

WHAT IS CLAIMED IS:

1. A method for acceptance of blockchain payment at a traditional point of sale device direct to a merchant account, comprising:

receiving, by a receiver of a processing server, an authorization request for a fiat payment transaction originating from a point of sale device and routed through a payment network, wherein the authorization request includes at least a transaction account number, a transaction amount, and a merchant identifier;

identifying, by a processor of the processing server, blockchain payment acceptance for a transaction account associated with the transaction account number;

transmitting, by a transmitter of the processing server, an address request to an exchange server, the address request including the merchant identifier;

receiving, by the receiver of the processing server, a destination address for an electronic wallet associated with the merchant identifier and a blockchain network from the exchange server;

transmitting, by the transmitter of the processing server, a new blockchain transaction to a blockchain node in the blockchain network, the new blockchain transaction including at least the destination address, a cryptocurrency amount based on the transaction amount, a digital signature, and one or more unspent transaction outputs; and

transmitting, by the transmitter of the processing server, an authorization response for the fiat payment transaction to the payment network for routing to the point of sale device, wherein the authorization response includes an indication that clearance and settlement of the fiat payment transaction is not required.

2. The method of claim 1, further comprising:
identifying, by the processor of the processing server, a private key of a cryptographic key pair; and
generating, by the processor of the processing server, the digital signature using the private key.
3. The method of claim 1 or claim 2, wherein the authorization response is formatted pursuant to a standard governing the exchange of financial transaction messages.
4. The method of claim 3, wherein the standard is ISO 8583.
5. The method of claim 3 or claim 4, wherein the response code is one of 01 and 85.
6. The method of any one of claims 1 to 5, further comprising:
transmitting, by the exchange server, a notification message to the point of sale device indicating successful processing of the blockchain transaction.
7. The method of any one of claims 1 to 6, further comprising:
receiving, by the receiver of the processing server, a transaction identifier from the blockchain node; and

transmitting, by the transmitter of the processing server, the transaction identifier to the exchange server.

8. The method of any one of claims 1 to 7, wherein
an exchange rate is included with the destination address, and
the cryptocurrency amount is further based on the exchange rate.

9. A system for acceptance of blockchain payment at a traditional point of sale device direct to a merchant account, comprising:

a payment network;

a blockchain network comprised of a plurality of blockchain nodes;

a point of sale device;

an exchange server; and

a processing server, the processing server including

a receiver receiving an authorization request for a fiat payment

transaction originating from a point of sale device and routed through a payment network, wherein the authorization request includes at least a transaction account number, a transaction amount, and a merchant identifier,

a processor identifying blockchain payment acceptance for a transaction account associated with the transaction account number, and

a transmitter transmitting an address request to an exchange server, the address request including the merchant identifier, wherein

the receiver further receives a destination address for an electronic wallet associated with the merchant identifier and a blockchain network from the exchange server, and

the transmitter further transmits

a new blockchain transaction to a blockchain node in the blockchain network, the new blockchain transaction including at least the destination address, a cryptocurrency amount based on the transaction amount, a digital signature, and one or more unspent transaction outputs, and

an authorization response for the fiat payment transaction to the payment network for routing to the point of sale device, wherein the authorization response includes an indication that clearance and settlement of the fiat payment transaction is not required.

10. The system of claim 9, wherein the processor further identifies a private key of a cryptographic key pair, and generates the digital signature using the private key.

11. The system of claim 9 or claim 10, wherein the authorization response is formatted pursuant to a standard governing the exchange of financial transaction messages.

12. The system of claim 11, wherein the standard is ISO 8583.

13. The system of claim 11 or claim 12, wherein the response code is one of 01 and 85.

14. The system of any one of claims 9 to 13, wherein the exchange server transmits a notification message to the point of sale device indicating successful processing of the blockchain transaction.

15. The system of any one of claims 9 to 14, wherein
the receiver of the processing server receives a transaction identifier from the blockchain node, and
the transmitter of the processing server transmits the transaction identifier to the exchange server.

16. The system of any one of claims 9 to 15, wherein
an exchange rate is included with the destination address, and
the cryptocurrency amount is further based on the exchange rate.