Description

[Title of Invention] Card Shoe Apparatus and Game System

[Technical Field]

[0001]

The present invention relates to a card shoe apparatus having a function of preventing cheating in card games such as baccarat that are played using playing cards (hereinafter simply referred to as "cards"), a table game system and a method.

[Background Art]

[0002]

Conventional card shoe apparatuses that are suitable for use in card games played in casinos or the like have been proposed. For example, a card shoe apparatus is disclosed in Patent Literature 1. In the card shoe apparatus of Patent Literature 1, a CCD image sensor and the related optical system components are incorporated in the card shoe. Also, a card reading window is provided in the exit of the card shoe. When a card passes through the exit of the shoe, the suit (type) and the rank (number) of the card are read through the card reading window.

[Citation List]

[0003]

Patent Literature 1: JP 1998-508236A (page 12, Fig.1)

[Summary of Invention]

[Technical Problem]

[0004]

However, such a conventional apparatus could not prevent a fraudulent act such as the insertion of false cards from the exit of the card shoe.

[0005]

The present ~~invention has been made in view of the above problem, and~~disclosure aims to provide a card shoe and a table game system with which it is possible to prevent the fraudulent insertion of cards into a card shoe used in the card game or the fraudulent dealing of cards, as well as the dealing of any card that should not be dealt onto the game table.

[0006]

[Solution to Problem]

~~To solve the above conventional problems, the present invention~~

~~provides a card shoe apparatus including:~~

~~a card housing unit for housing a plurality of cards;~~

~~an opening unit for manually taking out cards one by one from the card housing unit;~~

~~a card reading unit that reads information of a card that is manually drawn out from the card housing unit onto a game table from that card;~~

~~a control unit that stores rules of a card game and determines the winning/losing of the card game according to the rules of the card game based on the information of a card read by the card reading unit;~~

~~a display unit that outputs a winning/losing result as determined by the control unit; and~~

~~a card entry/exit restriction means that is provided in the opening unit and restricts the entry/exit of a card from the card housing unit,~~

~~the card housing unit, the card reading unit, the control unit, the display unit and the card entry/exit restriction means being configured as a single unit,~~

~~wherein the card entry/exit restriction means includes:~~

~~1) a function of prohibiting the insertion of a card that is inserted from the exterior toward the card housing unit via the opening unit in an opposite direction ; and~~

~~2) a function of prohibiting, based on the information of a card read by the card reading unit, the drawing out of any additional card in a case where no additional card needs to be drawn out from the card housing unit.~~

An aspect of the present invention provides a method of delivering cards from a card housing unit during a card game, the card housing unit having (i) a guide unit in which the cards are manually moved, and (ii) an opening from which the cards are manually drawn one by one and, the method comprising: detecting a card which is located at the opening for a period of time longer than a predetermined period of time, or a manual attempt drawing of a card from the opening after the card game ends; and outputting a signal of a result of the detection for preventing further delivery of the cards.

Another aspect of the present invention provides a method of delivering cards from a card housing unit during a card game, the card housing unit having (i) a guide unit in which the cards are manually moved, and (ii) an opening from which the cards are manually drawn one by one, the method comprising: detecting an inappropriate

attempt at manually drawing a card from the opening; and outputting a signal of a result of the detection for preventing further drawing of the card through the opening.

[0007]

[Advantageous Effects of Invention]

~~With the present invention~~As disclosed herein, it is possible to provide a card shoe apparatus and a table game system capable of preventing, on site, any fraudulent act such as the fraudulent insertion of cards into a card shoe apparatus, false or inappropriate dealing of cards, or the like.

[0008]

[Brief Description of Drawings]

[Fig. 1] Fig. 1 is a block diagram illustrating the entirety of a card shoe apparatus according to an embodiment of the present invention.

[Fig. 2] Fig. 2 shows an example of a card according to the embodiment of the present invention.

[Fig. 3] Fig. 3 is a plan view of a main portion of a card guide of the card shoe apparatus, with the card guide partially broken.