for gaming is bet or is paid off.

Solution to Problem

[0006a]

An aspect of the present invention provides a management system for substitute currency for gaming that inspects a fraud in a game that is played by betting the substitute currency for gaming at a gaming table, an RFID tag is embedded in the substitute currency for gaming, the management system comprising:

a winning/losing result determination device that determines winning/losing result of each game at the gaming table;

a chip tray that holds the substitute currency for gaming at the gaming table;

an imaging device that images a status of the game including the substitute currency for gaming placed on the gaming table and generates image data;

a recording device that records the image data generated by the imaging device;

a reading device that reads the RFID tag in the substitute currency for gaming held in the chip tray and outputs a reading result; and

a management control device comprising:

a first chip identifying function of identifying a total amount of the substitute currency for gaming in the chip

tray based on the reading result from the reading device;

a second chip identifying function of identifying positions and amounts of the substitute currency for gaming on the gaming table based on the image data from the imaging device;

a calculation function of calculating a balance of casino at the gaming table for each game using the winning/losing result from the winning/losing result determination device and the positions, amounts, and number of the substitute currency for gaming; and

a function of determining that there was a fraud or mistake in collection or payment of the substitute currency for gaming in each game by determining a result of calculating of balance of the casino in the gaming table and the total amount of the substitute currency for gaming in the chip tray,

wherein the recording device records the image data and the identified positions and amounts of the substitute currency for gaming on the gaming table at least when there is determined the fraud or mistake in collection or payment by the management control device.

[0006b] Another aspect of the present invention provides a management system for managing substitute currency for gaming with ID used in a gaming table, comprising:

a winning/losing result determination device that determines a winning/losing result of each game at the gaming table;

a chip tray that holds the substitute currency for gaming of dealer;

a camera device that images the substitute currency for

gaming placed on the gaming table;

an image analyzing device that determines on which of betting areas including at least player, banker, tie of the gaming table the substitute currency for gaming is placed by analyzing a result of imaging of the camera device;

a first reading device that reads the IDs of the substitute currency for gaming on the gaming table to determine types and number of the substitute currency for gaming placed in the betting area;

a second reading device that reads the IDs of the substitute currency for gaming in the chip tray to determine a total amount of the substitute currency for gaming held in the chip tray; and

a control device that detects a fraud or a mistake based on the winning/losing result, information indicating the types of the substitute currency for gaming which are bet, the number of each of the types of the substitute currency for gaming which are bet, and the betting area including player, banker and tie to which the substitute currency for gaming are bet, the total amount of the substitute currency for gaming in the chip tray of before a settlement, and the total amount of the substitute currency for gaming in the chip tray of after the settlement, wherein the winning/losing result is determined by the winning/losing result determination device,

the types, the number and the betting area are determined by using the image analyzing device and the first reading device, and the total amounts are determined by the second reading device.

[0007]

Substitute currency for gaming according to an aspect of the present disclosure is substitute currency for gaming in which a stacked structure body formed by a plurality of plastic layers is configured by stacking at least a coloring layer and a white layer or a thin-color layer, a stripe pattern is formed on a side face in a stacking direction, a configuration enabling a type of substitute currency for gaming to be specified by the coloring layer is included, a print layer representing a type of the substitute currency for gaming is applied to a further upper and lower faces of the stacked structure body, and a layer structure is formed by thermo-compressing each interlayer.

[0008]

In the substitute currency for gaming described above, a side ID that can be individually identified may be attached to an outer face of the white layer or the thin-color layer.

[0009]

In the substitute currency for gaming described above, the side IDs may be attached to at least three or more positions spaced apart in a rotation direction of the side face of the substitute currency for gaming.

[0010]

CLAIMS

1. A management system for substitute currency for gaming that inspects a fraud in a game that is played by betting the substitute currency for gaming at a gaming table, an RFID tag is embedded in the substitute currency for gaming, the management system comprising:

a winning/losing result determination device that determines winning/losing result of each game at the gaming table;

a chip tray that holds the substitute currency for gaming at the gaming table;

an imaging device that images a status of the game including the substitute currency for gaming placed on the gaming table and generates image data;

a recording device that records the image data generated by the imaging device;

a reading device that reads the RFID tag in the substitute currency for gaming held in the chip tray and outputs a reading result; and

a management control device comprising:

a first chip identifying function of identifying a total amount of the substitute currency for gaming in the chip tray based on the reading result from the reading device;

a second chip identifying function of identifying

positions and amounts of the substitute currency for gaming on the gaming table based on the image data from the imaging device;

a calculation function of calculating a balance of casino at the gaming table for each game using the winning/losing result from the winning/losing result determination device and the positions, amounts, and number of the substitute currency for gaming; and

a function of determining that there was a fraud or mistake in collection or payment of the substitute currency for gaming in each game by determining a result of calculating of balance of the casino in the gaming table and the total amount of the substitute currency for gaming in the chip tray,

wherein the recording device records the image data and the identified positions and amounts of the substitute currency for gaming on the gaming table at least when there is determined the fraud or mistake in collection or payment by the management control device.

2. The management system according to claim 1, wherein the game played at the gaming table is baccarat game.

3. The management system according to claim 1 or 2, wherein the RFID tag is configured at the time of manufacturing of the substitute currency for gaming.

4. A management system for managing substitute currency for gaming with ID used in a gaming table, comprising:

a winning/losing result determination device that determines a winning/losing result of each game at the gaming table;

a chip tray that holds the substitute currency for gaming of dealer;

a camera device that images the substitute currency for gaming placed on the gaming table;

an image analyzing device that determines on which of betting areas including at least player, banker, tie of the gaming table the substitute currency for gaming is placed by analyzing a result of imaging of the camera device;

a first reading device that reads the IDs of the substitute currency for gaming on the gaming table to determine types and number of the substitute currency for gaming placed in the betting area;

a second reading device that reads the IDs of the substitute currency for gaming in the chip tray to determine a total amount of the substitute currency for gaming held in the chip tray; and

a control device that detects a fraud or a mistake based on the winning/losing result, information indicating the types of the substitute currency for gaming which are bet, the number of each of the types of the substitute currency for gaming which

are bet, and the betting area including player, banker and tie to which the substitute currency for gaming are bet, the total amount of the substitute currency for gaming in the chip tray of before a settlement, and the total amount of the substitute currency for gaming in the chip tray of after the settlement, wherein the winning/losing result is determined by the winning/losing result determination device, the types, the number and the betting area are determined by using the image analyzing device and the first reading device, and the total amounts are determined by the second reading device.

5. The management system according to claim 4, wherein the game played at the gaming table is baccarat game, the winning/losing determination device is a card distribution device used for baccarat game.

6. The management system according to claim 4 or 5, wherein the ID is configured at the time of manufacturing of the substitute currency for gaming.