CLAIMS

1. A service processing method, comprising:

receiving RF signals including device identifiers and sent by at least one terminal device;

selecting an RF signal from the received RF signals, a terminal device corresponding to a device identifier included in the RF signal being taken as a target payment device, wherein the selecting an RF signal from the received RF signals comprises determining, from the received RF signals, an RF signal having a signal strength greater than a set value;

collecting first biometric feature information of a user using the terminal device; and

after obtaining a verification result of verifying the user's identity based on the first biometric feature information, sending a payment request to a server if the verification result is passing the verification, wherein the payment request is configured to request for completing payment based on a payment account corresponding to the target payment device.

2. The service processing method of claim 1, wherein the selecting an RF signal from the received RF signals comprises:

determining a distance value from each of the received RF signals to a receiving device; and

determining the RF signal having the distance value smaller than a set threshold as the selected RF signal.

3. The service processing method of claim 1, wherein the selecting an RF signal from the received RF signals comprises:

acquiring, from the server, user information corresponding to the device identifier included in each of the received RF signals according to a preset masking algorithm, wherein the user information is configured to distinguish each of the RF signals; and

selecting an RF signal from the received RF signals according to the user information.

4. The service processing method of claim 3, wherein the selecting an RF signal from the received RF signals according to the user information comprises:

sending a query message to the terminal device sending the RF signal according to the user information, wherein the query message is configured to confirm whether the user using the terminal device is consistent with the user corresponding to the device identifier included in the RF signal; and

determining the RF signal sent by the terminal device as the selected RF signal after confirmation information sent by the terminal device is received.

5. The service processing method of claim 1, wherein the selecting an RF signal from the received RF signals comprises:

determining time at which each of the RF signals is received;

sorting each of the RF signals according to the time; and

determining the RF signal having a sorting number smaller than a set number as the selected RF signal according to the sorting result.

6. The service processing method of claim 1, wherein the receiving RF signals including device identifiers and sent by at least one terminal device comprises:

receiving the RF signals including the device identifiers and sent by the at least one terminal device through a short-range communication mode.

7. The service processing method of claim 6, wherein the short-range communication mode includes: one or more of a Bluetooth communication mode, a near field

communications (NFC) mode, a wireless fidelity (WIFI) mode, and a sound wave mode.

8. The service processing method of claim 1, wherein the receiving RF signals including device identifiers and sent by at least one terminal device comprises:

receiving the RF signals including the device identifiers and sent by the terminal device when detecting that the terminal device arrives at a detection region.

9. The service processing method of claim 8, wherein the detecting that the terminal device arrives at a detection region comprises:

transmitting a detection signal in a set detection region; and

when a feedback signal sent by the terminal device is received, determining that arrival of the terminal device at the detection region is detected.

10. The service processing method of claim 1, wherein the collecting first biometric feature information of a user using the terminal device comprises:

collecting the first biometric feature information of the user using the terminal device through an image recognition device.

11. The service processing method of claim 10, wherein the collecting the first biometric feature information of the user using the terminal device through an image recognition device comprises:

collecting the first biometric feature information of the user through the image recognition device when it is determined that the user using the terminal device arrives at the detection region.

12. The service processing method of claim 1 or 10, wherein the biometric feature information comprises one or more of face feature information, fingerprint information, palmprint information, eye print information, and iris information.

13. The service processing method of claim 1, wherein the obtaining a verification result of verifying the user's identity based on the first biometric feature information comprises:

acquiring, from a server, second biometric feature information of the user corresponding to the device identifier included in the selected RF signal, wherein the server stores a mapping relationship between the device identifier and the biometric feature information of the user corresponding to the device identifier;

comparing the first biometric feature information with the second biometric feature information; and

obtaining the verification result of verifying the user's identity according to the comparison result.

14. The service processing method of claim 13, wherein the obtaining the verification result of verifying the user's identity according to the comparison result includes:

if the first biometric feature information is consistent with the second biometric feature information, determining that the verification on the user's identity is passed; otherwise, determining that the verification on the user's identity is not passed.

15. The service processing method of claim 1, wherein the obtaining a verification result of verifying the user's identity based on the first biometric feature information comprises:

sending the first biometric feature information and the device identifier included in the selected RF signal to the server, so that the server verifies the user's identity according to the

first biometric feature information and the second biometric feature information of the user corresponding to the device identifier included in the selected RF signal, wherein the server stores the mapping relationship between the device identifier and the biometric feature information of the user corresponding to the device identifier; and

receiving the verification result sent by the server.

16. The service processing method of claim 1 or 14 or 15, wherein the sending a payment request to a server comprises:

when the verification is passed, if the RF signal includes order data, determining a payment amount according to the order data; and

sending the payment request carrying the payment amount to the server.

17. The service processing method of claim 1, further comprising:

receiving first monitoring data sent by an Internet of Things monitoring device, wherein the first monitoring data includes a device identifier of a terminal device used by a user entering a target site; and

storing the device identifier into a user list.

18. The service processing method of claim 17, further comprising:

receiving second monitoring data sent by the Internet of Things monitoring device, wherein the second monitoring data includes a device identifier of a terminal device used by a user departing from the target site; and

updating the user list according to the second monitoring data.

19. A service processing device, comprising:

a receiving unit configured to receive RF signals including device identifiers and sent by at least one terminal device;

a selecting unit configured to select an RF signal from the received RF signals, and use a terminal device corresponding to a device identifier included in the RF signal as a target payment device, wherein selecting an RF signal from the received RF signals comprises determining, from the received RF signals, an RF signal having a signal strength greater than a set value;

a collecting unit configured to collect first biometric feature information of a user using the terminal device; and

a sending unit configured to, after obtaining a verification result of verifying the user's identity based on the first biometric feature information, send a payment request to a server if the verification result is passing the verification, wherein the payment request is configured to request for completing payment based on a payment account corresponding to the target payment device.

20. A service processing device, comprising: at least one processor; and a memory storing programs, and configured to execute the following steps by the at least one processor:

receiving RF signals including device identifiers and sent by at least one terminal device;

selecting an RF signal from the received RF signals, and using a terminal device corresponding to a device identifier included in the RF signal as a target payment device, wherein the selecting an RF signal from the received RF signals comprises determining, from the received RF signals, an RF signal having a signal strength greater than a set value;

collecting first biometric feature information of a user using the terminal device; and

after obtaining a verification result of verifying the user's identity based on the first biometric feature information, sending a payment request to a server if the verification result is passing the verification, wherein the payment request is configured to request for completing payment based on a payment account corresponding to the target payment device.

21. A service processing method, comprising:

transmitting an RF signal including a device identifier; and

receiving payment information, the payment information being sent by a server after completing payment based on a payment account corresponding to the device identifier carried in a payment request sent by a service processing device, wherein the payment request is sent by the service processing device after receiving and selecting the RF signal by determining a signal strength of the RF signal is greater than a set value and when obtaining a verification result that a verification on a user's identity based on collected first biometric feature information of the user is passed.

22. The service processing method of claim 21, wherein the transmitting an RF signal comprises:

transmitting the RF signal periodically or in real time when it is detected that a short-range communication function is enabled.

23. The service processing method of claim 21, before the receiving payment information, further comprising:

receiving a query message sent by the service processing device, wherein the query message is configured to confirm whether the user using the terminal device is consistent with the user corresponding to the device identifier included in the RF signal; and

sending confirmation information to the service processing device when it is confirmed that the user using the terminal device is consistent with the user corresponding to the device identifier included in the RF signal are consistent.

24. The service processing method of claim 21, before the transmitting an RF signal, further comprising:

scanning a commodity object selected by a user to generate order data,

wherein the transmitting an RF signal comprises:

transmitting the RF signal carrying the order data and the device identifier.

25. A service processing device, comprising:

a sending unit configured to transmit an RF signal including a device identifier; and

a receiving unit configured to receive payment information sent by a server after completing payment based on a payment account corresponding to the device identifier carried in a payment request sent by the service processing device, wherein the payment request is sent by the service processing device after receiving and selecting the RF signal by determining a signal strength of the RF signal is greater than a set value and when obtaining a verification result that a verification on a user's identity based on collected first biometric feature information of the user is passed.

26. A service processing device, comprising: at least one processor; and a memory storing programs, and configured to execute the following steps by the at least one processor:

transmitting an RF signal including a device identifier; and

receiving payment information sent by a server after completing payment based on a payment account corresponding to the device identifier carried in a payment request sent by

the service processing device, wherein the payment request is sent by the service processing device after receiving and selecting the RF signal by determining a signal strength of the RF signal is greater than a set value and when obtaining a verification result that a verification on a user's identity based on collected first biometric feature information of the user is passed.

27. A service processing method, comprising:

receiving a payment request sent by a service processing device, wherein the payment request includes a device identifier of a terminal device, and the device identifier is obtained by selecting based on RF signals via the service processing device after the RF signals sent by at least one terminal device are received, wherein the selecting comprises determining, from the received RF signals, an RF signal having a signal strength greater than a set value;

determining a payment account corresponding to the device identifier included in the payment request according to a mapping relationship between the device identifier and the payment account; and

using the payment account to complete payment.

28. The service processing method of claim 27, before the determining a payment account corresponding to the device identifier included in the payment request, further comprising:

if the payment request includes first biometric feature information of a user, determining second biometric feature information corresponding to the device identifier included in the payment request according to a mapping relationship between the device identifier and the biometric feature information; and

verifying the user's identity according to the first biometric feature information and the second biometric feature information.

29. The service processing method of claim 28, further comprising:

sending a verification result to the service processing device.

30. The service processing method of claim 28, wherein the determining a payment account corresponding to the device identifier included in the payment request comprises:

when the verification result is passing the verification, determining the payment account corresponding to the device identifier included in the payment request.

31. The service processing method of claim 27, wherein the using the payment account to complete payment comprises:

deducting the payment amount from the payment account according to the payment amount included in the payment request, for completing the payment.

32. A service processing device, comprising:

a receiving unit configured to receive a payment request sent by the service processing device, wherein the payment request includes a device identifier of a terminal device, and the device identifier is obtained by selecting based on RF signals via the service processing device after the RF signals sent by at least one terminal device are received, wherein the selecting comprises determining, from the received RF signals, an RF signal having a signal strength greater than a set value; and

a determining unit configured to determine a payment account corresponding to the device identifier included in the payment request according to a mapping relationship between the device identifier and the payment account; and

a processing unit configured to use the payment account to complete payment.

33. A service processing device, comprising: at least one processor; and a memory storing programs, and configured to execute the following steps by the at least one processor:

receiving a payment request sent by the service processing device, wherein the payment request includes a device identifier of a terminal device, and the device identifier is obtained by selecting based on RF signals via the service processing device after the RF signals sent by at least one terminal device are received, wherein the selecting comprises determining, from the received RF signals, an RF signal having a signal strength greater than a set value;

determining a payment account corresponding to the device identifier included in the payment request according to a mapping relationship between the device identifier and the payment account; and

using the payment account to complete payment.

34. A service processing system, comprising: a service processing device, a terminal device, and a server, wherein

the service processing device is configured to receive RF signals including device identifiers and sent by at least one terminal device; select an RF signal from the received RF signals, and use a terminal device corresponding to a device identifier included in the RF signal as a target payment device; collect first biometric feature information of a user using the terminal device, wherein selecting an RF signal from the received RF signals comprises determining, from the received RF signals, an RF signal having a signal strength greater than a set value;

and after obtaining a verification result of verifying the user's identity based on the first biometric feature information, send a payment request to the server if the verification result is passing the verification, wherein the payment request is configured to request for completing payment based on a payment account corresponding to the target payment device;

the terminal device is configured to transmit an RF signal and receive payment information; and

the server is configured to receive the payment request sent by the service processing device, and complete payment based on the payment account corresponding to the device identifier included in the payment request, thereby sending the payment information to the terminal device corresponding to the device identifier.