identification (RFID) tag attached for preventing use of a counterfeit game token. A game token with RFID is known and disclosed in International Application Publication No. WO2008/120749.

[0005]

With a game token based on conventional technology, it has been possible to determine authenticity of the game token itself by determining information written in a memory area by reading RFID. However, information obtained during use of the game token at a casino site, in particular, information about an owner of the game token has not been able to be recorded and determined. Therefore, it has not been possible to determine, by reading RFID, presence of a genuine game token having abnormal history in terms of usage, such as history of being used or exchanged by an owner different from an original owner, failing to prevent use of such a game token having strange use history in a casino.

[0006]

Therefore, it is desired to provide a system that makes it possible to determine and manage owner information of each game token.

[0006a]

According to one aspect, there is provided a table game management system comprising: a game table at which a game can be played; a chip placement area that is on the game table, on which can be placed (1) a bet chip that is bet by one or more players participating in the game and (2) a payout chip that is paid out from a chip tray of the game table by a dealer to a winning player of the one or more players; a chip reader,

wherein the chip reader is configured to read a first radio frequency identification (RFID) tag associated with the bet chip and a second RFID tag associated with the payout chip when placed on the chip placement area to obtain a reading result; and a controller, wherein the controller is configured to, when each player of a plurality of players placed a bet chip on a same chip placement area: based on identification (ID) information of the reading result of the chip reader, acquire information about a respective owner of chips placed in the same chip placement area, the chips including the bet chips of the plurality of players and the payout chip paid out to one of the plurality of players; recognize that a part of the bet chips bet by the plurality of players and the payout chip are transferred outside the same chip placement area at a related timing; associate, in a database, first ID information of the part of the bet chips and second ID information of the payout chip based on the transfer of the payout chip and the part of the bet chips at the related timing; and associate, in the database, information corresponding to the player of the part of the bet chips indicated by the first RFID tag of the bet chip to second ID information received from the second RFID tag of the payout chip.

[0006b]

According to another aspect, there is provided a method comprising, for each player of a plurality of players who placed a bet chip on a same chip placement area: reading, by a chip reader of a table game management system, a first radio frequency identification (RFID) tag associated with a bet chip and a second RFID tag associated with a payout chip when

placed on a chip placement area of a game table of the table game management system to obtain a reading result, wherein the bet chip is bet by one or more players of the plurality of players participating in a game, and wherein the payout chip is paid out from a chip tray of the game table by a dealer to a winning player of the one or more players; receiving, by a controller of the table game management system, information about the player of the bet chip of which a first RFID tag has been read by a chip reader and of the payout chip of which a second RFID tag has been read by the chip reader; recognizing, by the controller, that the bet chip and the payout chip are transferred outside the same chip placement area at a related timing; associating, by the controller from a database, first ID information of the bet chip and second ID information of the payout chip based on the transfer of the payout chip and the bet chip at the related timing; and associating, by the controller in the database, information corresponding to the player of the bet chip indicated by the first RFID tag of the bet chip to second ID information received from the second RFID tag of the payout chip.

[0007]

There is also disclosed a game token management system that includes

a game token to which individually identifiable RFID

CLAIMS

1. A table game management system comprising:

a game table at which a game can be played;

a chip placement area that is on the game table, on which can be placed (1) a bet chip that is bet by one or more players participating in the game and (2) a payout chip that is paid out from a chip tray of the game table by a dealer to a winning player of the one or more players;

a chip reader, wherein the chip reader is configured to read a first radio frequency identification (RFID) tag associated with the bet chip and a second RFID tag associated with the payout chip when placed on the chip placement area to obtain a reading result; and

a controller, wherein the controller is configured to, when each player of a plurality of players placed a bet chip on a same chip placement area:

based on identification (ID) information of the reading result of the chip reader, acquire information about a respective owner of chips placed in the same chip placement area, the chips including the bet chips of the plurality of players and the payout chip paid out to one of the plurality of players;

recognize that a part of the bet chips bet by the plurality of players and the payout chip are transferred outside the same chip placement area at a related timing;

associate, in a database, first ID information of the part of the bet chips and second ID information of the payout chip based on the transfer of the payout chip and the part of the bet chips at the related timing; and

associate, in the database, information corresponding to the player of the part of the bet chips indicated by the first RFID tag of the bet chip to second ID information received from the second RFID tag of the payout chip.

2. The table game management system of claim 1, wherein the same chip placement area is divided into a plurality of player positions that each includes a respective payment area for placement therein of the payout chip, and the chip reader is further configured to perform the reading separately for each of the payment areas of the plurality of player positions.

3. The table game management system of claim 1, wherein the game table is divided into a plurality of regions, wherein each region of the plurality of regions is associated with a plurality of player positions, and wherein the chip reader is further configured to receive the first ID information and the second ID information from a region of the plurality of regions associated with the chip reader.

4. The table game management system of claim 1, wherein the database is configured to store the first ID information, the second ID information, and the information corresponding to at least one player of the one or more players.

5. The table game management system of claim 1, further comprising an imaging device configured to generate an image of the game table including of the bet chip and the payout chip.

6. The table game management system of claim 5, further comprising a game participant identification unit configured to identify one or more players of the plurality of players based on an image of the one or more players generated by the imaging device.

7. The table game management system of claim 1, wherein the first ID information and the second ID information are encrypted.

8. The table game management system of claim 1, wherein, when the bet chip and the payout chip are transferred outside of the chip placement area, the first RFID tag and the second RFID tag are no longer readable by the chip reader.

9. The table game management system of claim 1, wherein the first RFID tag and the second RFID tag each include a data non-rewritable area and a data rewritable area.

10. The table game management system of claim 9, wherein the data non-rewritable area is configured to store invariant data corresponding to the bet chip and to the payout chip, respectively, and wherein the data rewritable area is configured to store variable data corresponding to the bet chip and to the payout chip, respectively.

11. A method comprising, for each player of a plurality of players who placed a bet chip on a same chip placement area:

reading, by a chip reader of a table game management system, a first radio frequency identification (RFID) tag associated with a bet chip and a second RFID tag associated with a payout chip when placed on a chip placement area of a game table of the table game management system to obtain a reading result, wherein the bet chip is bet by one or more players of the plurality of players participating in a game, and wherein the payout chip is paid out from a chip tray of the game table by a dealer to a winning player of the one or more players;

receiving, by a controller of the table game management system, information about the player of the bet

chip of which a first RFID tag has been read by a chip reader and of the payout chip of which a second RFID tag has been read by the chip reader;

recognizing, by the controller, that the bet chip and the payout chip are transferred outside the same chip placement area at a related timing;

associating, by the controller from a database, first ID information of the bet chip and second ID information of the payout chip based on the transfer of the payout chip and the bet chip at the related timing; and

associating, by the controller in the database, information corresponding to the player of the bet chip indicated by the first RFID tag of the bet chip to second ID information received from the second RFID tag of the payout chip.

12. The method of claim 11, the method further comprising:

generating, by an imaging device of the table game management system, an image of the one or more players; and

identifying, by an image analyzer of the table game management system, an identity of the player of the bet chip.

13. The method of claim 12, the method further comprising identifying, by the controller of the table game management system, that the information corresponding to the player of

the bet chip indicated by the first RFID tag does not match face authentication information.

14. The method of claim 11, wherein the chip placement area is divided into a plurality of player positions that each includes a respective payment area for placement therein of the payout chip.

15. The method of claim 11, wherein reading the first radio RFID tag and the second RFID tag comprises reading variable data stored in a first data rewritable area of the first RFID tag and a second data rewritable area of the second RFID tag.

16. The method of claim 15, wherein the variable data is encrypted.