

CLAIMS

1. A system for generating a digital token that uniquely represents a real-world object, comprising:

an interface configured to handle a unique identifier for a unique unit of a real-world object, the real-world object having a set of real-world object attributes;

a ~~cryptographic~~ token generation system ~~that generates~~ configured to generate a unique digital token that has a set of digital attributes that correspond to the set of real-world object attributes, wherein the unique digital token is cryptographically secure and wherein the unique digital token is generated by generating a value that uniquely identifies the unique digital token; and

a ~~cryptographic~~ linking system configured to generate a ~~cryptographically secure, one-to-at-least-one~~ link between the unique digital token generated by the ~~cryptographic~~ token generation system and the unique identifier for the unique unit of the real-world object by digitally signing the value that uniquely identifies the unique digital token by utilizing a private key/public key pair corresponding to a token creator to obtain a digital signature and generating a token wrapper that includes the digital signature and the set of real-world object attributes, such that the unique digital token provides a unique digital representation of the unique unit of the real-world object, and;

a ledger update system configured to write the digital token to a blockchain in accordance with a protocol, thereby facilitating transactions for the unique unit of the real-world object using the unique digital token,

wherein the ledger update system updates a sidechain of a set of side chains of the blockchain with the unique digital token.

2. The system of claim 1, wherein the real-world object is a consumer product.

3. The system of claim 1, wherein the real-world object is a unique instance of a digital item.

4. The system of claim 1, wherein the real-world object is a gift card.
5. The system of claim 1, wherein the real-world object is already in existence
6. The system of claim 1, wherein the real-world object has a defined type and a defined set of characteristics but is not ~~yet~~yet in existence.
7. The system of claim 1, wherein the unique digital token is redeemable for a right to possess the real-world object.
8. The system of claim 1, wherein possession of the unique digital token represents ownership of the real-world object.
9. The system of claim 1, wherein the unique digital token is transferable.
10. The system of claim 1, wherein the set of real-world-object attributes includes a set of physical attributes.
11. The system of claim 1, wherein the set of real-world-object attributes a set of origination attributes.
12. The system of claim 11, wherein the set of origination attributes includes one or more of limited edition attributes.
- ~~13. The system of claim 11, wherein the set of origination attributes includes _celebrity signature attributes.~~
- ~~14. The system of claim 11, wherein the set of origination attributes includes _certification of originality attributes.~~
- ~~15. The system of claim 11, wherein the set of origination attributes includes _location of origin attributes.~~
- ~~16. The system of claim 11, wherein the set of origination attributes includes _or certification of ethical production attributes.~~

~~17~~13. The system of claim 1, wherein the set of digital attributes of the unique digital token includes a data structure that represents the physical attributes of the real-world object.

~~18~~14. The system of claim 1, wherein the set of digital attributes of the unique digital token includes a data structure that supports a visual representation of the real-world object.

~~19~~15. The system of claim 1, wherein the set of digital attributes of the unique digital token includes an image of the real-world object.

~~20~~16. The system of claim 1, wherein the set of digital attributes of the unique digital token includes a data structure that represents an animation of the real-world object.

17. The system of claim 1, wherein each side chain of the set of side chains is a respective shard of the blockchain that extends from a main chain of the blockchain.

18. The system of claim 17, wherein each side chain of the set of side chains corresponds to a different categorization of real-world objects.

19. The system of claim 17, wherein the main chain of the block chain stores information relating to a plurality of users including a first user that associated with the blockchain and each side chain corresponds to a different respective account of the plurality of users and stores respective digital tokens associated with the respective account of the plurality of users.

20. The system of claim 1, wherein the side chain of the set of side chains of the blockchain further stores a virtual representation of the real-world object.

21. The system of claim 1, wherein the blockchain is a private blockchain.

22. The system of claim 1, wherein the blockchain is a public blockchain.

~~21~~23. A system for generating a digital token that uniquely represents a unique unit of a consumer product, comprising:

an interface configured to handle a unique identifier for a unique unit of a consumer product, the consumer product having a set of consumer-product attributes;

~~a cryptographic token generation system that generates~~ configured to generate a unique digital token that has a set of digital attributes that corresponds to the set of consumer-product attributes, wherein the unique digital token is cryptographically secure and wherein the unique digital token is generated by generating a value that uniquely identifies the unique digital token; and

~~a linking system configured to generate a one-to-at-1-eas-least-one link between the unique digital token generated by the cryptographic token generation system and the unique identifier for the unique unit of the consumer product~~ by digitally signing the value that uniquely identifies the unique digital token by utilizing a private key/public key pair corresponding to a token creator to obtain a digital signature and generating a token wrapper that includes the digital signature and the set of attributes of the consumer product, such that the unique digital token provides a unique digital representation of the unique unit of the consumer product; and

~~a ledger update system configured to write the unique digital token to a blockchain in accordance with a protocol, thereby facilitating transactions for the unique unit of the consumer product using the unique digital token.~~

~~wherein the ledger update system updates a sidechain of a set of side chains of the blockchain with the unique digital token.~~

~~2224.~~ The system of claim ~~21~~23, wherein the set of consumer-product attributes includes a set of physical attributes.

~~23~~25. The system of claim ~~21~~23, wherein the set of consumer-product attributes includes a set of origination attributes.

~~24~~26. The system of claim ~~23~~25, wherein the set of origination attributes includes one or more limited edition attributes₁.

~~25.~~ The system of claim ~~23~~, wherein the set of origination attributes of the consumer product include celebrity signature attributes₁.

~~26.~~ The system of claim ~~23~~, wherein the set of origination attributes includes certification of originality attributes₁.

~~27. The system of claim 23, wherein the set of origination attributes includes location of origin attributes.~~

~~28. The system of claim 23, wherein the set of origination attributes includes or certification of ethical production attributes.~~

~~29~~27. The system of claim ~~21~~23, wherein the set of digital attributes of the unique digital token includes a data structure that represents the physical attributes of the consumer product.

~~30~~28. The system of claim ~~21~~23, wherein the set of digital attributes of the unique digital token includes a data structure that supports a visual representation of the consumer product.

~~31~~29. The system of claim ~~21~~23, wherein the set of digital attributes of the unique digital token includes an image of the consumer product.

~~32~~30. The system of claim ~~21~~23, wherein the set of digital attributes of the unique digital token includes a data structure that represents an animation of the consumer product.

~~33~~31. The system of claim ~~21~~23, wherein the consumer product is already in existence.

~~34~~32. The system of claim ~~33~~23, wherein the unique digital token is redeemable for fulfillment of the unit of the consumer product.

~~35~~33. The system of claim ~~21~~23, wherein the consumer product has a defined type and a defined set of characteristics but the consumer product is not yet in existence.

~~36~~34. The system of claim 35, wherein the unique digital token is redeemable for fulfillment of creation and delivery of the unit of the consumer product.

35. The system of claim 23, wherein each side chain of the set of side chain is a respective shard of the blockchain that extends from a main chain of the blockchain.

36. The system of claim 35, wherein each side chain of the set of side chains corresponds to a different categorization of the consumer product.

37. The system of claim 35, wherein the main chain of the block chain stores information relating to a plurality of users including a first user that associated with the blockchain and

each side chain corresponds to a different respective account of the plurality of users and stores respective digital tokens associated with the respective account of the plurality of users.

38. The system of claim 23, wherein the blockchain is a private blockchain.

39. The system of claim 23, wherein the blockchain is a public blockchain.

~~37. A method for facilitating transactions via a tokenization platform comprising: maintaining a ledger that stores:~~

~~—— a plurality of public addresses, wherein each respective public address corresponds to a respective account of a respective user of the tokenization platform;~~

~~—— a plurality of virtual representations of a plurality of respective items; for each virtual representation, a set of tokens that respectively correspond to a respective instance of the item represented by the virtual representation; and~~

~~—— ownership data of each respective token;~~

~~—— providing a digital marketplace that provides a second graphical user interface that allows consumers to:~~

~~—— view visualizations of virtual representations of items including the virtual representation of the item; and~~

~~—— transact for an instance of an item of the plurality of respective items by purchasing a digital token from the set of tokens corresponding to the item; receiving a request to participate in a transaction for an instance of an item represented by a virtual representation of the plurality of virtual representations from a transacting user;~~

~~—— in response to verifying the request to participate in the transaction, updating the ledger with a block that includes ownership data that indicates that a specific token corresponding to the virtual representation is owned by the transacting user, wherein the specific token is redeemed by an owner of the digital token to satisfy the transaction for the instance of the item.~~

~~38. The method of claim 37, wherein the set of tokens corresponding to a virtual representation includes non-fungible tokens.~~

~~39. The method of claim 37, wherein the set of tokens corresponding to a virtual representation includes fungible tokens.~~

~~40. The method of claim 37, wherein the set of tokens corresponding to a virtual representation are transferable to other users.~~

~~41. The method of claim 37, wherein the item is one of a digital good, a physical good, a digital service, a physical service, a digital experience, or a physical experience.~~

~~42. The method of claim 37, wherein a transaction for an instance of an item is one of a sale of the instance of the item, a lease of the instance of the item, a gifting of the instance of the item, and a giveaway of the instance of the item.~~

~~43. The method of claim 37, wherein the ledger is a distributed ledger.~~