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(54) Titre : PROCEDE ET SYSTEME POUR MODIFIER, PAR ETAPES, CHAQUE STADE D'UNE PERIODE DE VALIDITE D'UN CERTIFICAT ELECTRONIQUE

(54) Title: METHOD AND SYSTEM FOR MODIFYING IN STAGES EACH STAGE OF PERIOD OF VALIDITY OF ELECTRONIC CERTIFICATE

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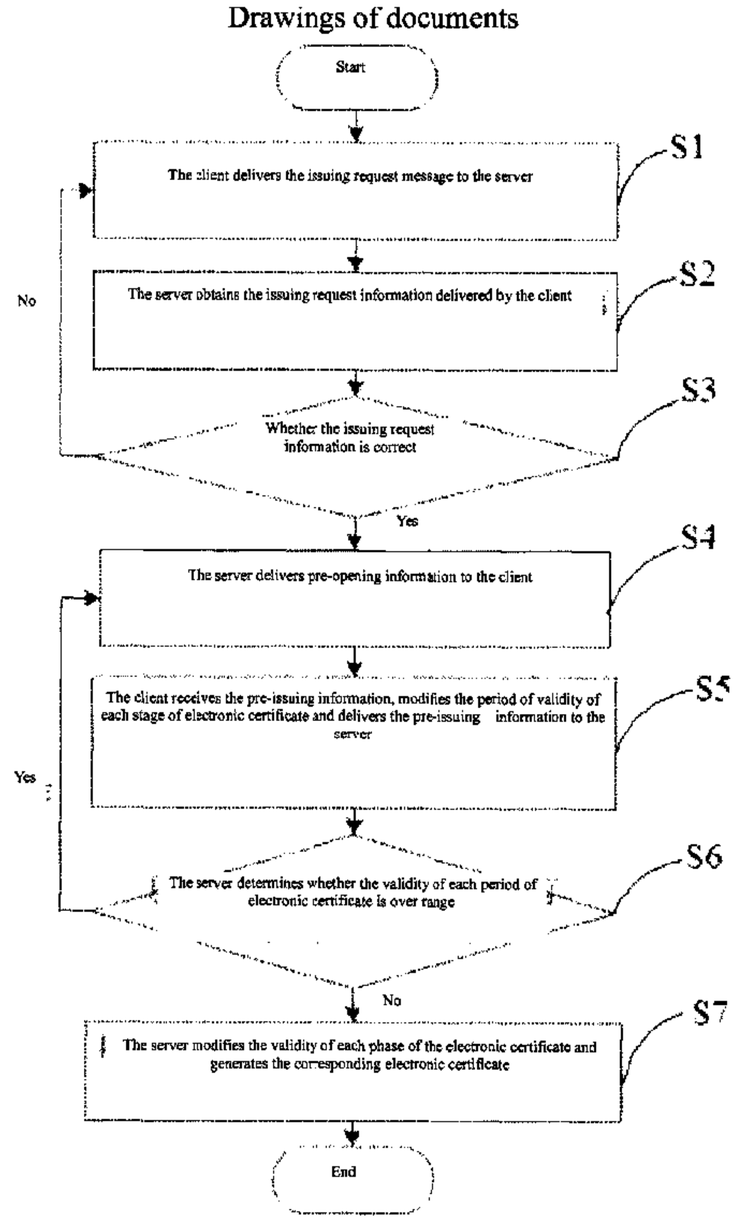

(57) Abrégé/Abstract:
Disclosed in the present application are a method and system for modifying in stages each stage of the period of validity of an electronic certificate, the method for modifying in stages each stage of the period of validity of an electronic certificate comprising: a

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(57) Abrégé(suite)/Abstract(continued):
client terminal sends a certificate issuing request message to a server; the server sends a certificate pre-issuing message comprising data for the client terminal to modify in stages each stage of the period of validity of the electronic certificate; the client terminal receives the certificate pre-issuing message, and respectively modifies each stage of the period of validity of the electronic certificate, and sends to the server a certificate pre-issuing feedback message comprising the modified stages of the period of validity of the electronic certificate; the server receives the certificate pre-issuing feedback message, and on the basis of the certificate pre-issuing feedback message, issues and electronic certificate. The present invention enables remote modification of the duration of each stage of the period of validity of an electronic certificate, such that use of an electronic certificate is more flexible, enriching the application of financial payment tools, and simultaneously preventing the tedious step and unnecessary repetitive work of re-issuing an electronic certificate as a result of changing the period of validity due to requirements, improving efficiency such that e-commerce applications are more convenient and fast.

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(54) Title: METHOD AND SYSTEM FOR MODIFYING IN STAGES EACH STAGE OF PERIOD OF VALIDITY OF ELECTRONIC CERTIFICATE

(54) 发明名称: 一种分段修改电子凭证各阶段有效期的方法及系统

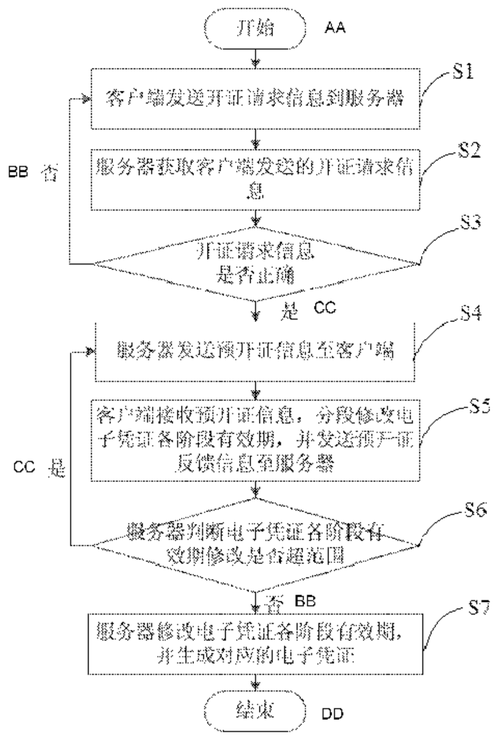

图 1

S1 A client terminal sends a certificate issuing request message to a server
S2 The server acquires the certificate issuing request message sent by the client terminal
S3 Is the certificate issuing request message accurate
S4 The server sends a certificate pre-issuing message to the client terminal
S5 The client terminal receives the certificate pre-issuing message, and respectively modifies each stage of the period of validity of the electronic certificate, and sends to the server a certificate pre-issuing feedback message
S6 The server determines whether the changes of each stage of the period of validity of the electronic certificate are out of range
S7 The server changes each stage of the period of validity of the electronic certificate, and generates a corresponding electronic certificate
AA Start
BB No
CC Yes
DD Finish

(57) Abstract: Disclosed in the present application are a method and system for modifying in stages each stage of the period of validity of an electronic certificate, the method for modifying in stages each stage of the period of validity of an electronic certificate comprising: a client terminal sends a certificate issuing request message to a server; the server sends a certificate pre-issuing message comprising data for the client terminal to modify in stages each stage of the period of validity of the electronic certificate; the client terminal receives the certificate pre-issuing message, and respectively modifies each stage of the period of validity of the electronic certificate, and sends to the server a certificate pre-issuing feedback message comprising the modified stages of the period of validity of the electronic certificate; the server receives the certificate pre-issuing feedback message, and on the basis of the certificate pre-issuing feedback message, issues and electronic certificate. The present invention enables remote modification of the duration of each stage of the period of validity of an electronic certificate, such that use of an electronic certificate is more flexible, enriching the application of financial payment tools, and simultaneously preventing the tedious step and unnecessary repetitive work of re-issuing an electronic certificate as a result of changing the period of validity due to requirements, improving efficiency such that e-commerce applications are more convenient and fast.

(57) 摘要:

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BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

本国际公布:

— 包括国际检索报告(条约第 21 条(3))。

本申请公开了一种分段修改电子凭证有效期的方法及系统，其中分段修改电子凭证有效期的方法包括：客户端发送开证请求信息到服务器；服务器发送包含供客户端分段修改电子凭证各阶段有效期数据的预开证信息；客户端接收预开证信息，并分别修改电子凭证各阶段的有效期，发送包括修改后电子凭证各阶段有效期的预开证反馈信息到服务器；服务器接收预开证反馈信息，并依所述预开证反馈信息开立电子凭证。本发明能够实现远程修改电子凭证各个阶段的有效期时长，使得电子凭证的使用更加灵活，丰富了金融支付工具的应用，同时避免因需要更改有效期而重新开设电子凭证的繁琐步骤，以及不必要的重复性工作，提高了效率，使电子商务应用更加方便快捷。

Title: Method And System For Modifying In Stages Each Stage Of Period Of Validity Of Electronic Certificate

Technical Field

[0001] The present invention relates to the field of electronic commerce, and in particular, to a method and a system for modifying the validity period of an electronic certificate based on internet segments.

[0002] Background Technology

[0003] With the continuous development of computers, networks and modern communication technology, E-commerce applications have also gradually entered into tens of thousands of households and become one of the familiar transactions. E-commerce using the Internet platform to connect the parties involved in traditional business activities (buyers, sellers, logistics companies, financial institutions, etc.), the whole transaction process is networked, electronically and informational, thus reducing the cost of the transaction and improving the efficiency of the transaction.

[0004] However, in the current application of E-commerce, the transfer of funds mainly depends on the traditional way of electronic direct transfer payment and third-party payment. Even if payment is made by check or other ticket, the expiration date usually cannot be changed. However, due to unexpected reasons, it is often necessary to amend the validity period of the electronic certificate, so an electronic certificate must be reopened. Therefore, in the current E-commerce application, the method of issuing bank letters of credit is complicated, resulting in a lot of repetitive work and low efficiency, which is not conducive to the rapid development of E-commerce activities. According to a first aspect of the present application, the present application provides a method for segmenting an expiration date of an electronic certificate, including:

[0005] The client delivers the issuing request information to the server;

[0006] The server obtains the issuing request information delivered by the client, and delivers the pre-issuing information corresponding to the issuing request information to the client. The pre-issuing information includes the validity data of each phase of electronic certificate for the client to be modified;

[0007] The client terminal receives the pre-opening certification information, respectively, to modify the validity period of each stage of electronic certificate to generate pre-opening feedback information including the valid period of the modified electronic certificate, and

deliver the pre-opening feedback information to the server;

[0008] The server receives the pre-opening feedback information and opens the electronic certificate according to the pre-opening feedback information.

[0009] The method for modifying the validity period of the electronic certificate in the subsection further includes:

[0010] The server presets the scope of the validity period of each stage to be modified;

[0011] After the server receives the pre-opening feedback information, it determines whether the validity period modification is within the allowable modification range. If yes, the electronic certificate is opened according to the pre-opening feedback information.

[0012] The method for modifying the expiration date of the electronic certificate is segmented, wherein the server acquiring the issuing identification information delivered by the client and generating the pre-opening identification information corresponding to the issuing identification information, specifically includes:

[0013] The server receives the issuing request information delivered by the client;

[0014] Verifies whether the issuing request information is correct, and if correct, generates pre-issuing information and delivers it to the client.

[0015] The sub-paragraph modified electronic certificate valid period method, wherein, the electronic certificate each stage include: the collection period, the performance period, the receipt period, settlement period, liquidation period.

[0016] The method for modifying the validity period of the electronic certificate is segmented, wherein the electronic certificate further includes:

[0017] The client logs in with the server information and determines whether the corresponding electronic certificate has been signed. If it is not signed, it will submit a modification request for the validity period of electronic certificate;

[0018] The server receives the request for modification of the validity of each stage of the electronic certificate;

[0019] The server determines whether the modification request exceeds the allowable modification range, and if not, the corresponding period of the electronic certificate correspondingly is validated.

[0020] The method for modifying the validity of the electronic certificate is to modify the validity period of the electronic certificate, including:

[0021] Modify the deadline for the validity of any period of electronic certificate or change the period of validity for any period of electronic certificate.

[0022] The method for modifying an expiration date of an electronic certificate is segmented, wherein the issuing request information at least includes issuer identity information and

payment account information bound to the electronic certificate.

[0023] According to a second aspect of the present application, the present application provides a method for segmenting an expiration date of an electronic certificate, including:

[0024] The first terminal receives the issuing request information delivered by the second terminal;

[0025] The first terminal generates pre-permitting information containing the valid period of each stage of the custom electronic certificate according to the issuing request information;

[0026] The first terminal delivers the pre-opened card information to the second terminal;

[0027] The first terminal receives the pre-opening feedback information that is delivered by the second terminal and contains the valid period of each stage of the modified electronic certificate, and opens the electronic certificate according to the pre-opening feedback information.

[0028] According to a third aspect of the present application, the present application provides a system for modifying the validity period of an electronic certificate by stages, including:

[0029] The data requesting terminal is used to deliver the issuing request information containing at least the issuer identification information and the payment account, and receive the pre-opening certification information and segment modification of the validity period of each stage of the electronic certificate therein. The modified pre-opening information is generated to generate the pre-opening feedback information to the data processing terminal.

[0030] The data processing terminal is used to receive the issuing request information delivered by the data requesting terminal and deliver the pre-opening information to the data requesting terminal; and receive the pre-opening feedback information delivered by the data requesting terminal to generate the pre-opening information corresponding to the electronic certificate.

[0031] The system for modifying the validity period of the electronic certificate, wherein the data processing terminal also includes:

[0032] The input / output module is used to receive the issuing request information delivered by the data requesting terminal, and according to the issuing request information, deliver the pre-opening information to the data request terminal and receive the pre-opening feedback information returned by the data request terminal;

[0033] When the data processing terminal receives the issuing request information, determine whether the input and output module receives the issuing request information is correct; when the data processing terminal receives the pre-opened card information, in the judgement of the pre-opening information, whether the modification of the validity period

of the electronic certificate is within the allowed scope, if it is delivered to open the electronic certificate demand to the execution module;

[0034] The execution module modifies the stages of electronic certificate's validity according to the pre-opening feedback information, and opens electronic certificate according to the feedback information of the pre-opening certificate.

[0035] The beneficial effects of this application are: use Internet technology to implement electronic certificate online, and can remotely modify the validity period of each stage of electronic certificate, making the use of electronic certificate more flexible and enrich the application of financial payment tool, at the same time avoid the need to change the period of validity and to set up electronic certificate cumbersome steps, as well as the changes brought by the electronic certificate valid for unnecessary repetitive work, improve the efficiency, make E-commerce application more convenient.

[0036] Brief Description

[0037] Figure 1 is a flowchart of a method for modifying the validity period of an electronic certificate according to Example one of the present invention;

[0038] Figure 2 is a flow chart of a method for modifying the validity period of an electronic certificate according to Example two of the present invention;

[0039] Figure 3 is a schematic block diagram of a system for modifying the validity period of an electronic certificate according to Example three of the present invention.

[0040] Description of the Preferred Examples

[0041] The present application will be further described in detail below with reference to the accompanying drawings through specific examples.

[0042] The terms used in this application define:

[0043] Electronic certificate: it refers to the bank, in accordance with the application of the opening issuing, freeze the funds or use the credit line and open it in the name of the bank, and commit to make the payment certificate of electronic credit commitment in accordance with the agreed conditions.

[0044] The basic business process of electronic certificate referred to in this application: the issuing bank, according to the application of the issuer, freeze the required amount of funds to open the electronic certificate, when the agreed condition for the settlement are reached, the issuing bank will settle the funds for payment and settlement.

[0045] Collection Period: collection period is the deadline for the recipient to apply for collection, if the certificates are not received within the time limit, the electronic certificate will be invalidated. After receiving the certificate, the electronic certificate will enter into the compliance period.

[0046] Compliance Period: the performance period is the deadline for the submitter to submit compliance information (such as delivery information), the electronic certificate fails to be submitted within the time limit. After the recipient submits the compliance information, the electronic certificate enters the receipt period.

[0047] Signature Period: the receipt period is the deadline for the recipient to apply for payment, the overdue application for payment information (such as receipt of information) then the electronic certificate expires. After receiving the certificate, the electronic certificate will enter the payment period.

[0048] Settlement period: apply for payment from the electronic certificate to pay for the implementation of a period of time.

[0049] Liquidation: the time required for liquidation.

[0050] In this example of the present application, an online certificate for electronic certificate can be realized through the Internet. First, in the process of issuing an electronic certificate, the validity periods of electronic certificate may be modified in stages. Secondly, before the electronic certificate receipt has been issued, the validity of each phase of electronic certificate can be amended by the login information.

[0051] Example 1

[0052] This example is used in the electronic certificate of the issuing process, and applied to the issuing period. Please refer to Figure 1, a method for modifying the validity period of an electronic certificate provided by the present invention includes the following steps:

[0053] S1, the client delivers the issuing request message to the server.

[0054] Specifically, the client logs on to the issuing bank website, fills in the issuing request information and delivers the data containing the issuing request information to the server. Wherein, the client may be a mobile terminal, a PC connected to the Internet such as a computer, or a teller machine of the issuing bank. The server is the background server of the issuing bank.

[0055] The issuing request information includes the issuer's identity information and payment account information. It can also include information such as the recipient's name, cellphone, email, ID card, WeChat, QQ number and other information that can be used by the recipient, the recipient's account (deposit account), so that facilitate the recipient to receive timely electronic certificate. Of course, the customer may also not specify the certificate collector information, so that anyone who obtains the electronic certificate information can receive the electronic certificate.

[0056] S2, the server acquires the issuing request information delivered by the client.

[0057] S3, the server verifies whether the issuing request information is correct.

[0058] Specifically, verifying that the request information is correct at least to verify that the applicant is valid, that is, verifying whether the certificate is a real name, and verifying whether the issuing applicant has a bad credit record. If the issuer's identity information is a real name system and there is no bad credit record, it is determined that the issuing request information is correct, and the process proceeds to step S4. If the non-real-name applicant or issuing applicant has a bad credit record, it determines that the issuing request information is incorrect, and returns to step S1 to prompt the client to resend the issuing request information. Of course, it is also possible to verify whether the applicant has an account opening in the issuing bank, but this is only used as an internal statistic of the issuing bank, and does not serve as the basis for the legality of the request information of the applicant.

[0059] S4, the server delivers the pre-opening information corresponding to the opening request information to the client.

[0060] The server reads the issuing request information and generates the corresponding pre-issuing data information, the pre-issuing information contains data information for the client to customize the validity period of each stage of the electronic certificate. Wherein, the various stages of the electronic certificate include: collection period, performance period, receipt period, settlement period, and liquidation period.

[0061] S5, the client receives the pre-opening information delivered by the server, modifies the valid period of each stage of the electronic certificate, and generates pre-opening feedback information and delivers it to the server.

[0062] The client receives the pre-opened card data information delivered by the server, reads the pre-opened card data therein, and modifies the valid period of each phase of the electronic certificate one by one, and then delivers the pre-opened card with the modified valid period information to generate a pre-issuing feedback packet and deliver the pre-issuing information to the server.

[0063] Wherein, the modification method of the validity period of the electronic certificate can be divided into two types: an absolute validity period and a relative validity period. The absolute validity period refers to an effective deadline of any period of the electronic certificate. For example, the expiration date of a visa period is a year / month / day. The relative validity period refers to the time span of any valid period of the electronic certificate. For example, the validity period of the visa is within 15 days from the date of issuance of the license, and the modification of the validity period of other phases is the same.

[0064] Further, the period of validity of the previous period of the electronic certificate is subject

to a period of validity, that is, if the corresponding operation is performed within the validity period of the electronic certificate, the electronic certificate of the validity period exceeds the validity of the electronic certificate. In contrast, when the previous period of validity has not been closed, the operation of the corresponding phase is performed, and the remaining time of the period is accumulated to the next period of validity. For example, the electronic certificate is valid for a period of 15 days from the date of issuance. The period of validity of the electronic certificate is within 20 days from the date of issuance. If the electronic certificate is received by the receiving party on the 10th day after the date of issuing the electronic certificate. The remaining five days of the collection period automatically accumulated to the compliance period, which the electronic certificate of compliance period from the original five-day period extended to 10 days.

[0065] S6, the server receives the pre-opened card feedback information delivered by the client to determine whether the validity period of each stage of the electronic certificate is beyond the scope of the modification.

[0066] Specifically, the server receives the pre-opening feedback information returned by the client, reads the pre-opening feedback information, and determines whether the modification of the expiration of the validity period of each stage of the electronic certificate exceeds the modification scope; if not, the process proceeds to step S7, If yes, return to step S4, prompting the client to modify the validity period of each stage of the electronic certificate.

[0067] Further, the server preliminarily defines the allowable modification range of the validity period of each stage of the electronic certificate, for example, according to the chronological order of each stage of the electronic certificate, the expiration date of the latter stage may not be earlier than the start date of the prior expiration date. The duration of validity of each stage shall not exceed the fixed maximum length of opening bank.

[0068] S7, the server modifies the duration of each stage of the electronic certificate and generates the corresponding electronic certificate.

[0069] Specifically, the server modifies the validity period of each stage of the electronic certificate according to the pre-opening feedback information, meanwhile, the server freezes the funds corresponding to the payment account bound with the electronic certificate, and opens the electronic certificate according to the pre-opening feedback information.

[0070] Further, in other examples of the present invention, before determining that the pre-opening feedback information is within the modified range and before opening the electronic certificate, the method may further include: the server delivers the login

password to set the information to the client, indicating that the electronic certificate information is generated successfully, and require the client to enter the login password, and with the issuance of information corresponding to save; customer according to the electronic certificate application login information and password to log in Bank Credit certificate, and determine whether the corresponding electronic certificate has been issuing to sign for, if it is not received, the client shall be allowed to modify the validity period of each phase of electronic certificate. The login password can be a number of digital passwords or other password combinations that can be edited by the customer. The password can be used to check and further modify the validity period of each stage after the customer has opened the card. In this way, after the successful opening of the electronic certificate, the issuer can modify the validity of each stage of the electronic certificate through the client before receiving the certificate.

[0071] In this example, the following steps are modified after the electronic certificate is validated:

[0072] Step one, the client logs on the issuing bank website or corresponding software, enter the login information.

[0073] Step two, the server verifies the login information is correct, if it is correct then go to step three, if incorrect, prompt the client to re-enter the login information.

[0074] Wherein, after receiving the login information, the server retrieve the identity information of the holder according to the identity information of the holder and the login password set at the time of issuing the certificate, for example, if the information entered by the client is matched with each other, the login is successful, and the login fails if the match is not matched, prompting the customer to re-enter the login information.

[0075] Step three, the server reads the stage of the electronic certificate, if t the electronic certificate has not been received, then enter the fourth step. If the electronic certificate has been received by the recipient, it will not be satisfied with the expiry date again. The server will deliver the expiry date to allow the failure prompt to the client and end the process.

[0076] Step four, the server delivers the valid information to the client, including the expiration date of the validity period of each phase of the electronic certificate, and receives the valid change feedback information returned by the client.

[0077] Step five, the server modify the validity period of the electronic certificate according to the modified feedback information of the expiry date returned by the client.

[0078] Example 2

[0079] Based on the description of the foregoing example, the present invention also proposes another method for modifying the validity period of an electronic certificate by stages. As

shown in Figure 2, a method for modifying the validity period of an electronic certificate according to this example includes:

[0080] S10, the first terminal receives the issuing request information delivered by the second terminal;

[0081] Specifically, the first terminal is a bank background terminal, the second terminal is an operation terminal of a client, and the second terminal may be a mobile terminal or other network-connected PC device. The issuing request information is delivered by the second terminal of the client, and the first terminal of the bank receives the opening request information.

[0082] S20: the first terminal, based on the data of the issuing request, generates the pre-opening information that contains the validity of each stage of the electronic certificate, and delivers the pre-opening information to the second terminal;

[0083] The first terminal generates pre-issuing information according to the issuing request information, and delivers the editable pre-issuing information to the second terminal. Wherein, the pre-opening information contains at least the time limit data for each phase of electronic certificate for the second terminal customization. After receiving the pre-opening information, the second terminal may arbitrarily modify the duration of the validity period of each stage of the electronic certificate, the modified pre-opening certificate information is generated to generate the pre-open card feedback information.

[0084] S30: the first terminal receives the pre-opening feedback information that is delivered by the second terminal and contains the valid period of each stage of the modified electronic certificate, and opens the electronic certificate according to the pre-opening feedback information.

[0085] The pre-opening feedback information is generated after the second terminal modifies the validity period of each stage of the electronic certificate in the pre-opening information, and the second terminal delivers the generated pre-opening feedback information to the first terminal. After receiving the pre-opening feedback information, the first terminal correspondingly modifies the validity period of each stage of the electronic certificate and simultaneously freezes the funds corresponding to the payment account and generates the corresponding electronic certificate.

[0086] Example 3

[0087] Based on the description of the foregoing example, this example also provides a system for modifying the validity period of an electronic certificate sub-section. As shown in Figure 3, this example provides a system for modifying the validity period of an electronic certificate system, including:

[0088] The data requesting terminal 10 is used to deliver the issuing request information containing at least the issuer identification information and the payment account, and receive the pre-opening certification information and segment modification of the validity period of each stage of the electronic certificate therein. The modified pre-opening information is generated to generate the pre-opening feedback information to the data processing terminal 20.

[0089] The data processing terminal 20 is used to receive the issuing request information delivered by the data requesting terminal 10 and deliver the pre-opening information to the data requesting terminal 10; and receive the pre-opening feedback information delivered by the data requesting terminal 10 to generate the pre-opening information corresponding to the electronic certificate.

[0090] Further, the data processing terminal 20 specifically includes:

[0091] The input / output module (21) is used to receive the issuing request information delivered by the data requesting terminal 10, and according to the issuing request information, it delivers the pre-opening information to the data request terminal 10 and receives the pre-opening feedback information returned by the data request terminal 10;

[0092] The judging module 22 is used to judge whether the issuing request information received by the input-output module 21 is correct when the data processing terminal 10 receives the issuing request information, and when the data processing terminal 20 receives the pre-issuing information, in the judgement of the pre-opening information, whether the modification of the validity period of the electronic certificate is within the allowed scope, if it is delivered to open the electronic certificate demand to the execution module 23;

[0093] The execution module (23), according to the pre-issuing feedback information sub-modified the period of validity of the electronic certificate, and generate the corresponding electronic certificate.

[0094] The beneficial effects of the present invention are: use Internet technology to implement electronic certificate online, and can remotely modify the validity period of each stage of electronic certificate, making the use of electronic certificate more flexible and enrich the application of financial payment tool, at the same time avoid the need to change the period of validity and to set up electronic certificate cumbersome steps, as well as the changes brought by the electronic certificate valid for unnecessary repetitive work, improve the efficiency, make E-commerce application more convenient.

[0095] Specific examples are used above to illustrate the present invention, but only to help understand the present invention, but not to limit the present invention. For the general technical personnel in this field, according to the ideas of the present invention, the above

specific implementation methods can be changed.

Technical problem

Problem solving solution

The beneficial effect of the invention

CLAIMS

1. A system for modifying an expiration date of an electronic certificate comprising:

a data requesting terminal; and

a data processing terminal;

wherein the data requesting terminal is configured to:

deliver an issuing request including at least issuer identification information and a payment amount to the data processing terminal;

receive a pre-opening certification information which includes an electronic certificate from the data processing terminal;

modify a validity period of the electronic certificate; and

deliver modified pre-opening certification information to the data processing terminal;

wherein the data processing terminal is configured to:

receive the issuing request delivered by the data requesting terminal;

deliver the pre-opening certification information to the data requesting terminal;

receive the modified pre-opening certification information from the data requesting terminal; and

open the electronic certificate contained in the modified pre-opening certificate information.

2. The system of claim 1 wherein the data processing terminal further comprises:

an input-output module;

a judgement module; and

an execution module;

wherein the input-output module is configured to:

receive the issuing request;

deliver the pre-opening certification information to the data requesting terminal; and

receive the modified pre-opening certification information;

wherein the judgement module is configured to:

determine whether the issuing request received by the input-output module is correct; and

determine whether the validity period of the electronic certificate is within a pre-determined allowable range; and

wherein the execution module is configured to modify the validity period of the electronic certificate based on feedback information on the pre-opening certification information.

3. The system of any one of claims 1-2 wherein the issuing request includes payment account information.

4. The system of any one of claims 1-3 wherein the issuing request includes a recipient name.

5. The system of any one of claims 1-4 wherein the issuing request includes a recipient cell phone number.

6. The system of any one of claims 1-5 wherein the issuing request includes a recipient email address.

7. The system of any one of claims 1-6 wherein the issuing request includes a recipient ID card.

8. The system of any one of claims 1-7 wherein the validity period is an absolute validity period.

9. The system of any one of claims 1-7 wherein the validity period is a relative validity period.

10. The system of any one of claims 1-9 wherein the validity period is a collection period.

11. The system of any one of claims 1-9 wherein the validity period is a performance period.

12. The system of any one of claims 1-9 wherein the validity period is a receipt period.

13. The system of any one of claims 1-9 wherein the validity period is a settlement period.

14. The system of any one of claims 1-9 wherein the validity period is a liquidation period.

15. A method for modifying an expiration date of an electronic certificate comprising:

delivering an issuing request from a client terminal to a server;

acquiring the issuing request delivered by the client terminal at the server;

delivering pre-opening certification information corresponding to the issuing request from the server to the client terminal wherein the pre-opening certification information includes a validity period for the electronic certificate that is to be modified;

receiving the pre-opening certification information at the client terminal;

modifying, at the client terminal, the validity period of the electronic certificate to generate pre-opening feedback information including a new validity period of the electronic certificate;

delivering the pre-opening feedback information from the client terminal to the server;

receiving the pre-opening feedback information at the server; and

opening the electronic certificate at the server.

16. The method of claim 15 further comprising:

pre-setting a scope of the validity period to be modified at the server;

determining whether a proposed validity period modification is within an allowable modification range after the server has received the pre-opening certification information;

when the proposed validity period modification is within an allowable modification range the method further comprises:

opening the electronic certificate according to the pre-opening certification information.

17. The method of claim 15 further comprising:

receiving the issuing request that is delivered by the client terminal at the server; and

verifying whether the issuing request is valid; and

when the issuing request is valid the method further comprises:

generating a pre-opening certification information and delivering it to the client terminal.

18. The method of any one of claims 15-17 wherein the electronic certificate includes a plurality of validity periods.

19. The method of any one of claims 15-18 wherein the validity period is a collection period.

20. The method of any one of claims 15-18 wherein the validity period is a performance period.

21. The method of any one of claims 15-18 wherein the validity period is a receipt period.

22. The method of any one of claims 15-18 wherein the validity period is a settlement period.

23. The method of any one of claims 15-18 wherein the validity period is a liquidation period.

24. The method of any one of claims 19-23 further comprising:

logging into the server from a client device; and

determining whether a corresponding electronic certificate has been signed; and

when the corresponding electronic certificate has not been signed the method further comprises:

submitting a modification request to modify the validity period of the electronic certificate;

receiving the modification request at the server; and

determining, at the server, whether the modification request exceeds an allowable modification range, and when the modification request does not exceed the allowable modification range, the corresponding electronic certificate is validated.

25. The method according to claim 24 further comprising:

modifying a deadline for the validity period of the electronic certificate.

26. The method according to claim 24 further comprising:

modifying a period of validity for the validity period of the electronic certificate.

27. The method according to claim 26 wherein the issuing request includes an issuer identification information.

28. The method according to any one of claim 26 and 27 wherein the issuing request includes a payment account information bound to the electronic certificate.

29. A method for segmenting an expiration date of an electronic certificate comprising:

receiving an issuing request at a first terminal delivered by a second terminal;

generating, at the first terminal, pre-permitting information including a validity period of each stage of the electronic certificate according to the issuing request;

delivering the pre-permitting information from the first terminal to the second terminal,;

receiving the pre-permitting information at the second terminal;

modifying, at the second terminal, the validity period of at least one stage of the electronic certificate;

delivering the modified pre-permitting information from the second terminal to the first terminal;

receiving, at the first terminal, the modified pre-permitting information; and

generating, at the first terminal, the electronic certificate corresponding to the pre-permitting information.

30. The method of claim 29 wherein the validity period is a collection period.

31. The method of claim 29 wherein the validity period is a performance period.

32. The method of claim 29 wherein the validity period is a receipt period.

33. The method of claim 29 wherein the validity period is a settlement period.

34. The method of claim 29 wherein the validity period is a liquidation period.

35. The method of claim 29 wherein the validity period is an absolute validity period.

36. The method of claim 29 wherein the validity period is a relative validity period.

Drawings of documents

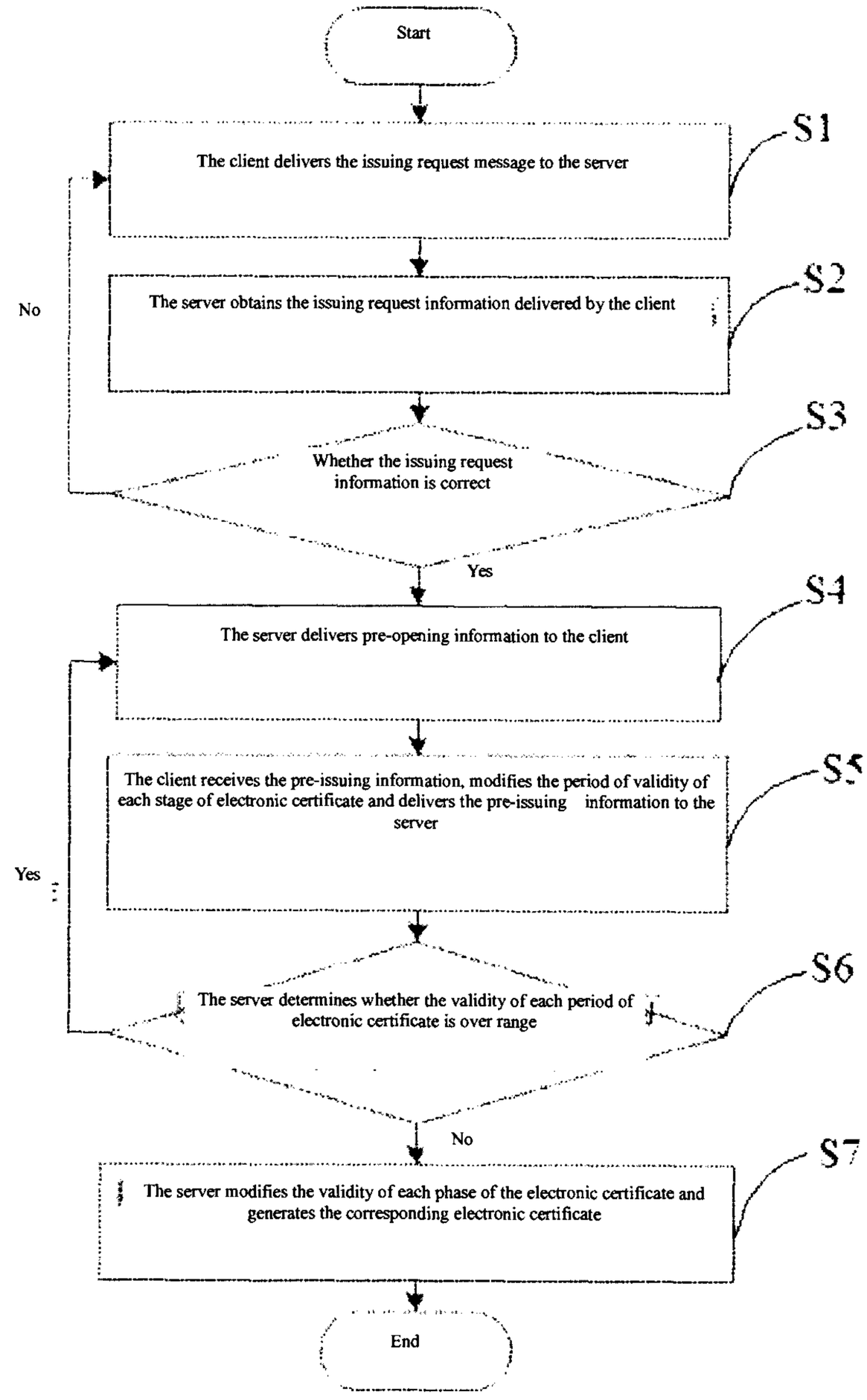

Figure 1

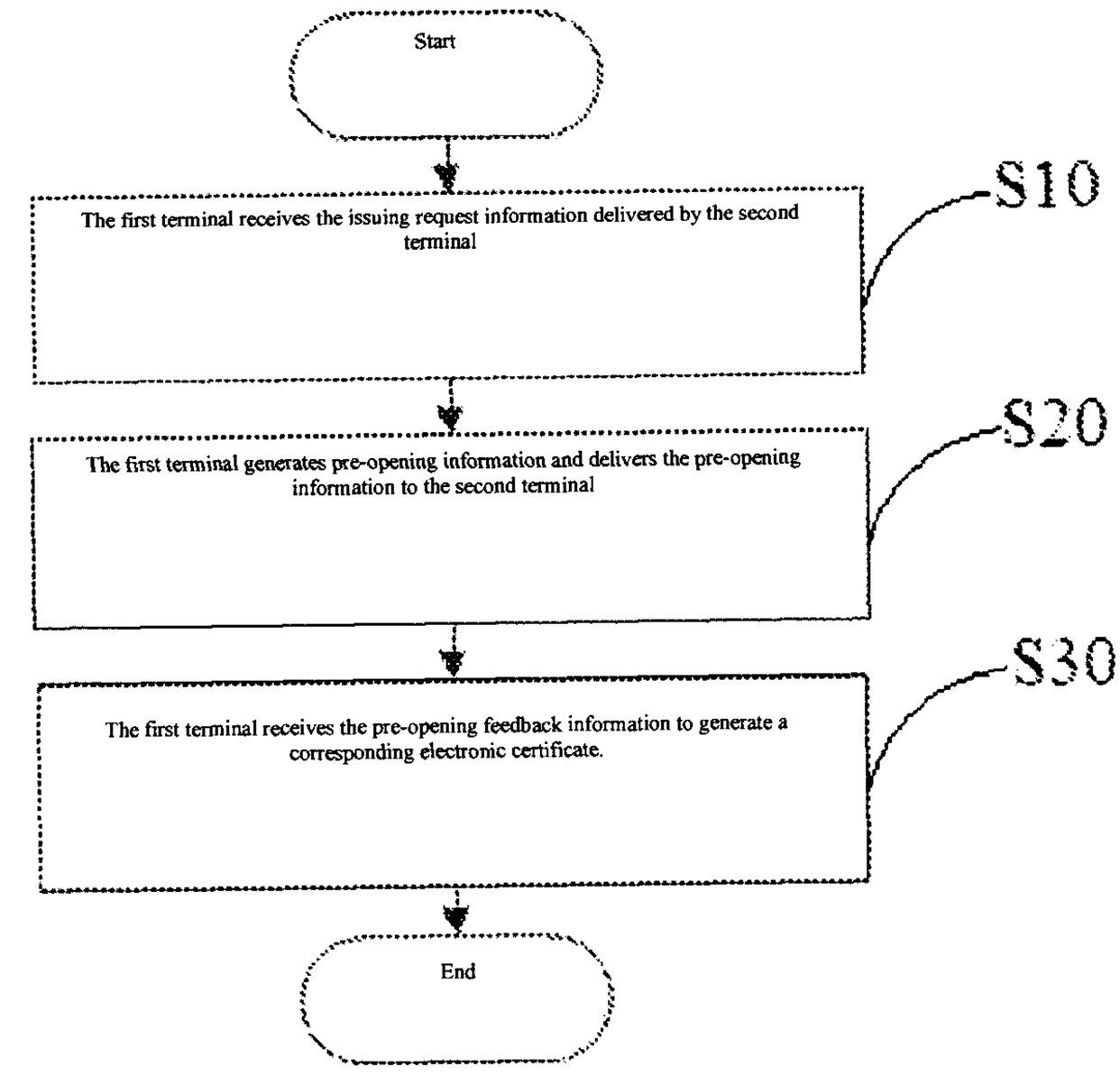

Figure 2

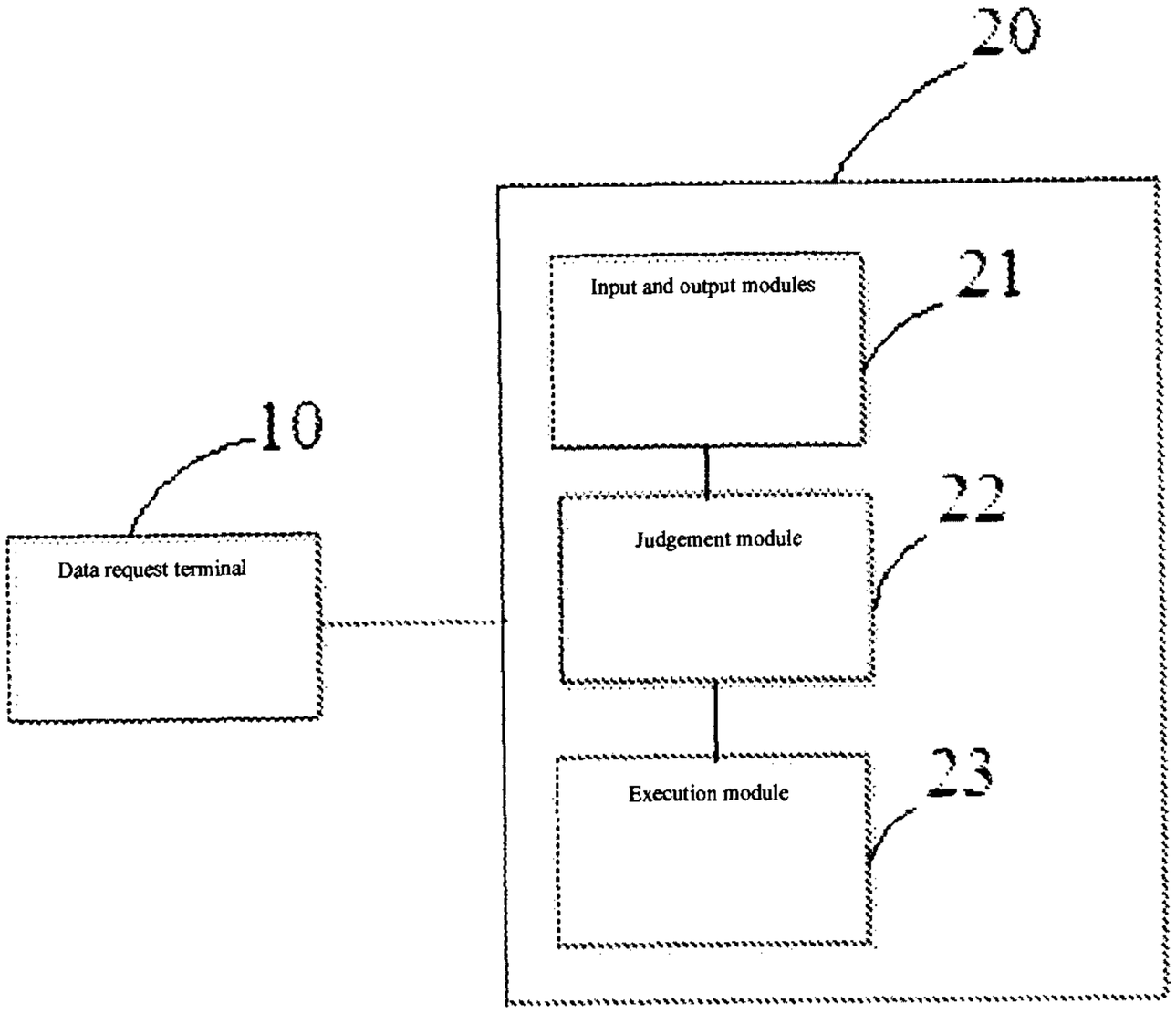

Figure 3

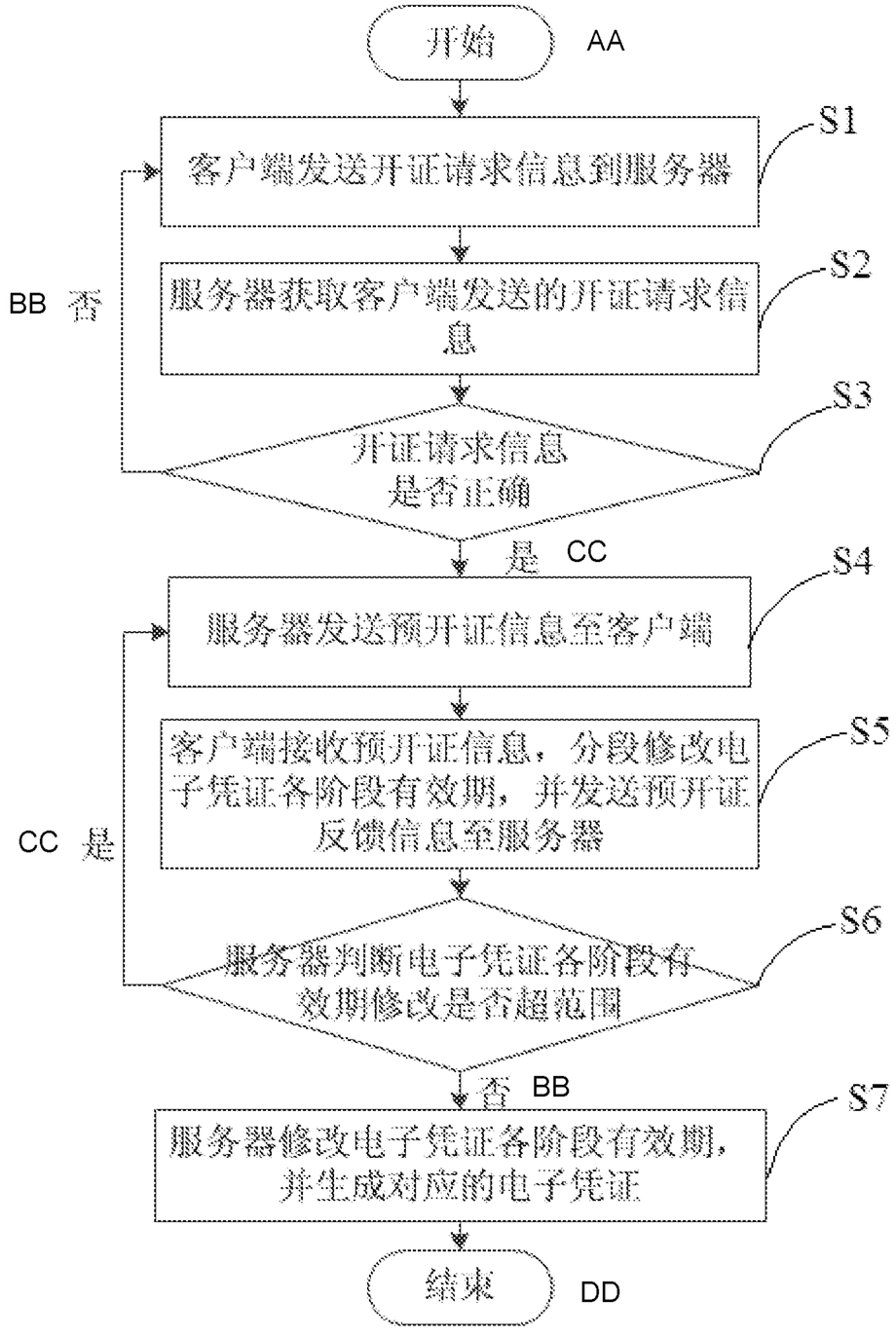

图 1

S1 A client terminal sends a certificate issuing request message to a server
S2 The server acquires the certificate issuing request message sent by the client terminal
S3 Is the certificate issuing request message accurate
S4 The server sends a certificate pre-issuing message to the client terminal
S5 The client terminal receives the certificate pre-issuing message, and respectively modifies each stage of the period of validity of the electronic certificate, and sends to the server a certificate pre-issuing feedback message
S6 The server determines whether the changes of each stage of the period of validity of the electronic certificate are out of range
S7 The server changes each stage of the period of validity of the electronic certificate, and generates a corresponding electronic certificate
AA Start
BB No
CC Yes
DD Finish