the tracing, the owner associated with the chip ID in the database is updated at each time at which the owner of the gaming chip is changed.

[0005]

It is also possible to detect the above illicitness or mistake by imaging the gaming chip with a camera and recognizing a type (value) of gaming chip in the bet area or the chip tray with image recognition using a neural network or the like. It is also possible to realize traceability by marking the chip ID on the side surface of the gaming chip and recognizing the chip ID with image recognition.

[0006]

Furthermore, nowadays, it is possible, by performing pose tracking and facial recognition of the player who operates the gaming chip to play the game at the game table, to associate the player, the gaming chip, and a betting activity with each other.

[0007]

There is Japanese Patent Application Publication No. 2017-064386 as a prior art document.

SUMMARY OF THE PRESENT INVENTION

[0008]

Embodiments of the present invention seek to provide a management system configured to help to electronically grasp a transaction of a gaming chip within a casino, in particular at a game table.

[0008a]

According to an aspect, there is provided a management system for a gaming table for playing games using gaming chips with built-in RFID tags, wherein the gaming table comprising a chip tray for storing the dealer's gaming chips, a betting area for placing gaming chips to bet on the game, a collection area and a payout area separate from the betting area and chip tray, the management system comprising: a collection reading unit configured to read the RFID tags of gaming chips that are collected after losing a game in the collection area; and a payout reading unit configured to read the RFID tags of gaming chips that are paid out to players who have

won a game in the payout area, wherein the collection reading unit comprises a collection antenna installed in the collection area and a collection reading device that controls the collection antenna and decodes the signal received by the collection antenna, the payout reading unit comprises a payout antenna installed in the payout area and a payout reading device that controls the payout antenna and decodes the signal received by the payout antenna, and the collection reading unit and the payout reading unit each perform reading at independent timings.

[0008b]

According to another aspect, there is provide a management system for a gaming table for playing games using gaming chips with built-in RFID tags, wherein the gaming table is provided with a chip tray for accommodating the dealer's gaming chips, a betting area for placing gaming chips to bet on a game, a collection area and a payout area separate from the betting area and the chip tray, the management system comprising: a collection reading unit configured to read the RFID tags of the gaming chips collected after losing a game in the collection area; and a payout reading unit configured to read the RFID tags of gaming chips to be paid out to players who have won the game in the payout area, wherein the collection reading unit comprises a collection antenna installed in the collection area and a collection reading device that controls the collection antenna and decodes the signals received by the collection antenna, the payout reading unit comprises a payout antenna installed in the payout area and a payout reading device that controls the payout antenna and decodes the signals received by the payout antenna, and the same device is used for the collection reading device and the payout reading device.

[0008c]

According to another aspect, there is provided a management system for a gaming table for playing games using gaming chips with built-in RFID tags, wherein the game table is provided with a chip tray for storing the dealer's gaming chips, a betting area for placing gaming chips to bet on the game, and a separate collection area and payout area from the betting area and chip tray, the

management system comprising: a collection reading unit configured to read the RFID tags of the gaming chips collected after losing the game in the collection area; and a payout reading unit configured to read the RFID tags of gaming chips to be paid out to players who have won the game in the payout area, wherein the collection reading unit comprises a collection antenna installed in the collection area and a collection reading device that controls the collection antenna and decodes the signals received by the collection antenna, the payout reading unit comprises a payout antenna installed in the payout area and a payout reading device that controls the payout antenna and decodes the signal received by the payout antenna,

the management system further comprises a jamming antenna that restricts the retrieval antenna from reading the RFID tag of the gaming chip in the retrieval area, and/or a jamming antenna that restricts the retrieval antenna from reading the RFID tag of the gaming chip in the retrieval area.

[0009]

There is also disclosed a management system at a game table for performing a game using a gaming chip including a built-in RFID tag and has a configuration wherein the game table includes a chip tray configured to accommodate the gaming chip of a dealer, a bet area on which the gaming chip to be bet in the game is to be placed, and a collection area and a payout area different from the bet area and the chip tray, the management system comprises: a collection reading means configured to read at the collection area the RFID tag of the gaming chip collected due to losing in the game; and a