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 ~~invention is~~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 management system in a casino having a plurality of gaming tables, the management system comprising:

a camera configured to capture an image of a gaming table of the plurality of gaming tables including one or more betting areas and chips wagered on the one or more betting areas;

a game result processor, wherein the game result processor is configured to determine a result of a game; and

a control device, wherein the control device is configured to:

process the image using artificial intelligence technology or a neural network based image recognition

technology to determine one or more positions, one or more types, and one or more numbers of the wagered chips;

based on the one or more positions of the wagered chips, determine which of the wagered chips are winning wagered chips and which of the wagered chips are losing wagered chips;

based at least on the one or more types and one or more numbers of the wagered chips, calculate a betting amount for the game; and

based on (1) the one or more positions, one or more types, and one or more numbers of the wagered chips and (2) the result of the game, calculate (a) a collection amount of the losing wagered chips, (b) a redemption amount for the winning wagered chips according to a game rule, and/or (c) a balance of the collection amount and the redemption amount.

[0007]

~~According to an aspect of the invention, t~~There is ~~provided~~ 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 ~~invention~~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 ~~invention~~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