SUMMARY OF THE INVENTION

PROBLEM TO BE SOLVED BY THE INVENTION

[0004]

However, proper management analysis cannot be made merely by ascertaining the magnitude of the income. That is, if the income is diverged from a target amount or an ideal amount, the game organizer of the casino play hall cannot acquire information about room for improvement.

[0005]

Embodiments of the present invention seek to provide a table game management system capable of acquiring useful management information for improvement in the management and operation of the casino play hall.

SOLUTION TO SOLVE THE PROBLEM

[0005a]

An aspect of the present invention provides a table game management system for use with gaming chips (a) that each includes a plurality of plastic colored portions that are of varying colors and (b) a respective type of each of which is identifiable from its respective appearance, the table game management system comprising: a camera; and at least one processor, wherein the at least one processor is configured to: determine a respective win-loss result (WL) of each of a plurality of games at a game table for a bet area of the game table; use the camera to detect respective positions, types, and numbers of those of the gaming chips that are respectively placed, by respective ones of at least one game participant, on the bet area for each of the plurality of games; store the

detected respective positions, types, and numbers; based on the detected respective positions, types, and numbers, determine a total bet amount (B) formed by the gaming chips placed on the bet area of the game table for a predetermined number of games; based on the determined win-loss result and the detected respective positions, types, and numbers, determine a winning or losing amount of a game organizer for the predetermined number of games; determine a sales profit ratio (X) of the winning or losing amount of the game organizer to the total bet amount (B) for the predetermined number of games; compare the sales profit ratio (X) to a theoretical profit ratio or a previous average profit ratio; and generate an alarm in response to a result of the comparison.

[0005b]

Another aspect of the present invention provides a table game management system for use with gaming chips that each includes a unique ID, the table game management system comprising: a reader configured to read the unique IDs of the gaming chips; and at least one processor, wherein the at least one processor is configured to: determine a respective win-loss result (WL) of each of a plurality of games at a game table for a bet area of the game table; use the unique IDs read by the reader to detect respective positions, types, and numbers of those of the gaming chips that are respectively placed, by respective ones of at least one game participant, on the bet area for each of the plurality of games; store the detected respective positions, types, and numbers; based on the detected respective positions, types, and numbers,

determine a total bet amount (B) formed by the gaming chips placed on the bet area of the game table for a predetermined number of games; based on the determined win-loss result and the detected respective positions, types, and numbers, determine a winning or losing amount of a game organizer for the predetermined number of games; determine a sales profit ratio (X) of the winning or losing amount of the game organizer to the total bet amount (B) for the predetermined number of games; compare the sales profit ratio (X) to a theoretical profit ratio or a previous average profit ratio; and generate an alarm in response to a result of the comparison.

[0006]

There is also disclosed a table game management system including: a win-loss determination device configured to determine a win-loss result of each game at a game table; a measurement device configured to measure the type and the number of gaming chips placed on the game table; and a management and control device configured to identify and store the position, the type, and the number of the gaming chips placed on a bet area of the game table by a game participant, based on a measurement result of the measurement device in each game, wherein the gaming chip has a plurality of plastic colored