction object in the ecommerce transaction wherein a page of the transaction object is obtained from the electronic transaction certificate.

.

65. The computer readable storage medium of claim 64, wherein the first data includes manufacturers' information of the transaction object.
66. The computer readable storage medium of any one of claims 64 to 65, wherein the first data includes settlement account information of the transaction object.
67. The computer readable storage medium of any one of claims 64 to 66, wherein the first data includes logistics attributes information of the transaction object.
68. The computer readable storage medium of any one of claims 64 to 67, wherein the first data includes insurance attributes information of the transaction object.
69. The computer readable storage medium of any one of claims 64 to 68, wherein the first data includes transaction rules of the transaction object.
70. The computer readable storage medium of claim 69, wherein the second data includes picture information of the transaction object.
71. The computer readable storage medium of any one of claims 64 and 70, wherein the second data includes video information of the transaction object.
72. The computer readable storage medium of any one of claims 64 and 71, wherein the second data includes the combination information of pictures and videos of the transaction object.
73. The computer readable storage medium of any one of claims 64 to 72, wherein when a user selects a link or button, the request of electronic transaction certificate's page acquisition is sent.

74. The computer readable storage medium of any one of claims 64 to 73, wherein a client receives the request for page acquisition of electronic transaction certificate and sends a request of electronic transaction certificate acquisition.

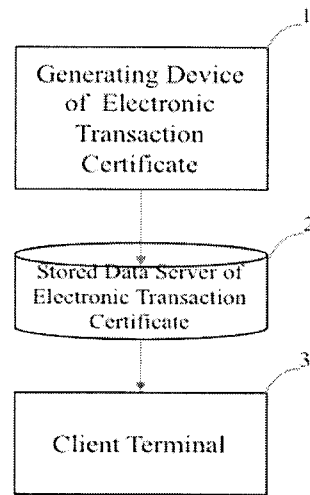


Figure 1

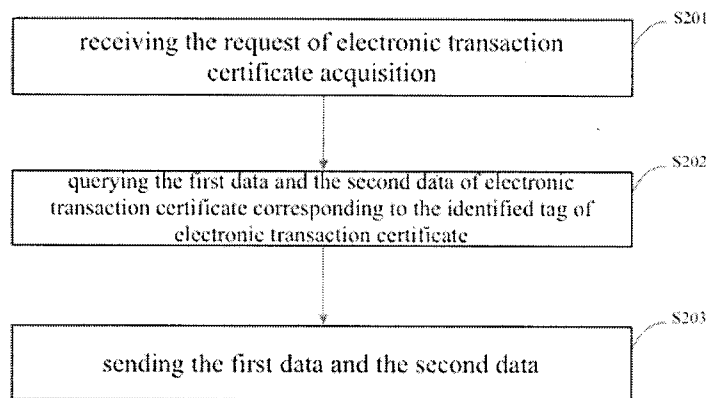


Figure 2

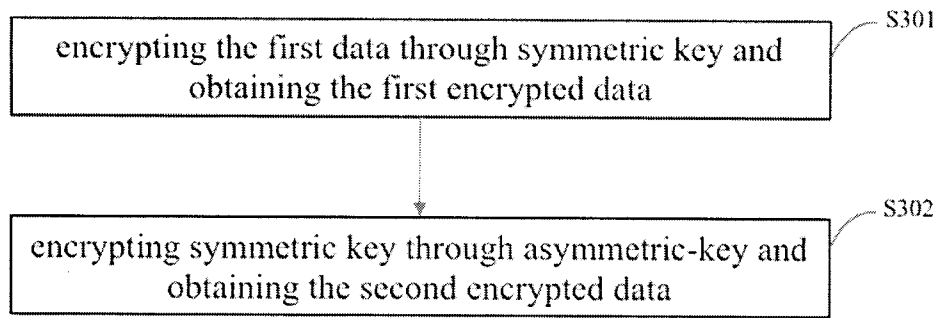


Figure 3

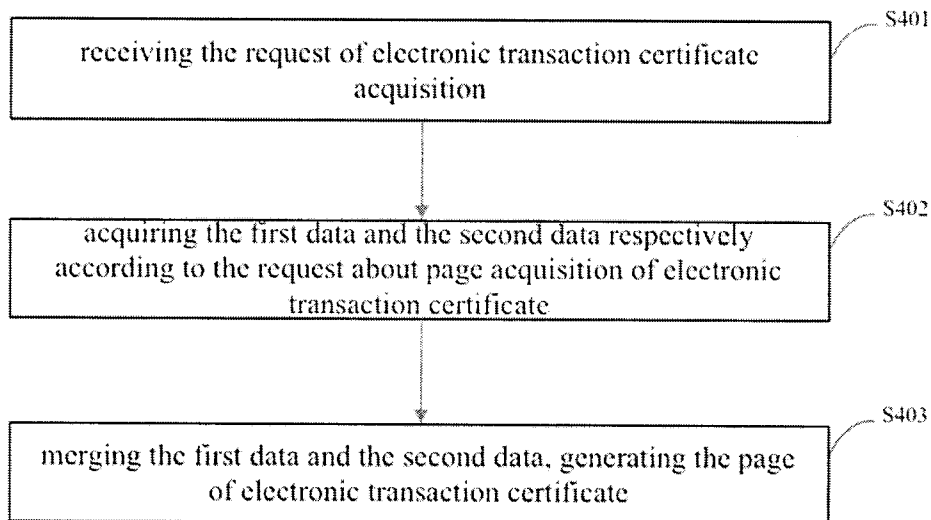


Figure 4

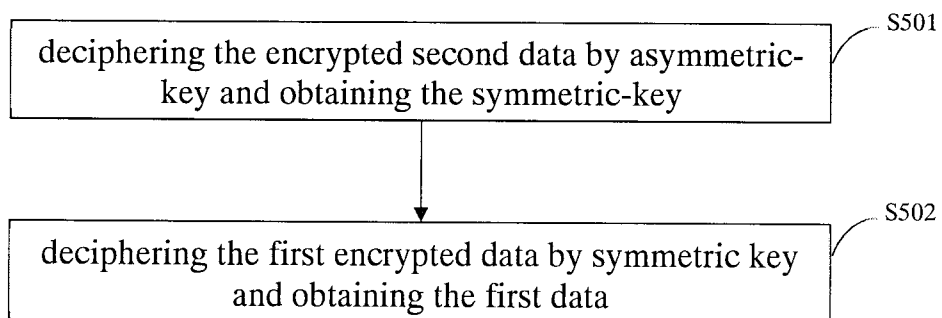


Figure 5

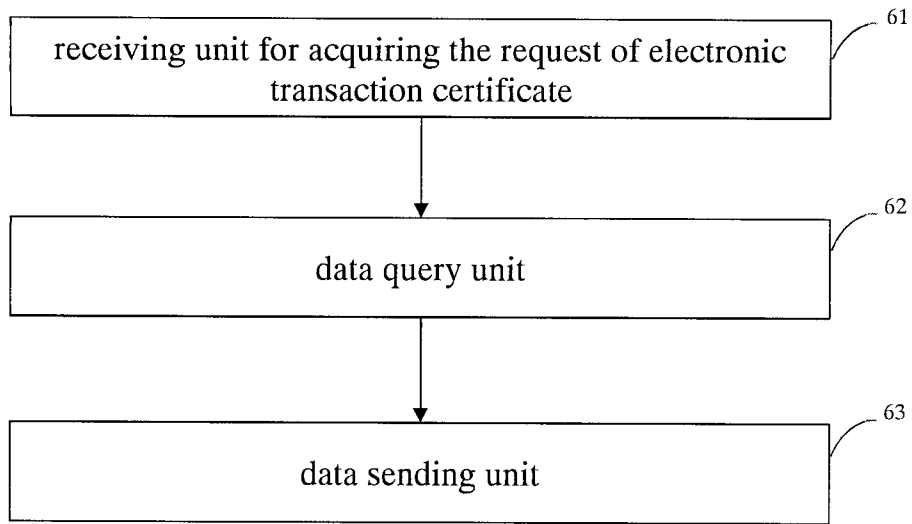


Figure 6

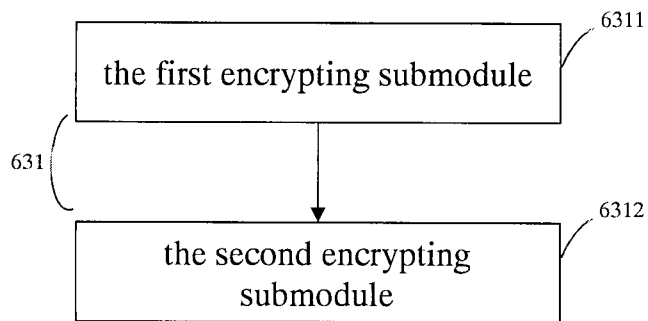


Figure 7

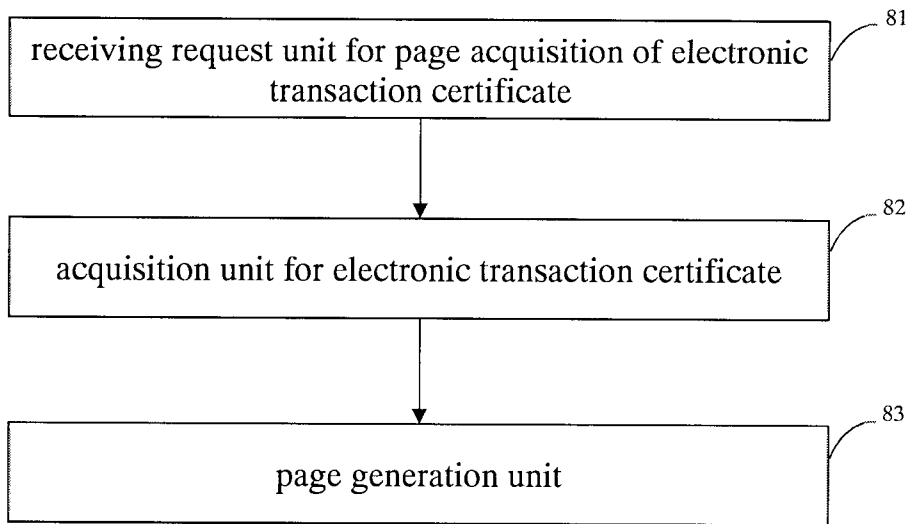


Figure 8

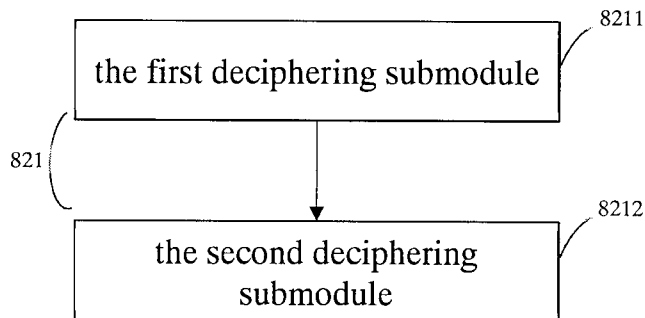


Figure 9

receiving the request of electronic transaction certificate acquisition

S401

acquiring the first data and the second data respectively according to the request about page acquisition of electronic transaction certificate

S402

merging the first data and the second data, generating the page of electronic transaction certificate

S403