

[0013] Preferably, the blockchain network is a consortium blockchain network.

[0014] Preferably, that the sensors are configured to perceive or collect parameters related to the resource value includes the following: each of the sensors is configured to perceive or collect a parameter of each constituent entity of a resource that is related to the value of the constituent entity; and where the calculated resource value is greater than or equal to the sum of the values of all constituent entities of the resource.

[0015] Preferably, that the sensors are configured to perceive or collect parameters related to the resource value includes the following: the sensors are configured to perceive or collect parameters of a plurality of constituent entities of a resource that are related to the resource value of the plurality of constituent entities.

[0016] Correspondingly, the present invention further provides a blockchain-based resource value evaluation apparatus, where a blockchain network includes a plurality of device nodes provided with sensors, where the sensors are configured to perceive or collect parameters related to a resource value, and where the apparatus includes the following: an acquisition unit, configured to obtain information data released on the blockchain network, where the information data is released on the blockchain network by the plurality of device nodes provided with the sensors, and where the information data includes the parameter related to the resource value; a determining unit, configured to determine whether a parameter value in the information data exceeds a predetermined threshold or a threshold range; and a calculation unit, configured to calculate the resource value using a predetermined resource value evaluation logic.

[0017] Preferably, the apparatus further includes the following: a service processing unit, configured to perform a processing service in response to a resource value change based on the calculated resource value.

[0018] The present specification further provides a computer device, including a memory and a processor, where the memory stores a computer program that can run on the processor, and where when running the computer program, the processor performs the steps of the described resource value evaluation method.

[0019] The present specification further provides a computer readable storage medium, where the computer readable storage medium stores a computer program, and where when the computer program is run by a processor, the steps of the described resource value evaluation method are performed.

method such as machine learning, more accurate and reasonable resource value evaluation logic can be obtained by performing input and output training on a large quantity of parameters.

[0051] In addition, it is worthwhile to note that the resource value evaluation model is closely related to a parameter setting method, and the described parameter setting method is further closely related to a method of obtaining a parameter (that is, a method of configuring the IoT sensor). To reduce the quantity of sensors and further economize data occupation space on the blockchain network, the movable property that can be aggregated together for value evaluation can be evaluated through overall evaluation. For example, for a plurality of boxes of milk in one container having the same production batch or production date, the value of all milk in the container can be calculated by collecting parameters such as weight, temperature, humidity, and storage time in the entire container, without a need to install a corresponding weight, temperature, humidity, or storage time sensor for each box of milk. For some movable property with aggregation of enhancement features, for example, a set of collections (such as antiques, artworks, or stamps), because a total price obtained by adding the value of each constituent entity one by one is far lower than the total evaluation value of the constituent entities being aggregated, a sensor needs to be configured for each constituent entity during evaluation of such movable property, to monitor corresponding parameters of each constituent entity, such as a location and an owner, and the previous information data is collected into the blockchain network. However, for some complex movable property forms, if the movable property includes the plurality of aggregation features, the value of resources of various aggregation features can be separately calculated, and then added together, to provide data reference for the loan quota.

[0052] FIG. 3 is a schematic diagram illustrating a blockchain-based resource value evaluation and processing method, according to an implementation of the present specification. In the present implementation, machine learning training is performed on the value of movable property by using a plurality of parameters, to obtain a value evaluation model of the movable property. The value evaluation model of the movable property is written into a smart contract program, and is compiled and deployed on a blockchain network. In addition, through device status setting or updating, a plurality of IoT sensing devices (IoT Terminals) can run a node registration program of the blockchain network and obtain a corresponding account or address, to register with the blockchain network. There is no time sequence limitation between smart contract deployment and registration with the plurality of

CLAIMS

What is claimed is:

1. A method for evaluating a resource value of a movable property, the method comprising:
obtaining information data released by an Internet of Things sensor node on a consortium
5 blockchain network, wherein the information data comprises a parameter related to the resource
value of the movable property collected by the Internet of Things sensor node, wherein the Internet
of Things sensor node is configured to send information data to the consortium blockchain network
based on a predetermined frequency, wherein the consortium blockchain network comprises a
plurality of Internet of Things sensor nodes and a plurality of member nodes, wherein the plurality
10 of member nodes participate in block ledger and control a consensus process of the consortium
blockchain network and the plurality of Internet of Things sensor nodes are common nodes that
can access the consortium blockchain network, wherein the plurality of Internet of Things sensor
nodes are provided with sensors each configured to perceive or collect a parameter related to the
resource value of the movable property;
15 in response to obtaining the information data, triggering execution of a resource value
evaluation smart contract released on the consortium blockchain network;
determining, using the resource value evaluation smart contract, whether the parameter in
the information data exceeds a predetermined threshold or a threshold range; and
in response to determining that the parameter in the information data exceeds the
20 predetermined threshold or the threshold range, calculating, 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
25 resource value.
3. The method according to claim 1, wherein determining whether the parameter in the
information data exceeds the predetermined threshold or the threshold range comprises:
executing an execution program that is declared in the resource value evaluation smart
30 contract and that is used for determining whether the parameter in the information data 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:

5 in response to determining that the parameter in the information data 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 blockchain network; and

executing a processing program in response to the resource value change that is declared in the 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 parameter related to the resource value.

7. The method according to claim 6, wherein the machine learning training comprises a 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 for evaluating a resource value, the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 9.