CLAIMS

1. An alerting method, comprising:

acquiring a result of a game played at a game table and a plurality of frames of first images obtained by shooting the game table at a settlement stage of the game, the game table comprising at least one placement area for placing game currencies;

determining, based on the plurality of frames of the first images, an actual settlement action of a game controller for each placement area, wherein the actual settlement action comprises at least one of an action of collecting the game currencies or an action of delivering the game currencies;

determining, based on the result of the game, a settlement action required to be performed by the game controller; and

outputting alert information in a case that the actual settlement action does not match the settlement action required to be performed,

wherein determining, based on the plurality of frames of the first images, the actual settlement action of the game controller for each placement area comprises:

detecting change information of the game currencies in each placement area based on the plurality of frames of the first images; and

determining the actual settlement action of the game controller in each placement area based on the change information of the game currencies in each placement area,

wherein the method further comprises: determining, based on the plurality of frames of the first images, a game currency operator associated with the change information of the game currencies in each placement area, wherein it is determined whether the game currency operator is the game controller based on a face associated with a hand appearing in a placement area of a loser, or the game currency operator is determined as the game

controller when it is detected that the game currencies in the placement area of the loser are emptied and then increased,

determining the actual settlement action of the game controller in each placement area based on the change information of the game currencies in each placement area comprises:

in a case that the game currency operator is the game controller, determining the actual settlement action of the game controller in each placement area based on the change information of the game currencies in each placement area.

2. The method of claim 1, wherein the game table further comprises a game prop operation area, and acquiring the result of the game played at the game table comprises:

obtaining at least one frame of a second image obtained by shooting the game table at a game prop operation stage of the game;

determining information about game props within the game prop operation area based on the at least one frame of the second image; and

generating the result of the game according to the information about the game props.

3. The method of any one of claims 1 to 2, wherein the plurality of frames of the first images are acquired as follows:

receiving the plurality of frames of the first images which are obtained by shooting the game table with at least one camera mounted on a side and/or top of the game table and sent by the at least one camera; or

receiving at least one video which is obtained by shooting the game table with at least one camera mounted on a side and/or top of the game table and sent by the at least one camera, and intercepting the plurality of frames of the first images from the at least one video.

4. The method of any one of claims 1 to 3, wherein outputting the alert information comprises outputting the alert information to a management system.

5. The method of any one of claims 1 to 4, wherein after outputting the alert information, the method further comprises:

outputting cancellation information indicating cancellation of an alert, in a case that it is determined that the game controller withdraws an actual settlement action not matching the settlement action required to be performed based on at least one frame of a third image obtained by shooting the game table at the settlement stage of the game.

6. The method of any one of claims 1 to 5, wherein the at least one placement area comprises a first placement area and a second placement area, and the result of the game comprises a winning/losing determination result between a player corresponding to the first placement area and a player corresponding to the second placement area; and

determining, based on the result of the game, the settlement action required to be performed by the game controller comprises:

in a case that the player corresponding to the first placement area is a winner and the player corresponding to the second placement area is a loser, determining that the settlement action required to be performed in the first placement are is the action of delivering the game currencies, and determining that the settlement action required to be performed in the second placement area is the action of collecting the game currencies; or

in a case that the player corresponding to the first placement area is a loser and the player corresponding to the second placement area is a winner, determining that the settlement action required to be performed in the first placement are is the action of collecting the game currencies, and determining that the settlement action required to be performed in

the second placement area is the action of delivering the game currencies.

7. The method of any one of claims 1 to 6, wherein determining, based on the result of the game, the settlement action required to be performed by the game controller comprises:

determining, based on the result of the game, that a placement area where the settlement action required to be performed is the action of collecting the game currencies is the placement area of a loser, and a placement area where the settlement action required to be performed is the action of delivering the game currencies is the placement area of a winner; and

outputting the alert information in a case that the actual settlement action does not match the settlement action required to be performed comprises at least one of:

outputting first alert information in a case that it is detected that the actual settlement action performed by the game controller on the placement area of the winner is the action of collecting the game currencies; wherein the first alert information indicates that the game controller collects the game currencies in the placement area of the winner; and/or

outputting second alert information in a case that it is detected that the actual settlement action performed by the game controller on the placement area of the loser is the action of delivering the game currencies; wherein the second alert information indicates that the game controller increases the game currencies in the placement area of the loser.

8. The method of any one of claims 1 to 6, wherein determining, based on the result of the game, the settlement action required to be performed by the game controller comprises:

determining, based on the result of the game, that the settlement action required to be performed is delivering the game currencies in the placement area of the winner, after completion of collecting the game currencies in the placement area of a loser, and

outputting alert information in a case that the actual settlement action does not match

the settlement action required to be performed comprises:

outputting third alert information, in a case that it is detected that the game controller does not collect all of the game currencies in the placement area of the loser and delivers the game currencies in the placement area of the winner; wherein the third alert information indicates that the game controller does not collect all of the game currencies in the placement area of the loser and delivers the game currencies in the placement area of the winner.

9. The method of claim 1, wherein the plurality of frames of the first images comprise: at least one frame of a first sub-image, and at least one frame of a second sub-image shot after the at least one frame of the first sub-image; and

detecting the change information of the game currencies in each placement area based on the plurality of frames of the first images comprises:

determining a first attribute value of the game currencies in each placement area in the first sub-image, the attribute value comprising at least one of a quantity or a total value;

determining a second attribute value of the game currencies in each placement area in the second sub-image; and

determining the change information of the game currencies in each placement area based on the first attribute value of the game currencies and the second attribute value of the game currencies for a same placement area.

10. The method of claim 1, wherein the plurality of frames of the first images comprise at least one frame of a third sub-image, and at least one frame of a fourth sub-image shot after the at least one frame of the third sub-image;

detecting the change information of the game currencies in each placement area based on the plurality of frames of the first images comprises:

determining that the game currencies in a predetermined placement area in each of the third sub-image are emptied; and

determining the change information of the game currencies in each placement area, in a case that game currencies exists in the predetermined placement area of each of the at least one fourth sub-image and attribute values of the game currencies are the same, wherein the attribute values comprise at least one of a quantity or a total value.

11. The method of claim 1, wherein the plurality of frames of the first images comprise at least one frame of a fifth sub-image, and at least one frame of a sixth sub-image shot after the at least one frame of the fifth sub-image;

detecting the change information of the game currencies in each placement area based on the plurality of frames of the first images comprises:

determining, in the fifth sub-image, a third attribute value of the game currencies in a first placement area corresponding to which a player is a winner and a fourth attribute value of the game currencies in a second placement area corresponding to which a player is a loser, the attribute value comprising at least one of a quantity or a total value;

determining, in the sixth sub-image, a fifth attribute value of the game currencies in the first placement area and a sixth attribute value of the game currencies in the second placement area; and

determining the change information of the game currencies in each placement area based on the third attribute value of the game currencies, the fourth attribute value of the game currencies, the fifth attribute value of the game currencies and the sixth attribute value of the game currencies.

12. An alerting device comprising:

an acquisition unit configured to acquire a result of a game played at a game table and a plurality of frames of first images obtained by shooting the game table at a settlement stage of the game, the game table comprising at least one placement area for placing game currencies;

a determination unit configured to determine, based on the plurality of frames of the first images, an actual settlement action of a game controller for each placement area, wherein the actual settlement action comprises at least one of an action of collecting the game currencies or an action of delivering the game currencies; and determine, based on the result of the game, a settlement action required to be performed by the game controller; and

an output unit configured to output alert information in a case that the actual settlement action does not match the settlement action required to be performed,

wherein the determination unit is further configured to:

detect change information of the game currencies in each placement area based on the plurality of frames of the first images; and

determine the actual settlement action of the game controller in each placement area based on the change information of the game currencies in each placement area,

wherein the determination unit is further configured to: determine, based on the plurality of frames of the first images, a game currency operator associated with the change information of the game currencies in each placement area, wherein it is determined whether the game currency operator is the game controller based on a face associated with a hand appearing in a placement area of a loser, or the game currency operator is determined as the game controller when it is detected that the game currencies in the placement area of the loser are emptied and then increased, and

determine the actual settlement action of the game controller in each placement area based on the change information of the game currencies in each placement area, in a case that the game currency operator is the game controller.

13. An alerting apparatus comprising a memory and a processor, the memory storing computer programs executable by the processor, the processor implementing the operations of the method of any one of claims 1 to 11 when executing the computer programs.

14. A computer storage medium storing one or more programs executable by one or more processors to implement the operations of the method of any one of claims 1 to 11.