

WHAT IS CLAIMED IS:

1 1. A method comprising:
2 receiving, by a mobile device from a remote mobile application
3 server, encrypted user data associated with a user of the mobile device, wherein
4 the encrypted user data is generated with an encryption key associated with a
5 token server computer;
6 generating, by the mobile device, a token request message, the
7 token request message including the encrypted user data;
8 sending, by the mobile device, the token request message to the
9 token server computer via the remote mobile application server, wherein the
10 token server computer decrypts the encrypted user data using the encryption
11 key, identifies an account associated with the decrypted user data, generates a
12 token associated with the account, stores the token, and sends the token to the
13 mobile device;
14 receiving, by the mobile device, the token associated with the
15 encrypted user data from the token server computer via the remote mobile
16 application server; and
17 storing, by the mobile device, the token in a token memory.

1 2. The method of claim 1, wherein storing the token in a token
2 memory includes storing a token in a secure memory of the mobile device,
3 determining a token key associated with the stored token, and providing the
4 token key to a mobile application on the mobile device for use as a token
5 reference identifier for the token.

1 3. The method of claim 1, further comprising:
2 requesting, by the mobile device, a status of the token;
3 receiving, by the mobile device, a token status response from the
4 token server computer; and
5 storing, by the mobile device, the status associated with the token in
6 the token memory.

1 4. The method of claim 1, wherein the encryption key and the
2 user data associated with the user of the mobile device are stored by the remote
3 mobile application server.

1 5. The method of claim 1, wherein the token memory is
2 managed by a token module provided on the mobile device, the token module
3 being associated with the token server computer such that the mobile device
4 interfaces with the token server computer via the token module.

1 6. The method of claim 5, wherein the token module interfaces
2 with an Application Programming Interface (API) of the token server computer.

1 7. The method of claim 1, wherein the token request message is
2 sent to the token server computer via a token module provided on the mobile
3 device, and the token associated with the encrypted user data is received from
4 the token server computer by the token module.

1 8. The method of claim 1, further comprising:
2 interacting with an access device to initiate a transaction using a
3 mobile application provided on the mobile device; and
4 providing the token to the access device, wherein the token is
5 provided to the access device by a token module bypassing the mobile
6 application, wherein the token module is stored on the mobile device.

1 9. A method comprising:
2 receiving, by a mobile application provided on a mobile device,
3 encrypted user data from a remote mobile application server, the encrypted user
4 data being associated with an account of a user of the mobile device, wherein the
5 encrypted user data is generated with an encryption key associated with a token
6 server computer;
7 interacting with a token module to request, via the remote mobile
8 application server, a token from the token server computer, wherein the token
9 represents the encrypted user data;

10 receiving, by the mobile application, a message indicating that the
11 token associated with the encrypted user data is received from the token server
12 computer via the remote mobile application server;
13 interacting with an access device to initiate a transaction; and
14 requesting the token module to provide the token to the access
15 device such that the token is provided to the access device by the token module
16 bypassing the mobile application.

1 10. The method of claim 9, further comprising:
2 receiving, by the mobile application, a token request message from
3 the token module, wherein the token request message includes the encrypted
4 user data and is generated by the token module;
5 sending, by the mobile application, the token request message to
6 the remote mobile application server, wherein the remote mobile application
7 server obtains the token from the token server computer using the token request
8 message;
9 receiving, by the mobile application, a token response message
10 from the remote mobile application server; and
11 sending, by the mobile application, the token request message to
12 the token module, wherein the token module stores the token.

1 11. The method of claim 9, wherein the token module generates a
2 token request message including the encrypted user data, sends the token
3 request message to the token server computer, receives a token from the token
4 server computer and stores the token.

1 12. A mobile device comprising:
2 a processor; and
3 a memory element comprising code, executable by the processor,
4 for implementing a method comprising
5 receiving, by a mobile device from a remote mobile
6 application server, encrypted user data associated with a user of the

7 mobile device, wherein the encrypted user data is generated with an
8 encryption key associated with a token server computer;
9 generating, by the mobile device, a token request message,
10 the token request message including the encrypted user data;
11 sending, by the mobile device, the token request message to
12 the token server computer via the remote mobile application server,
13 wherein the token server computer decrypts the encrypted user data using
14 the encryption key, identifies an account associated with the decrypted
15 user data, generates a token associated with the account, stores the
16 token, and sends the token to the mobile device;
17 receiving, by the mobile device, the token associated with the
18 encrypted user data from the token server computer via the remote mobile
19 application server; and
20 storing, by the mobile device, the token in a token memory.

1 13. The mobile device of claim 12, wherein storing the token in a
2 token memory includes storing a token in a secure memory of the mobile device,
3 determining a token key associated with the stored token, and providing the
4 token key to a mobile application on the mobile device for use as a token
5 reference identifier for the token.

1 14. The mobile device of claim 12, wherein the token request
2 message is sent to the token server computer via a token module provided on the
3 mobile device, and the token associated with the encrypted user data is received
4 from the token server computer by the token module.

1 15. The mobile device of claim 12, wherein the method further
2 comprises:
3 interacting with an access device to initiate a transaction using a
4 mobile application provided on the mobile device; and
5 providing the token to the access device, wherein the token is
6 provided to the access device by a token module bypassing the mobile
7 application, wherein the token module is stored on the mobile device.

1 16. The mobile device of claim 12, wherein the method further
2 comprises:
3 requesting, by the mobile device, a status of the token;
4 receiving, by the mobile device, a token status response from the
5 token server computer; and
6 storing, by the mobile device, the status associated with the token in
7 the token memory.

1 17. The mobile device of claim 12, wherein the token memory is
2 managed by a token module provided on the mobile device, the token module
3 being associated with the token server computer such that the mobile device
4 interfaces with the token server computer via the token module.

1 18. The mobile device of claim 17, wherein the token module
2 interfaces with an Application Programming Interface (API) of the token server
3 computer.