PROXY PAYMENT METHOD, DEVICE AND ELECTRONIC DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a National Stage of International Application No. PCT/CN2016/079732, filed April 20, 2016, which claims priority to Chinese Patent Application No.201510276466.9, filed May 27, 2015, both of which are incorporated herein by reference in their entireties.

TECHNICAL FIELD

The present invention relates to the technical field of financial data processing, and in particular to an agency payment method and an electronic device.

BACKGROUND ART

Currently, it has been electronic payment times, and online or mobile payments are increasingly popular. But this is undoubtedly a problem to people who are unfamiliar with or inconvenient to the operations on computers and mobile phones.

Based on the problem, measures for the agency payment are proposed at present. In accordance with the prior art, the agency operation and payment can only be achieved in the following ways:

1. The consignor notifies the agent of the user name and the password of the account. In this way, the account of the consignor faces a very high security risk.

2. The consignor transfers money or pays cashes to the agent, and then the agent pays using his own account. Such operation procedure is very troublesome.

SUMMARY OF THE INVENTION

In order to solve the problem of the prior art, the present invention provides an agency payment method, apparatus and an electronic device. The consignor entrusts his account to any other person for an agency payment operation. In each payment transaction of the account, the money will not be transferred from the account of the consignor until an acknowledgement is made by the consignor, and the payment operation is invalid if no acknowledgement is made within a specified period, thus the security is high.

In order to achieve the above objectives, the present invention provides an agency payment method, comprising:

acquiring an agency payment request instruction, and parsing the agency payment request instruction to acquire control information thereof; wherein the agency payment request instruction is generated according to an agent's operation of performing a payment process through an account of a consignor;

inquiring content information of the agency payment request instruction according to the control information of the agency payment request instruction, so as to acquire a login account and a transaction account, and performing a verification with an agency relation between the login account and the transaction account; generating payment acknowledgement information after the verification succeeds; acquiring response information according to the payment acknowledgement information and performing a verification of the response information; wherein the transaction account is an account of the consignor, the login account is an account of the agent, and the response information is generated according to the consignor's acknowledgement of the agent's operation of performing the payment process;

determining whether to complete the payment according to a result of the verification of the response information.

Preferably, the method further comprises:

acquiring an account agency request instruction, and parsing the account agency request instruction to acquire control information thereof;

inquiring content information of the account agency request instruction according to the control information of the account agency request instruction, so as to acquire a login account and a transaction account, and performing a verification of the login account and the transaction account;

establishing an agency relation between the login account and the transaction account, after the verification succeeds.

Preferably, the method further comprises:

acquiring a transaction verification request instruction before the agency payment request instruction is acquired, and parsing the transaction verification request instruction to acquire control information thereof;

inquiring content information of the transaction verification request instruction according to the control information of the transaction verification request instruction, acquiring a login account, and performing a verification of validity of the login account, wherein the agency payment request instruction is allowed to be acquired only when the verification succeeds.

Preferably, the method further comprises:

acquiring an account agency cancelling instruction, and parsing the account agency cancelling instruction to acquire control information thereof;

inquiring content information of the account agency cancelling instruction according to the control information of the account agency cancelling instruction, acquiring a transaction account, and performing a verification of validity of the transaction account;

cancelling an agency relation between the login account and the transaction account, after the verification succeeds.

Preferably, the method further comprises:

storing account information, the agency relation, operation logs and verification information.

In order to achieve the above objectives, the present invention further provides an agency payment apparatus, comprising:

a first instruction parsing unit used to acquire an agency payment request instruction, and parse the agency payment request instruction to acquire control information thereof; wherein the agency payment request instruction is generated according to an agent's operation of performing a payment process through an account of a consignor;

an agency payment behavior verification unit used to inquire content information of the agency payment request instruction according to the control information of the agency payment request instruction, so as to acquire a login account and a transaction account, and perform a verification of an agency relation between the login account and the transaction account; generate payment acknowledgement information after the verification succeeds; acquire response information according to the payment acknowledgement information and perform a verification of the response information; wherein the transaction account is an account of the consignor, the login account is an account of the agent, and the response information is generated according to the consignor's acknowledgement of the agent's operation of performing the payment process;

a payment unit used to determine whether to complete a payment according to a result of the verification of the response information.

Preferably, the apparatus further comprises:

a second instruction parsing unit used to acquire an account agency request instruction, and parse the account agency request instruction to acquire control information thereof;

an agency relation verification unit used to inquire content information of the account agency request instruction according to the control information of the account agency request instruction, so as to acquire a login account and a transaction account, and perform a

verification of the login account and the transaction account;

an agency relation establishing unit 206 used to establish an agency relation between the login account and the transaction account, after the verification succeeds.

In this embodiment, before establishing the above agency relation, the agency relation verification unit 205 checks whether any agency relation has been established between the login account and the transaction account, and the legalities of the two accounts.

Further, an embodiment of the present invention provides a third structural diagram of an agency payment apparatus. As illustrated in Fig. 4, on the basis of Fig. 3, the agency payment apparatus further comprises:

a third instruction parsing unit 207 used to acquire a transaction verification request instruction before the agency payment request instruction is acquired, and parse the transaction verification request instruction to acquire control information thereof;

a login account verification unit 208 used to inquire content information of the transaction verification request instruction according to the control information of the transaction verification request instruction, acquire a login account, and perform a verification of validity of the login account; wherein the agency payment request instruction is allowed to be acquired only when the verification succeeds.

Before the agency payment, it is verified whether the login behavior is made by the agent himself to prevent any malicious login by other persons, which lays a foundation for the security of the following agency payment behavior.

Further, an embodiment of the present invention provides a fourth structural diagram of an agency payment apparatus. As illustrated in Fig. 5, on the basis of Fig. 4, the agency payment apparatus further comprises:

a fourth instruction parsing unit 209 used to acquire an account agency cancelling instruction, and parse the account agency cancelling instruction to acquire control information thereof;

a transaction account verification unit 210 used to inquire content information of the account agency cancelling instruction according to the control information of the account agency cancelling instruction, acquire a transaction account, and perform a verification of validity of the transaction account;

an agency relation cancelling unit 211 used to cancel the agency relation between the login account and the transaction account, after the verification succeeds.

In this embodiment, when the consignor cancels the agency relation, the transaction account verification unit 210 verifies whether such an operation is performed by the

In addition, although several units of the agency payment apparatus are mentioned in the above detailed descriptions, the division is not compulsory. In fact, according to the embodiments of the present invention, the features and functions of two or more of those units may be embodied in one unit. Similarly, the feature and function of one of those units can be embodied by being further divided into a plurality of units.

Example method

After the agency payment apparatus of the example embodiments of the present invention are introduced, the agency payment method of the example embodiments of the present invention will be introduced as follows with reference to Fig. 6.

Fig. 6 illustrates a first flow diagram of an agency payment method provided by an embodiment of the present invention, comprising:

step 601): acquiring an agency payment request instruction, and parsing the agency payment request instruction to acquire control information thereof; wherein the agency payment request instruction is generated according to an agent's operation of performing a payment process through an account of a consignor;

step 602): inquiring content information of the agency payment request instruction according to the control information of the agency payment request instruction, so as to acquire a login account and a transaction account, and performing a verification of an agency relation between the login account and the transaction account; generating payment acknowledgement information after the verification succeeds; acquiring response information according to the payment acknowledgement information and performing a verification of the response information; wherein the transaction account is an account of the consignor, the login account is an account of the agent, and the response information is generated according to the consignor's acknowledgement of the agent's operation of performing a payment process;

step 603): determining whether to complete the payment according to a result of the verification of the response information.

In this embodiment, the agency payment must be performed based on the agency relation. The agency relation is established before step 601 is performed, and as illustrated in Fig. 7, a flow of establishing the agency relation comprises:

step 1): acquiring an account agency request instruction, and parsing the account agency request instruction to acquire control information thereof;

step 2): inquiring content information of the account agency request instruction according to the control information of the account agency request instruction, so as to

to prevent any malicious action by other persons, which lays a foundation for the security of the following agency payment behavior.

In this embodiment, the agency payment relation can be established upon demand, and also can be canceled at any time. As illustrated in Fig. 9, a flow of cancelling an agency relation comprises:

step 11): acquiring an account agency cancelling instruction, and parsing the account agency cancelling instruction to acquire control information thereof;

step 12): inquiring content information of the account agency cancelling instruction according to the control information of the account agency cancelling instruction, acquiring a transaction account, and performing a verification of validity of the transaction account;

step 13): cancelling an agency relation between the login account and the transaction account, after the verification succeeds.

As can be analyzed from Figs. 6 to 9, after the account agency relation takes effect, by logging in his own account, the agent can see an agency account that functions to pay for the transaction during the payment. The agent only sees an account identification (a series of letters or numbers) of other person, rather than other information (e.g., password, ID number, card number, etc.) of the agency account.

It can be seen that in fact, the agent only knows the account of the consignor, so that the agent logs in his own account and performs a payment process on behalf of the consignor through the account of the consignor, while the transaction will not be valid unless it is acknowledged by the consignor. In addition, the consignor can unilaterally and autonomously cancel the agency relation between the accounts.

To be noted, although operations of the method of the present invention are depicted in a specific order in the drawings, it does not require or imply that those operations must be performed in the specific order, or that the expected effect is only achieved by performing all the operations. Additionally or optionally, some steps may be omitted, a plurality of steps may be combined into one step, and/or one step may be divided into a plurality of steps.

Example device

Based on the above example apparatus and method, an embodiment further provides an electronic device as illustrated in Fig. 10, which is used to run an agency payment application program according to various request instructions, comprising:

a memory a used to store a request instruction;

a processor b coupled to the memory, and configured to perform the request instruction stored in the memory, wherein the processor is used by a configured application program to:

CLAIMS

1. An agency payment method, comprising:

acquiring an agency payment request instruction, and parsing the agency payment request instruction to acquire control information thereof; wherein the agency payment request instruction is generated according to an agent's operation of performing a payment process through an account of a consignor;

inquiring content information of the agency payment request instruction according to the control information of the agency payment request instruction, so as to acquire a login account and a transaction account, and performing a verification of an agency relation between the login account and the transaction account; generating payment acknowledgement information after the verification succeeds; acquiring response information according to the payment acknowledgement information and performing a verification of the response information; wherein the transaction account is an account of the consignor, the login account is an account of the agent, and the response information is generated according to the consignor's acknowledgement of the agent's operation of performing the payment process;

determining whether to complete the payment according to a result of the verification of the response information.

2. The method according to claim 1, further comprising:

acquiring an account agency request instruction, and parsing the account agency request instruction to acquire control information thereof;

inquiring content information of the account agency request instruction according to the control information of the account agency request instruction, so as to acquire the login account and the transaction account, and performing a verification of the login account and the transaction account;

establishing an agency relation between the login account and the transaction account, after the verification succeeds.

3. The method according to claim 1, further comprising:

acquiring a transaction verification request instruction before the agency payment request instruction is acquired, and parsing the transaction verification request instruction to acquire control information thereof;

inquiring content information of the transaction verification request instruction according to the control information of the transaction verification request instruction, acquiring the login account, and performing a verification of validity of the login account, wherein the

agency payment request instruction is allowed to be acquired only when the verification succeeds.

4. The method according to claim 1 or 2, further comprising:

acquiring an account agency cancelling instruction, and parsing the account agency cancelling instruction to acquire control information thereof;

inquiring content information of the account agency cancelling instruction according to the control information of the account agency cancelling instruction, acquiring the transaction account, and performing a verification of validity of the transaction account;

cancelling an agency relation between the login account and the transaction account, after the verification succeeds.

5. The method according to claim 1 or 2, further comprising:

storing account information, the agency relation, operation logs and verification information.

6. An electronic device, comprising:

a memory used to store a request instruction;

a processor coupled to the memory, and configured to perform the request instruction stored in the memory, wherein the processor is used by a configured application program to:

acquire an agency payment request instruction, and parse the agency payment request instruction to acquire control information thereof; wherein the agency payment request instruction is generated according to an agent's operation of performing a payment process through an account of a consignor;

inquire content information of the agency payment request instruction according to the control information of the agency payment request instruction, so as to acquire a login account and a transaction account, and perform a verification of an agency relation between the login account and the transaction account; generate payment acknowledgement information after the verification succeeds; acquire response information according to the payment acknowledgement information and perform a verification of the response information; wherein the transaction account is an account of the consignor, the login account is an account of the agent, and the response information is generated according to the consignor's acknowledgement of the agent's operation of performing the payment process;

determine whether to complete the payment according to a result of the verification of the response information.

7. A computer readable storage medium, comprising a stored computer programs, which controls the terminal device to perform the following operations when running a computer

program:

acquiring an agency payment request instruction, and parsing the agency payment request instruction to acquire control information thereof; wherein the agency payment request instruction is generated according to an agent's operation of performing a payment process through an account of a consignor;

inquiring content information of the agency payment request instruction according to the control information of the agency payment request instruction, so as to acquire a login account and a transaction account, and performing a verification with an agency relation between the login account and the transaction account; generating payment acknowledgement information after the verification succeeds; acquiring response information according to the payment acknowledgement information and performing a verification of the response information; wherein the transaction account is an account of the consignor, the login account is an account of the agent, and the response information is generated according to the consignor's acknowledgement of the agent's operation of performing the payment process;

determining whether to complete the payment according to a result of the verification of the response information.