[0005]

Accordingly, in embodiments of the present invention, an inspection device is provided that can determines whether or not weights of valuables calculated from information read from RF tags and the actual weights of the valuables are matching.

[0006]

An inspection system according to one aspect of the present invention is an inspection system having for inspecting valuables provided with RF tags on which information of the valuables is recorded, wherein the valuables are types capable of being specified by a weight difference are set as an inspection target, the inspection system for inspecting the valuables provided with RF tags on which information of the valuables is recorded, and the inspection system including: an RF reading device for reading the information of the valuables from the RF tags of the valuables placed on a platform; a weight measuring device for measuring and recording weights of the valuables; and a management control device for using measurement results of the weight measuring device to ascertain a total weight of the valuables on the platform, in which the management control device includes a function for ascertaining the weights of the valuables on the platform based on standard weights of the valuables from the information obtained from the RF reading device, measuring the a calculated total weight of the valuables on the platform by using the measurement

results of the weight measuring device, performing a comparison between a calculated weight of the valuables obtained from the RF reading device and a total weight of the valuables obtained from the measurement results of the weight measuring device, ~~and~~ estimating whether or not the totals of the number of the valuables are matching, in case it is determined that the calculated total weight of the valuables obtained from the RF reading device does not match the total weight of the valuables obtained from a measurement result of the weight measuring device, identifying a type of valuable that is not the cause of a discrepancy.

[0007]

According to this configuration, since the weights ascertained based on the information of the RF tags and the actual weights measured by the weight measuring device are compared, these weights will not match in the case where there are valuables with an RF tag that cannot be read. Therefore, in the case where there are valuables with an RF tag that cannot be read, the presence of this can be detected.

[0008]

In the above inspection system, the information of the RF tags may include weight information of the valuables, and the management control device may include a function for ascertaining the weights of the valuables on the platform from the weight information obtained from the RF reading device.

[0009]

According to this configuration, the management control device can ascertain standard weights of the

the present invention is an inspection system for inspecting valuables including RF tags, the inspection system including: an RF reading device for reading information of the valuables from the RF tags provided in the valuables; a weight measuring device for measuring weights of the valuables; and a management control device for ascertaining a total weight of the valuables by using measurement results of the weight measuring device, in which the management control device obtains the weights of the valuables based on the information read by the RF reading device, and compares the obtained weights and the weights measured by the weight measuring device to determine whether or not both are matching, and in case it is determined that the both does not match each other, identifies a type of valuable that is not the cause of a discrepancy.

[0017]

According to this configuration, since the weights obtained from the RF tags and the weights measured by the weight measuring device are compared, it can be ascertained that valuables are present with an RF tag that cannot be read in the case where both are not matching.

[0018]

In the above inspection system, the management control device may obtain prices of the valuables based on the information read by the RF reading device, and may output information of the obtained prices.

[0019]

According to this configuration, the prices of the valuables can be obtained, by referring to the storage device based on the information stored in the RF tags.

[0024]

~~Another aspect of the present invention is~~ There is also disclosed a cash register system, this cash register system including: the above inspection system; and a cash register device for performing an accounting process based on the information of the prices output by the management control device.

[0025]

According to this configuration, the RFIDs and the weight measuring device can be used to inspect that an effective RF tag is included in all the valuables, and information of the prices stored in the RF tags can be used to perform an accounting process.

[0026]

~~An~~ There is also disclosed an inspection system ~~of another aspect of the present invention~~that includes: an RF reading means for reading RF tags of objects placed at a prescribed location; a detecting means for detecting at least a number of the objects placed at the prescribed location by a method other than an RFID; and an alarm means for generating an alarm in the case where the number of the objects with an RF tag that can be read by the RF reading means does not match the number detected by the detecting

CLAIMS

1. An inspection system for inspecting valuables provided with RF tags on which information of the valuables is recorded, wherein the valuables are capable of being specified by a weight difference, the inspection system comprising:

an RF reading device for reading the information of the valuables from the RF tags of the valuables placed on a platform;

a weight measuring device for measuring and recording weights of the valuables; and

a management control device for using measurement results of the weight measuring device to ascertain a total weight of the valuables on the platform,

wherein the management control device includes a function for ascertaining the weights of the valuables on the platform based on standard weights of the valuables from the information obtained from the RF reading device, measuring ~~the~~a calculated total weight of the valuables on the platform by using the measurement results of the weight measuring device, performing a comparison between a calculated weight of the valuables obtained from the RF reading device and a total weight of the valuables obtained from the measurement results of the weight measuring device, ~~and~~ estimating whether or not the totals

of the number of the valuables are matching, in case it is determined that the calculated total weight of the valuables obtained from the RF reading device does not match the total weight of the valuables obtained from a measurement result of the weight measuring device, identifying a type of valuable that is not the cause of a discrepancy.

2. The inspection system for inspecting valuables according to claim 1,

wherein the information of the RF tags includes weight information of the valuables, and

the management control device includes a function for ascertaining the weights of the valuables on the platform from the weight information obtained from the RF reading device.

3. The inspection system for inspecting valuables according to claim 1 or 2,

wherein the management control device includes a function for ascertaining the weight for each type of the valuables on the platform from the information from the RF reading device, specifying a total weight of the valuables on the platform by using the measurement results of the weight measuring device, and ascertaining an excess weight of the total weight of the valuables obtained from the measurement results of the weight measuring device with

respect to a sum of the weights of each type of the valuables obtained from the RF reading device.

4. The inspection system for inspecting valuables according to claim 3,

wherein the management control device includes a function for specifying types of the valuables that are a cause of a mismatch between the sum of the weights for each type of the valuables obtained from the RF reading device and the total weight of the valuables obtained from the measurement results of the weight measuring device~~, or types of the valuables not a cause of a mismatch,~~ based on the excess weight.

5. The inspection system for inspecting valuables according to any one of claims 1 to 4,

wherein the management control device includes a function for ascertaining a total money amount of the valuables on the platform from the RF reading device.

6. An inspection system for inspecting valuables including RF tags, the inspection system comprising:

an RF reading device for reading information of the valuables from the RF tags provided in the valuables;

a weight measuring device for measuring weights of the valuables; and

a management control device for ascertaining a total weight of the valuables by using measurement results

of the weight measuring device,

wherein the management control device obtains the weights of the valuables based on the information read by the RF reading device, and compares the obtained weights and the weights measured by the weight measuring device to determine whether or not both are matching, and in case it is determined that the both does not match each other, identifies a type of valuable that is not the cause of a discrepancy.

7. The inspection system according to claim 6, wherein the management control device obtains prices of the valuables based on the information read by the RF reading device, and outputs information of the obtained prices.

8. The inspection system according to claim 7,

wherein the information of the price of the valuable is stored in the RF tag of the valuable, and

the management control device obtains the prices of the valuables in accordance with the information read by the RF reading device.

9. The inspection system according to claim 7,

wherein information for specifying a type of the valuable is stored in the RF tag of the valuable,

the inspection system further comprises a storage device for storing the information specifying the types of the valuables and prices of the types in association with

each other, and

the management control device refers to the storage device to obtain the prices of the valuables by reading the prices associated with the information read by the RF reading device.

10. A cash register system, comprising:

the inspection system according to any one of claims 7 to 9; and

a cash register device for performing an accounting process based on the information of the prices output by the management control device.

~~11. An inspection system, comprising:~~

~~an RF reading means for reading RF tags of objects placed at a prescribed location;~~

~~a detecting means for detecting at least a number of the objects placed at the prescribed location by a method other than an RFID; and~~

~~an alarm means for generating an alarm in the case where the number of the objects with an RF tag that can be read by the RF reading means does not match the number detected by the detecting means.~~

~~12. The inspection system according to claim 11, wherein the detecting means is a weight measuring device for measuring weights of the objects placed at the prescribed location, and detecting at least the number of~~

~~the objects placed at the prescribed location by the weights.~~

~~13. The inspection system according to claim 12, wherein the alarm means determines whether or not the number of the objects with an RF tag that can be read by the RF reading means matches the number detected by the detecting means by ascertaining the weights of each of the objects placed at the prescribed location and comparing the ascertained weights and the weights measured by the weight measuring device based on the information of the RF tags read by the RF reading means.~~