

CLAIMS

1. A method for distributed-ledger based intraday trading, comprising
in an information processing apparatus comprising at least one computer processor:
receiving, at a first distributed ledger and from a cash borrower digital wallet on a second distributed ledger, a digital representation of collateral for a cash borrower, wherein the collateral that is digitally represented on the first distributed ledger is ringfenced or locked by a collateral custodian, wherein the second distributed ledger is a side distributed ledger for the first distributed ledger;
receiving, at the first distributed ledger and from a cash provider digital wallet on the second distributed ledger, a digital representation of cash for a cash provider;
receiving, at the first distributed ledger, agreement from the cash borrower and the cash provider to terms of an intraday trade comprising an expiration of the intraday trade, a collateral trade amount of the digital representation of the collateral, and a cash trade amount of the digital representation of the cash;
a smart contract executed on the first distributed ledger orchestrating the intraday trade by:
automatically providing the collateral trade amount to the cash provider digital wallet and the cash trade amount to the cash borrower digital wallet;
writing a first change in ownership for the cash trade amount and the collateral trade amount to the first distributed ledger;

automatically returning the collateral trade amount to the cash borrower digital wallet and the cash trade amount to the cash provider digital wallet at the expiration of the intraday trade; and writing a second change in ownership for the cash trade amount and the collateral trade amount to the first distributed ledger.

2. The method of claim 1, wherein the duration of the intraday trade is one of minutes or hours.

3. The method of claim 1, wherein the collateral comprises a security.

4. The method of claim 1, further comprising:
verifying that the digital representation of the collateral is sufficient for the collateral trade amount; and
verifying that the digital representation of the cash is sufficient for the cash trade amount.

5. A method for distributed-ledger based intraday trading, comprising

in an information processing apparatus comprising at least one computer processor:

receiving, at a first distributed ledger, agreement from a cash borrower and a cash provider to terms of an intraday trade comprising an expiration of the intraday trade, a collateral trade amount of the collateral, and a cash trade amount of cash;

receiving, at the first distributed ledger and from a cash borrower digital wallet on a second distributed ledger, a digital representation of the collateral trade amount for a cash borrower, wherein the collateral that is digitally represented on the second distributed ledger is ringfenced or locked by a collateral custodian, wherein the second distributed ledger is a side distributed ledger to the first distributed ledger;

- receiving, at the first distributed ledger and from a cash provider digital wallet, a digital representation of cash for a cash provider;
- a smart contract executed on the first distributed ledger orchestrating the intraday trade by:
 - automatically providing the collateral trade amount to the cash provider digital wallet and the cash trade amount to the cash borrower digital wallet;
 - writing a first change in ownership for the cash trade amount and the collateral trade amount to the first distributed ledger;
 - automatically returning the collateral trade amount to the cash borrower digital wallet and the cash trade amount to the cash provider digital wallet at the expiration of the intraday trade; and
 - writing a second change in ownership for the cash trade amount and the collateral trade amount to the first distributed ledger.
- 6. The method of claim 5, wherein the duration of the intraday trade is one of minutes or hours.
- 7. The method of claim 5, wherein the collateral comprises a security.