CLAIMS

1. A method for processing credit payment, the method comprising:

receiving a transaction information sent by a transaction terminal (S310);

generating a transaction response information based on the transaction information;

sending the transaction response information to the transaction terminal (S320);

receiving deduction accept request information of the current payment transaction that is sent by the transaction terminal (S330);

generating an application-private-key-generated payment authorization license in a mobile terminal based on the deduction accept request information and the transaction response information (S340); and

sending the payment authorization license to the transaction terminal, the transaction terminal being configured to complete the current payment transaction based on the received payment license (S350).

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

in response to sending, to the transaction terminal, the transaction response information that corresponds to the transaction information, receiving application public key certificate return request information sent by the transaction terminal (S360); and

generating application public key certificate response information for an application public key certificate in the mobile terminal based on the application public key certificate return request information, and sending the application public key certificate response information to the transaction terminal (S370).

3. The method according to any one of claims 1 to 2, wherein generating the application-private-key-generated payment license in the mobile terminal comprises:

generating signature data based on the deduction accept request information by using an application private key stored in the mobile terminal (S361);

generating transaction authentication code (TAC) based on the deduction accept request information and the transaction response information by using a TAC sub-key pre-generated in the mobile terminal (S362); and

using the signature data and the TAC as the payment authorization license (S363).

4. The method according to any one of claims 1 to 3, wherein the payment method is applied to payment for public transportation; and

the transaction response information comprises at least one of a payment card number, an available limit, and an entry flag or an exit flag.

5. The method according to any one of claims 1 to 4, wherein the deduction accept request information comprises at least one of a deduction amount, a date of the current payment transaction, a time of the current payment transaction, an entry flag or an exit flag of the current payment transaction, and station information of the current payment transaction.

6. The method according to claim 5, further comprising:

subtracting the deduction amount from the available limit in the transaction response information based on the deduction amount in the current deduction accept request information, to obtain a current available limit (S380); and

using the current available limit as an available limit of a user that corresponds to the mobile terminal (S390).

7. A method for processing credit payment, the method comprising:

sending transaction information to a mobile terminal (S410);

receiving transaction response information sent by the mobile terminal (S420);

generating deduction accept request information of the current payment transaction based on the transaction response information (S430);

sending the deduction accept request information to the mobile terminal (S440); and

in response to receiving a payment authorization license, determining, based on the payment authorization license, that the current payment transaction is completed (S450).

8. The method according to claim 7, wherein after the receiving transaction response information sent by the mobile terminal, the method further comprises:

sending application public key certificate return request information to the mobile terminal

(S460);

receiving application public key certificate response information sent by the mobile terminal (S470);

verifying a signature on an application public key certificate in the application public key certificate response information by using a credit authorization public key on the transaction terminal (S480); and

in response to determining that an application public key is restored from the application public key certificate during verification, performing the step of generating deduction accept request information of the current payment transaction.

9. The method according to any one of claims 7 to 8, wherein the payment method is applied to public transportation payment; and

the transaction response information comprises a payment card number, an available limit, and an entry flag or an exit flag.

10. The method according to claim 9, wherein the method further comprises:

determining whether the payment card number in the transaction response information is comprised in a predetermined blacklist (S401); and

in response to determining that the payment card number in the transaction response information is not comprised in the predetermined blacklist, performing the step of sending application public key certificate return request information to the mobile terminal.

11. The method according to claim 9, further comprising:

determining whether the available limit in the transaction response information is greater than or equal to a predetermined threshold (S402);

if the available limit is greater than or equal to the predetermined threshold, checking whether the entry flag or an exit flag in the transaction response information is an exited state (S403); and

if the entry flag or an exit flag is an exited state, performing the step of sending application public key certificate return request information to the mobile terminal (S460).

12. The method according to any one of claims 8 to 12, wherein the payment authorization license comprises signature data and transaction authentication code (TAC), and the determining, based on the payment license, that the current payment transaction can be completed comprises:

verifying the signature data by using the application public key (S481);

generating a transaction log in response to determining that the signature data is verified (S482); and

sending the transaction log to a predetermined server, so that the predetermined server deducts, based on the transaction log, a corresponding amount of fund from a user account that corresponds to the mobile terminal, wherein the transaction log comprises the deduction amount, a transaction date, a transaction moment, a transaction terminal ID, a payment card number, an available limit, and the TAC (S483).

13. The method according to any one of claims 7 to 12, further comprising obtaining a user identity information that corresponds to the mobile terminal, the user identity comprising at least one of an identity card number, a name, a bank card number, and an email address (S105).

14. The method according to any one of claims 1 to 12, wherein the transaction terminal communicates with the mobile terminal using a peer to peer data transmission.

15. An apparatus for processing credit payment, applied to a mobile terminal, the apparatus comprising a plurality of modules configured to perform the method according to any one of claims 1 to 14.