tag.

[0006]

The RFID reader can read the RFID tags of multiple RFID-equipped gaming chips (e.g., multiple RFID gaming chips stored in the dealer chip tray of a game table) simultaneously. Therefore, RFID has the advantage that multiple gaming chips can be inspected simultaneously at once, without the need to inspect each gaming chip one by one. On the other hand, it is difficult for the RFID reader to read multiple nearby RFID-equipped gaming chips individually.

[0007]

If the RFID tags of a large number of gaming chips are read at the same time, even though it is possible to find that there is a gaming chip with a problem in its RFID tag (i.e., the RFID tag is faulty, the RFID tag is missing, the information stored in the RFID tag is incorrect, etc.), it is difficult to determine which specific gaming chip has such a problem. In order to identify a gaming chip with a problem from a large number of gaming chips, for example, it is necessary to read the RFID tags of gaming chips one by one with an inspection device, which is a very time-consuming process.

[0008]

In addition, there is a case in which, an RFID tag can be read normally when the inspection device reads the gaming chips one by one, but the RFID tag is not read properly when the reading is done on the table or in a chip tray where the gaming chips are actually used. In this case, even if the inspection device inspects the gaming chips one by one, it will not be able to identify the gaming chips with such a problem. Furthermore, if the RFID tag is faulty, or if there is no RFID tag, it may not even be possible to ascertain the existence of such a gaming chip.

[0009]

The present disclosure seeks to provide a management system that can identify a gaming chip with problem in RFID tag.

[0009a]

According to an aspect of the present invention, there is provided a management system, comprising an image capturing device configured to capture an image of one or more gaming chips, wherein each gaming chip has an embedded RFID tag storing first information

and has second information represented on a side thereof to be displayed on the image, the second information being observable from any direction around the circumference of the gaming chip; a reader configured to read the RFID tag of the one or more gaming chips to obtain the first information of the one or more gaming chips; an image analyzer configured to obtain, based on the image, a location of each of the one or more gaming chips and second information of each of the one or more gaming chips; a controller configured to determine an existence of a problem of at least one of problems including no RFID tag or an incorrect RFID tag or a damaged RFID tag or an incorrect notation by comparing , for each gaming chip, the first information of the gaming chip obtained by the reader with the second information of the gaming chip obtained by the image analyzer and identify one or more gaming chips related to the problem.

[0010]

There is also disclosed a management system comprising: an image capturing device configured to capture a plurality of gaming chips having a built-in RFID tag storing first information and having second information written on a surface thereof to generate an image;

may be configured to capture the plurality of gaming chips accommodated in the housing unit, and the display device may be configured to display an address of the accommodating position of the problem gaming chip in the housing unit.

[0035]

The management system described above may further comprise: a housing unit capable of accommodating the plurality of gaming chips in an aligned manner; and a light irradiation device configured to irradiate light to a designated gaming chip among the plurality of gaming chips accommodated in the housing unit, wherein the image capturing device may be configured to capture the plurality of gaming chips accommodated in the housing unit, the control device may be configured to control the light irradiation device to irradiate light on the problem gaming chip for which the location has been identified.

[0036]

There is also disclosed a management system comprising: an image capturing device configured to capture a plurality of gaming chips having a built-in RFID tag storing first information and having second information written on surface thereon to generate an image; a reading device configured to read the RFID tags of the plurality of gaming chips to obtain the first information of the plurality of gaming chips; an image analysis device configured to obtain a location of each of the plurality of gaming chips and the second information based on the image; and a control device configured to, when there is a specific first information in the first information of the plurality of gaming chips obtained by the reading device, identify a location of the second information corresponding to the specific first information.

BRIEF DESCRIPTION OF THE DRAWINGS

[0037]

Fig. 1 shows a game table to which the management system of the embodiment is applied;

Fig. 2 shows an example of an image obtained by processing an image captured by a camera of the embodiment;

Fig. 3A shows an example of a gaming chip of the embodiment;

Fig. 3B shows another example of a gaming chip of the