

CLAIMS

1. A method for registering a biometric identity, the method comprising:
 - receiving a registration information request packet of user equipment from a service server, wherein the registration information request packet comprises a service account identity (310);
 - generating a virtual account identity corresponding to the service account identity(310);
 - generating a registration information response packet comprising the virtual account identity and a server public key into (310);
 - signing the registration information response packet by using a server private key corresponding to the server public key (310);
 - transmitting the registration information response packet to the service server to be forwarded to the user equipment (310);
 - receiving a registration request packet of the user equipment from the service server (320);
 - signing the registration request packet by using a device encryption key of the user equipment, wherein the registration request packet comprises a device identity of the user equipment, the virtual account identity, a biometric authentication type, a biometric feature token, and a service public key (320);
 - transmitting the registration request packet to a biometric authentication center server (320);
 - receiving a signature verification result returned by the biometric authentication center server after performing signature verification on the registration request packet by using a device public key corresponding to the device identity (320);
 - determining whether the signature verification on the registration request packet succeeds (330); and
 - in response to determining that the signature verification on the registration request packet succeeds, storing a correspondence among the device identity, the virtual account identity, the biometric authentication type, the biometric feature token, and the service public key after , to perform identity authentication on the account(330).
2. The method according to claim 1, wherein the method further comprises: generating a registration verification code of the virtual account.

3. The method according to claim 2, wherein the registration information response packet further comprises the generated registration verification code.

4. The method according to any one of claims 1 to 3, wherein the registration request packet further comprises a registration verification code.

5. The method according to claim 4, wherein saving the correspondence among the device identity, the virtual account identity, the biometric authentication type, the biometric feature token, and the service public key comprises: saving the correspondence among the device identity, the virtual account identity, the biometric authentication type, the biometric feature token, and the service public key, when the registration verification code in the registration request packet is the same as the registration verification code generated for the virtual account in the registration request packet, and a time interval between sending the registration information response packet and receiving the registration request packet is within first predetermined duration.

6. The method according to any one of claims 1 to 5, wherein the signature verification of the authentication information response packet is determined by using the server public key, obtaining a biometric feature token corresponding to biometric data used by the user in the latest successful local biometric verification from the token and key manager after signature verification succeeds, obtaining a service private key corresponding to the biometric authentication type, the virtual account identity in the authentication information response packet, and the biometric feature token from a stored correspondence among the virtual account identity, the biometric authentication type, the biometric feature token, and the service private key, encapsulating the device identity, the virtual account identity, the biometric authentication type, and the biometric feature token into an authentication request packet, and returning the authentication request packet to the biometric authentication client after signing the authentication request packet by using the service private key.

7. The method according to claim 6, wherein the authentication request packet comprises the device identifier of the user equipment.

8. The method according to any one of claims 1 to 7, further comprising performing an identity authentication on the user based on a registered service public key and a registered biometric feature token corresponding to the virtual account identity, the device identity, and the biometric authentication type.

9. The method according any one of claims 1 to 8, wherein the biometric feature token comprises a characteristic quantity or an index value of the user equipment that uniquely corresponds to sample data used for verifying the biometric data.

10. A device for registering a biometric identity, the device comprising a plurality of modules configured to perform the method of any one of claims 1 to 9.