applications extremely fast, as to ensure quick processing of fiat currency transactions. Accordingly, the use of traditional payment networks and payment systems technologies in combination with blockchain currencies may provide consumers and merchants the benefits of the decentralized blockchain while still maintaining security of account information and provide a strong defense against fraud and theft.

SUMMARY

The present disclosure provides a description of systems and methods for managing fractional reserves of blockchain currency.

According to an aspect, the present disclosure refers to a method for managing fractional reserves of blockchain currency, comprising: receiving, by a receiving device, a transaction message associated with a payment transaction, wherein the transaction message is formatted based on a standard and includes a plurality of data elements, including at least a data element reserved for private use if the transaction is determined to be a blockchain transaction based on the transaction message, the data element including a specific address and a transaction amount; identifying, by a processing device, a specific account profile stored in an account database that includes the specific address included in the data element in the received transaction message, wherein the specific account profile further includes a fiat currency amount and a blockchain currency amount; and if the transaction is determined to be a blockchain transaction based on the transaction message, updating, by the processing device, the blockchain currency amount included in the identified specific account profile based on the transaction amount included in the data element in the received transaction message.

According to another aspect, the present disclosure refers to a system for managing fractional reserves of blockchain currency, comprising: a receiving device configured to receive a transaction message associated with a payment transaction, wherein the transaction message is formatted based on a standard and includes a plurality of data elements, including at least a data element reserved for private use if the transaction is determined to be a

blockchain transaction based on the transaction message, the data element including a specific address and a transaction amount, and a processing device configured to identify a specific account profile stored in an account database that includes the specific address included in the data element in the received transaction message, wherein the specific account profile further includes a fiat currency amount and a blockchain currency amount, and if the transaction is determined to be a blockchain transaction based on the transaction message, update the blockchain currency amount included in the identified specific account profile based on the transaction amount included in the data element in the received transaction message.

In an example, a method for managing fractional reserves of blockchain currency includes: storing, in a first central account, at least a fiat amount associated with a fiat currency; storing, in a second central account, at least a blockchain amount associated with a blockchain currency; storing, in an account database, a plurality of account profiles, wherein each account profile includes data associated with a consumer including at least a fiat currency amount, a blockchain currency amount, an account identifier, and an address; receiving, by a receiving device, a transaction message associated with a payment transaction, wherein the transaction message is formatted based on one or more standards and includes a plurality of data elements, including at least a data element reserved for private use if the transaction is determined to be a blockchain transaction based on the transaction message, the data element including including a specific address and a transaction amount; identifying, by a processing device, a specific account profile stored in the account database where the included address corresponds to the specific address included in the data element in the received transaction message; and if the transaction is determined to be a blockchain transaction based on the transaction message, updating, by the processing device, the blockchain currency amount included in the identified specific account profile based on the transaction amount included in the data element in the received transaction message.

In an example, a system for managing fractional reserves of blockchain currency includes a central database, an account database, a receiving device, and a processing device. The central database is

configured to store: a first central account including at least a fiat amount associated with a fiat currency; and a second central account including at least a blockchain amount associated with a blockchain currency. The account database is

CLAIMS:

1. A method for managing fractional reserves of blockchain currency, comprising:

receiving, by a receiving device, a transaction message associated with a payment transaction, wherein the transaction message is formatted based on a standard and includes a plurality of data elements, including at least a data element reserved for private use if the transaction is determined to be a blockchain transaction based on the transaction message, the data element including a specific address and a transaction amount;

identifying, by a processing device, a specific account profile stored in an account database that includes the specific address included in the data element in the received transaction message, wherein the specific account profile further includes a fiat currency amount and a blockchain currency amount; and

if the transaction is determined to be a blockchain transaction based on the transaction message, updating, by the processing device, the blockchain currency amount included in the identified specific account profile based on the transaction amount included in the data element in the received transaction message.

2. The method of claim 1, further comprising:

updating, by the processing device, the blockchain amount stored in a second central account based on the transaction amount included in the data element in the received transaction message.

3. The method of claim 1, wherein the blockchain amount stored in a second central account is based on a sum of the blockchain currency amounts included in each account profile stored in the account database.

4. The method of claim 1, further comprising:

initiating, by the processing device, a blockchain transaction using a blockchain network associated with the blockchain currency amount, wherein the blockchain transaction is for the transaction amount to or from the specific address.

5. The method of claim 1, wherein the standard includes at least the ISO 8583 standard.

6. The method of claim 1, wherein a second central account is configured to store a plurality of keys, each key associated with an account profile stored in the account database.

7. The method of claim 6, further comprising:

generating, by the processing device, an address stored in each account profile of the account database based on application of the associated key to one or more hashing and/or encoding algorithms.

8. The method of claim 7, wherein the one or more hashing and/or encoding algorithms includes the use of Base58Check encoding.

9. The method of claim 1, wherein the transaction message further includes a data element configured to store a personal account number that includes a funding address.

10. The method of claim 9, further comprising:

identifying, by the processing device, a funding account profile stored in the account database where the included address corresponds to the funding address; and

deducting, by the processing device, the blockchain currency amount included in the identified funding account profile based on the transaction amount included in the data element in the received transaction message, wherein

updating the blockchain currency amount included in the identified specific account profile includes adding to the blockchain currency amount based on the transaction amount included in the data element in the received transaction message.

11. A system for managing fractional reserves of blockchain currency, comprising:

a receiving device configured to receive a transaction message associated with a payment transaction, wherein the transaction message is formatted based on a standard and includes a plurality of data elements, including at least a data element reserved for private use if the transaction is determined to be a blockchain transaction based on the transaction message, the data element including a specific address and a transaction amount, and

a processing device configured to

identify a specific account profile stored in an account database that includes the specific address included in the data element in the received transaction

message, wherein the specific account profile further includes a fiat currency amount and a blockchain currency amount, and

if the transaction is determined to be a blockchain transaction based on the transaction message, update the blockchain currency amount included in the identified specific account profile based on the transaction amount included in the data element in the received transaction message.

12. The system of claim 11, wherein the processing device is further configured to update the blockchain amount stored in a second central account based on the transaction amount included in the data element in the received transaction message.

13. The system of claim 11, wherein the blockchain amount stored in a second central account is based on a sum of the blockchain currency amounts included in each account profile stored in the account database.

14. The system of claim 11, wherein the processing device is further configured to initiate a blockchain transaction using a blockchain network associated with the blockchain currency amount, wherein the blockchain transaction is for the transaction amount to or from the specific address.

15. The system of claim 11, wherein the standard includes at least the ISO 8583 standard.

16. The system of claim 11, wherein a second central account is configured to store a plurality of keys, each key associated with an account profile stored in the account database.

17. The system of claim 16, wherein the processing device is further configured to generate an address stored in each account profile of the account database based on application of the associated key to one or more hashing and/or encoding algorithms.

18. The system of claim 17, wherein the one or more hashing and/or encoding algorithms includes the use of Base58Check encoding.

19. The system of claim 11, wherein the transaction message further includes a data element configured to store a personal account number that includes a funding address.

20. The system of claim 19, wherein the processing device is further configured to

identify a funding account profile stored in the account database where the included address corresponds to the funding address, and

deduct the blockchain currency amount included in the identified funding account profile based on the transaction amount included in the data element in the received transaction message, and wherein

updating the blockchain currency amount included in the identified specific account profile includes adding to the blockchain currency amount based on the transaction amount included in the data element in the received transaction message.