issuers may leave a great deal of value and liquidity on the table by not allowing access to many of the world's most affluent recipients. This embargo strategy is neither prudent nor economically optimal as it leaves the residents and citizens of many of the world's wealthiest countries unable to participate in ITOs, thus diminishing the value of the entire sector as well as of individual assets.

SUMMARY OF THE TECHNOLOGY

[0005] Methods and apparatus for tokenizing securities according to various aspects of the present technology include various modules for facilitating a controlled exchange environment for tokens residing on one or more distributed ledgers. The modules are configured to create and issue tokens on one or more distributed ledgers and verify that a wallet of a recipient or other entity is qualified to receive the token before allowing the transfer of the token into the wallet. The modules may also restrict access to the token until one or more predetermined events take place.

[0005a] An aspect of the disclosure provides a method for tokenizing securities and assets associated with an offering created by an issuer and traded between at least one recipient, comprising:

creating and issuing an issuer token on a first distributed ledger corresponding to the offering;

performing a check to qualify a wallet of a first recipient;

transferring the issuer token to the wallet of the first recipient following a confirmation that the wallet of the first recipient has been qualified; and

constraining any subsequent transfer of the issuer token between recipient wallets until a confirmation that a wallet of a second recipient has been qualified;

wherein:

qualifying the wallet of the first recipient and the wallet of the second recipient is based on a set of Know Your Client (KYC) data created for each wallet; and

the set of KYC data for each wallet is used to create a KYC token for each recipient; wherein:

each KYC token comprises a set of transfer criteria generated by the issuer, wherein the transfer criteria comprises a set of imposed restrictions by the issuer pertaining to who may be allowed to purchase, receive, acquire, or otherwise trade the corresponding token; and;

the transfer of the issuer token to the second recipient is:

restricted when the set of transfer criteria of a second KYC token does not match the set of transfer criteria of a first KYC token; and

permitted when the set of transfer criteria of the second KYC token matches the set of transfer criteria of the first KYC token.

[0005b] Another aspect of the disclosure provides a system for tokenizing securities and assets on a distributed ledger associated with an offering created by an issuer and traded between at least one recipient wallet, comprising:

a tokenization system in communication with the distributed ledger, comprising:

an issuer module configured to create and issue an issuer token on a first distributed ledger according to a set of issuer data, wherein the issuer data includes a first set of transfer criteria comprising a set of imposed restrictions by the issuer

pertaining to who may be allowed to purchase, receive, acquire, or otherwise trade the corresponding token;

a recipient module configured to create a recipient account according to a set of recipient data; and

a token transfer module in communication with the issuer module and the distributed ledger configured to transfer the issuer token from the issuer module to a first recipient wallet; and

a qualification module communicatively linked to the recipient module and configured to:

create a Know Your Client (KYC) token for the first recipient, wherein the KYC token comprises:

the set of recipient data;

a set of KYC data; and

a second set of transfer criteria;

store the KYC token in the wallet of the first recipient; and

qualify the wallet of the first recipient according to:

a comparison of the issuer data to the set of recipient data, and

a confirmation that the first set of transfer criteria included in the issuer data matches the second set of transfer criteria in the KYC token;

wherein the transfer of the issuer token to the wallet of the first recipient is constrained until the qualification module confirms that the wallet of the first recipient is qualified to receive the issuer token

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] A more complete understanding of the present technology may be derived by referring to the detailed description and claims when considered in connection with the following illustrative figures. In the following figures, like reference numbers refer to similar elements and steps throughout the figures.

[0007] Figure 1 is a block diagram of a tokenization system in accordance with an exemplary embodiment of the present technology;

[0008] Figure 2 is a detailed view of the tokenization system in accordance with an exemplary embodiment of the present technology;

once it is shown that the original issuer token is no longer accessible and transfer that replacement issuer token into the new wallet 110b. The original issuer token may then be invalidated or otherwise rendered unusable to prevent it from later being traded or used. The recipient module 202 may also remove or otherwise delete a KYC token corresponding to the original issuer token from the recipient's original wallet 110 thereby preventing the original issuer token from ever being transferred to another recipient in the event that the original wallet 110a is accessed at a later date.

[0026] In yet another embodiment, the recipient module 202 may be configured to move the issuer token from the recipient's original wallet 110a into the new wallet 110b. In case of issuer tokens being issued on multiple DLs, the recipient module 202 may only allow one DL at a time to be honored and used to provide the recipient access to the issuer token. If access is somehow lost the first DL, then the recipient module 202 may transfer access to the issuer token to the second DL thereby maintaining the complete transaction history of the issuer token while preserving the value and access to the assets held in the wallet 110 for the recipient.

[0027] Referring now to Figures 1 and 2, the qualification module 206 may be configured to obtain data from the recipient module 202 and interact with a third party 106 provider of information relating to a given recipient account to confirm at least a portion of the recipient data. For example, the third party may verify the identity of the recipient using a process known as Know Your Client (KYC) and provide the qualification module 206 with a set of KYC data that is associated with the recipient. The amount of disclosure required to create the set of KYC data may vary with jurisdiction or by a particular issuer's 108 requirements. For example, for

CLAIMS

1. A method for tokenizing securities and assets associated with an offering created by an issuer and traded between at least one recipient, comprising:

   creating and issuing an issuer token on a first distributed ledger corresponding to the offering;

   performing a check to qualify a wallet of a first recipient;

   transferring the issuer token to the wallet of the first recipient following a confirmation that the wallet of the first recipient has been qualified; and

   constraining any subsequent transfer of the issuer token between recipient wallets until a confirmation that a wallet of a second recipient has been qualified,

   wherein:

   qualifying the wallet of the first recipient and the wallet of the second recipient is based on a set of Know Your Client (KYC) data created for each wallet; and

   the set of KYC data for each wallet is used to create a KYC token for each recipient; wherein:

      each KYC token comprises a set of transfer criteria generated by the issuer, wherein the transfer criteria comprises a set of imposed restrictions by the issuer pertaining to who may be allowed to purchase, receive, acquire, or otherwise trade the corresponding token; and;

      the transfer of the issuer token to the second recipient is:

         restricted when the set of transfer criteria of a second KYC token does not match the set of transfer criteria of a first KYC token; and

         permitted when the set of transfer criteria of the second KYC token matches the set of transfer criteria of the first KYC token.

2. A method for tokenizing securities and assets according to claim 1, further comprising issuing the issuer token simultaneously on a second distributed ledger when the issuer token is issued to the first distributed ledger.

3. A method for tokenizing securities and assets according to claim 1, further comprising providing an alternative method of accessing the issuer token in response to a verified lockout request.

4. A method for tokenizing securities and assets according to claim 1, wherein all transfers of the issuer token occur directly on the first distributed ledger.

5. A method for tokenizing securities and assets according to claim 1, wherein the transfer of the issuer token to the wallet of the first recipient is completed following an occurrence of a time based event.

6. A method for tokenizing securities and assets according to claim 1, wherein the subsequent transfer of the issuer token to the wallet of the second recipient is completed without the authorization of the first recipient in response to an occurrence of a predetermined event.

7. A method for tokenizing securities and assets according to claim 1, wherein the created KYC token for each recipient is stored in their respective wallets.

8. A method for tokenizing securities and assets according to claim 7, wherein the KYC token is configured to act as an authentication device to allow payments from the corresponding wallet.

9. A method for tokenizing securities and assets according to claim 7, wherein the recipient wallets reside on a second distributed ledger.

10. A method for tokenizing securities and assets according to claim 1, wherein creating the KYC token comprises combining the set of transfer criteria with the set of KYC data.

11. A method for tokenizing securities and assets according to claim 1, wherein the KYC token is configured to be used as a master key for logging in to one or more websites.

12. A method for tokenizing securities and assets according to claim 1, wherein the set of KYC data is obtained from a third party provider.

13. A method for tokenizing securities and assets according to claim 1, further comprising generating an Anti-Money Laundering (AML) token for the issuer that is linked to the issuer token.

14. A method for tokenizing securities and assets according to claim 13, wherein:
    the AML token is linked to at least one KYC token held in one or more issuer related wallets; and
    each KYC token is created based on a set of KYC data for each issuer related wallet.

15. A method for tokenizing securities and assets according to claim 1, further comprising generating at least one of a compliance report and a tax report corresponding to the issuer token and the wallet the issuer token is residing in.

16. A method for tokenizing securities and assets according to claim 1, wherein the issuer token comprises a derivative.

17. A system for tokenizing securities and assets on a distributed ledger associated with an offering created by an issuer and traded between at least one recipient wallet, comprising:
    a tokenization system in communication with the distributed ledger, comprising:
        an issuer module accessible by the issuer and configured to create and issue an issuer token on a first distributed ledger according to a set of issuer data, wherein the issuer data includes a first set of transfer criteria comprising a set of imposed restrictions by the issuer pertaining to who may be allowed to purchase, receive, acquire, or otherwise trade the corresponding token;
        a recipient module configured to create a recipient account according to a set of recipient data; and
        a token transfer module in communication with the issuer module and the distributed ledger configured to transfer the issuer token from the issuer module to a first recipient wallet; and
    a qualification module communicatively linked to the recipient module and configured to:

create a Know Your Client (KYC) token for the first recipient, wherein the KYC token comprises:

the set of recipient data;

a set of KYC data; and

a second set of transfer criteria;

store the KYC token in the wallet of the first recipient; and

qualify the wallet of the first recipient according to:

a comparison of the issuer data to the set of recipient data; and

a confirmation that the first set of transfer criteria included in the issuer data matches the second set of transfer criteria in the KYC token,

wherein the transfer of the issuer token to the wallet of the first recipient is constrained until the qualification module confirms that the wallet of the first recipient is qualified to receive the issuer token.

18. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the issuer module is configured to issue the issuer token simultaneously on a second distributed ledger when the issuer token is issued to the first distributed ledger.

19. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the wallet of the first recipient resides on a second distributed ledger.

20. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the KYC token is configured to act as an authentication device to allow payments from the wallet.

21. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the KYC token is configured to be used as a master key for logging in to one or more websites.

22. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the qualification module is configured to receive the KYC data from a third party provider.

23. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the tokenization system is further configured to constrain any subsequent transfer of the issuer token between the first recipient wallet holding the issuer token and a second recipient wallet intending to receive the issuer token until the qualification module confirms that the wallet of the second recipient is qualified to receive the issuer token.

24. A system for tokenizing securities and assets on a distributed ledger according to claim 23, wherein the transfer of the issuer token to the second recipient wallet:

is restricted if a third set of transfer criteria associated with the second recipient wallet does not match the first set of transfer criteria in the issuer data; and

is permitted if the third set of transfer criteria associated with the second recipient wallet matches the first set of transfer criteria in the issuer data.

25. A system for tokenizing securities and assets on a distributed ledger according to claim 23, wherein the subsequent transfer of the issuer token to the second recipient wallet is completed without the authorization of the first recipient in response to an occurrence of a predetermined event.

26. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the token transfer module is further configured to provide an alternative method of accessing the issuer token in response to a verified lockout request.

27. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the token transfer module is further configured to the transfer of the issuer token to the wallet of the first recipient is completed following an occurrence of a time based event.

28. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the qualification module is further configured to generate an Anti-Money Laundering (AML) token for the issuer that is linked to the issuer token.

29. A system for tokenizing securities and assets on a distributed ledger according to claim 28, wherein:

the AML token is linked to at least one KYC token held in one or more issuer related wallets; and

each KYC token is created based on a set of KYC data for each issuer related wallet.

30. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the tokenization system is further configured to generate at least one of a compliance report and a tax report corresponding to the issuer token and the wallet the issuer token is residing in.

31. A system for tokenizing securities and assets on a distributed ledger according to claim 17, wherein the issuer token comprises a derivative.

32. A system for tokenizing securities and assets on a distributed ledger according to claim 17, further comprising a funding system in communication with the recipient module and the token transfer module configured to:

receive a coin sell order from the issuer;

assign a discount rate to the coin sell order;

identify a party to purchase the coin at the discount rate; and

facilitate the coin sell order between the party and the issuer without the use of an exchange off of the distributed ledger.