CLAIMS

1. A method being implemented via execution of computing instructions configured to run at one or more processors and stored at one or more non-transitory computer-readable media, the method comprising:

receiving, at a payment service computer system, transaction data related to a fund transfer, the transaction data specifying a transfer amount of the fund transfer, a sender public identifier to identify a sender of the fund transfer, a recipient public identifier to identify a recipient of the fund transfer, a sender financial institution identifier for a sender financial institution, a recipient financial institution identifier for a recipient financial institution, and a tokenized financial instrument of the sender;

determining, at the payment service computer system, the sender financial institution, using the sender financial institution identifier, the sender financial institution being a member of a payment network associated with the payment service computer system;

providing, from the payment service computer system to the sender financial institution, the tokenized financial instrument of the sender to enable the sender financial institution to de-tokenize the tokenized financial instrument of the sender and identify a sender account of the sender financial institution associated with the sender;

providing, from the payment service computer system to the sender financial institution, the transfer amount of the fund transfer, the recipient public identifier, and the recipient financial institution identifier to enable the sender financial institution to determine availability of money in the sender account to satisfy the transfer amount of the fund transfer;

determining, at the payment service computer system, a recipient private identifier based on the recipient public identifier;

generating, at the payment service computer system, a transaction identifier associated with the fund transfer;

sending the transaction identifier from the payment service computer system to the sender financial institution; and

providing the transaction identifier and a recipient private identifier from the payment service computer system to the recipient financial institution to enable the recipient financial institution to identify a recipient account of the recipient financial institution associated with the recipient to enable the recipient financial institution to receive an ACH message over an ACH network, the ACH message indicating payment from the sender financial institution to the recipient financial institution, the ACH message being generated by the sender financial institution and including the transaction identifier to identify the fund transfer between the sender and the recipient, and the ACH message allowing the recipient financial institution to retrieve funds from an ACH batch transfer and deposit the funds into the recipient account.

2. The method of claim 1, further comprising validating that the sender has authorization to use the sender public identifier to perform the fund transfer.

3. The method of claim 1, further comprising:

receiving, at the payment service computer system, a tokenized financial instrument of the recipient and the recipient financial institution identifier associated with the recipient financial institution;

determining, at the payment service computer system, using the recipient financial institution identifier, the recipient financial institution, the recipient financial institution being a member of the payment network associated with the payment service computer system; and

providing, from the payment service computer system to the recipient financial institution, the tokenized financial instrument of the recipient to enable the recipient financial institution to de-tokenize the tokenized financial instrument of the recipient and identify the recipient account.

4. The method of claim 1, wherein the transaction data related to the fund transfer are received from a first online reseller of goods.

5. The method of claim 4, wherein the first online reseller of goods tokenizes a financial instrument of the sender to create the tokenized financial instrument of the sender.

6. The method of claim 5 wherein the financial instrument of the sender is issued by the sender financial institution.

7. The method of claim 4, further comprising:

receiving, at the payment service computer system, a tokenized financial instrument of the recipient from a second online reseller of goods different than the first online reseller of goods.

8. The method of claim 7, wherein the second online reseller of goods tokenizes a financial instrument of the recipient to create the tokenized financial instrument of the recipient.

9. The method of claim 1, wherein the recipient financial institution transfers the funds to the recipient account before the recipient financial institution receives the ACH message.

10. The method of claim 1, further comprising:

providing a request from the payment service computer system to a recipient system associated with the recipient requesting if the recipient will accept the fund transfer from the sender.

11. A system comprising:

one or more processors;

one or more non-transitory computer-readable media storing computer instructions configured to run on the one or more processors to perform:

receiving, at a payment service computer system, transaction data related to a fund transfer, the transaction data specifying a transfer amount of the fund transfer, a sender public identifier to identify a sender of the fund transfer, a recipient public identifier to identify a recipient of the fund transfer, a

sender financial institution identifier for a sender financial institution, a recipient financial institution identifier for a recipient financial institution, and a tokenized financial instrument of the sender;

determining, at the payment service computer system, the sender financial institution, using the sender financial institution identifier, the sender financial institution being a member of a payment network associated with the payment service computer system;

providing, from the payment service computer system to the sender financial institution, the tokenized financial instrument of the sender to enable the sender financial institution to de-tokenize the tokenized financial instrument of the sender and identify a sender account of the sender financial institution associated with the sender;

providing, from the payment service computer system to the sender financial institution, the transfer amount of the fund transfer, the recipient public identifier, and the recipient financial institution identifier to enable the sender financial institution to determine availability of money in the sender account to satisfy the transfer amount of the fund transfer;

determining, at the payment service computer system, a recipient private identifier based on the recipient public identifier;

generating, at the payment service computer system, a transaction identifier associated with the fund transfer;

sending the transaction identifier from the payment service computer system to the sender financial institution; and

providing the transaction identifier and a recipient private identifier from the payment service computer system to the recipient financial institution to enable the recipient financial institution to identify a recipient account of the recipient financial institution associated with the recipient to enable the recipient financial institution to receive an ACH message over an ACH network, the ACH message indicating payment from the sender financial institution to the recipient financial institution, the ACH message being generated by the sender financial institution and including the transaction identifier to identify the fund transfer between the sender and the recipient,

and the ACH message allowing the recipient financial institution to retrieve funds from an ACH batch transfer and deposit the funds into the recipient account.

12. The system of claim 11, wherein the method further comprises validating that the sender has authorization to use the sender public identifier to perform the fund transfer.

13. The system of claim 11, wherein the method further comprises:

receiving, at the payment service computer system, a tokenized financial instrument of the recipient and the recipient financial institution identifier associated with the recipient financial institution;

determining, at the payment service computer system, using the recipient financial institution identifier, the recipient financial institution, the recipient financial institution being a member of the payment network associated with the payment service computer system; and

providing, from the payment service computer system to the recipient financial institution, the tokenized financial instrument of the recipient to enable the recipient financial institution to de-tokenize the tokenized financial instrument of the recipient and identify the recipient account.

14. The system of claim 11, wherein the transaction data related to the fund transfer are received from a first online reseller of goods.

15. The system of claim 14, wherein the first online reseller of goods tokenizes a financial instrument of the sender to create the tokenized financial instrument of the sender.

16. The system of claim 15 wherein the financial instrument of the sender is issued by the sender financial institution.

17. The system of claim 14, wherein the computing instructions are further configured to perform:

receiving, at the payment service computer system, a tokenized financial instrument of the recipient from a second online reseller of goods different than the first online reseller of goods.

18. The system of claim 17, wherein the second online reseller of goods tokenizes a financial instrument of the recipient to create the tokenized financial instrument of the recipient.

19. The system of claim 1, wherein the recipient financial institution transfers funds to the recipient account before the recipient financial institution receives the ACH message.

20. One or more non-transitory computer-readable media comprising executable instructions, the executable instructions being executable by a processor to perform:

receiving, at a payment service computer system, transaction data related to a fund transfer, the transaction data specifying a transfer amount of the fund transfer, a sender public identifier to identify a sender of the fund transfer, a recipient public identifier to identify a recipient of the fund transfer, a sender financial institution identifier for a sender financial institution, a recipient financial institution identifier for a recipient financial institution, and a tokenized financial instrument of the sender;

determining, at the payment service computer system, the sender financial institution, using the sender financial institution identifier, the sender financial institution being a member of a payment network associated with the payment service computer system;

providing, from the payment service computer system to the sender financial institution, the tokenized financial instrument of the sender to enable the sender financial institution to de-tokenize the tokenized financial instrument of the sender and identify a sender account of the sender financial institution associated with the sender;

providing, from the payment service computer system to the sender financial institution, the transfer amount of the fund transfer, the recipient public

identifier, and the recipient financial institution identifier to enable the sender financial institution to determine availability of money in the sender account to satisfy the transfer amount of the fund transfer;

determining, at the payment service computer system, a recipient private identifier based on the recipient public identifier;

generating, at the payment service computer system, a transaction identifier associated with the fund transfer;

sending the transaction identifier from the payment service computer system to the sender financial institution; and

providing the transaction identifier and a recipient private identifier from the payment service computer system to the recipient financial institution to enable the recipient financial institution to identify a recipient account of the recipient financial institution associated with the recipient to enable the recipient financial institution to receive an ACH message over an ACH network, the ACH message indicating payment from the sender financial institution to the recipient financial institution, the ACH message being generated by the sender financial institution and including the transaction identifier to identify the fund transfer between the sender and the recipient, and the ACH message allowing the recipient financial institution to retrieve funds from an ACH batch transfer and deposit the funds into the recipient account.