CLAIMS

What is claimed is:

1. A blockchain smart contract-based data processing method, wherein an instruction set of a blockchain virtual machine comprises a JSON processing instruction, and JSON processing logic corresponding to the JSON processing instruction is deployed in the blockchain virtual machine;

an instruction set of a smart contract compiler comprises the JSON processing instruction, and a service smart contract compiled by using the smart contract compiler comprises the JSON processing instruction and a contract identifier of a JSON processing smart contract, and the JSON processing smart contract is a smart contract pre-deployed in a blockchain network;

the service smart contract is deployed in ~~a~~ the blockchain network; and

the data processing method comprises:

obtaining, by a node in the blockchain network, a service initiation transaction, and broadcasting the service initiation transaction to other nodes;

when executing the service initiation transaction, invoking, by each node in the blockchain network, the service smart contract by using the blockchain virtual machine;

invoking, by the node, the JSON processing smart contract based on the contract identifier of the JSON processing smart contract in the service smart contract by using the blockchain virtual machine; and

triggering, by the node, execution of the JSON processing logic based on the JSON processing instruction in the JSON processing ~~service~~ smart contract by using the blockchain virtual machine, to perform a JSON processing operation on data to be processed.

2. The method according to claim 1, wherein the service initiation transaction comprises the data to be processed; or

the service smart contract comprises the data to be processed; or

the data to be processed is generated when the service initiation transaction is executed.

~~3. A blockchain smart contract based data processing method, wherein an instruction set of a blockchain virtual machine comprises a JSON processing instruction, and JSON processing logic corresponding to the JSON processing instruction is deployed in the blockchain virtual machine;~~

~~an instruction set of a smart contract compiler comprises the JSON processing instruction, a service smart contract compiled by using the smart contract compiler comprises a contract identifier of a JSON processing smart contract, and the JSON processing smart contract is a smart contract pre-deployed in a blockchain network;~~

~~the service smart contract is deployed in the blockchain network; and~~

~~the data processing method comprises:~~

~~obtaining, by a node in the blockchain network, a service initiation transaction, and broadcasting the service initiation transaction to other nodes;~~

~~when executing the service initiation transaction, invoking, by each node in the blockchain network, the service smart contract by using the blockchain virtual machine;~~

~~invoking, by the node, the JSON processing smart contract based on the contract identifier of the JSON processing smart contract in the service smart contract by using the blockchain virtual machine; and~~

~~triggering, by the node, execution of the JSON processing logic based on the JSON processing instruction in the JSON processing smart contract by using the blockchain virtual machine, to perform a JSON processing operation on data to be processed.~~

~~4~~3. A blockchain virtual machine, configured to implement the method according to ~~any one of~~ claim~~s~~ 1 or~~to~~ ~~3~~2, wherein

~~an~~ the instruction set of the blockchain virtual machine comprises ~~a~~ the JSON processing instruction, and ~~a~~ the service smart contract compiled by using the smart contract compiler comprises the JSON processing instruction.

~~5~~4. The blockchain virtual machine according to claim ~~4~~3, wherein the instruction set of the blockchain virtual machine further comprises at least one Ethereum instruction, and the Ethereum instruction is an instruction in an instruction set of an Ethereum virtual machine; and

relevant logic corresponding to each Ethereum instruction comprised in the instruction set of the blockchain virtual machine is deployed in the blockchain virtual machine.

~~6~~5. A smart contract compiler, configured to implement the method according to claim 1 or 2, wherein

~~an~~ the instruction set of the smart contract compiler comprises ~~a~~ the JSON processing instruction, and ~~a~~ the service smart contract compiled by using the smart contract compiler comprises the JSON processing instruction.

~~7~~6. The smart contract compiler according to claim ~~6~~5, wherein the instruction set of the smart contract compiler further comprises at least one Ethereum instruction, and the Ethereum instruction is an instruction in an instruction set of an Ethereum virtual machine.

~~8~~7. A smart contract compiler, configured to implement the method according to claim ~~3~~1, wherein

~~an~~ the instruction set of the smart contract compiler comprises ~~a~~ the JSON processing instruction, ~~a~~ the service smart contract compiled by using the smart contract compiler comprises ~~a~~ the contract identifier of ~~a~~ the JSON processing smart contract, and the JSON processing smart contract is ~~a~~ the smart contract pre-deployed in ~~a~~ the blockchain network.

~~9. A blockchain system, comprising a blockchain network, wherein~~

~~an instruction set of a blockchain virtual machine comprises a JSON processing instruction, JSON processing logic corresponding to the JSON processing instruction is deployed in the blockchain virtual machine, an instruction set of a smart contract compiler comprises the JSON processing instruction, a service smart contract compiled by using the smart contract compiler comprises the JSON processing instruction, and the service smart contract is deployed in the blockchain network;~~

~~a node in the blockchain network obtains a service initiation transaction, and broadcasts the service initiation transaction to other nodes; and~~

~~when executing the service initiation transaction, each node in the blockchain network invokes the service smart contract by using the blockchain virtual machine,~~

~~and triggers execution of the JSON processing logic based on the JSON processing instruction in the service smart contract by using the blockchain virtual machine, to perform a JSON processing operation on data to be processed.~~

~~10~~8. A blockchain system, comprising a blockchain network, wherein

an instruction set of a blockchain virtual machine comprises a JSON processing instruction, JSON processing logic corresponding to the JSON processing instruction is deployed in the blockchain virtual machine, an instruction set of a smart contract compiler comprises the JSON processing instruction, a service smart contract compiled by using the smart contract compiler comprises a contract identifier of a JSON processing smart contract, the JSON processing smart contract is a smart contract pre-deployed in the blockchain network, and the service smart contract is deployed in the blockchain network;

a node in the blockchain network obtains a service initiation transaction, and broadcasts the service initiation transaction to other nodes; and

when executing the service initiation transaction, each node in the blockchain network invokes the service smart contract by using the blockchain virtual machine, invokes the JSON processing smart contract based on the contract identifier of the JSON processing smart contract in the service smart contract by using the blockchain virtual machine, and triggers execution of the JSON processing logic based on the JSON processing instruction in the JSON processing smart contract by using the blockchain virtual machine, to perform a JSON processing operation on data to be processed.

~~11~~9. A computer device, comprising a memory, a processor, and a computer program that is stored in the memory and that can run on the processor, wherein when executing the computer program, the processor implements the method according to ~~any one of~~ claim~~s~~ 1 ~~and 3~~.