

WHAT IS CLAIMED IS:

1 1. A method comprising:
2 receiving, by a server computer comprising a processor, a payment
3 method manager, and a digital asset management engine, in communication with
4 a digital asset account data store, a transfer request associated with a first user,
5 the transfer request comprising authentication information associated with the
6 first user, first identification information associated with the first user, an identifier
7 associated with a second user, and a transfer amount;
8 validating, by the server computer, the transfer request utilizing the
9 authentication information;
10 transmitting, by the server computer, the transfer request to a
11 computing device of the second user utilizing the identifier associated with the
12 second user;
13 receiving, by the server computer, a digital asset request
14 comprising second identification information associated with the second user and
15 a digital asset amount related to the transfer amount;
16 transmitting, by the server computer, a transaction request to a
17 financial institution computer, the transaction request comprising the first
18 identification information, the second identification information, and the transfer
19 amount, wherein transmitting the transaction request to the financial institution
20 computer causes the financial institution computer to: create a holding account
21 on behalf of the second user; and transfer the transfer amount from a financial
22 account of the first user to the holding account;
23 receiving, by the server computer, a transaction response
24 corresponding to the transaction request;
25 generating, by the server computer, a digital asset corresponding to
26 the digital asset amount utilizing the first identification information, the digital
27 asset being associated with a first digital asset account of the first user;
28 generating, by the payment method manager and the processor of
29 the server computer, a payment method identifier associated with a second

digital asset account of the second user, the payment method identifier being a prepaid card number;

storing the digital asset in association with the payment method identifier in the digital asset account data store;

transferring, by the server computer, the digital asset from the first digital asset account of the first user to the second digital asset account of the second user utilizing the first identification information and the second identification information;

maintaining, by the server computer, a blockchain ledger of transactions to indicate the transfer of the digital asset from the first digital asset account of the first user to the second digital asset account of the second user;

transmitting, by the server computer, a notification comprising the payment method identifier to the computing device of the second user;

receiving, by the server computer, an authorization request comprising the payment method identifier, a transaction amount, and a resource provider identifier from a resource provider computer;

determining, by the server computer, the digital asset using the payment method identifier;

determining, by the server computer, if the transaction amount is less than or equal to the transfer amount; and

facilitating, by the server computer, by using the payment method identifier, a transfer of the transaction amount from the holding account of the second user to a financial account associated with the resource provider identifier.

2. The method of claim 1, wherein the authentication information comprises a digital signature of the first user that is verifiable using a public key associated with the first user, the public key being maintained as part of the first digital asset account of the first user.

1 3. The method of claim 1, wherein the first identification
2 information associated with the first user comprises at least one of: an account
3 number, a name, an address, a social security number, or a date of birth.

1 4. The method of claim 1, wherein the second identification
2 information associated with the second user comprises at least one of: a driver's
3 license number, a name, an address, a social security number, or a date of birth.

1 5. The method of claim 1, wherein the blockchain ledger of
2 transactions is updated to include an entry comprising the first identification
3 information, first data associated with the first digital asset account, the second
4 identification information, second data associated with the second digital asset
5 account, and the digital asset amount.

1 6. The method of claim 1, wherein the computing device of the
2 second user comprises an application associated with the digital asset account of
3 the second user.

1 7. The method of claim 1, wherein transmitting the transfer
2 request to the computing device associated with the second user utilizes a text
3 messaging protocol.

1 8. The method of claim 1, wherein the transfer request
2 associated with the first user is received from an application executing on a user
3 device of the first user.

1 9. A server computer comprising,
2 a processor, and
3 a computer readable medium coupled to the processor, the
4 computer readable medium comprising code for causing the processor to:
5 receive a transfer request associated with a first user, the
6 transfer request comprising authentication information associated with the

7 first user, first identification information associated with the first user, an
8 identifier associated with a second user, and a transfer amount;
9 validate the transfer request utilizing the authentication
10 information;
11 transmit the transfer request to a computing device of the
12 second user utilizing the identifier associated with the second user;
13 receive a digital asset request comprising second
14 identification information associated with the second user and a digital
15 asset amount related to the transfer amount;
16 transmit a transaction request to a financial institution
17 computer, the transaction request comprising the first identification
18 information, the second identification information, and the transfer amount,
19 thereby causing the financial institution computer to: create a holding
20 account on behalf of the second user; and transfer the transfer amount
21 from a financial account of the first user to the holding account;
22 receive a transaction response corresponding to the
23 transaction request;
24 generate a digital asset corresponding to the digital asset
25 amount utilizing the first identification information, the digital asset being
26 associated with a first digital asset account of the first user;
27 generate, a payment method identifier associated with a
28 second digital asset account of the second user, the payment method
29 identifier being a prepaid card number;
30 store the digital asset in association with the payment
31 method identifier in a digital asset account data store;
32 transfer the digital asset from the first digital asset account of
33 the first user to the second digital asset account of the second user
34 utilizing the first identification information and the second identification
35 information;

36 maintain a blockchain ledger of transactions to indicate the
37 transfer of the digital asset from the first digital asset account of the first
38 user to the second digital asset account of the second user;
39 transmit a notification comprising the payment method
40 identifier to the computing device of the second user;
41 receive an authorization request comprising the payment
42 method identifier, a transaction amount, and a resource provider identifier
43 from a resource provider computer;
44 determine the digital asset using the payment method
45 identifier;
46 determine, if the transaction amount is less than or equal to
47 the transfer amount; and
48 facilitate, by using the payment method identifier, a transfer
49 of the transaction amount from the holding account of the second user to a
50 financial account associated with the resource provider identifier.

1 10. The server computer of claim 9, wherein the authentication
2 information comprises a digital signature of the first user that is verifiable using a
3 public key associated with the first user, the public key being maintained as part
4 of the digital asset account of the first user.

1 11. The server computer of claim 9, wherein the first
2 identification information associated with the first user comprises at least one of:
3 an account number, a name, an address, a social security number, or a date of
4 birth.

1 12. The server computer of claim 9, wherein the second
2 identification information associated with the second user comprises at least one
3 of: a driver's license number, a name, an address, a social security number, or a
4 date of birth.

1 13. The server computer of claim 9, wherein the blockchain
2 ledger of transactions is updated to include an entry comprising the first

3 identification information, first data associated with the first digital asset account,
4 the second identification information, second data associated with the second
5 digital asset account, and the digital asset amount.

1 14. The server computer of claim 9, wherein transmitting the
2 transfer request to the computing device associated with the second user utilizes
3 a text messaging protocol.

1 15. A user computing device comprising,
2 a display;
3 a processor; and
4 a computer readable medium coupled to the processor, the
5 computer readable medium comprising code for causing the processor to:
6 receive, from a server computer, a transfer request
7 associated with a transferor, the transfer request comprising a transfer
8 amount;
9 provide an option to request the transfer amount to be
10 provided as a digital asset, the option being provided to a user of the user
11 computing device utilizing the display;
12 receive user input indicating that the option has been
13 selected;
14 collect user identification information of the user;
15 transmit, to the server computer, a digital asset request
16 comprising the user identification information and a digital asset amount
17 related to the transfer amount, wherein receipt of the digital asset request
18 causes a digital asset service provider computer to facilitate a transfer of
19 the digital asset from the transferor to the user utilizing a blockchain ledger
20 of transactions;
21 receive notification that the digital asset has been
22 transferred; and
23 present the notification to the user at the display,
24 wherein facilitating a transfer of the digital asset further comprises:

25 transmitting a transaction request from the server computer
26 to a financial institution computer, the transaction request causing the
27 financial institution to:
28 maintain a holding account on behalf of the user; and
29 transfer digital currency corresponding to the transfer
30 amount from a financial account of the transferor to the holding
31 account; and
32 receive, by the server computer from the financial account, a
33 transaction response corresponding to the transaction request, the
34 transaction response indicating a status associated with the transaction
35 request.