

CLAIMS

What is claimed is:

1. An information output method, applied to an information output device and comprising:

5 establishing, ~~a long connection to a server by using a communication module provided in~~ the information output device, a connection to a server based on maintaining an automatic connection heartbeat with the server at a predetermined frequency; ~~and~~

10 sending, by the information output device, an account number ~~information associated with the information output device~~ to the server;

 receiving, by the information output device, an output instruction for a payment receipt sent by the server based on the account number ~~information~~, wherein the output instruction ~~is used to~~ instructs the information output device to output the payment receipt, and wherein the payment receipt ~~is used to identify~~ identifies that a user has
15 completed an online payment; and

 outputting, by the information output device, the payment receipt based on the output instruction.

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

20 receiving the account number ~~information~~ sent by a mobile device connected to the information output device, wherein the account number ~~information~~ is set by using a settings interface corresponding to the information output device displayed on the mobile device; and

 establishing a mapping relationship between the account number ~~information~~ and
25 the information output device.

3. The method according to claim 1, wherein the information output device carries a two-dimensional code used for the user to make the online payment; and

 correspondingly, before the receiving ~~the an~~ output instruction for ~~the a~~ payment receipt sent by the server based on the account number ~~information~~, the method further comprises:

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 receiving a scan operation performed by the user for the two-dimensional code, so that the user makes the online payment by using the two-dimensional code, and sends

the payment receipt corresponding to the online payment to the server.

4. The method according to claim 1, wherein the outputting the payment receipt comprises:

- 5 obtaining a pre-stored payment receipt output template;
 combining the payment receipt output template with the payment receipt based on a predetermined rule to generate payment receipt output content; and
 outputting the payment receipt output content.

10 5. The method according to claim 4, wherein before the obtaining ~~thea~~ pre-stored payment receipt output template, the method further comprises:

- receiving the payment receipt output template sent by a mobile device connected to the information output device, wherein the payment receipt output template is set by using a settings interface corresponding to the information output device displayed on
15 the mobile device; and
 storing the payment receipt output template.

6. The method according to claim 1, wherein before the receiving ~~thean~~ output instruction for ~~thea~~ payment receipt sent by the server based on the account number
20 ~~information~~, the method further comprises:

- outputting first content, wherein the first content comprises pre-stored content on the information output device and/or specified content sent by the server to the information output device; and
 correspondingly, the outputting the payment receipt comprises:
25 suspending output of the first content; and
 outputting the payment receipt, and continuing to output the first content after output of the payment receipt is completed.

7. The method according to any one of claims 1 to 6, wherein the information output device comprises a communication module, and wherein the communication
30 module is a general packet radio service module.

8. An information output apparatus, applied to an information output device and comprising:

a connection module, configured to establish a ~~long~~ connection to a server based on maintaining an automatic connection heartbeat with the server at a predetermined frequency; ~~by using a communication module provided in the information output device;~~
~~and~~

5 send -an account number ~~information associated with the information output device~~ to the server;

a first receiving module, configured to receive an output instruction for a payment receipt sent by the server based on the account number ~~information~~, wherein the output instruction ~~is used to instructs~~ the information output device to output the payment receipt, and wherein the payment receipt ~~is used to identify~~ identifies that a user has completed an online payment; and

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a first output module, configured to output the payment receipt based on the output instruction.

15 9. The apparatus according to claim 8, further comprising:

a second receiving module, configured to receive the account number ~~information~~ sent by a mobile device connected to the information output device, wherein the account number ~~information~~ is set by using a settings interface corresponding to the information output device displayed on the mobile device; and

20 an establishing module, configured to establish a mapping relationship between the account number ~~information~~ and the information output device.

10. The apparatus according to claim 8, wherein the information output device carries a two-dimensional code used for the user to make the online payment; and

25 correspondingly, the apparatus further comprises:

a third receiving module, configured to, before the output instruction for the payment receipt sent by the server based on the account number ~~information~~ is received, receive a scan operation performed by the user for the two-dimensional code, so that the user makes the online payment by using the two-dimensional code, and sends the payment receipt corresponding to the online payment to the server.

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11. The apparatus according to claim 8, wherein the first output module comprises:

an acquisition unit, configured to obtain a pre-stored payment receipt output template;

a generation unit, configured to combine the payment receipt output template with the payment receipt based on a predetermined rule to generate payment receipt output content; and

a first output unit, configured to output the payment receipt output content.

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12. The apparatus according to claim 11, further comprising:

a fourth receiving module, configured to, before the pre-stored payment receipt output template is obtained, receive the payment receipt output template sent by a mobile device connected to the information output device, wherein the payment receipt output template is set by using a settings interface corresponding to the information output device displayed on the mobile device; and

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a storage module, configured to store the payment receipt output template.

13. The apparatus according to claim 8, wherein the apparatus further comprises:

a second output module, configured to output first content before the output instruction for the payment receipt sent by the server based on the account number ~~information~~ is received, wherein the first content comprises pre-stored content on the information output device and/or specified content sent by the server to the information output device; and

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correspondingly, the first output module comprises:

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a suspending unit, configured to suspend output of the first content; and

a second output unit, configured to output the payment receipt, and continue to output the first content after output of the payment receipt is completed.

14. The apparatus according to any one of claims 8 to 13, wherein the information output device comprises a communication module, and wherein the communication module is a general packet radio service module.

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15. An information output device, comprising:

a communication module, configured to establish a ~~long~~-connection to a server based on maintaining an automatic connection heartbeat with the server at a predetermined frequency;

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a processor, configured to send an account number ~~information associated with the information output device~~ to the server; and receive an output instruction for a

payment receipt sent by the server based on the account number ~~information~~, wherein the output instruction ~~is used to~~ instructs the information output device to output the payment receipt, and wherein the payment receipt ~~is used to identify~~ that a user has completed an online payment; and

5 a player, configured to output the payment receipt based on the output instruction.

16. The device according to claim 15, wherein the information output device carries a two-dimensional code used for the user to make the online payment.

10 17. The device according to claim 15, wherein the information output device carries a two-dimensional code for entering a settings interface corresponding to the information output device, and the settings interface is used by ~~the~~ user to set related information about the information output device, wherein

the related information comprises at least one of the account number ~~information~~,
15 a payment receipt output template, output volume, output content, output time, and output frequency.

18. The device according to any one of claims 15 to 17, wherein the communication module is a general packet radio service module.

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19. An information output device, comprising:

a processor; and

a memory configured to store computer-executable instructions, wherein when the executable instructions are executed, the processor performs the following steps:

25 establishing a ~~long~~ connection to a server based on maintaining an automatic connection heartbeat with the server at a predetermined frequency; ~~by using a communication module provided in the information output device; and~~

sending an account number ~~information associated with the information output device~~ to the server;

30 receiving an output instruction for a payment receipt sent by the server based on the account number ~~information~~, wherein the output instruction ~~is used to~~ instructs the information output device to output the payment receipt, and wherein the payment receipt ~~is used to identify~~ that a user has completed an online payment; and

outputting the payment receipt based on the output instruction.

20. A storage medium for storing computer-executable instructions, wherein when the executable instructions are executed, the following procedure is implemented:

- establishing, by an information output device, a ~~long~~ connection to a server based
5 on maintaining an automatic connection heartbeat with the server at a predetermined
frequency; ~~by using a communication module provided in the information output device;~~
~~and~~—
- sending, by the information output device, an account number ~~information~~
~~associated with the information output device~~ to the server;
- 10 receiving, by the information output device, an output instruction for a payment
receipt sent by the server based on the account number ~~information~~, wherein the output
instruction ~~is used to~~ instructs the information output device to output the payment
receipt, and wherein the payment receipt ~~is used to~~ identifies that a user has completed
an online payment; and
- 15 outputting, by the information output device, the payment receipt based on the
output instruction.