CLAIMS:

1. A chip recognizing and learning system of an amusement place having a gaming table, the system comprising:

a game recording device configured to record a state of chips piled up on the gaming table as an image by a camera;

a chip determining device including an artificial intelligence device for performing learning by a plurality of teaching data in advance, and configured to analyze the recorded image of the state of chips, and determine numbers and kinds of the chips that are bet by a player;

wherein: the system comprises a teaching device configured to, in a case where it is determined that there is a doubt for an error of a result of the determination by the chip determining device, input an image used for the determination of the chip determining device and the correct numbers and the correct kinds of the chips for the error as teaching data to the artificial intelligence device to allow the artificial intelligence device to perform additional learning, and

wherein the chip determining device can determine kinds, the numbers, and positions of the bet chips, even when some of the plurality of the chips put on the gaming table are partially or entirely hidden due to a blind spot of the camera.

2. The chip recognizing and learning system according to claim 1, wherein

the teaching device is configured to, in a case where it is determined that the determining result of the chip determining device is correct, further input an image used for the determination of the chip determining device and the numbers and kinds of the chips of the determining result as teaching

data to the artificial intelligence device to allow the artificial intelligence device to perform learning.

3. A chip recognizing and learning system of an amusement place having a gaming table, the system comprising:

a game recording device configured to record a state of chips piled up on the gaming table as an image by a camera;

a chip determining device including an artificial intelligence device for performing learning by a plurality of teaching data in advance, and configured to analyze the recorded image of the state of chips, and determine numbers and kinds of the chips that are bet by a player;

wherein: the artificial intelligence device is configured to, in a case where it is determined that there is a doubt of a correctness of a result of the determination by the chip determining device, input by the teaching device an image used for the determination of the chip determining device and the correct numbers and the correct kinds of the chips for the error as teaching data and perform additional learning, and

wherein the chip determining device can determine kinds, the numbers, and positions of the bet chips, even when some of the plurality of the chips put on the gaming table are partially or entirely hidden due to a blind spot of the camera.

4. The chip recognizing and learning system according to claim 1 or 3, further comprising a control device configured to determine whether the result of the determination by the chip determining device is correct, wherein:

the table is a gaming table;

the chip determining device is configured to determine: the kinds and the numbers of the chips that are in a chip tray included in the gaming table; and positions, the kinds, and the numbers of the chips that are bet respectively by each of a

plurality of players in a game performed on the gaming table; and

the control device is configured to determine an actual total amount of the chips in the chip tray when retrieval of all losing chips bet by the plurality of players ends, calculate a necessary total amount of the chips in the chip tray by adding an increased amount of the chip tray in the game calculated from the kinds and the numbers of the chips bet by a losing player of the plurality of players, which is based on the result of the determination by the chip determining device, to the total amount of the chips in the chip tray obtained before settlement of the game, compare the necessary total amount of the chips in the chip tray to the actual total amount of the chips in the chip tray, and determine that there is the doubt when a result of the comparison is that there is a difference between the necessary total amount and the actual total amount.

5. The chip recognizing and learning system according to claim 4, wherein

the control device is configured to determine the actual total amount of the chips in the chip tray based on radio frequency identifications (RFIDs) provided in the chips.

6. The chip recognizing and learning system according to claim 4, wherein

the control device includes an artificial intelligence device for deciding a correct answer that is different than the artificial intelligence device of the chip determining device, and is configured to determine the actual total amount of the chips in the chip tray based on the image recorded in the game recording device.

7. The chip recognizing and learning system according to

claim 4, wherein

the game recording device records the image acquired from the camera after giving, to the image, an index or a time, or a tag specifying a retrieval scene or a payment scene of the chips, such that the chip determining device can analyze a record of the game.

8. A chip recognizing and learning method in an amusement place having a gaming table, the method comprising:

a game recording step of recording a state of chips piled up on the gaming table as an image by a camera;

a chip determining step of analyzing, by an artificial intelligence device for performing learning by a plurality of teaching data in advance, the recorded image of the state of the chips to determine the numbers and kinds of chips bet by a player; and

a teaching step of inputting, in a case where it is determined that there is a doubt for an error in a determining result of the chip determining step, the image used for determination of the chip determining step and the correct numbers and correct kinds of the chips for the error as teaching data to the artificial intelligence device to allow the artificial intelligence device to perform learning, and

wherein at the chip determining step, it can determine kinds, the numbers, and positions of the bet chips even when some of the plurality of the chips put on the gaming table are partially or entirely hidden due to a blind spot of the camera.

9. A chip recognizing and learning system of an amusement place having a gaming table, the system comprising:

a game recording device configured to record a state of chips piled up on the gaming table as an image by a camera;

a chip determining device including an artificial

intelligence device for performing learning by a plurality of teaching data in advance, and configured to analyze the recorded image of the state of chips, and determine numbers and kinds of the chips that are bet by a player;

wherein: the system further comprises a teaching device configured to, in a case where it is determined that the determining result of the chip determining device is correct, input by the teaching device an image used for the determination of the chip determining device and the correct numbers and the correct kinds of the chips for the error as teaching data and perform additional learning, and

wherein the chip determining device can determine kinds, the numbers, and positions of the bet chips even when some of the plurality of the chips put on the gaming table are partially or entirely hidden due to a blind spot of the camera.

10. A chip recognizing and learning system of an amusement place having a gaming table, the system comprising:

a game recording device configured to record a state of chips piled up on the gaming table as an image by a camera;

a chip determining device including an artificial intelligence device for performing learning by a plurality of teaching data in advance, and configured to analyze the recorded image of the state of chips, and determine numbers and kinds of the chips that are bet by a player;

wherein: the artificial intelligence device is configured to, in a case where it is determined that the determining result of the chip determining device is correct, input by the teaching device an image used for the determination of the chip determining device and the correct numbers and the correct kinds of the chips for the error as teaching data and perform additional learning, and

wherein the chip determining device can determine kinds,

the numbers, and positions of the bet chips even when some of the plurality of the chips put on the gaming table are partially or entirely hidden due to a blind spot of the camera.

11. The chip recognizing and learning system according to claim 9 or 10, further comprising a control device configured to determine whether the result of the determination by the chip determining device is correct, wherein:

the table is a gaming table;

the chip determining device is configured to determine: the kinds and the numbers of the chips that are in a chip tray included in the gaming table; and positions, the kinds, and the numbers of the chips that are bet respectively by each of a plurality of players in a game performed on the gaming table; and

the control device is configured to determine an actual total amount of the chips in the chip tray when retrieval of all losing chips bet by the plurality of players ends, calculate a necessary total amount of the chips in the chip tray by adding an increased amount of the chip tray in the game calculated from the kinds and the numbers of the chips bet by a losing player of the plurality of players, which is based on the result of the determination by the chip determining device, to the total amount of the chips in the chip tray obtained before settlement of the game, compare the necessary total amount of the chips in the chip tray to the actual total amount of the chips in the chip tray, and determine that there is the doubt when a result of the comparison is that there is a difference between the necessary total amount and the actual total amount.

12. The chip recognizing and learning system according to claim 11, wherein

the control device is configured to determine the actual

total amount of the chips in the chip tray based on radio frequency identifications (RFIDs) provided in the chips.

13. The chip recognizing and learning system according to claim 11, wherein

the control device includes an artificial intelligence device for deciding a correct answer that is different than the artificial intelligence device of the chip determining device, and is configured to determine the actual total amount of the chips in the chip tray based on the image recorded in the game recording device.

14. The chip recognizing and learning system according to claim 11, wherein

the game recording device records the image acquired from the camera after giving, to the image, an index or a time, or a tag specifying a retrieval scene or a payment scene of the chips, such that the chip determining device can analyze a record of the game.

15. A chip recognizing and learning method in an amusement place having a gaming table, the method comprising:

a game recording step of recording a state of chips piled up on the gaming table as an image by a camera;

a chip determining step of analyzing, by an artificial intelligence device for performing learning by a plurality of teaching data in advance, the recorded image of the state of the chips to determine the numbers and kinds of chips bet by a player; and

a teaching step of inputting, in a case where it is determined that the determining result of the chip determining device is correct, input by the teaching device an image used for the determination of the chip determining device and the

correct numbers and the correct kinds of the chips for the error as teaching data and perform additional learning, and

wherein the chip determining device can determine kinds, the numbers, and positions of the bet chips even when some of the plurality of the chips put on the gaming table are partially or entirely hidden due to a blind spot of the camera.