

CLAIMS

1. A computer-implemented method, comprising:
 - receiving, by a first coordination server in a blockchain network, a data reading request from a client device, wherein the data reading request comprises a first code value;
 - when the first code value is matched in first code value configuration data, obtaining, by the first coordination server in the blockchain network, a first location value corresponding to the first code value based on the first code value configuration data, wherein the first location value is associated with a location of first block data in a blockchain, and wherein the first code value configuration data comprises at least one code value that corresponds to a location value; and
 - when the first location value satisfies a location value determining condition:
 - obtaining, by the first coordination server in the blockchain network, the first block data based on the first location value; and
 - sending, by the first coordination server in the blockchain network, a reading result to the client device based on the obtained first block data; and
 - when the first location value does not satisfy the location value determining condition:
 - sending, by the first coordination server in the blockchain network, the first location value to a second coordination server in the blockchain network;
 - receiving, by the first coordination server in the blockchain network and from the second coordination server in the blockchain network, second block data associated with the first location value; and
 - sending, by the first coordination server in the blockchain network, the reading result to the client device based on the received second block data.
2. The computer-implemented method of claim 1, wherein the data reading request comprises a block data reading request, wherein the block data reading request comprises a code value of to-be-read block data in the blockchain, and wherein sending the reading result to the client device based on the obtained first block data comprises sending the obtained first block data to the client device.

3. The computer-implemented method of claim 1, wherein the data reading request comprises a transaction data reading request, wherein the transaction data reading request comprises a code value of to-be-read transaction data in the blockchain, and wherein sending the reading result to the client device based on the obtained first block data comprises:

obtaining, from the obtained first block data, transaction data corresponding to the code value of the to-be-read transaction data in the blockchain; and
sending the obtained transaction data to the client device.

4. The computer-implemented method of claim 1, further comprising:

when the first code value is not matched in the first code value configuration data:

sending, by the first coordination server in the blockchain network, the first code value to the second coordination server in the blockchain network;

receiving, by the first coordination server in the blockchain network, block data sent by the second coordination server in the blockchain network, wherein the block data is associated with the first code value; and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the received block data.

5. The computer-implemented method of claim 1, further comprising:

when the first code value is not matched in the first code value configuration data:

sending, by the first coordination server in the blockchain network, the first code value to the second coordination server in the blockchain network; and

receiving, by the first coordination server in the blockchain network, a location value sent by the second coordination server in the blockchain network, wherein the location value is associated with the first code value.

6. The computer-implemented method of claim 5, further comprising:

obtaining, by the first coordination server in the blockchain network, third block data based on the location value sent by the second coordination server in the blockchain network; and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the obtained third block data.

7. A non-transitory, computer-readable medium storing one or more instructions executable by a first coordination server in a blockchain network to perform operations comprising:

receiving, by the first coordination server in the blockchain network, a data reading request from a client device, wherein the data reading request comprises a first code value;

when the first code value is matched in first code value configuration data, obtaining, by the first coordination server in the blockchain network, a first location value corresponding to the first code value based on the first code value configuration data, wherein the first location value is associated with a location of first block data in a blockchain, and wherein the first code value configuration data comprises at least one code value that corresponds to a location value; and

when the first location value satisfies a location value determining condition:

obtaining, by the first coordination server in the blockchain network, the first block data based on the first location value; and

sending, by the first coordination server in the blockchain network, a reading result to the client device based on the obtained first block data; and

when the first location value does not satisfy the location value determining condition:

sending, by the first coordination server in the blockchain network, the first location value to a second coordination server in the blockchain network;

receiving, by the first coordination server in the blockchain network and from the second coordination server in the blockchain network, second block data associated with the first location value; and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the received second block data.

8. The non-transitory, computer-readable medium of claim 7, wherein the data reading request comprises a block data reading request, wherein the block data reading request comprises a code value of to-be-read block data in the blockchain, and wherein sending the reading result to the client device based on the obtained first block data comprises sending the obtained first block data to the client device.

9. The non-transitory, computer-readable medium of claim 7, wherein the data reading request comprises a transaction data reading request, wherein the transaction data reading request

comprises a code value of to-be-read transaction data in the blockchain, and wherein sending the reading result to the client device based on the obtained first block data comprises:

obtaining, from the obtained first block data, transaction data corresponding to the code value of the to-be-read transaction data in the blockchain; and

sending the obtained transaction data to the client device.

10. The non-transitory, computer-readable medium of claim 7, the operations further comprising:

when the first code value is not matched in the first code value configuration data:

sending, by the first coordination server in the blockchain network, the first code value to the second coordination server in the blockchain network;

receiving, by the first coordination server in the blockchain network, block data sent by the second coordination server in the blockchain network, wherein the block data is associated with the first code value; and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the received block data.

11. The non-transitory, computer-readable medium of claim 7, the operations further comprising:

when the first code value is not matched in the first code value configuration data:

sending, by the first coordination server in the blockchain network, the first code value to the second coordination server in the blockchain network; and

receiving, by the first coordination server in the blockchain network, a location value sent by the second coordination server in the blockchain network, wherein the location value is associated with the first code value.

12. The non-transitory, computer-readable medium of claim 11, the operations further comprising:

obtaining, by the first coordination server in the blockchain network, third block data based on the location value sent by the second coordination server in the blockchain network; and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the obtained third block data.

13. A computer-implemented system, comprising:

one or more computers of a first coordination server in a blockchain network; and

one or more computer memory devices interoperably coupled with the one or more computers and having tangible, non-transitory, machine-readable media storing one or more instructions that, when executed by the one or more computers, perform one or more operations, comprising:

receiving, by the first coordination server in the blockchain network, a data reading request from a client device, wherein the data reading request comprises a first code value;

when the first code value is matched in first code value configuration data, obtaining, by the first coordination server in the blockchain network, a first location value corresponding to the first code value based on the first code value configuration data, wherein the first location value is associated with a location of first block data in a blockchain, and wherein the first code value configuration data comprises at least one code value that corresponds to a location value; and

when the first location value satisfies a location value determining condition:

obtaining, by the first coordination server in the blockchain network, the first block data based on the first location value; and

sending, by the first coordination server in the blockchain network, a reading result to the client device based on the obtained first block data; and

when the first location value does not satisfy the location value determining condition:

sending, by the first coordination server in the blockchain network, the first location value to a second coordination server in the blockchain network;

receiving, by the first coordination server in the blockchain network, from the second coordination server in the blockchain network, second block data associated with the first location value; and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the received second block data.

14. The computer-implemented system of claim 13, wherein the data reading request comprises a block data reading request, wherein the block data reading request comprises a code value of to-be-read block data in the blockchain, and wherein sending the reading result to the client device based on the obtained first block data comprises sending the obtained first block data to the client device.

15. The computer-implemented system of claim 13, wherein the data reading request comprises a transaction data reading request, wherein the transaction data reading request comprises a code value of to-be-read transaction data in the blockchain, and wherein sending the reading result to the client device based on the obtained first block data comprises:

obtaining, from the obtained first block data, transaction data corresponding to the code value of the to-be-read transaction data in the blockchain; and

sending the obtained transaction data to the client device.

16. The computer-implemented system of claim 13, the one or more operations further comprising,

when the first code value is not matched in the first code value configuration data:

sending, by the first coordination server in the blockchain network, the first code value to the second coordination server in the blockchain network;

receiving, by the first coordination server in the blockchain network, block data sent by the second coordination server in the blockchain network, wherein the block data is associated with the first code value; and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the received block data.

17. The computer-implemented system of claim 13, the one or more operations further comprising,

when the first code value is not matched in the first code value configuration data:

sending, by the first coordination server in the blockchain network, the first code value to the second coordination server in the blockchain network;

receiving, by the first coordination server in the blockchain network, a location value sent by the second coordination server in the blockchain network, wherein the location value is associated with the first code value;

obtaining, by the first coordination server in the blockchain network, third block data based on the location value sent by the second coordination server in the blockchain network;
and

sending, by the first coordination server in the blockchain network, the reading result to the client device based on the obtained third block data.