

CLAIMS

What is claimed is:

1. A blockchain transaction method, wherein an account of a transaction initiator corresponds to a plurality of public keys and wherein each of the plurality of public keys is assigned a predetermined transaction weight, and the method comprises the following:

receiving a target transaction sent by a node device of the transaction initiator, wherein the target transaction comprises transaction content and ~~a digital signature~~ signatures created by using a plurality of private keys s corresponding to ~~a the~~ plurality of public keys of the account based on at least a part of the transaction content; ~~and,~~ wherein the transaction content further comprises target transaction weights corresponding to several public keys of the account, and the target transaction weights corresponding to the several public keys are not greater than predetermined transaction weights corresponding to the several public keys of the account;

verifying the target transaction; and

in response to a successful verification, recording the target transaction to a distributed database of a blockchain based on a consensus rule of the blockchain,

wherein the step of verifying comprises verifying whether the digital signatures are valid, and verifying whether a sum of predetermined transaction weights of public keys corresponding to private keys using which valid digital signatures are created meets a predetermined weight threshold, and

wherein the step of verifying whether the sum of the predetermined transaction weights meets the predetermined weight threshold comprises: verifying whether a sum of target transaction weights of the public keys corresponding to the private keys using which the valid digital signatures are created meets the predetermined weight threshold, wherein the target transaction passes the verification if the sum of target transaction weights meets the predetermined weight threshold.

~~so that after the verification is passed, the target transaction is recorded to a distributed database of a blockchain based on a consensus rule of the blockchain, wherein the verifying comprises verifying whether the digital signature is valid.~~

2. The method according to claim 1, wherein the plurality of public keys of the account respectively correspond to predetermined transaction weights; and

~~the verifying further comprises verifying whether the sum of predetermined transaction weights of public keys corresponding to private keys using which valid digital signatures are created meets a predetermined weight threshold.~~

~~3.2.~~ The method according to claim ~~2~~1, wherein the transaction content comprises the predetermined weight threshold.

~~4. The method according to claim 2 or 3, wherein the transaction content further comprises target transaction weights corresponding to several public keys of the account, and the target transaction weights corresponding to the several public keys are not greater than predetermined transaction weights corresponding to the several public keys of the account; and~~

~~the verifying whether the sum of predetermined transaction weights of public keys corresponding to private keys using which valid digital signatures are created meets a predetermined weight threshold comprises the following:~~

~~verifying whether the sum of target transaction weights of the public keys corresponding to the private keys using which the valid digital signatures are created meets the predetermined weight threshold.~~

~~5.3.~~ The method according to claim 1, wherein an identifier of the account of the transaction initiator is a unique identifier obtained based on a name of the transaction initiator.

~~6.4.~~ A blockchain transaction apparatus, wherein an account of a transaction initiator corresponds to a plurality of public keys and wherein each of the plurality of public keys is assigned a predetermined transaction weight, and the apparatus comprises the following:

a receiving unit, configured to receive a target transaction sent by a node device of the transaction initiator, wherein the target transaction comprises transaction content and ~~a digital signatures~~s created by using a plurality of private keys~~s~~ corresponding to ~~a the~~ plurality of public keys of the account based on at least a part of the transaction content; and, wherein the transaction content further comprises target transaction weights corresponding to several public keys of the account, and the target transaction weights corresponding to the several public keys are not greater than predetermined transaction weights corresponding to the several public keys of the account; and

a verifying unit, configured to verify the target transaction and in response to a successful verification, record the target transaction to a distributed database of a blockchain based on a consensus rule of the blockchain, wherein the verifying

~~comprises verifying whether the digital signatures are valid, so that after the verification is passed, the target transaction is recorded to a distributed database of a blockchain based on a consensus rule of the blockchain, wherein the verifying comprises verifying whether the digital signature is valid.~~

~~7. The apparatus according to claim 6, wherein the plurality of public keys of the account respectively correspond to predetermined transaction weights; and~~

~~wherein~~ the verifying unit is configured to:

~~verify whether the a sum of predetermined transaction weights of public keys corresponding to private keys using which valid digital signatures are created meets a predetermined weight threshold, and wherein the verifying of the sum of predetermined transaction weights comprises verifying whether a sum of target transaction weights of the public keys corresponding to the private keys using which the valid digital signatures are created meets the predetermined weight threshold, wherein the target transaction passes the verification if the sum of target transaction weights meets the predetermined weight threshold.~~

~~8.5.~~ The apparatus according to claim ~~74~~, wherein the transaction content comprises the predetermined weight threshold.

~~9. The apparatus according to claim 7 or 8, wherein the transaction content further comprises target transaction weights corresponding to several public keys of the account, and the target transaction weights corresponding to the several public keys are not greater than predetermined transaction weights corresponding to the several public keys of the account; and~~

~~the verifying unit is configured to:~~

~~verify whether the sum of target transaction weights of the public keys corresponding to the private keys using which the valid digital signatures are created meets the predetermined weight threshold.~~

~~10.6.~~ The apparatus according to claim ~~64~~, wherein an identifier of the account of the transaction initiator is a unique identifier obtained based on a name of the transaction initiator.

~~11.7.~~ A computer device, comprising a memory and a processor, wherein the memory stores a computer program that can be executed by the processor, and the processor executes the computer program to perform the method according to any one of claims 1 to 5.

~~12~~.8. A computer readable storage medium, storing a computer program, wherein when the computer program is executed by a processor, the method according to any one of claims 1 to 5 is performed.