CLAIMS

1. A method for broadcasting messages, the method comprising:

obtaining, by a first consensus node of a blockchain network, a first broadcast message, the blockchain network comprising the first consensus node and other consensus nodes, the first consensus node having a corresponding first message processing device and each of the other consensus nodes having a respective corresponding other message processing device, all of the message processing devices being computing devices independent of their corresponding consensus nodes, wherein message exchange between consensus nodes is performed by message processing devices respectively corresponding to the consensus nodes;

creating, by the first consensus node, a first thread for the first message processing device;

sending, by the first consensus node, the first broadcast message to the first message processing device by using the first thread;

cancelling, by the first consensus node, the first thread directly after sending the first broadcast message, without determining whether the first message processing device receives the first broadcast message;

sending, by the first message processing device, the first broadcast message to the other message processing devices corresponding to the other consensus nodes by creating a respective second thread for each of the other message processing devices and sending the first broadcast message to the other message processing devices by using the respective second threads; and

for each of one or more second threads, determining that the other message processing device to which the first broadcast message was sent received the first broadcast message, and in response to the determining, cancelling the second thread by the first message processing device.

2. The method according to claim 1, wherein the first consensus node is connected to the first message processing device by using a regional private line to completely ensure that the first broadcast message is not lost in a process of transmitting the first broadcast message from the first consensus node to the first message processing device.

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

receiving, by the first consensus node, a second broadcast message sent by the first message processing device, wherein the second broadcast message was broadcast by the message processing device corresponding to the one of the other consensus nodes.

4. The method according to claim 1, comprising:

counting, by the first message processing device, a number of received response signals by using each second thread, wherein the response signals are returned by the respective other message processing device corresponding to the respective thread after receiving the first broadcast message; and

resending, by the first message processing device, the first broadcast message by using each second thread in response to determining that the number is less than a specific value, until the counted number of received response signals is not less than the specific value, wherein the specific value is an integer greater than 0.

5. The method according to claim 1, wherein the first consensus node creates the first thread using an asynchronous call technology.

6. The method according to claim 1, wherein the blockchain network comprises a consortium-chain subnetwork and a public-chain subnetwork and not all blockchain nodes can participate in consensus verification as consensus nodes.

7. A consensus node and a message processing device for broadcasting messages, comprising a plurality of modules configured to perform the method of any one of claims 1 to 6.