I/We Claim:

1. A method of transaction processing, comprising:

receiving, at a blockchain node for processing a transaction in a blockchain, a transaction request comprising a plurality of fields, the plurality of fields comprising a transaction task field, the transaction task field comprising a plurality of clauses and each clause of the plurality of clauses indicating one task of a plurality of tasks of the transaction;

processing the plurality of tasks of the transaction; and

only in response to successfully processing all the plurality of tasks, determining that the transaction is successfully processed.

2. The method according to claim 1, wherein at least one of the plurality of clauses comprises:

a first information element indicating a recipient address associated with the task,

a second information element indicating an amount of cryptocurrency to be transferred to the recipient address, and

a third information element indicating data for the task indicated by the at least one clause.

3. The method according to claim 2, wherein processing the plurality of tasks of the transaction comprises:

in response to determining that the first information element is null, deploying a smart contract based on the third information element and transferring the amount indicated in the second information element to the smart contract, the data indicated by the third information element comprising program codes of the smart contract.

4. The method according to claim 2, wherein processing the plurality of transaction tasks of the transaction comprises:

in response to determining that the first information element indicates a valid address, determining whether the first information element indicates a smart contract address; and

in response to determining that the first information element indicates a smart contract address, executing a smart contract corresponding to the smart contract address based on the third information element and transferring the amount indicated in the second information

element to the smart contract, the data indicated by the third information element comprising parameters for executing the smart contract.

5. The method according to claim 4, wherein processing the plurality of transaction tasks of the transaction further comprises:

in response to determining that the first information element indicates a non-smart-contract address, transferring the amount indicated in the second information element to the non-smart-contract address.

6. The method according to claim 1, wherein the task indicated by one of the clauses is not dependent on a further task indicated by a further clause of the plurality of clauses.

7. The method according to claim 1, wherein the task indicated by one of the clauses is dependent on a further task indicated by a further clause of the plurality of clauses such that the task can be implemented only after the further task has been implemented.

8. The method according to claim 1, wherein the plurality of fields indicate at least one of the following:

an identifier of an associated transaction on which the transaction associated with the transaction request depends,

a transaction nonce,

a reference of a block into which the transaction is to be packaged,

an expiration field to determine expiration time of the transaction,

a coefficient for transaction fee calculation,

a maximum transaction fee that an initiator of the transaction is willing to pay for the transaction,

a reserved field for backward compatibility,

signature information of the initiator of the transaction, and

a last byte of an identifier of a genesis block of the blockchain.

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

determining whether the plurality of fields indicate an identifier of an associated transaction on which the transaction associated with the transaction request depends;

in response to determining that the plurality of fields indicate the identifier of the associated transaction, determining whether the associated transaction has been processed successfully; and

in response to determining that the associated transaction has been processed successfully, enabling the plurality of tasks of the transaction to be processed.

10. The method according to claim 9, wherein the transaction is associated with a unique identifier, and the unique identifier of the transaction is generated based on the transaction request and an address of an initiator of the transaction.

11. The method according to claim 10, wherein the unique identifier of the transaction is generated by hashing the address of the initiator of the transaction and a part of the plurality of fields, the part of the plurality of fields being all fields in the transaction request excluding a field indicating signature information of the initiator of the transaction.

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

determining a block based on one of the plurality of fields indicating a reference of the block into which the transaction is to be packaged; and

packaging data associated with the processed plurality of tasks of the transaction into the determined block.

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

in response to reaching a preset block based on the plurality of fields, causing the transaction to expire.

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

determining a transaction fee for processing the transaction, the transaction fee comprising at least a fixed expense and a non-fixed expense.

15. The method according to claim 14, wherein the non-fixed expense of the transaction fee is determined based on at least respective types of the plurality of tasks and data for the plurality of tasks, the data for the plurality of tasks being included in the plurality of clauses.

16. The method according to claim 14, wherein determining the transaction fee comprises:

determining the non-fixed expense based on a first number of bytes of data for the plurality of tasks being equal to a first predefined value and a second number of bytes of data for the plurality of tasks being different from the first predefined value.

17. A device for transaction processing, comprising:

a memory configured to store one or more programs; and

a processing unit coupled to the memory and configured to execute said one or more programs to cause the device to perform the method according to any one of claims 1-16.

18. A non-transitory computer readable storage medium having machine executable instructions stored thereon, the machine executable instructions, when executed, causing a machine to perform the method according to any one of claims 1-16.

19. A computer program product being tangibly stored on a non-transient computer readable medium and comprising machine executable instruction, the machine executable instructions, when being executed, causing a machine to perform the method according to any one of claims 1-16.