amount of wagered chips, proposed is a technique of attaching an wireless IC (RFID) tag to each chip to recognize the amount of the chip.

[0005]

In a card game monitoring system disclosed in WO 2015/107902 A, fraud monitoring is performed by determining through image analysis of movement of chips whether or not the chips placed on a gaming table are collected or redeemed in accordance with a win or lose result.

SUMMARY

[0006]

The present disclosure seeks to provide a new system for detecting fraud in a game in a casino or an error or fraud at the time of wagering chips or doing settlement.

[0006a]

An aspect of the present invention provides a table game management system comprising:

a gaming table that includes a plurality of betting areas that are adjacent each other and that include, for each of a plurality of player positions, a respective player area and a respective banker area;

at least one detector, wherein the at least one detector is configured to:

identify, for each of the betting areas respectively, respective information, including types and numbers, of respective gaming chips placed in the respective betting area for placement of a bet in a game; and

detect contents of gaming chips of a dealer; and

at least one processor, wherein the at least one processor is configured to:

determine a result of the game;

determine an expected change to the gaming chips of the dealer based on (1) the determined result of the game and (2) the identified respective information of the gaming chips;

based on the expected change and based on contents of the gaming chips of the dealer as detected by the at least one detector prior to a settlement, determine a modified contents of the gaming chips of the dealer that should be present after the settlement; and

determine whether a collection or a payment is correctly performed by comparing the determined modified contents and an actual contents detected by the at least one detector after the settlement. [0006b]

Another aspect of the present invention provides a table game management system for use with a gaming table that includes a plurality of betting areas that are adjacent each other and that include, for each of a plurality of player positions, a respective player area and a respective banker area, the table game management system comprising:

at least one detector, wherein the at least one detector is configured to:

identify, for each of the betting areas respectively, respective information, including types and numbers, of respective gaming chips placed in the respective betting area for placement of a bet in a game; and

detect contents of gaming chips of a dealer; and

at least one processor, wherein the at least one processor is configured to:

determine a result of the game;

determine an expected change to the gaming chips of the dealer based on (1) the determined result of the game and (2) the identified respective information of the gaming chips;

based on the expected change and based on contents of the gaming chips of the dealer as detected by the at least one detector prior to a settlement, determine a modified contents of the gaming chips of the dealer that should be present after the settlement; and

determine whether a collection or a payment is correctly performed by comparing the determined modified contents and an actual contents detected by the at least one detector after the settlement.

[0007]

There is also disclosed a fraud detection system in a casino having a plurality of gaming tables, including: a game recording apparatus which records a progress of a game played in the gaming table as an image; an image analyzing apparatus which performs image analysis on the image of the recorded progress of the game; a win/lose result determining apparatus which determines a win or lose result of each game in the gaming table; and a control device which detects fraud practiced in the gaming table by using a result of the image analysis by the image analyzing

interval when the dealer collects chips wagered by the losers among the game participants after the end of each game;

4) whether or not the dealer performs payment for a position of chips wagered by the winner among the game participants after the end of each game; and

5) whether or not the winner among the game participants receives wagered chips and paid chips after the end of each game.

[0020]

In the above fraud detection system, the win/lose result determining apparatus may be a card distribution device which distributes the cards in the gaming table or a control device which determines the win or lose result of each game from information of the image analyzing apparatus reading the cards distributed in the gaming table by using a camera.

[0021]

According to the fraud detection system of the present disclosure, it is possible to detect fraud in collection and redemption of chips in accordance with a win or lose result of a game.

[0022]

In addition, according to the system of the present disclosure, although the cards are slanted by "card squeegee" frequently performed by players in a baccarat game or the like, the rank and suit of the cards can be