

WHAT IS CLAIMED IS:

1. A computer-implemented method for merger of smart assets in a blockchain network, the method being executed by one or more processors and comprising:

5 receiving a merger request for merging a first smart asset associated with a first node and a second smart asset associated with a second node in the blockchain network, the merger request comprising a first identifier of the first node, a second identifier of the second node, a type identifier of the first smart asset, and a type identifier of the second smart asset;

10 comparing the type identifier of the first smart asset to the type identifier of the second smart asset identified in the merger request;

determining whether the first smart asset is capable of merger with the second smart asset associated with the second node at least partially based on a result of comparing the type identifier of the first smart asset and the type identifier of the second smart asset; and

15 in response to determining that the first smart asset is capable of being merged with the second smart asset, automatically:

updating the second smart asset as an updated second smart asset, the updated second smart asset being assigned a first value, and including properties of the first smart asset;

20 recording the updated second smart asset to the second node; and
deleting the first smart asset; and

in response to determining that the first smart asset is not capable of being merged with the second smart asset, automatically:

25 recording the first smart asset to the second node, the first smart asset being assigned the second identifier of the second node and a second value, and
deleting the first smart asset from the first node.

2. The method of claim 1, wherein determining whether the first smart asset is
30 capable of merger is determined by executing a function provided in computer-executable smart contract associated with the first smart asset.

3. The method of claim 1, wherein determining whether the first smart asset is capable of merger is determined at least partially based on a determination that the type identifier of the first smart asset is the same as the type identifier of the second smart asset.

4. The method of claim 1, wherein the first value is provided as one of a numerical value, and a string description.

5. The method of claim 4, wherein the string description is provided in Javascript object notation (JSON).

6. The method of claim 1, wherein the first value is a sum of an original value of the first smart asset plus an original value of the second smart asset.

7. The method of claim 1, wherein the second value is equal to an original value of the first smart asset.

8. The method of claim 1, wherein the blockchain network is a consortium blockchain network.

9. The method of claim 1, wherein the first smart asset and the second smart asset are each defined by an underlying data object having multiple fields.

10. A non-transitory computer-readable storage medium coupled to one or more processors and having instructions stored thereon which, when executed by the one or more processors, cause the one or more processors to perform operations for merger of smart assets in a blockchain network, the operations comprising:

receiving a merger request for merging a first smart asset associated with a first node and a second smart asset associated with a second node in the blockchain network, the merger request comprising a first identifier of the first node, a second identifier of the

second node, a type identifier of the first smart asset, and a type identifier of the second smart asset;

comparing the type identifier of the first smart asset to the type identifier of the second smart asset identified in the merger request;

5 determining whether the first smart asset is capable of merger with the second smart asset associated with the second node at least partially based on a result of comparing the type identifier of the first smart asset and the type identifier of the second smart asset; and

10 in response to determining that the first smart asset is capable of being merged with the second smart asset, automatically:

updating the second smart asset as an updated second smart asset, the updated second smart asset being assigned a first value, and including properties of the first smart asset;

recording the updated second smart asset to the second node; and

15 deleting the first smart asset; and

in response to determining that the first smart asset is not capable of being merged with the second smart asset, automatically:

recording the first smart asset to the second node, the first smart asset being assigned the second identifier of the second node and a second value, and

20 deleting the first smart asset from the first node.

11. The computer-readable storage medium of claim 10, wherein determining whether the first smart asset is capable of merger is determined by executing a function provided in computer-executable smart contract associated with the first smart asset.

25 12. The computer-readable storage medium of claim 10, wherein determining whether the first smart asset is capable of merger is determined at least partially based on a determination that the type identifier of the first smart asset is the same as the type identifier of the second smart asset.

13. The computer-readable storage medium of claim 10, wherein the first value is provided as one of a numerical value, and a string description.

14. The computer-readable storage medium of claim 13, wherein the string description is provided in Javascript object notation (JSON).

15. The computer-readable storage medium of claim 10, wherein the first value is a sum of an original value of the first smart asset plus an original value of the second smart asset.

16. The computer-readable storage medium of claim 10, wherein the second value is equal to an original value of the first smart asset.

17. The computer-readable storage medium of claim 10, wherein the blockchain network is a consortium blockchain network.

18. The computer-readable storage medium of claim 10, wherein the first smart asset and the second smart asset are each defined by an underlying data object having multiple fields.

19. A system, comprising:

a computing device; and

a computer-readable storage device coupled to the computing device and having instructions stored thereon which, when executed by the computing device, cause the computing device to perform operations for merger of smart assets in a blockchain network, the operations comprising:

receiving a merger request for merging a first smart asset associated with a first node and a second smart asset associated with a second node in the blockchain network, the merger request comprising a first identifier of the first node, a second identifier of the second node, a type identifier of the first smart asset, and a type identifier of the second smart asset;

comparing the type identifier of the first smart asset to the type identifier of the second smart asset identified in the merger request;

determining whether the first smart asset is capable of merger with the second smart asset associated with the second node at least partially based on a result of comparing the type identifier of the first smart asset and the type identifier of the second smart asset; and

in response to determining that the first smart asset is capable of being merged with the second smart asset, automatically:

updating the second smart asset as an updated second smart asset, the updated second smart asset being assigned a first value, and including properties of the first smart asset;

recording the updated second smart asset to the second node; and
deleting the first smart asset; and

in response to determining that the first smart asset is not capable of being merged with the second smart asset, automatically:

recording the first smart asset to the second node, the first smart asset being assigned the second identifier of the second node and a second value, and
deleting the first smart asset from the first node.

20. The system of claim 19, wherein determining whether the first smart asset is capable of merger is determined by executing a function provided in computer-executable smart contract associated with the first smart asset.

21. The system of claim 19, wherein determining whether the first smart asset is capable of merger is determined at least partially based on a determination that the type identifier of the first smart asset is the same as the type identifier of the second smart asset.

22. The system of claim 19, wherein the first value is provided as one of a numerical value, and a string description.

23. The system of claim 22, wherein the string description is provided in Javascript object notation (JSON).

5 24. The system of claim 19, wherein the first value is a sum of an original value of the first smart asset plus an original value of the second smart asset.

25. The system of claim 19, wherein the second value is equal to an original value of the first smart asset.

10 26. The system of claim 19, wherein the blockchain network is a consortium blockchain network.

27. The system of claim 19, wherein the first smart asset and the second smart asset are each defined by an underlying data object having multiple fields.