[0005]

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[Summary of Invention]

[Technical Problem]

[0006]

The present invention disclosure seeks to provide a system that uses a card shoe used in a table game to measure, as periods in the course of a game handled by a dealer, particularly, a game play period from the time when a card is drawn from a card accommodating section to the time when a result of the game is displayed, and periods other than the play period including periods spent for bet placement and bet settlement.

[0007]

Further, in addition to the measurement of the detailed periods in a single game, measurement of the detailed periods over a plurality of games allows grasp of the sum and average of the detailed periods and dispersion and progress tendencies thereof, whereby countermeasures can be examined.

[0008]

The present disclosure also seeks to provide a system that can measure a period required to stop

using cards accommodated in the card shoe and replace the cards with a new set or package of cards.

[Solution to Problem]

[0008a]

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

shuffle playing cards that are playing cards formed of a multiple number of decks and shuffled and packaged or set;

a card shoe including

a card accommodating section that accommodates the shuffle playing cards, and

an opening through which the cards are drawn one by one from the card accommodating section onto a game table; and

a management control section

wherein the management control section is configured to measure at least any one period of game period, play period, period other than play, dealing period, player's period, bet period, and settlement period of the game using the card shoe, and

measure the exclusion period that does not correspond to any of the game period, play period, period other than play, dealing period, player's period, bet period, and settlement period.

[0008b]

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

a card accommodating section that accommodates shuffle playing cards consisting of multiple decks as a playing cards of one package;

a card shoe having an opening through which the cards are drawn one by one from the card accommodating section onto a game table; and

a management control section configured to determine as the start time the time when accommodation of the playing cards of the one package into the card shoe is completed, determine as an end time the time when accommodating of playing cards of the one package is started after a plurality of the playing cards are drawn from the card accommodating section, and measure a period from the start time to the end time as a use period of shuffle playing cards of the one package.

[0008c]

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

a card shoe including:

a card accommodating section that accommodates a set of cards formed by a plurality of decks of playing cards;

an opening through which the cards of the set are drawn one by one from the card accommodating section onto a game table, and

a management control section configured to:

determine an error state that is against a rule of the card game; and

memorize in a memory an occurrence of the error when the error is sensed; and

memorize in the memory a time when starting use of the set of cards and a time when ending use of the set of cards.

[0009]

There is also disclosed a table game system comprising:

shuffle playing cards that are playing cards formed of a multiple number of decks and shuffled and packaged or set;

a card shoe including

a card accommodating section that accommodates the shuffle playing cards, and

an opening through which the cards are drawn one by one from the card accommodating section onto a game table; and

a management control section that measures, based on points of time when specific items in a card game occur, a period between points of time when at least two of the specific items occur,

wherein the card shoe includes

a card sensor that senses that one of the cards is drawn and outputs a signal,

a card reading section that reads at least a rank of the drawn card,

a win/loss evaluating section that performs win/loss evaluation of the card game based on information on the rank of the card read by the card reading section,

a win/loss evaluation result output section that outputs a result of the win/loss evaluation performed by the win/loss evaluating section, and

a result output start control section that controls start of the win/loss evaluation result output performed by the win/loss evaluation result output section for an instruction to start of the output,

the management control section is configured to be

capable of receiving, from the card sensor, a signal representing that a card has been drawn and sensed and further measuring how many cards have been drawn in each game, and

capable of receiving a signal from the result output start control section and memorizing time when the win/loss evaluation result output starts, and

as an item of the measurement of the period between the points of time when the at least two specific items occur, a period from time when a first card is drawn to time when the win/loss evaluation result output starts is measured as a play period.

[0010]

There is also disclosed a table game system comprising:

operation is received from the package exchange detecting section or a point of time when the card shoe is powered off, and

measurement of an in-shoe package exchange period

with the in-shoe package exchange operation starting at the point of time when the signal representing the start of the in-shoe package exchange operation is received from the package exchange detecting section or the point of time when the card shoe is powered off, and

the in-shoe package exchange operation ending at the point of time when the signal representing the end of the in-shoe package exchange operation is received from the package exchange detecting section or the point of time when the card shoe is powered on.

[0011]

There is also disclosed a table game system comprising:

shuffle playing cards that are playing cards formed of a multiple number of decks and shuffled and packaged or set;

a card shoe including

a card accommodating section that accommodates the shuffle playing cards, and

an opening through which the cards are drawn one by one from the card accommodating section onto a game table; and

the table game system further comprises a package exchange detecting section that detects start and end of in-shoe package exchange operation of exchanging the playing cards accommodated in the card accommodating section, and

an item of the measurement of the period between the points of time when the at least two specific items occur includes

measurement of a period for which shuffle playing cards on a package basis or a set basis are used,

the period starting at a point of time when a signal representing the end of the in-shoe package exchange operation is received from the package exchange detecting section or a point of time when the card shoe is powered on, and

the period ending at a point of time when a signal representing the start of the in-shoe package exchange operation is received from the package exchange detecting section or a point of time when the card shoe is powered off.

[0012]

There is also disclosed a table game system comprising:

shuffle playing cards that are playing cards formed of a multiple number of decks and shuffled and packaged or set;

detecting section or the point of time when the card shoe is powered off, and

the period ending at the point of time when the signal representing the end of the in-shoe package exchange operation is received from the package exchange detecting section or the point of time when the card shoe is powered on,

[3] measurement of a game period that starts at a point of time when the win/loss evaluation result output in a preceding game stops and ends at a point of time when the win/loss evaluation result output in a current game stops, and

[4] calculation of a sum, an average, or dispersion of the game periods in a plurality of games in the period for which the shuffle playing cards on a package basis or a set basis are used.

[0013]

There is also disclosed a card shoe comprising:

a card accommodating section that accommodates shuffle playing cards that are playing cards formed of a multiple number of decks and shuffled and packaged or set; and

an opening through which the cards are drawn one by one from the card accommodating section onto a game table,

wherein the card shoe further includes

[Advantageous Effects]

[0014]

According to the table game system of the present disclosure, the card shoe used in a table game can be used to perform detailed analysis of a period particularly from the time when a card is drawn from a card accommodating section to the time when a result of the game is displayed, as periods associated with the progress of the game handled by a dealer, and grasp of the sum and average of the periods and dispersion and progress tendencies thereof, whereby countermeasures can be examined.

[Brief Description of Drawings]

[0015]

[Figure 1] Figure 1 is a side view of a card shoe and a management control section connected to the card shoe in an embodiment of the present invention.

[Figure 2] Figure 2 shows an overview of an entire casino in the embodiment of the present invention.

[Figure 3] Figure 3 shows an overview of a game of baccarat on a game table in the embodiment of the present invention.

[Figure 4] Figure 4 is a block diagram showing the progress of baccarat in the embodiment of the present invention.

Claims

[Claim 1]

A table game system comprising:

shuffle playing cards that are playing cards formed of a multiple number of decks and shuffled and packaged or set;

a card shoe including

a card accommodating section that accommodates the shuffle playing cards, and

an opening through which the cards are drawn one by one from the card accommodating section onto a game table; and

a management control section

wherein the management control section is configured to measure at least any one period of game period, play period, period other than play, dealing period, player's period, bet period, and settlement period of the game using the card shoe, and

measure the exclusion period that does not correspond to any of the game period, play period, period other than play, dealing period, player's period, bet period, and settlement period.

[Claim 2]

The table game system according to claim 1, wherein the management control section is configured to determine the start and end of the exclusion period, respectively.

[Claim 3]

The table game system according to claim 2, wherein the management control section is configured to determine the start and / or end of the exclusion period based on a signal from the card shoe.

[Claim 4]

The table game system according to claim 1, wherein the management control section is configured to measure at least any one period of the game period, the play period, the period other than play, the dealing period, the player's period, the bet period, and the settlement period based on the signal from the card shoe.

[Claim 5]

The table game system according to claim 1, wherein the card shoe comprises a sensor for detecting a card drawn from the card accommodating section, and is configured to output a detection signal when a card is detected, and

the management control section is configured to measure at least any one period of the game period, the play period, the period other than play, the dealing period, the player's period, the bet period, and the settlement period based on the detection signal from the card shoe.

[Claim 6]

The table game system according to claim 1, wherein the card shoe includes a button operated by a dealer, and

is configured to output a button operation signal when the button is operated, and

the management control section is configured to measure at least any one period of the game period, the play period, the period other than play, the dealing period, the player's period, the bet period, and the settlement period based on the button operation signal from the card shoe.

[Claim 7]

A table game system comprising:

a card accommodating section that accommodates shuffle playing cards consisting of multiple decks as a playing cards of one package;

a card shoe having an opening through which the cards are drawn one by one from the card accommodating section onto a game table; and

a management control section configured to determine as the start time the time when accommodation of the playing cards of the one package into the card shoe is completed, determine as an end time the time when accommodating of playing cards of the one package is started after a plurality of the playing cards are drawn from the card accommodating section, and measure a period from the start time to the end time as a use period of shuffle playing cards of the one package.

[Claim 8]

The table game system according to claim 7, wherein the management control section is configured to determine the start time and/or the end time based on an operation for the card shoe.

[Claim 9]

The table game system according to claim 7, wherein the management control section is configured to count a number of games during the use period of shuffle playing cards of the one package.

[Claim 10]

The table game system according to claim 7, wherein the management control section is configured to measure at least any one period of game period, play period, period other than play, dealing period, player's period, bet period, and settlement period of each game during the use period of shuffle playing cards of the one package.

[Claim 11]

The table game system according to claim 7, wherein the management control section determines that the end time is at least one of:

(1) when the lid becomes an opened state from a closed state in response to a signal of a sensor detecting the opening/closing of the lid provided in an upper portion of the card accommodating section of the card shoe;

(2) when the output of the winning/losing judgment result of the game is stopped in which the cut card inserted in the shuffle playing cards in the card accommodating section is drawn or the game after a predetermined number of times after the cut card is drawn;

(3) when the lid provided on an upper portion of the card accommodating section changes to the opened state from the closed state after the cut card is drawn;

(4) when a signal indicating the end of use of shuffle playing cards or the start of the package replacement work in the card shoe is input; and

(5) when the power of the card shoe is turned off.

[Claim 12]

The table game system according to claim 7, wherein the management control section determines that the start time is at least one of:

(1) when the lid changes from the opened state to the closed state in response to a signal of a sensor detecting the opening/closing of the lid provided in an upper portion of the card accommodating portion of the card shoe;

(2) when a card is drawn firstly from the card shoe;

(3) when the game bet starts;

(4) when a signal indicating the start of use of shuffle playing cards or the end of the package replacement work in the card shoe is input; and

(5) when the power of the card shoe is turned on.

[Claim 13]

A table game system comprising:

a card shoe including:

a card accommodating section that accommodates a set of cards formed by a plurality of decks of playing cards;

an opening through which the cards of the set are drawn one by one from the card accommodating section onto a game table, and

a management control section configured to:

determine an error state that is against a rule of the card game; and

memorize in a memory an occurrence of the error when the error is sensed; and

memorize in the memory a time when starting use of the set of cards and a time when ending use of the set of cards.

[Claim 14]

The table game system according to claim 13, wherein

the card shoe further includes a card sensor that senses that one of the cards is drawn from the opening,

the management control section is configured to determine the error state based on a sensing result of the card sensor.

[Claim 15]

The table game system according to claim 13, wherein

the management control section is further configured to detect a reset operation after determining the error.

[Claim 16]

The table game system according to claim 13, wherein

the management control section is further configured to count a number of the error during a period between the time when starting the use of the set of cards and the time when ending the use of the set of cards.

[Claim 17]

The table game system according to claim 13, wherein

the management control section is further configured to memorize in the memory a content of the error.