Claims:

1. A transaction processing method, comprising:

receiving a transaction request for executing a target transaction having a smart contract transaction type;

determining whether there is a transaction template matching the smart contract transaction type in a plurality of configured transaction templates corresponding to a blockchain;

in response to determining that there is a transaction template matching the smart contract transaction type in the plurality of configured transaction templates, loading the transaction template matching the smart contract transaction type of the target transaction, or in response to determining that there is no transaction template matching the smart contract transaction type in the plurality of configured transaction templates, generating a smart contract transaction template as the transaction template;

determining a smart contract transaction processing rule matching the smart contract transaction type from the transaction template;

processing the target transaction according to the transaction template by:

analyzing, the transaction request based on the smart contract transaction processing rule to obtain a smart contract's address and one or more transaction parameters included in the transaction request, wherein the smart contract is stored on the blockchain; and

invoking, according to the smart contract's address, the smart contract to execute the one or more transaction parameters and output a transaction result; and

writing the transaction result into the blockchain.

2. The transaction processing method according to claim 1, wherein the determining a transaction type corresponding to the transaction request comprises:

determining a transaction identifier of the target transaction; and

determining the smart contract transaction type of the target transaction according to the transaction identifier.

3. The transaction processing method according to claim 1, wherein the processing the target transaction according to the transaction processing rule comprises:

determining a check rule included in the transaction template;

checking whether the transaction request satisfies a preset condition according to the check rule;

if the transaction request satisfies the preset condition according to the check rule, processing the target transaction according to the smart contract transaction processing rule in the transaction processing rule; and

if the transaction request does not satisfy the preset condition according to the check rule, returning a prompt that processing of the target transaction has failed.

4. The transaction processing method according to clam 1, wherein:

writing the transaction result into the blockchain comprises writing first transaction information of the transaction result into a target block to be added to the blockchain; and

wherein the method further comprises: when writing the first transaction information into the target block, determining and storing a state change value of the target block, the state change value being used to check whether the first transaction information recorded in the target block is consistent with other transaction information recorded in other blocks in the blockchain.

5. The transaction processing method according to claim 4, wherein the determining and storing a state change value of the target block comprises:

after writing the obtained transaction information into the target block, computing a check value of the target block;

using the check value as the state change value of the target block.

6. A transaction processing apparatus, comprising:

a receiving module configured to receive a transaction request for executing a target transaction having a smart contract transaction type;

a determining module configured to determine whether there is a transaction template matching the smart contract transaction type in a plurality of configured transaction templates corresponding to a blockchain and to determine a smart contract transaction processing rule matching the smart contract transaction type from the transaction template;

a template loading module configured to, in response to the determining module determining that there is a transaction template matching the smart contract transaction type in the plurality of configured transaction templates, load, according to the transaction type, a transaction template matching the transaction type; and

a processing module configured to process the target transaction according to the transaction template by analyzing, the transaction request based on the smart contract transaction processing rule to obtain a smart contract's address and one or more transaction parameters included in the transaction request, wherein the smart contract is stored on the blockchain; and

invoking, according to the smart contract's address, the smart contract to execute the one or more transaction parameters and output a transaction result; and

writing the transaction result into the blockchain.

7. The transaction processing apparatus according to claim 6, wherein the determining module is configured to determine a transaction identifier of the target transaction, and determine the smart contract transaction type of the target transaction according to the transaction identifier.

8. The transaction processing apparatus according to claim 6, wherein the processing module is configured to determine a check rule included in the transaction template; check whether the transaction request satisfies a preset condition according to the check rule; if the transaction request satisfies the preset condition according to the check rule, process the target transaction according to the smart contact transactoin processing rule in the transaction processing rule; and if the transaction request does not satisfy the preset condition according to the check rule, return a prompt that the processing of the target transaction has failed.

9. The transaction processing apparatus according to claim 6, wherein: the processing module is configured to write the transaction result by writing first transaction information of the transaction result into a target block to the added to the blockchain; and when writing the first transaction information into the target block, determine and store a state change value of the target block, the state change value being used to check whether the first transaction information recorded in the target block is consistent with other transaction information recorded in other blocks in the blockchain.

10. The transaction processing apparatus according to claim 9, wherein the processing module is configured to determine and store a state change value of the target block by:

after writing the obtained transaction information into the target block, computing a check value of the target block;

using the check value as the state change value of the target block.

11. A non-transitory computer-readable storage medium storing instructions that, when executed by a processor, cause the processor to perform the transaction processing method according any one of claims 1 to 5.