

CLAIMS

1. A method for electing a representative node device, performed by a first node device, the first node device being any node device in a blockchain system, the method comprising:

5 ~~receiving-broadcasting~~ candidate newly addition transaction data, ~~wherein the candidate~~
~~newly~~ addition transaction data ~~carries-including~~ credential data, ~~and the credential data indicates~~
indicating that the first node device meets a qualification requirement for a candidate node device;

10 storing the candidate newly addition transaction data on a target blockchain of the blockchain system ~~in a case that~~upon a plurality of node devices in the blockchain system ~~verify~~
achieving consensus on the candidate newly addition transaction data ~~by consensus~~; and

~~participating in~~performing an election process of ~~the a~~ representative node device ~~according~~
~~to~~based on the candidate newly addition transaction data stored on the target blockchain.

2. The method according to claim 1, wherein the credential data comprises signature data of a plurality of auditing users.

15 3. The method according to claim 1 or 2, wherein before the ~~receiving-broadcasting~~
candidate newly addition transaction data, the method further comprises:

transmitting a candidate application request to a target server, ~~wherein the candidate~~
application request ~~carries-including~~ qualification information of the first node device.

20 4. The method according to claim 3, wherein the target server is any node device in the blockchain system; or

the target server is a server of a third party organization associated with the blockchain system.

25 5. The method according to any one of claims 1 to 4, wherein the first node device meeting a qualification requirement for a candidate node device comprises at least one of the following:
device performance of the first node device meeting a preset performance condition, the first node device having paid a preset amount of deposit, and credit of a user corresponding to the first node device meeting a preset credit condition.

30 6. The method according to any one of claims 1 to 5, wherein the plurality of node devices in the blockchain system ~~verifying-achieving consensus on~~ the candidate newly addition transaction data ~~by consensus-comprises~~ is characterized in that a plurality of representative node devices in the blockchain system ~~verify-achieving consensus on~~ the candidate newly addition

transaction data ~~by consensus~~.

~~7. The method according to claim 1, wherein the storing the candidate addition transaction data on a target blockchain of the blockchain system in a case that a plurality of node devices in the blockchain system verify the candidate addition transaction data by consensus comprises:~~

~~5 broadcasting the candidate addition transaction data in the blockchain system based on the credential data, wherein the candidate addition transaction data comprises the credential data and a list of candidate node devices;~~

~~receiving the candidate addition transaction data through second node devices, wherein the second node devices are node devices other than the first node device in the blockchain system;~~

~~10 and~~

~~storing the candidate addition transaction data on the target blockchain of the blockchain system in a case that a plurality of representative node devices among the second node devices verify the candidate addition transaction data by consensus.~~

~~87. The method according to any one of claims 1 to 6, wherein after the storing the candidate newly addition transaction data on a target blockchain of the blockchain system, the method further comprises:~~

~~receiving candidate deletion transaction data, wherein the candidate deletion transaction data is data for ~~indicates~~ indicating deleting a second target node device from the candidate node devices; and~~

~~20 storing the candidate deletion transaction data on the target blockchain of the blockchain system in a case that ~~when~~ the plurality of node devices in the blockchain system ~~verify~~ achieves consensus on the candidate deletion transaction data ~~by consensus~~.~~

~~98. The method according to claim 87, wherein after the storing the candidate deletion transaction data on the target blockchain of the blockchain system, the method further comprises:~~

~~25 receiving target transaction data, wherein the target transaction data is ~~used for indicating~~ to data for ~~refunding~~ the a deposit to an account of the second target node device.~~

~~9. A node device in a blockchain system, the node device performs the method according to any one of claims 1 to 8.~~

~~30 10. A computer program for causing a node device in a blockchain system to perform the method according to any one of claims 1 to 8.~~

~~10. An apparatus for electing a representative node device, comprising:~~

~~a receiving module, configured to receive candidate addition transaction data, wherein the candidate addition transaction data carries credential data, and the credential data indicates that a first node device meets a qualification requirement for a candidate node device;~~

~~a storage module, configured to store the candidate addition transaction data on a target blockchain of a blockchain system in a case that a plurality of node devices in the blockchain system verify the candidate addition transaction data by consensus; and~~

~~an election module, configured to participate in an election of the representative node device according to the candidate addition transaction data stored on the target blockchain.~~

~~11. The apparatus according to claim 10, wherein the credential data comprises signature data of a plurality of auditing users.~~

~~12. The apparatus according to claim 10, further comprising:~~

~~a transmitting module, configured to transmit a candidate application request to a target server, wherein the candidate application request carries qualification information of the first node device.~~

~~13. The apparatus according to claim 12, wherein the target server is any node device in the blockchain system; or~~

~~the target server is a server of a third party organization associated with the blockchain system.~~

~~14. The apparatus according to claim 10, wherein the first node device meeting a qualification requirement for a candidate node device comprises at least one of the following: device performance of the first node device meeting a preset performance condition, the first node device having paid a preset amount of deposit, and credit of a user corresponding to the first node device meeting a preset credit condition.~~

~~15. The apparatus according to claim 10, wherein the plurality of node devices in the blockchain system verifying the candidate addition transaction data by consensus comprises that a plurality of representative node devices in the blockchain system verify the candidate addition transaction data by consensus.~~

~~16. The apparatus according to claim 10, wherein the storage module is further configured to: broadcast the candidate addition transaction data in the blockchain system based on the credential data, wherein the candidate addition transaction data comprises the credential data and a list of candidate node devices; receive the candidate addition transaction data through second~~

~~node devices, wherein the second node devices are node devices other than the first node device in the blockchain system; and store the candidate addition transaction data on the target blockchain of the blockchain system in a case that a plurality of representative node devices among the second node devices verify the candidate addition transaction data by consensus.~~

5 ~~17. The apparatus according to claim 10, further comprising:~~

~~a second receiving module, configured to receive candidate deletion transaction data, wherein the candidate deletion transaction data indicates deleting a second target node device from the candidate node devices; and~~

10 ~~a second storage module, configured to store the candidate deletion transaction data on the target blockchain of the blockchain system in a case that the plurality of node devices in the blockchain system verify the candidate deletion transaction data by consensus.~~

~~18. The apparatus according to claim 17, further comprising:~~

15 ~~a third receiving module, configured to receive target transaction data, wherein the target transaction data is used for indicating to refund the deposit to an account of the second target node device.~~

~~19. A computer device, comprising a processor and a memory, wherein the memory stores computer readable instructions, and the computer readable instructions, when executed by the processor, cause the processor to perform operations of the method according to any one of claims 1 to 9.~~

20 ~~20. A non-volatile computer readable storage medium, storing computer readable instructions, wherein the computer readable instructions, when executed by one or more processors, cause the one or more processors to perform operations of the method according to any one of claims 1 to 9.~~