

CLAIMS

1. A fee method for payment of a traffic section, the method comprising:

scanning, by an inbound charging apparatus, first barcode information displayed by a client
5 device, wherein the first barcode information comprises first electronic credential information
and an inbound timestamp, and wherein the inbound timestamp is added to the first barcode
information and limits the validity of the first barcode information to a predetermined period of
time;

obtaining, by the inbound charging apparatus and from the first barcode information, the
10 first electronic credential information, wherein the first electronic credential information is a first
authentication information generated by a payment system based on a user identity in the client
device;

sending, by the inbound charging apparatus, inbound information to the payment system,
wherein the inbound information comprises inbound station information and the first electronic
15 credential information;

obtaining, by an outbound charging apparatus, second electronic credential information of
the client device, wherein the second electronic credential information is a second authentication
information different from the first authentication information, the second authentication
information being generated by the payment system based on the user identity in the client
20 device; and

sending, by the outbound charging apparatus, outbound information to the payment system,
wherein the outbound information comprises outbound station information and the second
electronic credential information, wherein the outbound information and the inbound information
are used by the payment system to determine a payment account that corresponds to the user
25 identity in the client device and pay a traffic fee.

2. The method according to claim 1, wherein before the sending, by the inbound charging
apparatus, inbound information to the payment system, the method further comprises:

verifying, by the inbound charging apparatus, validity of the first electronic credential

information.

3. The method according to claim 2, wherein sending, by the inbound charging apparatus, the inbound information to the payment system comprises:

5 sending, by the inbound charging apparatus, the inbound information to the payment system, in response to determining that the inbound charging apparatus verifies that the first electronic credential information is valid.

10 4. The method according to claim 3, wherein before sending, by the outbound charging apparatus, the outbound information to the payment system, the method further comprises:

 verifying, by the outbound charging apparatus, validity of the second electronic credential information.

15 5. The method according to claim 4, wherein the sending, by the outbound charging apparatus, outbound information to the payment system comprises:

 sending, by the outbound charging apparatus, the outbound information to the payment system, in response to determining that the outbound charging apparatus verifies that the second electronic credential information is valid.

20 6. The method according to claim 5, wherein the second electronic credential information further comprises an inbound identifier, the inbound identifier indicates that the client device has registered with the inbound charging apparatus, and the inbound identifier is used to verify the validity of the second electronic credential information.

25 7. The method according to claim 5, wherein the first electronic credential information further comprises a first timestamp, used to verify the validity of the first electronic credential and the second electronic credential information further comprises a second timestamp, used to verify the validity of the second electronic credential.

30 8. The method according to claim 1, wherein:
 obtaining, by the inbound charging apparatus, the first electronic credential information by

using the first barcode information displayed by the client device; and

obtaining, by the outbound charging apparatus, the second electronic credential information by using second barcode information displayed by the client device, wherein the second barcode information comprises the second electronic credential information.

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9. The method according to claim 8, wherein the method comprises at least one of:

the first barcode information further comprises the inbound station information, used to verify validity of the first barcode information; and

10 the second barcode information further comprises the outbound station information, used to verify validity of the second barcode information.

10. The method according to claim 1, wherein the inbound charging apparatus and the outbound charging apparatus are the same apparatus.

15 11. The method according to any one of claim 1, wherein the inbound charging apparatus and the outbound charging apparatus are configured to perform near field communication.

12. The method according to any one of claim 1, wherein the first electronic credential and the second electronic credential information are randomly allocated by the payment system.

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13. A system for payment of a traffic section, the system comprising a plurality of modules configured to perform the method of any one of claims 1 to 12.