bet, the game participant has to ask the dealer, and thus there is a problem in that time and efforts to go through the dealer's hand are taken, and it is difficult to bet. Further, in the system of the related art, a difference in a bet amount on each of the PLAYER, the BANKER, the TIE, the PLAYER PAIR, and the BANKER PAIR in each gaming table layout is not detected.

[0007]

Embodiments of the present disclosure seek to provide a gaming table layout which is excellent and capable of evaluating whether or not a gaming table layout is excellent by photographing a game token with a camera device, recognizing a type of game token and the number of game tokens, and further calculating a ratio of an amount of money bet on a side bet.

MEANS FOR SOLVING THE PROBLEM

[0007a]

According to an aspect, there is provided a management system comprising a first gaming table, the first gaming table has a first gaming table layout including a plurality of betting areas as betting targets for baccarat; a second gaming table, the second gaming table has a second gaming table layout including a plurality of betting areas as betting targets, wherein the second gaming table layout is different from the first gaming table layout in at least one of: size of each of the plurality of betting areas; the number of playing positions; positional relationships of the plurality of betting areas;

type of side bet areas included in the plurality of betting areas; and colors of the plurality of betting areas, and wherein both of the first gaming table layout and the second gaming table layout have non-side bet areas and side bet areas; and a first betting amount determination system, the first betting amount determination system is configured to determine at least a betting amount of the first gaming table layout; a second betting amount determination system, the second betting amount determination system is configured to determine at least a betting amount of the second gaming table layout; one or more processor, wherein the one or more processor is configured to compare the betting amount of the first gaming table layout and the betting amount of the second gaming table layout.

[0007b]

According to another aspect, there is provided a management system comprising a first gaming table, the first gaming table has a first gaming table layout including a plurality of betting areas as betting targets for baccarat, a second gaming table, the second gaming table has a second gaming table layout including a plurality of betting areas as betting targets, wherein the second gaming table layout is different from the first gaming table layout in at least one of: size of each of the plurality of betting areas; the number of playing positions; positional relationships of the plurality of betting areas; type of side bet areas included in the plurality of betting areas; and colors of the plurality of betting areas,

and wherein both of the first gaming table layout and the second gaming table layout have non-side bet areas and side bet areas, a first revenue amount determination system, the first revenue amount determination system is configured to determine a first revenue amount for a casino at the first gaming table; a second revenue amount determination system, the second revenue amount determination system is configured to determine a second revenue amount for the casino at the second gaming table; one or more processor, wherein the one or more processor is configured to compare the first revenue amount and the second revenue amount.

[0007c]

According to another aspect, there is provided a management system comprising a first gaming table, the first gaming table has a first gaming table layout including a plurality of betting areas as betting targets for baccarat, a second gaming table, the second gaming table has a second gaming table layout including a plurality of betting areas as betting targets, wherein the second gaming table layout is different from the first gaming table layout in at least one of: size of each of the plurality of betting areas; the number of playing positions; positional relationships of the plurality of betting areas; type of side bet areas included in the plurality of betting areas; and colors of the plurality of betting areas, and wherein both of the first gaming table layout and the second gaming table layout have non-side bet areas and side bet areas, a first betting amount determination system, the first betting

amount determination system is configured to determine at least a betting amount for the non-side bet areas of the first gaming table layout and a betting amount for the side bet areas of the first gaming table layout; a second betting amount determination system, the second betting amount determination system is configured to determine at least a betting amount for the non-side bet areas of the second gaming table layout and a betting amount for the side bet areas of the second gaming table layout; one or more processor, wherein the one or more processor is configured to compare: (a) a first ratio: (a-1) of the betting amount for the side bet areas of the first gaming table layout to the betting amount for the non-side bet areas of the first gaming table layout; or (a-2) of the betting amount for the side bet areas of the first gaming table layout to the betting amount for the non-side bet areas and the side bet areas of the first gaming table layout; and (b) a second ratio: (b-1) of the betting amount for the side bet areas of the second gaming table layout to the betting amount for the non-side bet areas of the second gaming table layout; or (b-2) of the betting amount for the side bet areas of the second gaming table layout to the betting amount for the non-side bet areas and the side bet areas of the second gaming table layout.

[0008]

The present disclosure also provides a table game management system including a gaming table having a baccarat gaming table layout, a chip determining device capable of determining a type of game token placed on the gaming table to participate in a bet and the number of game tokens, and a control device that records the type of game token and the number of game tokens determined by the chip determining device in a database, in which the gaming table layout includes a portion on which a chip float storing the game token is placed, a portion on which a

player specified by the player specifying unit and a bet amount of each player position in the database in association with each other.

[0025]

The control device may be configured to detect an amount of the bet game token and a balance for each player.

[0026]

The chip determining device may be configured to separately detect a plurality of game token stacks within each bet area of each player position.

[0027]

Alternatively, another aspect of the present disclosure provides a table game management system including a gaming table having a baccarat gaming table layout, a chip determining device capable of determining a type of game token placed on the gaming table to participate in a bet and the number of game tokens, and a control device that records the type of game token and the number of game tokens determined by the chip determining device in a database, and the gaming table layout includes a portion on which a chip float storing the game token is placed, a portion on which a card chute device storing a playing card is placed, a card area in which the playing card withdrawn from the card chute device is placed, and a bet area in which a game participant places the game token to participate in a bet, in which the control device is configured to detect transition of an amount of the game token bet on each of the PLAYER, the BANKER, the TIE, the PLAYER PAIR, and the BANKER PAIR independently for

of the bet game token and a balance for each player.

[0041]

The chip determining device may be configured to separately detect a plurality of game token stacks within each bet area of each player position.

[0042]

Further, another aspect of the present disclosure provides a baccarat gaming table layout including a portion on which a chip float storing a game token is placed, a portion on which a card chute device storing a playing card is placed, a card area in which the playing card withdrawn from the card chute device is placed, and a bet area in which a game participant places the game token to participate in a bet, in which further, as the bet area, a bet area for PLAYER, a bet area for BANKER, a bet area for TIE, a bet area for PLAYER PAIR, and a bet area for BANKER PAIR are set in a plurality of rows for each position radially centering on a dealer, and the bet areas of the PLAYER, the BANKER, the TIE, the PLAYER PAIR, and the BANKER PAIR of each player position are set within a range which a hand of each game participant sitting at the player position can reach.

[0043]

Further, in the gaming table layout, a distance from an end of the table at a position at which the dealer sits to an end of each bet area may be within 1 m, and a distance from an end of the table at a position at which the game participant sits to an end of the bet area of each player position on which the game participant places the game token may be within 1 m.

[0044]

Further, in the gaming table layout, the bet area for the player, the bet area for the banker, the bet area for TIE, the bet area for PLAYER PAIR, and the bet area for BANKER PAIR may be arranged in five rows in one column for each player position.

[0045]

Further, in the gaming table layout, there is no contour line in the bet area, and the bet area may be distinguished from a place of the gaming table layout by a color or a color density.

[0046]

Further, in the gaming table layout, a game token including a feature color specifying a type and a common color used in common to a plurality of types of game tokens may be a use target as the game token to be used, and the bet area may be colored with a color other than the common color.

[0047]

Further, the gaming table layout may include a game token check area.

[0048]

Further, a gaming table may include the gaming table layout set on a top surface thereof.

EFFECT OF THE INVENTION

[0049]

According to embodiments of the present disclosure, it is possible to correctly recognize a game token without confusion with a layout pattern when a game token is recognized using an image captured

CLAIMS:

1. A management system comprising:

a first gaming table, the first gaming table has a first gaming table layout including a plurality of betting areas as betting targets for baccarat;

a second gaming table, the second gaming table has a second gaming table layout including a plurality of betting areas as betting targets, wherein the second gaming table layout is different from the first gaming table layout in at least one of: size of each of the plurality of betting areas; the number of playing positions; positional relationships of the plurality of betting areas; type of side bet areas included in the plurality of betting areas; and colors of the plurality of betting areas, and wherein both of the first gaming table layout and the second gaming table layout have non-side bet areas and side bet areas; and

a first betting amount determination system, the first betting amount determination system is configured to determine at least a betting amount of the first gaming table layout;

a second betting amount determination system, the second betting amount determination system is configured to determine at least a betting amount of the second gaming table layout;

one or more processor, wherein the one or more

processor is configured to compare the betting amount of the first gaming table layout and the betting amount of the second gaming table layout.

2. A management system comprising:

a first gaming table, the first gaming table has a first gaming table layout including a plurality of betting areas as betting targets for baccarat,

a second gaming table, the second gaming table has a second gaming table layout including a plurality of betting areas as betting targets, wherein the second gaming table layout is different from the first gaming table layout in at least one of: size of each of the plurality of betting areas; the number of playing positions; positional relationships of the plurality of betting areas; type of side bet areas included in the plurality of betting areas; and colors of the plurality of betting areas, and wherein both of the first gaming table layout and the second gaming table layout have non-side bet areas and side bet areas,

a first revenue amount determination system, the first revenue amount determination system is configured to determine a first revenue amount for a casino at the first gaming table;

a second revenue amount determination system, the second revenue amount determination system is configured to determine a second revenue amount for the casino at the second gaming table;

one or more processor, wherein the one or more processor is configured to compare the first revenue amount and the second revenue amount.

3. A management system comprising:

a first gaming table, the first gaming table has a first gaming table layout including a plurality of betting areas as betting targets for baccarat,

a second gaming table, the second gaming table has a second gaming table layout including a plurality of betting areas as betting targets, wherein the second gaming table layout is different from the first gaming table layout in at least one of: size of each of the plurality of betting areas; the number of playing positions; positional relationships of the plurality of betting areas; type of side bet areas included in the plurality of betting areas; and colors of the plurality of betting areas, and wherein both of the first gaming table layout and the second gaming table layout have non-side bet areas and side bet areas,

a first betting amount determination system, the first betting amount determination system is configured to determine at least a betting amount for the non-side bet areas of the first gaming table layout and a betting amount for the side bet areas of the first gaming table layout;

a second betting amount determination system, the second betting amount determination system is configured to determine at least a betting amount for the non-side bet

areas of the second gaming table layout and a betting amount for the side bet areas of the second gaming table layout;

one or more processor, wherein the one or more processor is configured to compare:

(a) a first ratio:

(a-1) of the betting amount for the side bet areas of the first gaming table layout to the betting amount for the non-side bet areas of the first gaming table layout; or

(a-2) of the betting amount for the side bet areas of the first gaming table layout to the betting amount for the non-side bet areas and the side bet areas of the first gaming table layout; and

(b) a second ratio:

(b-1) of the betting amount for the side bet areas of the second gaming table layout to the betting amount for the non-side bet areas of the second gaming table layout; or

(b-2) of the betting amount for the side bet areas of the second gaming table layout to the betting amount for the non-side bet areas and the side bet areas of the second gaming table layout.

4. The management system according to any one of claims 1 to 3, wherein each betting area has a boundary line to demarcate it.

5. The management system according to any one of claims 1 to 3, wherein the betting areas do not have border lines and are distinguished from a background of the gaming table layout by a color or a color density.

6. The management system according to any one of claims 1 to 3, wherein:

gaming chips each includes a respective characteristic color that corresponds to a respective type of the respective gaming chip and a common color that is commonly used for a plurality of different types of the gaming chips; and

the bet areas are each colored in a color other than the common color.

7. The management system according to claim 1 or 3, wherein

the first betting amount determination system comprises:

a first image capturing device, the first image capturing device is configured to capture, from above at an angle, the first gaming table layout with gaming chips placed on one or more of the betting areas of the first gaming table layout to generate a first image; and

a first image analyzing device, wherein the first image analyzing device is configured to determine,

based on the first image, types of the gaming chips placed on one or more of the betting areas of the first gaming table layout, the number of the gaming chips placed on one or more of the betting areas of the first gaming table layout and the betting targets of the first gaming table layout on which the gaming chips are placed, using a first deep learning structured artificial intelligence image recognition model corresponding to the first gaming table layout, to determine betting amounts for each betting targets;

the second betting amount determination system comprises:

a second image capturing device, the second image capturing device is configured to capture, from above at an angle, the second gaming table layout with gaming chips placed on one or more of the betting areas of the second gaming table layout to generate a second image; and

a second image analyzing device, wherein the second image analyzing device is configured to determine, based on the second image, types of the gaming chips placed on one or more of the betting areas of the second gaming table layout, the number of the gaming chips placed on one or more of the betting areas of the second gaming table layout and the betting targets of the second gaming table layout on which the gaming chips are placed, using a second deep learning structured artificial intelligence image recognition model corresponding to the second gaming table

layout, to determine betting amounts for each betting targets.

8. The management system according to claim 2, wherein the first revenue amount determination system comprises:

a first image capturing device, the first image capturing device is configured to capture, from above at an angle, the first gaming table layout with gaming chips placed on one or more of the betting areas of the first gaming table layout to generate a first image; and

a first image analyzing device, wherein the first image analyzing device is configured to determine, based on the first image, types of the gaming chips placed on one or more of the betting areas of the first gaming table layout, the number of the gaming chips placed on one or more of the betting areas of the first gaming table layout and the betting targets of the first gaming table layout on which the gaming chips are placed, using a first deep learning structured artificial intelligence image recognition model corresponding to the first gaming table layout, to determine betting amounts for each betting targets;

a card shoe, where in the card shoe is configured to detect ranks of cards drawn therefrom to the first gaming table to determine a result of a game on the first gaming table based on the detected ranks; and

a first processor, wherein the first processor is configured to determine the first revenue amount based on the betting amounts of each betting targets and the result of the game,

the second revenue amount determination system comprises:

a second image capturing device, the second image capturing device is configured to capture, from above at an angle, the second gaming table layout with gaming chips placed on one or more of the betting areas of the second gaming table layout to generate a second image; and

a second image analyzing device, wherein the second image analyzing device is configured to determine, based on the second image, types of the gaming chips placed on one or more of the betting areas of the second gaming table layout, the number of the gaming chips placed on one or more of the betting areas of the second gaming table layout and the betting targets of the second gaming table layout on which the gaming chips are placed, using a second deep learning structured artificial intelligence image recognition model corresponding to the second gaming table layout, to determine betting amounts for each betting targets;

a card shoe, where in the card shoe is configured to detect ranks of cards drawn therefrom to the second gaming table to determine a result of a game on the second gaming table based on the detected ranks; and

a second processor, wherein the second processor is configured to determine the second revenue amount based on the betting amounts of each betting targets and the result of the game.

9. The management system according to claim 1, wherein,

the first betting amount determination system is configured to determine at least a betting amount for the side bet areas of the first gaming table layout,

the second betting amount determination system is configured to determine at least a betting amount for the side bet areas of the second gaming table layout, and

the one or more processor is configured to compare the betting amount for the side bet areas of the first gaming table layout and the betting amount for the side bet areas of the second gaming table layout.

10. The management system according to claim 7 or 8, wherein the first deep learning structured artificial intelligence image recognition model and the second deep learning structured artificial intelligence image recognition model are the same model which is used for the first gaming table layout and the second gaming table layout.

11. The management system according to any one of claims 1 to 3, wherein

the one or more processor is configured to determine superiorities of the first gaming table layout and the second gaming table layout.

12. The management system according to claim 11, further comprising:

an output device, wherein the output device is configured to output the superiorities.