

CLAIMS

What is claimed is:

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 ~~an amount 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 ~~an amount 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 a ~~duration~~ 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 ~~executing~~ executed on the first distributed ledger orchestrating the intraday trade by: automatically providing the collateral trade amount of the digital collateral to the cash provider digital wallet and the cash trade amount of the digital cash to the cash borrower digital wallet; writing a first change in ownership for the cash trade amount and the ~~smart contract~~ collateral trade amount to the first distributed ledger; automatically returning the collateral trade amount of the digital collateral to the cash borrower digital wallet and the cash trade amount of the digital cash to the cash provider digital wallet at the ~~completion~~ expiration of the intraday trade.

~~2. The method of claim 1, wherein the ; and writing a second change in ownership for the cash trade amount of and the collateral that is digitally represented on the distributed ledger is ringfenced or locked by a collateral custodian.~~

~~3. The method of claim 1, wherein the trade amount of cash that is digitally represented on the distributed ledger is separated from other cash by a cash bank.~~

~~4. The method of claim 1, wherein the digital representation of the amount of collateral is written to a digital wallet for the cash borrower.~~

~~5. The method of claim 1, wherein the digital representation of the amount of cash is written to a digital wallet for the cash provider the first distributed ledger.~~

~~6. The method of claim 1, wherein the amount of collateral that is digitally represented on the distributed ledger is the same as the collateral trade amount.~~

~~7. The method of claim 1, wherein the amount of cash that is digitally represented on the distributed ledger is the same as the cash trade amount.~~

~~8. 2. The method of claim 1, wherein the duration of the intraday trade is one of minutes or hours.~~

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

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

—11.—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 a ~~duration~~ 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 the ~~cash trade amount~~ for a cash provider; a smart contract ~~executing~~ executed on the first distributed ledger orchestrating the intraday trade by: automatically providing the trade amount of the digital collateral to 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 provider borrower digital wallet and the cash trade amount of the ~~digital cash to the cash borrower~~; and

~~—— the smart contract returning the trade amount of the digital collateral to the cash borrower and the cash trade amount of the digital cash to the cash provider to the cash provider digital wallet at the completionexpiration of the intraday trade.~~

~~—— 12. The method of claim 11, wherein the collateral trade amount of collateral is ringfenced or locked by a collateral custodian.~~

~~—— 13. The method of claim 11, wherein the cash trade amount of cash is separated from other cash by a cash bank.~~

~~—— 14. The method of claim 11, wherein the digital representation of the collateral trade amount is written to a digital wallet for the cash borrower.~~

~~—— 15. The method of claim 14, wherein the digital wallet is on a second distributed ledger.~~

~~—— 16. The method of claim 11, wherein the digital representation of; and writing a second change in ownership for the cash trade amount is written to a digital wallet for the cash provider and the collateral trade amount to the first distributed ledger.~~

~~—— 17. 6. The method of claim 16, wherein the digital wallet is on a second distributed ledger.~~

~~—— 18. The method of claim 115, wherein the duration of the intraday trade is one of minutes or hours.~~

| ~~19.~~7. The method of claim ~~115~~5, wherein the collateral comprises a security.