CLAIMS

What is claimed is:

1. A method for consensus verification, the method comprising:

receiving, by a first node of a blockchain, service data (S300);

performing first consensus verification on the service data (S302);

determining if the first consensus verification on the service data succeeds (S302);

in response to determining that the first consensus verification on the service data succeeds, adding the service data to a service queue to be validated, so that a second node selects service data from the service queue to be validated to generate a block, and performs the second consensus verification on the block (S304); or

in response to determining that the first consensus verification on the service data fails, determining whether the service data satisfies a predetermined retry condition, and if yes, storing the service data as service data to be retried (S306; S308); and

performing the first consensus verification on the service data to be retried when it is determined that a predetermined retry execution condition is triggered (S312).

2. The method according to claim 1, wherein determining whether the service data satisfies the predetermined retry condition comprises:

determining, based on a reason why the first consensus verification on the service data fails, whether the service data satisfies the predetermined retry condition.

3. The method according to claim 2, wherein the service data comprises service data of a transfer service.

4. The method according to claim 3, wherein determining, based on a reason why the first consensus verification on the service data fails, whether the service data satisfies the predetermined retry condition comprises:

when an asset balance of a transfer is insufficient, determining that the service data satisfies the predetermined retry condition.

5. The method according to claim 1, wherein of each of the first node and the second node of the blockchain comprises a predetermined maximum capacity and/or the second node generates a period of each block.

6. The method according to claim 5, wherein determining that the predetermined retry execution condition is triggered comprises:

determining that the predetermined retry execution condition is triggered if a difference between the maximum capacity and a total data amount of service data selected by each second node from the service queue to be validated to generate a next block falls within a first specified value range.

7. The method according to any one of claims 5 and 6, wherein the determining that the predetermined retry execution condition is triggered comprises:

determining that the predetermined retry execution condition is triggered if a time interval between a current moment and an end moment of a current period falls within a second specified value range.

8. The method according to claim 1, wherein storing the service data as service data to be retried comprises:

adding the service data to a queue tail of a precreated service queue to be retried as the service data to be retried.

9. The method according to claim 8, wherein performing the first consensus verification on the service data to be retried comprises:

sequentially selecting, in a front-to-back order, at least one piece of service data to be retried from the service queue to be retried; and

performing the first consensus verification on the selected service data to be retried.

10. The method according to claim 1, wherein the performing the first consensus verification on the service data to be retried comprises:

performing the first consensus verification on the service data to be retried, until the first consensus verification on the service data to be retried succeeds; or

performing the first consensus verification on the service data to be retried, until the number of times of performing the first consensus verification on the service data to be retried reaches a specified value.

11. The method according to claim 1, wherein adding the service data to the service queue to be validated comprises:

adding the service data to a queue tail of the service queue to be validated.

12. The method according to claim 11, wherein the second node selects service data from the service queue to be validated to generate a block by performing operations comprising:

sequentially selecting, by each second node, several pieces of service data in a front-to-back order from the service queue to be validated to generate the block; and

after the performing the first consensus verification on the service data to be retried, the method further comprises:

adding service data to be retried whose first consensus verification succeeds to a location that is before a specified location in the service queue to be validated.

13. An apparatus for consensus verification, the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 12.