

CLAIMS

What is claimed is:

1. A blockchain-based data processing method, wherein a blockchain comprises a node device of a service acceptance platform and a node device of a service data processing entity, and the method comprises:

receiving, by the node device of the service acceptance platform, service processing application data of a target user;

generating, by the node device of the service acceptance platform, a first service processing result;

encrypting, by the node device of the service acceptance platform, the first service processing result using a public key of the node device of the service data processing entity; and

sending, by the node device of the service acceptance platform, a first transaction to the blockchain, the first transaction being recorded in a distributed database of the blockchain upon verification of the first transaction according to a consensus mechanism, wherein:

the first transaction is recorded in the distributed database of the blockchain by:

selecting, before a round of consensus of the blockchain starts, one node device from a plurality of node devices associated with the blockchain as a primary node device, and setting other node devices associated with the blockchain as secondary node devices,

verifying, by the primary node device, the first transaction,

adding, by the primary node device and upon verification of the first transaction, the first transaction to a candidate block,

broadcasting, by the primary node device, the candidate block to the secondary node devices, and

setting the candidate block as a latest block after the candidate block is approved by a preset quantity of the secondary node devices, and adding the latest block to the distributed database of the blockchain;

the first transaction comprises the encrypted first service processing result; and

the plurality of node devices associated with the blockchain comprises the node device of the service acceptance platform and the node device of the service data processing entity.

2. The method according to claim 1, further comprising:

obtaining, by the node device of the service acceptance platform from the distributed database of the blockchain, a second transaction comprising a second service processing result of the target user generated by the node device of the service data processing entity; and
sending the second service processing result to the target user.

3. The method according to claim 2, wherein the second service processing result is encrypted using a public key of the node device of the service acceptance platform.

4. The method according to claim 1, wherein the service acceptance platform comprises an insurance application acceptance platform, the service data processing entity comprises an insurance application review agency, the service processing application data comprises insurance application data of the target user;

the first service processing result comprises insurance policy application data; and

the second service processing result comprises an insurance application result of the target user.

5. The method according to claim 1, wherein the service acceptance platform comprises a claim settlement acceptance platform, the service data processing entity comprises a claim settlement review agency, the service processing application data comprises claim settlement application data of the target user;

the first service processing result comprises claim settlement report data; and

the second service processing result comprises a compensation result for the target user.

6. The method according to claim 4 or 5, wherein the blockchain is a consortium blockchain, and the node device of the service acceptance platform and the node device of the service data processing entity are consortium member node devices of the consortium blockchain.

7. A blockchain-based data processing method, wherein a blockchain comprises a node device of a service acceptance platform and a node device of a service data processing entity, and the method comprises:

obtaining, by the node device of the service data processing entity from a distributed database of the blockchain, a first transaction sent by the node device of the service acceptance

platform, wherein the first transaction comprises a first service processing result, wherein the first service processing result is encrypted using a public key of the node device of the service data processing entity, wherein the first transaction is recorded in the distributed database of the blockchain by:

- selecting, before a round of consensus of the blockchain starts, one node device from a plurality of node devices associated with the blockchain as a primary node device, and setting other node devices associated with the blockchain as secondary node devices,

- verifying, by the primary node device, the first transaction,

- adding, by the primary node device and upon verification of the first transaction, the first transaction to a candidate block,

- broadcasting, by the primary node device, the candidate block to the secondary node devices, and

- setting the candidate block as a latest block after the candidate block is approved by a preset quantity of the secondary node devices, and adding the latest block to the distributed database of the blockchain,

- wherein the plurality of node devices associated with the blockchain comprises the node device of the service acceptance platform and the node device of the service data processing entity;

- generating, by the node device of the service data processing entity, a second service processing result based on the first service processing result; and

- sending, by the node device of the service data processing entity, a second transaction to the blockchain, wherein the second transaction comprises the second service processing result, for the second transaction to be recorded in the distributed database of the blockchain upon verification of the second transaction by the plurality of node devices associated with the blockchain according to a consensus mechanism.

8. The method according to claim 7, wherein the second service processing result is encrypted using a public key of the node device of the service acceptance platform.

9. The method according to claim 7 or 8, wherein the service acceptance platform comprises an insurance application acceptance platform, the service data processing entity comprises an insurance application review agency, the service processing application data comprises insurance application data of a target user;

the first service processing result comprises insurance policy application data; and
the second service processing result comprises an insurance application result of the target user.

10. The method according to claim 7 or 8, wherein the service acceptance platform comprises a claim settlement acceptance platform, the service data processing entity comprises a claim settlement review agency, the service processing application data comprises claim settlement application data of a target user;

the first service processing result comprises claim settlement report data; and
the second service processing result comprises a compensation result for the target user.

11. A blockchain-based data processing apparatus, wherein a blockchain comprises a node device of a service acceptance platform and a node device of a service data processing entity, and the apparatus comprises:

a receiving unit, configured to receive service processing application data of a target user;

a generating unit, configured to generate a first service processing result, wherein the first service processing result is encrypted using a public key of the node device of the service data processing entity; and

a sending unit, configured to send a first transaction to the blockchain, the first transaction being recorded in a distributed database of the blockchain upon verification of the first transaction according to a consensus mechanism, wherein:

the first transaction is recorded in the distributed database of the blockchain by:

selecting, before a round of consensus of the blockchain starts, one node device from a plurality of node devices associated with the blockchain as a primary node device, and setting other node devices associated with the blockchain as secondary node devices,

verifying, by the primary node device, the first transaction,

adding, by the primary node device and upon verification of the first transaction, the first transaction to a candidate block,

broadcasting, by the primary node device, the candidate block to the secondary node devices, and

setting the candidate block as a latest block after the candidate block is approved by a preset quantity of the secondary node devices, and adding the latest block to the distributed database of the blockchain;

the first transaction comprises the encrypted first service processing result; and
the plurality of node devices associated with the blockchain comprises the node device of the service acceptance platform and the node device of the service data processing entity.

12. The apparatus according to claim 11, further comprising:

an obtaining unit, configured to obtain, from the distributed database of the blockchain, a second transaction comprising a second service processing result of the target user generated by the node device of the service data processing entity, and

the sending unit is further configured to send the second service processing result to the target user.

13. The apparatus according to claim 12, wherein the second service processing result is encrypted using a public key of the node device of the service acceptance platform.

14. The apparatus according to claim 11, wherein the service acceptance platform comprises an insurance application acceptance platform, the service data processing entity comprises an insurance application review agency, the service processing application data comprises insurance application data of the target user;

the first service processing result comprises insurance policy application data; and

the second service processing result comprises an insurance application result of the target user.

15. The apparatus according to claim 11, wherein the service acceptance platform comprises a claim settlement acceptance platform, the service data processing entity comprises a claim settlement review agency, the service processing application data comprises claim settlement application data of the target user;

the first service processing result comprises the claim settlement report data; and

the second service processing result comprises a compensation result for the target user.

16. The apparatus according to claim 14 or 15, wherein the blockchain is a consortium blockchain, and the node device of the service acceptance platform and the node device of the service data processing entity are consortium member node devices of the consortium blockchain.

17. A blockchain-based data processing apparatus, wherein a blockchain comprises a node device of a service acceptance platform and a node device of a service data processing entity, and the apparatus comprises:

an obtaining unit, configured to obtain a first transaction sent by the node device of the service acceptance platform from a distributed database of the blockchain, wherein the first transaction comprises a first service processing result, wherein the first service processing result is encrypted using a public key of the node device of the service data processing entity, wherein the first transaction is recorded in the distributed database of the blockchain by:

selecting, before a round of consensus of the blockchain starts, one node device from a plurality of node devices associated with the blockchain as a primary node device, and setting other node devices associated with the blockchain as secondary node devices,

verifying, by the primary node device, the first transaction,

adding, by the primary node device and upon verification of the first transaction, the first transaction to a candidate block,

broadcasting, by the primary node device, the candidate block to the secondary node devices, and

setting the candidate block as a latest block after the candidate block is approved by a preset quantity of the secondary node devices, and adding the latest block to the distributed database of the blockchain,

wherein the plurality of node devices associated with the blockchain comprises the node device of the service acceptance platform and the node device of the service data processing entity;

a generating unit, configured to generate a second service processing result based on the first service processing result; and

a sending unit, configured to send a second transaction to the blockchain, wherein the second transaction comprises the second service processing result, for the second transaction to be recorded in the distributed database of the blockchain upon verification of the second transaction by the plurality of node devices associated with the blockchain according to a consensus mechanism.

18. The apparatus according to claim 17, wherein the second service processing result is encrypted using a public key of the node device of the service acceptance platform.

19. The apparatus according to claim 17 or 18, wherein the service acceptance platform comprises an insurance application acceptance platform, the service data processing entity comprises an insurance application review agency, the service processing application data comprises insurance application data of a target user;

the first service processing result comprises insurance policy application data; and

the second service processing result comprises an insurance application result of the target user.

20. The apparatus according to claim 17 or 18, wherein the service acceptance platform comprises a claim settlement acceptance platform, the service data processing entity comprises a claim settlement review agency, the service processing application data comprises claim settlement application data of a target user;

the first service processing result comprises claim settlement report data; and

the second service processing result comprises a compensation result of the target user.

21. A computer device, comprising a memory and a processor, wherein the memory stores a computer program executable by the processor, and the processor performs the method according to any one of claims 1 to 6 when executing the computer program.

22. A computer device, comprising a memory and a processor, wherein the memory stores a computer program executable by the processor, and the processor performs the method according to any one of claims 7 to 10 when executing the computer program.