numbers or the total amount of bet chips, and thus, the amount of chips is recognized.

[0005]

In a card game monitoring system described in WO 2015/107902 A, whether or not chips placed on a gaming table are collected or paid as a win or lose result is determined by performing image analysis with respect to the movement of the chip, and thus, fraud monitoring is performed.

SUMMARY OF INVENTION

PROBLEM TO BE SOLVED BY INVENTION

[0006]

Embodiments of the invention seek to provide a novel system managing a game in a casino.

[0007]

One aspect of the invention provides a game management system managing a casino game performed in a plurality of tables in casino facilities, the system including:

an information processing device specifying a betting target on the basis of a position of a gaming token in an image obtained by capturing bet gaming token or by using the ID buried in the gaming token, and specifying a betting amount on the basis of the type and the number of gaming tokens in the image or by using ID buried in the gaming token;

a game result determination device determining a game result of the casino game;

a calculation device calculating a profit of a casino

manager for each table and each game of the plurality of tables, on the basis of the betting target, the betting amount, and the game result; and

a recording apparatus recording the profit.

Another aspect of the invention provides a game management system managing a casino game performed in casino facilities, the system including:

a betting detection section detecting betting contents including a betting target and a betting amount of the casino game;

a game result determination section determining a game result of the casino game; and

a calculation section calculating a profit of a casino manager on the basis of the betting contents and the game result.

Another aspect of the invention provides a game management system managing a casino game performed in a plurality of tables in casino facilities, the system including:

a camera obtaining an image by capturing bet gaming tokens,

an information processing device specifying a betting amount on the basis of the type and the number of gaming tokens in the image;

a calculation device calculating a total betting amount for each table with respect to the plurality of tables; and

a recording apparatus recording the total betting amount for each table.

Another aspect of the invention provides a game management system managing a casino game performed in a table of casino facilities, the system including:

a camera obtaining an image by capturing bet gaming tokens;

an information processing device specifying a betting amount on the basis of the type and the number of gaming tokens in the image;

a calculation device calculating a total betting amount for each game; and

a recording apparatus recording a transition of the total betting amount for each game.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008]

FIG. 1 is a diagram illustrating an overview of a fraud detection system in a casino having a plurality of gaming tables according to a first embodiment of the invention;

FIG. 2A is a perspective diagram of chips illustrating an example of different overlapped states of chips recognized in the first embodiment of the invention;

FIG. 2B is a perspective diagram of chips illustrating an example of different overlapped states of chips recognized in the first embodiment of the invention;

FIG. 3A is a diagram illustrating details of a chip tray in the first embodiment of the invention;

FIG. 3B is a diagram illustrating another example of a chip tray in the first embodiment of the invention;

FIG. 4 is an enlarged diagram illustrating a mark explaining stains of a card recognized in the first embodiment of the invention;

FIG. 5A is a plan diagram illustrating a font side of a marker in the first embodiment of the invention;

FIG. 5B is a plan diagram illustrating a back side of the marker in the first embodiment of the invention;

What is claimed is:

1. A game management system managing a casino game performed in a plurality of tables in casino facilities, the system comprising:

an information processing device specifying a betting target on the basis of a position of a gaming token in an image obtained by capturing bet gaming token or by using the ID buried in the gaming token, and specifying a betting amount on the basis of the type and the number of gaming tokens in the image or by using ID buried in the gaming token;

a game result determination device determining a game result of the casino game;

a calculation device calculating a profit of a casino manager for each table and each game of the plurality of tables, on the basis of the betting target, the betting amount, and the game result; and

a recording apparatus recording the profit.

2. The game management system according to claim 1,

wherein the game result determination device is an electronic shoe including a containing portion containing playing cards, an extraction mechanism for extracting the playing cards one by one from the containing portion, a detection unit detecting contents of the playing cards extracted by the extraction mechanism, and a determination unit determining a game result of a baccarat game according to a rule of the baccarat game, on the basis of the contents of the playing