[0005]

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[Summary of Invention]

[Technical Problem]

[0006]

The present invention ~~has been made under the background described above and~~ disclosure seeks to provide~~s~~ 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]

~~Another object of t~~The present ~~invention is to~~disclosure also seeks to provide a system that can measure~~s~~ 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, equipped with a card shoe placed on a game table where a card game is played, comprising:

the card shoe including

an accommodating section that accommodates playing cards consisting of multiple decks; and

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

a reading section that reads at least a rank from the playing card drawn out from the opening; and

a determination section that determines a result of the card game based on the rank read by the reading section,

wherein the table game system further comprises a management control section that 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,

determine a number of players participating in the game, and

store the measured period associate with the number of players.

[0009]

~~To solve the problem of related art described above, the present invention provides~~

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]

~~To solve the problem of related art described above, the present invention provides~~

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]

~~To solve the problem of related art described above, the present invention provides~~

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]

~~To solve the problem of related art described above, the present invention provides~~

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]

~~To solve the problem of related art described above, the present invention provides~~

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~~ of Invention~~]

[0014]

According to the table game system of the present ~~invention~~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

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; and

a mode switcher that switches a mode to a period measurement omission mode when a card game doesn't start,

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, and

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

~~wherein the management control section is configured to be capable of measuring, 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 mode is switched to the period measurement omission mode to time when the card game starts as a measurement omission period.~~

~~[Claim 2]~~

~~The table game system according to claim1.~~

~~wherein the management control section is configured to be capable of measuring, 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 stars as a play period.~~

~~[Claim 3]~~

~~The table game system according to claim 1 or 2,~~

~~wherein~~

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

~~[1] an item of measurement of a period from the time when the win/loss evaluation result output starts to the time when the win/loss evaluation result output stops as a bet settlement period, and~~

~~[2] an item of measurement of a period from time when the win/loss evaluation result output in a preceding game stops to the time when the first card is drawn as a bet period.~~

~~[Claim 4]~~

~~The table game system according to claim 3, wherein the management control section adds a result of the measurement of the bet settlement period to a result of the measurement of the bet period and memorizes a result of the addition as a period excluding play.~~

~~[Claim 5]~~

~~The table game system according to claim 4, wherein the management control section adds the play period to a result of the measurement of the period excluding play and memorizes a result of the addition as a game period.~~

~~[Claim 6]~~

~~The table game system according to any of claims 1 to 5,~~

~~wherein as the item of the measurement of the period between the points of time when the at least two specific items occurred, at least one of~~

~~[1] an item of measurement of a period from the time when the first card is drawn to time when a fourth card is drawn as a dealing period, and~~

~~[2] an item of measurement of a period from the time when the fourth card is drawn to the time when the win/loss evaluation result output starts as a player's period~~

~~is further measured as a content of the play period.~~

~~[Claim 7]~~

~~The table game system according to any of claims 1 to 6, wherein the management control section further includes an error sensing section that memorizes a predetermined~~

~~rule of the card game and senses, based on the rule, a state of an error that is against the rule of the card game.~~

~~[Claim 8]~~

~~The table game system according to claim 7,~~

~~wherein the management control section further identifies at least one of~~

~~(1) drawing of a subsequent card from the card shoe in a course of the game, and~~

~~(2) the win/loss evaluation result output performed by the result output section~~

~~showing that the system has recovered from the error state and measures an error recovery period required from time when the error sensing section senses the error to time when recovery from the error state is achieved.~~

~~[Claim 9]~~

~~The table game system according to any of claims 1 to 8, wherein the management control section is configured to be capable of setting a standard guideline period corresponding to at least one of the measured dealing period, player's period, bet settlement period, bet period, play period, period excluding play, and game period and outputs a fact that any of the measured periods exceeds the standard guideline period.~~

~~[Claim 10]~~

~~The table game system according to any of claims 1 to 9, wherein the management control section is configured to be capable of further calculating, in a plurality of games, an average of at least one of the measured dealing period,~~

~~player's period, bet settlement period, bet period, play period, period excluding play, and game period.~~

~~[Claim 11]~~

~~The table game system according to any of claims 1 to 10, wherein the management control section is configured to be capable of further calculating a ratio among at least a plurality of the measured dealing period, player's period, bet settlement period, bet period, play period, period excluding play, and game period.~~

~~[Claim 12]~~

~~The table game system according to any of claims 1 to 11,~~

~~wherein~~

~~the management control section is configured to exclude the measured measurement omission period from at least one of the bet period, the period excluding play, and the game period in a game immediately after the operation mode switches to the period measurement omission mode.~~

~~[Claim 13]~~

~~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, and~~

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

~~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 a first card is drawn at the start of use of new shuffle playing cards is received or~~

~~a point of time when a signal representing the start of bets in a new game is received, and~~

~~the period ending at~~

~~a point of time when a cut card is drawn from the card accommodating section, or~~

~~a point of time when a game in which the cut card has been drawn from the card accommodating section or a last game of a predetermined number of games that follow a game in which the cut-card has been drawn ends, and~~

~~measurement of an in-shoe package exchange period~~

~~with the in-shoe package exchange operation starting at~~

~~the point of time when a cut card is drawn from the card accommodating section, or~~

~~the point of time when a game in which the cut card has been drawn from the card accommodating section or a last game of a predetermined number of games that follow a game in which the cut-card has been drawn ends, and~~

~~the in-shoe package exchange operation ending at~~

~~the point of time when a signal representing a first card is drawn at the start of use of new shuffle playing cards is received, or~~

~~the point of time when a signal representing the start of bets in a new game is received.~~

~~[Claim 14]~~

~~The table game system according to claim 13, wherein the management control section calculates a temporal ratio between the period for which the shuffle playing cards on a~~

~~package basis or a set basis are used and the in-shoe package exchange period.~~

~~[Claim 15]~~

~~The table game system according to claim 13,~~

~~wherein in a plurality of games in the period for which the shuffle playing cards on a package basis or a set basis are used, the management control section is further configured to be capable of~~

~~measuring a period from time when a first card is drawn in each of the games to time when the win/loss evaluation result output starts as a play period and~~

~~calculating at least one of~~

~~a sum of a plurality of play periods in the period for which the shuffle playing cards on a package basis or a set basis are used,~~

~~an average of the play periods, and~~

~~dispersion of the play period.~~

~~[Claim 16]~~

~~The table game system according to any of claims 13 to 15,~~

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

~~[1] an item of measurement of a period from the time when the win/loss evaluation result output starts to the time when the win/loss evaluation result output stops as a bet settlement period, and~~

~~[2] an item of measurement of a period from time when the win/loss evaluation result output in a preceding game stops to the time when the first card is drawn as a bet period, and~~

~~the management control section is further configured to be capable of calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the bet settlement periods or the bet 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.~~

~~[Claim 17]~~

~~The table game system according to claim 16,~~

~~wherein the management control section adds a result of the measurement of the bet settlement period to a result of the measurement of the bet period into a period excluding play and is further configured to be capable of calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the periods excluding play in the plurality of games in the period for which the shuffle playing cards on a package basis or a set basis are used.~~

~~[Claim 18]~~

~~The table game system according to claim 17,~~

~~wherein the management control section adds the play period to a result of the measurement of the period excluding play into a game period and is configured to be capable of calculating at least one of~~

~~a sum of a plurality of game periods in the period for which the shuffle playing cards on a package basis or a set basis are used,~~

~~an average of the game periods, and~~

~~dispersion of the game periods.~~

~~[Claim 19]~~

~~The table game system according to any of claims 13 to 14,~~

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

~~[1] an item of measurement of a dealing period that starts when a first card is drawn and ends when a fourth card is drawn in the play period, and~~

~~[2] an item of measurement of a player's period that starts when the fourth card is drawn and ends when the win/loss evaluation result output starts in the play period, and~~

~~the management control section is configured to be capable of further calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the dealing periods or the player's 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. [Claim 20]~~

~~The table game system according to any of claims 13 to 19, wherein the management control section is configured to be capable of setting a standard guideline period corresponding to at least one of the measured dealing period, player's period, bet settlement period, bet period, play period, period excluding play, game period, and in-shoe package exchange period and outputs a fact that any of the measured periods exceeds the standard guideline period. [Claim 21]~~

~~The table game system according to any of claims 13 to 20, wherein the management control section is configured to be capable of further calculating a ratio among at least a plurality of the calculated sum of the dealing periods, the player's periods, the bet settlement periods, the bet periods, the play periods, the periods excluding play, and the game periods and the in-shoe package exchange period. [Claim 22]~~

~~The table game system according to any of claims 13 to 21, wherein the management control section further includes an error sensing section that memorizes a predetermined rule of the card game and senses, based on the rule, a state of an error that is against the rule of the card game, and the error sensing section memorizes or outputs a number of sensed errors or contents of the sensed errors in the~~

~~period for which the shuffle playing cards on a package basis or a set basis are used.~~

~~[Claim 23]~~

~~The table game system according to claim 22,~~

~~wherein the management control section is further configured to be capable of identifying at least one of~~

~~(1) drawing of a subsequent card from the card shoe in a course of the game, and~~

~~(2) the win/loss evaluation result output performed by the result output section~~

~~showing that the system has recovered from the error state, measuring an error recovery period required from time when the error sensing section senses the error to time when recovery from the error state is achieved, and calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the error recovery period having occurred in the period for which the shuffle playing cards on a package basis or a set basis are used.~~

~~[Claim 24]~~

~~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, and~~

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

~~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 a first card is drawn at the start of use of new shuffle playing cards is received, or~~

~~a point of time when a signal representing the start of bets in a new game is received, and~~

~~the period ending at~~

~~a point of time whena cut card is drawn from the card accommodating section, or~~

~~a point of time when a game in which the cut card is drawn from the card accommodating section or a last game of a predetermined number of games that follow a game in which the cut-card has been drawn ends.~~

~~[Claim 25]~~

~~The table game system according to claim 24,~~

~~wherein in a plurality of games in the period for which the shuffle playing cards on a package basis or a set basis are used, the management control section is further configured to be capable of~~

~~measuring a period from time when a first card is drawn in each of the games to time when the win/loss evaluation result output starts as a play period and~~

~~calculating at least one of~~

~~a sum of a plurality of play periods in the period for which the shuffle playing cards on a package basis or a set basis are used,~~

~~an average of the play periods, and~~

~~dispersion of the play period.~~

~~[Claim 26]~~

~~The table game system according to any of claims 24 to 25,~~

~~wherein~~

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

~~[3] an item of measurement of a period from the time when the win/loss evaluation result output starts to the time when the win/loss evaluation result output stops as a bet settlement period, and~~

~~[4] an item of measurement of a period from time when the win/loss evaluation result output in a preceding game stops to the time when the first card is drawn as a bet period, and~~

~~the management control section is further configured to be capable of calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the bet settlement periods or the bet 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.~~

~~[Claim 27]~~

~~The table game system according to claim 26,~~

~~wherein the management control section adds a result of the measurement of the bet settlement period to a result of the measurement of the bet period into a period~~

~~excluding play and is further configured to be capable of calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the periods excluding play in the plurality of games in the period for which the shuffle playing cards on a package basis or a set basis are used.~~

~~[Claim 28]~~

~~The table game system according to claim 27,~~

~~wherein the management control section adds the play period to a result of the measurement of the period excluding play into a game period and is configured to be capable of calculating at least one of~~

~~a sum of a plurality of game periods in the period for which the shuffle playing cards on a package basis or a set basis are used,~~

~~an average of the game periods, and~~

~~dispersion of the game periods.~~

~~[Claim 29]~~

~~The table game system according to any of claims 24 to 26,~~

~~wherein the item of the measurement of the period between the points of time when the at least two specific items occur further includes at least one of~~

~~[3] an item of measurement of a dealing period that starts when a first card is drawn and ends when a fourth card is drawn in the play period, and~~

~~[4] an item of measurement of a player's period that starts when the fourth card is drawn and ends when the win/loss evaluation result output starts in the play period, and~~

~~the management control section is configured to be capable of further calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the dealing periods or the player's 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.~~

~~[Claim 30]~~

~~The table game system according to any of claims 24 to 29, wherein the management control section is configured to be capable of setting a standard guideline period corresponding to at least one of the measured dealing period, player's period, bet settlement period, bet period, play period, period excluding play, game period, and in-shoe package exchange period and outputs a fact that any of the measured periods exceeds the standard guideline period.~~

~~[Claim 31]~~

~~The table game system according to any of claims 24 to 30, wherein the management control section is configured to be capable of further calculating a ratio among at least a plurality of the calculated sum of the dealing periods, the player's periods, the bet settlement periods, the bet periods, the play periods, the periods excluding play, and the game periods and the in-shoe package exchange period.~~

~~[Claim 32]~~

~~The table game system according to any of claims 24 to 31, wherein the management control section further includes an error sensing section that memorizes a predetermined rule of the card game and senses, based on the rule, a state of an error that is against the rule of the card game, and the error sensing section memorizes or outputs a number of sensed errors or contents of the sensed errors in the period for which the shuffle playing cards on a package basis or a set basis are used.~~

~~[Claim 33]~~

~~The table game system according to claim 32,~~

~~wherein the management control section is configured to be capable of further identifying at least one of~~

~~(1) drawing of a subsequent card from the card shoe in a course of the game, and~~

~~(2) the win/loss evaluation result output performed by the result output section~~

~~showing that the system has recovered from the error state, measuring an error recovery period required from time when the error sensing section senses the error to time when recovery from the error state is achieved, and further calculating at least one of~~

~~a sum,~~

~~an average, and~~

~~dispersion~~

~~of the error recovery period having occurred in the period for which the shuffle playing cards on a package basis or a set basis are used.~~

~~[Claim 34]~~

~~The table game system according to any of claims 1 to 33,~~

~~further comprising bet area sensing means for sensing whether or not a bet is present in a bet area on the game table,~~

~~wherein the management control section further evaluates whether~~

~~(1) a bet has been placed in a player's area, and~~

~~(2) a bet has been placed in a banker's area,~~

~~based on information sensed by the beat area sensing means and representing whether or not a bet is present in the bet area, and memorizes or outputs a result of the evaluation in relation to at least one of the measured player's period, play period, or game period.~~

~~[Claim 35]~~

~~The table game system according to any of claims 1 to 34,~~

~~further comprising bet area sensing means for sensing whether or not a bet is present in a bet area on the game table,~~

~~wherein the management control section is configured to calculate data on a number of players in the table game based on information sensed by the beat area sensing means~~

~~and representing whether or not a bet is present in the bet area, and~~

~~the management control section further memorizes or outputs the calculated number of players in relation to at least one of the bet settlement period, the bet period, the period excluding play, or the game period.~~

~~[Claim 36]~~

~~The table game system according to any of claims 1 to 35, wherein the table game system further comprises dealer ID sensing means for sensing a dealer ID given to a dealer responsible for a game table in use, and the management control section memorizes or outputs the sensed dealer ID in relation to at least one of the periods measured as the item of the measurement of the period between the points of time when the at least two specific items occur.~~

~~[Claim 37]~~

~~The table game system according to any of claims 1 to 36,~~

~~further comprising a mode switcher that switches a mode in accordance with which the management control section operates to a period measurement omission mode in which the management control section does not measure the period between the points of time when the specific items occur in the table game, and~~

~~the management control section is configured to further measure a measurement omission period that starts at time when the mode switcher switches the mode in accordance with which the management control section~~

~~operates to the period measurement omission mode and ends at time when the operation mode changes from the period measurement omission mode and further configured to exclude the measured measurement omission period from the bet period, the period excluding play, or the game period in a game immediately after the operation mode switches to the period measurement omission mode.~~

~~[Claim 38]~~

~~The table game system according to any of claims 1 to 37, wherein the management control section further includes output means for outputting at least one of results of the measurement to an apparatus external to the card shoe in a wired or wireless manner.~~

~~[Claim 39]~~

~~The table game system according to any of claims 1 to 38, wherein the management control section is accommodated in the card shoe.~~

~~[Claim 40]~~

~~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~~

~~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; and~~

~~a mode switcher that switches a mode to a period measurement omission mode when the card game doesn't start~~

~~wherein the management control section is configured to be capable of measuring, 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 mode is switched to the period measurement omission mode to time when the card game starts.~~

~~[Claim 41]~~

~~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,~~

~~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 a first card is drawn at the start of use of new shuffle playing cards is received or~~

~~a point of time when a signal representing the start of bets in a new game is received, and~~

~~the period ending at~~

~~a point of time when a cut card is drawn from the card accommodating section, or~~

~~a point of time when a game in which the cut card is drawn from the card accommodating section or a last game of a predetermined number of games that follow a game in which the cut-card has been drawn ends, and~~

~~measurement of an in-shoe package exchange period~~

~~with the in-shoe package exchange operation starting at~~

~~the point of time when a cut card is drawn from the card accommodating section, or~~

~~the point of time when a game in which the cut card is drawn from the card accommodating section or a last game of a predetermined number of games that follow a game in which the cut-card has been drawn ends, and~~

~~the in-shoe package exchange operation ending at~~

~~the point of time when a signal representing a first card is drawn at the start of use of new shuffle playing cards is received, or~~

~~the point of time when a signal representing the start of bets in a new game is received.~~

~~[Claim 42]~~

~~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,~~

~~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 a first card is drawn at the start of use of new shuffle playing cards is received, or~~

~~a point of time when a signal representing the start of bets in a new game is received, and~~

~~the period ending at~~

~~a point of time whena cut card is drawn from the card accommodating section, or~~

~~a point of time when a game in which the cut card is drawn from the card accommodating section or a last game of a predetermined number of games that follow a game in which the cut-card has been drawn ends.~~

[Claim 1]

A table game system, equipped with a card shoe placed on a game table where a card game is played, comprising:

the card shoe including

an accommodating section that accommodates playing cards consisting of multiple decks; and

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

a reading section that reads at least a rank from the playing card drawn out from the opening; and

a determination section that determines a result of the card game based on the rank read by the reading section,

wherein the table game system further comprises a management control section that 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,

determine a number of players participating in the game, and

store the measured period associate with the number of players.

[Claim 2]

The table game system according to claim 1, wherein the management control unit has a time measurement exclusion mode that does not measure an interval between occurrence times of the specific item.

[Claim 3]

The table game system according to claim 2, wherein the management control section starts the time measurement exclusion mode according to an operation, and ends the time measurement exclusion mode according to an operation.

[Claim 4]

The table game system according to any of claims 1 to 3, wherein the management control section stores the time of withdrawal of the first card and the time of withdrawal of the last card, in each card game, as the occurrence times of the specific item, and calculates the interval between the withdrawal time of the first card and the withdrawal time of the last card, in each card game, as a dealing period.

[Claim 5]

The table game system according to any of claims 1 to 4, wherein the management control section stores the withdrawal time of the last card and the time of output start of the determination result in the determination section, in each card game, as the occurrence times of the specific item, and calculates the interval between the withdrawal time of the last card and the time of output start of the determination result, in each card game, as a player's period.

[Claim 6]

The table game system according to claim 5, wherein the management control unit calculates a sum of the dealing period and the player's period, in each card game, as a play period.

[Claim 7]

The table game system according to any of claims 1 to 3, wherein the management control section stores a withdrawal time of a first card and a time of output start of a determination result in the determination unit, in each card game, as the occurrence times of the specific item, and calculates the interval between the withdrawal time of the first card in each card game and the time of output start of a determination result, in each card game, as a play period.

[Claim 8]

The table game system according to any of claims 1 to 7, wherein the management control section stores a time of output start of the determination result in the determination unit, and a time of output stop of the determination result in the determination unit, in each card game, as the occurrence times of the specific item, and calculates an interval between the time of output start of the determination result and the time of output stop of the determination result, in each card game, as a settlement period.

[Claim 9]

The table game system according to any of claims 1 to 8, wherein the management control section stores a time of output stop of the determination result in the determination unit and a withdrawal time of the first card, in each card game, as the occurrence times of the specific item, and calculates an interval between the time of output stop of the determination result and the withdrawal time of the first card, in each card game, as a bet period.

[Claim 10]

The table game system according to claim 9, wherein the management control section calculates a sum of the settlement time and the bet time, in each card game, as a period excluding play.

[Claim 11]

The table game system according to any of claims 1 to 8, wherein the management control section stores the time of output start of the determination result in the determination unit and the withdrawal time of a first card, in each card game, as the occurrence times of the specific item, respectively, and calculates an interval between the time of output start of the determination result and the withdrawal time of the first card, in each card game, as a period excluding play.

[Claim 12]

The table game system according to claim 10 or 11, wherein the management control section calculates a sum of the play period and the period excluding play as the game period.

[Claim 13]

The table game system according to any of claims 1 to 12, wherein the management control section further calculates a total period, an average period, and/or a dispersion of the game period.