CLAIMS

[Claim 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

obtaining a verification result of verifying the user's identity based on the first biometric feature information, wherein the obtaining comprises:

sending the first biometric feature information and the device identifier included in the selected RF signal to a server, so that the server verifies the user’s identity according to the first biometric feature information and second biometric feature information of a 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 second biometric feature information of the user corresponding to the device identifier; and

receiving the verification result sent by the server; and

sending 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 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.

[Claim 13] 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.

[Claim 14] The service processing method of claim 13, 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.

[Claim 15] 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

obtaining a verification result of verifying the user's identity based on the first biometric feature information, wherein the obtaining comprises:

sending the first biometric feature information and the device identifier included in the selected RF signal to a server, so that the server verifies the user’s identity according to the first biometric feature information and second biometric feature information of a 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 second biometric feature information of the user corresponding to the device identifier; and

receiving the verification result sent by the server; and

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.

[Claim 16] A service processing method, comprising:

transmitting an RF signal including a device identifier of a terminal device used by a user; 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 the user's identity based on collected first biometric feature information of the user is passed, wherein the obtaining a verification result comprises:

sending the first biometric feature information and the device identifier included in the RF signal to the server, so that the server verifies the user’s identity according to the first biometric feature information and second biometric feature information of a user corresponding to the device identifier included in the RF signal, wherein the server stores a mapping relationship between the device identifier and the second biometric feature information of the user corresponding to the device identifier; and

receiving the verification result sent by the server.

[Claim 17] The service processing method of claim 16, 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.

[Claim 18] The service processing method of claim 16, 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.

[Claim 19] The service processing method of claim 16, 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.

[Claim 20] A terminal device used by a user, 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 of the terminal device; 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 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 the user's identity based on collected first biometric feature information of the user is passed, wherein the obtaining the verification result comprises:

sending the first biometric feature information and the device identifier included in the RF signal to the server, so that the server verifies the user’s identity according to the first biometric feature information and second biometric feature information of a user corresponding to the device identifier included in the RF signal, wherein the server stores a mapping relationship between the device identifier and the second biometric feature information of the user corresponding to the device identifier; and

receiving the verification result sent by the server.

[Claim 21] 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 used by a user and first biometric feature information of the user, 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;

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

sending a verification result to the service processing device;

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.

[Claim 22] The service processing method of claim 21, 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.

[Claim 23] A server, 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 a service processing device, wherein the payment request includes a device identifier of a terminal device used by a user and first biometric feature information of the user, 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;

verifying the user's identity according to the first biometric feature information and second biometric feature information of a 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 second biometric feature information of the user corresponding to the device identifier;

sending a verification result to the service processing device;

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.