

CLAIMS

What is claimed is:

1. A method for distributed-ledger based intercompany netting, comprising:
 - in an information processing apparatus comprising at least one computer processor:
 - receiving, from a first entity within an organization, a deposit of a first amount of funds to a first account;
 - tokenizing the first amount of funds and writing the first amount of funds to a first token wallet for the first entity on a distributed ledger;
 - receiving, from a second entity within an organization, a deposit of a second amount of funds to a second account;
 - tokenizing the second amount of funds and writing the second amount of funds to a second token wallet for the second entity on the distributed ledger; and
 - executing a transaction involving a transfer of a transaction amount from the first entity to the second entity by deducting the transaction amount from a token balance in the first wallet and adding the transaction amount to a token balance in the second wallet.
2. The method of claim 1, wherein the first amount of funds and the second amount of funds are tokenized with a one-to-one correspondence with a base currency.

3. The method of claim 1, further comprising:
applying a restriction to the first amount of funds in the first account after the first amount of funds is tokenized, wherein the restriction restricts access to the first amount of funds in the account.
4. The method of claim 3, further comprising:
receiving a surrender of a surrender token amount from the first entity;
deducting the surrender token amount from the first wallet; and
releasing the restriction on the surrender amount of funds in the first account.
5. The method of claim 4, wherein the tokens in the first wallet corresponding to the surrender amount are destroyed or deleted in response to the deduction.
6. The method of claim 4, wherein the deduction for the first wallet is written to the distributed ledger.
7. The method of claim 1, further comprising:
reconciling the first account and the second account based on the balances in the first wallet and the second wallet, respectively.
8. The method of claim 1, wherein the step of deducting the transaction amount from a token balance in the first wallet and adding the transaction amount to a token balance in the second wallet is performed by a smart contract.

9. The method of claim 1, wherein the first entity, the second entity, and the financial institution are nodes in a distributed ledger network and each maintain a copy of the distributed ledger.

10. The method of claim 1, wherein the first account or the second account comprises an escrow account.

11. The method of claim 1, wherein the first account or the second account comprises a treasury omnibus account.

12. A system for distributed-ledger based intercompany netting, comprising:
a first entity within an organization;
a second entity within an organization; and
a financial institution that maintains a first account for the first entity, and a second account for the second entity;

wherein:

the financial institution receives a deposit of a first amount of funds to the first account from the first entity;

the financial institution tokenizes the first amount of funds and writes the first amount of funds to a first token wallet for the first entity on a distributed ledger;

the financial institution receives a deposit of a second amount of funds to the second account from the second entity;

the financial institution tokenizes the second amount of funds and writes the second amount of funds to a second token wallet for the second entity on the distributed ledger;

the first entity writes a transaction involving a transfer of a transaction amount from the first entity to the second entity to the distributed ledger; and

a smart contract executed by the distributed ledger deducts the transaction amount from a token balance in the first wallet and adds the transaction amount to a token balance in the second wallet.

13. The system of claim 12, wherein the first amount of funds and the second amount of funds are tokenized with a one-to-one correspondence with a base currency.

14. The system of claim 12, wherein the financial institution applies a restriction to the first amount of funds in the first account after the first amount of funds is tokenized, wherein the restriction restricts access to the first amount of funds in the account.

15. The system of claim 14, wherein:
the financial institution receives a surrender of a surrender token amount from the first entity;
the smart contract deducts the surrender token amount from the first wallet; and
the financial institution releases the restriction on the surrender amount of funds in the first account.

16. The system of claim 15, wherein the tokens in the first wallet corresponding to the surrender amount are destroyed or deleted in response to the deduction.

17. The system of claim 12, wherein a smart contract writes the deduction for the first wallet to the distributed ledger.

18. The system of claim 12, wherein the financial institution reconciles the first account and the second account based on the balances in the first wallet and the second wallet, respectively.

19. The system of claim 12, wherein the first entity, the second entity, and the financial institution are nodes in a distributed ledger network and each maintains a copy of the distributed ledger.

20. The system of claim 12, wherein the first account or the second account comprises an escrow account.