

CLAIMS:

1. A computer-implemented method for implementing a resolver service, comprising:
obtaining event data from a blockchain, wherein the event data comprises a plurality of updates associated with a plurality of decentralized identifier (DID) documents stored on the blockchain;

storing the event data in a database;

receiving a request for information associated with the event data; and

providing information about one or more updates associated with one or more of the DID documents in response to the request.

2. The method of claim 1, wherein the event data further comprises a plurality of updates associated with a plurality of verifiable claims (VCs).

3. The method of any of the preceding claims, wherein the obtaining event data comprises periodically accessing an up-to-date version of the blockchain.

4. The method of any of the preceding claims, wherein the obtaining event data comprises:

obtaining a current height of the blockchain;

comparing the obtained current height of the blockchain with a maximum height in the blockchain that data currently stored in the database corresponds to; and

obtaining a plurality of blocks from the blockchain, wherein each of the obtained blocks corresponds to a height in the blockchain greater than the maximum height.

5. The method of claim 4, wherein the obtaining event data further comprises:

searching, in the obtained blocks, for transactions involving one or more blockchain contracts associated with DIDs or VCs; and

collecting one or more inputs and outputs associated with the one or more blockchain contracts.

6. The method of any of the preceding claims, wherein:

the providing information about one or more updates comprises sending the information to an online agent configured to manage DIDs or VCs for a plurality of users.

7. The method of any of the preceding claims, wherein:
the receiving a request for information associated with the event data comprises receiving the request from an entity, wherein the request comprises one or more account identifiers; and
the providing information about one or more updates comprises identifying one or more DIDs based on pre-stored mapping relationships between a plurality of account identifiers and a plurality of DIDs and sending information associated with the identified one or more DIDs to the entity.
8. The method of any of the preceding claims, further comprising:
receiving a request for creating a DID; and
sending one or more blockchain transactions for creating the DID and for adding a DID document associated with the DID to a blockchain node for execution.
9. The method of any of the preceding claims, further comprising:
receiving a request for updating a DID document; and
sending a blockchain transaction for updating the DID document to a blockchain node for execution.
10. The method of any of the preceding claims, further comprising:
receiving a query for a DID document, the query comprising a DID; and
sending a blockchain transaction for identifying the DID document based on the DID to a blockchain node for execution.
11. The method of any of the preceding claims, further comprising:
receiving a query for a public key associated with a DID; and
sending, to a blockchain node for execution, a blockchain transaction for accessing a DID document containing the public key based on the DID.
12. The method of any of the preceding claims, further comprising:
receiving a query for information associated with a VC, the query comprising one or more identifiers for the VC; and

sending, to a blockchain node for execution, a blockchain transaction for accessing the information associated with the VC based on the one or more identifiers.

13. A system for implementing a resolver service, comprising:

one or more processors; and

one or more computer-readable memories coupled to the one or more processors and having instructions stored thereon that are executable by the one or more processors to perform the method of any of claims 1 to 12.

14. An apparatus for implementing a resolver service comprising a plurality of modules for performing the method of any of claims 1 to 12.

15. A non-transitory computer-readable storage medium configured with instructions executable by one or more processors to cause the one or more processors to perform the method of any of claims 1 to 12.