

CLAIMS

What is claimed is:

1. A blockchain recording method, applied to a blockchain system that comprises a computing and recording node device, wherein at least one type of computing logic is deployed in the computing and recording node device, wherein the computing and recording node device is communicatively connected to each of a first data device and a second data device, wherein the computing and recording node device is connected to the first data device via a local communication method, and wherein the computing and recording node device is connected to the second data device via an external communication method, wherein the second data device is configured to receive a data computing application of a user, wherein the first data device stores service event data and wherein the method comprises:

receiving (102, 301), by the computing and recording node device, a computing invoking application sent by the second data device, wherein the computing invoking application comprises a query index of target service event data, and wherein the computing invoking application is generated based on the data computing application of the user;

obtaining (104, 302) the target service event data from the first data device based on the query index of the target service event data;

obtaining (106, 303) a computing result by running computing logic corresponding to the computing invoking application and performing computing based on the target service event data, wherein the computing logic is transmitted by the second data device to the computing and recording node device via the external communication method for deployment; and

sending (108, 304) a blockchain transaction to a blockchain, wherein the blockchain transaction is recorded in a distributed database of the blockchain after node consensus verification of the blockchain, and wherein the blockchain transaction comprises first recording information generated based on the computing result, wherein the computing logic is encrypted and transmitted by the second data device to the computing and recording node device via the external communication method for encrypted deployment;

the performing computing based on the target service event data comprises performing encrypted computing based on the target service event data; and the computing result is a computing result in an encrypted state.

2. The method according to claim 1, wherein the blockchain transaction further comprises second recording information generated based on the target service event data.

3. The method according to claim 2, wherein the second recording information comprises a hash digest of the target service event data.

~~4. The method according to claim 1, wherein the computing and recording node device is connected to the first data device via a local communication method, and wherein the computing and recording node device is connected to the second data device via an external communication method.~~

~~5. The method according to claim 4, wherein the computing logic is transmitted by the second data device to the computing and recording node device via the external communication method for deployment.~~

~~6. The method according to claim 5, wherein the computing logic is encrypted and transmitted by the second data device to the computing and recording node device via the external communication method for encrypted deployment;~~

~~the performing computing based on the target service event data comprises performing encrypted computing based on the target service event data; and the computing result is a computing result in an encrypted state.~~

~~7.4.~~ The method according to claim 1, wherein the second data device is a node device of the blockchain, and wherein the blockchain transaction further comprises third recording information generated based on an identifier of the first data device.

~~8~~.5. The method according to claim ~~74~~, wherein the blockchain transaction further comprises fourth recording information generated based on an identifier of the second data device that sends the computing invoking application.

~~9~~.6. The method according to claim 1, wherein the method is an insurance claim settlement recording method; the computing and recording node device is a claim settlement computing and recording node device; the computing logic is claim settlement computing logic; the computing invoking application is a claim settlement computing invoking application; and the blockchain transaction is a claim settlement blockchain transaction.

~~10~~.7. The method according to claim 1, wherein the method is an insurance claim settlement recording method; the computing and recording node device is a claim settlement computing and recording node device; the computing logic is claim settlement computing logic; the computing invoking application is a claim settlement computing invoking application; the blockchain transaction is a claim settlement blockchain transaction; the first data device is a service data device that stores service event data serving as a basis for claim settlement; and the second data device is a claim settlement service device that receives a user claim settlement application.

~~11~~.8. The method according to claim ~~107~~, wherein the blockchain is a consortium blockchain.

~~12~~.9. A blockchain recording apparatus, applied to a blockchain system that comprises a computing and recording node device, wherein at least one type of computing logic is deployed in the computing and recording node device, wherein the computing and recording node device is communicatively connected to each of a first data device and a second data device, wherein the computing and recording node device is connected to the first data device via a local communication method, and wherein the computing and recording node device is connected to the second data device via an external communication method, wherein the second data device is configured to receive a data computing application of a user, wherein the first data device stores service event data, and wherein the apparatus comprises:

a receiving unit, configured to receive a computing invoking application sent by the second data device, wherein the computing invoking application comprises a query index of target service event data, and wherein the computing invoking application is generated based on the data computing application of the user;

an acquisition unit, configured to obtain the target service event data from the first data device based on the query index of the target service event data;

a computing unit, configured to obtain a computing result by running computing logic corresponding to the computing invoking application and performing computing based on the service event data, wherein the computing logic is transmitted by the second data device to the computing and recording node device via the external communication method for deployment; and

a recording unit, configured to send a blockchain transaction to the blockchain, wherein the blockchain transaction is recorded in a distributed database of the blockchain after node consensus verification of the blockchain, and wherein the blockchain transaction comprises first recording information generated based on the computing result, wherein the computing logic is encrypted and transmitted by the second data device to the computing and recording node device via the external communication method for encrypted deployment;

the computing unit is configured to perform encrypted computing based on the target service event data; and

the computing result is a computing result in an encrypted state.

~~43.10.~~ The apparatus according to claim ~~429~~, wherein the blockchain transaction further comprises second recording information generated based on the target service event data.

~~44.11.~~ The apparatus according to claim ~~4310~~, wherein the second recording information comprises a hash digest of the target service event data.

~~45. The apparatus according to claim 12, wherein the computing and recording node device is connected to the first data device via a local communication method, and wherein the computing and recording node device is connected to the second data device via an external communication method.~~

~~16. The apparatus according to claim 15, wherein the computing logic is transmitted by the second data device to the computing and recording node device via the external communication method for deployment.~~

~~17. The apparatus according to claim 16, wherein the computing logic is encrypted and transmitted by the second data device to the computing and recording node device via the external communication method for encrypted deployment;~~

~~the computing unit is configured to perform encrypted computing based on the target service event data; and~~

~~the computing result is a computing result in an encrypted state.~~

~~18.~~12. The apparatus according to claim ~~129~~12, wherein the second data device is a node device of the blockchain, and wherein the blockchain transaction further comprises third recording information generated based on an identifier of the first data device.

~~19.~~13. The apparatus according to claim ~~18~~12, wherein the blockchain transaction further comprises fourth recording information generated based on an identifier of the second data device that sends the computing invoking application.

~~20.~~14 The apparatus according to claim ~~129~~12, wherein the apparatus is an insurance claim settlement recording apparatus; the computing and recording node device is a claim settlement computing and recording node device; the computing logic is claim settlement computing logic; the computing invoking application is a claim settlement computing invoking application; and the blockchain transaction is a claim settlement blockchain transaction.

~~24.~~15. The apparatus according to claim ~~129~~12, wherein the apparatus is an insurance claim settlement recording method; the computing and recording node device is a claim settlement computing and recording node device; the computing logic is claim settlement computing logic; the computing invoking application is a claim settlement computing invoking application; the blockchain transaction is a claim

settlement blockchain transaction; the first data device is a service data device that stores service event data serving as a basis for claim settlement; and the second data device is a claim settlement service device that receives a user claim settlement application.

22.16. The apparatus according to claim 2415, wherein the blockchain is a consortium blockchain.

23.17. A computer device, comprising a storage and a processor, wherein the storage stores a computer program executable by the processor, and when running the computer program, the processor performs the method according to any one of claims 1 to 448.