

CLAIMS

What is claimed is:

1. A method for evaluating a resource value of a movable property, the method comprising:
 - receiving, by a plurality of device nodes on a consortium blockchain network, historical data indicating fluctuations of a resource value, and an industry pricing standard related to the resource value;
 - providing the historical data as input to a machine learning algorithm;
 - processing, by using the machine learning algorithm, the fluctuations of the resource value and the industry pricing standard related to the resource value, as a perishable good, by executing a decision tree method to search a tree structure that identifies one or more leaf nodes, each leaf node of the one or more leaf nodes representing a classification result of a respective parameter related to a respective attribute of one or more attributes of the resource value;
 - processing, using the machine learning algorithm, the classification result of the respective parameter related to the respective attribute;
 - determining, using the machine learning algorithm, a projected change of the resource value, as the perishable good, within a time period during which one or more parameters related to the one or more attributes of the resource value change relative to environmental factors according to at least one rule;
 - determining, using the machine learning algorithm, an updated attribute of the resource value based on the projected change of the resource value within the time period;
 - generating, using the machine learning algorithm, evaluation logic associated with the one or more parameters based on the updated attribute;
 - compiling a resource value evaluation smart contract comprising the evaluation logic;
 - forming an autonomous ring of devices by connecting a plurality of sensors implemented on the plurality of device nodes to each other through a local connection protocol;
 - polling, using the plurality of sensors, an environment to detect the environmental factors;
 - receiving, by the consortium blockchain network from the plurality of sensors based on the polling, the one or more parameters related to the one or more attributes of the resource value;

triggering, by the consortium blockchain network, execution of the resource value evaluation smart contract released on the consortium blockchain network;

determining (104), using the resource value evaluation smart contract, whether the one or more parameters exceeds a predetermined threshold or a threshold range; and

in response to determining that the one or more parameters exceeds the predetermined threshold or the threshold range, calculating (106), using the resource value evaluation smart contract, the resource value of the movable property using resource value evaluation logic.

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

performing a processing service in response to a resource value change based on the resource value.

3. The method according to claim 1, wherein determining whether the one or more parameters exceeds the predetermined threshold or the threshold range comprises:

executing an execution program that is declared in the resource value evaluation smart contract and that is used for determining whether the one or more parameters exceeds the predetermined threshold or the threshold range.

4. The method according to claim 3, wherein calculating, using the resource value evaluation smart contract, the resource value of the movable property using the resource value evaluation logic comprises:

in response to determining that the one or more parameters exceeds the predetermined threshold or the threshold range, calculating the resource value using the resource value evaluation logic, to obtain the resource value.

5. The method according to claim 2, wherein performing the processing service in response to the resource value change comprises:

invoking a processing smart contract in response to the resource value change that is released on the consortium blockchain network; and

executing a processing program in response to the resource value change that is declared in the resource value evaluation smart contract.

6. The method according to claim 1, wherein the resource value evaluation logic comprises a resource value evaluation model obtained by performing a machine

learning training on the resource value based on the one or more parameters related to the resource value.

7. The method according to claim 6, wherein the machine learning training comprises the decision tree method.

8. The method according to claim 2, wherein performing the processing service in response to the resource value change comprises:
reevaluating a financing amount generated based on a resource.

9. The method according to claim 2, wherein performing the processing service in response to the resource value change comprises:
performing risk control processing on a financing loan started based on a resource, wherein the risk control processing comprises tightening or relaxing an unissued loan.

10. An apparatus (40) for evaluating a resource value, the apparatus comprising a plurality of modules (402 — 408) configured to perform the method of any one of claims 1 to 9.

11. A computer-readable medium storing instructions thereon which, when executed by one or more processors, cause the one or more processors to perform the method of any of claims 1 to 9.