CLAIMS

1. A gaming chip recognition system for a casino, the gaming chip recognition system comprising:

a camera configured to capture an image of a plurality of gaming chip stacks from diagonally above the plurality of gaming chips to capture the plurality of gaming chip stacks, each gaming chip stack of the plurality of gaming chip stacks having a different distance from the camera; and

at least one processor configured to:

perform an image analysis of the image using an artificial intelligence technology or deep learning technology to recognize the plurality of gaming chip stacks that appeared in the image;

determine respective numbers of gaming chips of each chip stack of the recognized plurality of gaming chip stacks;

recognize a position on a game table of at least one gaming chip included in the plurality of gaming chip stacks, the position including coordinates on the game table; and

based on the position of the at least one gaming chip, determine a purpose of the gaming chip being placed on the game table.

2. The gaming chip recognition system according to claim 1, wherein the at least one processor is further configured to determine position of each of the plurality of gaming chip stacks.

3. The gaming chip recognition system according to claim 1, wherein the at least one processor is further configured to recognize types of the gaming chips in the gaming chip stacks.

4. The gaming chip recognition system according to claim 1, wherein the at least one processor is further configured to recognize chip IDs of the gaming chips in the gaming chip stacks.

5. The gaming chip recognition system according to claim 1, further comprising:

a chip ID reader configured to read chip IDs of gaming chips held in a chip tray, and

wherein:

each gaming chip of the gaming chips has the chip ID by means of RFID, and

the chip ID reader reads the RFIDs of the gaming chips held in the chip tray.

6. The gaming chip recognition system according to claim 1, wherein the at least one processor is configured to perform the image analysis of the image which is captured according to a predetermined trigger by the camera.

7. The gaming chip recognition system according to claim 1, wherein the camera is configured to capture gaming chips placed in a betting area on a gaming table.

8. The gaming chip recognition system according to claim 1, wherein the camera is configured to capture gaming chips placed on a chip tray of a gaming table.

9. The gaming chip recognition system according to claim 1, wherein the camera is configured to capture gaming chips placed in a storage.

10. The gaming chip recognition system according to claim 1, wherein the camera is configured to capture gaming chips during transit from a backyard.

11. The gaming chip recognition system according to claim 1, wherein the at least one processor is configured

to recognize, by using the artificial intelligence technology, a gaming chip stack even when a portion of the gaming chips are hidden by a blind spot of the camera.

12. The gaming chip recognition system according to claim 1, wherein the at least one processor is configured to recognize, by using the artificial intelligence technology, a gaming chip stack even when the chip stack consists of multiple gaming chips stacked out of alignment with each other.

13. The gaming chip recognition system according to claim 1, further comprising a database that stores information of the gaming chips.

14. The gaming chip recognition system according to claim 1, wherein the plurality of gaming chip stacks appear in the image at different sizes.

15. The gaming chip recognition system according to claim 1, wherein the at least one processor configured to:

determine an amount of each of the plurality of gaming chip stacks based on a recognized type of each gaming chip in the plurality of gaming chip stacks, the plurality of gaming chip stacks including a gaming chip

stack placed by a dealer and a gaming chip stack placed by a player;

distinguish the gaming chip stack placed by the dealer from the gaming chip stack placed by the player; and

determine whether the amount of the chip stack placed by the dealer matches the amount of the chip stack placed by the player.

16. A gaming chip recognition system for a casino, the gaming chip recognition system comprising:

a camera configured to capture an image of a plurality of gaming chip stacks from diagonally above the plurality of gaming chips to capture the plurality of gaming chip stacks during transit from a backyard, each gaming chip stack of the plurality of gaming chip stacks positioned a different distance from the camera; and

at least one processor configured to:

perform an image analysis of the image using an artificial intelligence technology or deep learning technology to recognize the plurality of gaming chip stacks that appeared in the image; and

determine respective numbers of gaming chips of each chip stack of the recognized plurality of gaming chip stacks.

17. A gaming chip recognition system for a casino, the gaming chip recognition system comprising:

a camera configured to capture an image of a plurality of gaming chip stacks from diagonally above the plurality of gaming chips to capture the plurality of gaming chip stacks; and

at least one processor configured to:

perform an image analysis of the image using an artificial intelligence technology or deep learning technology to recognize the plurality of gaming chip stacks that appeared in the image;

determine respective numbers of gaming chips of each chip stack of the recognized plurality of gaming chip stacks;

for a first stack of the plurality of gaming chip stack:

recognize a position on a game table of a gaming chip included in the first stack, the position including coordinates on the game table; and

based on the position of the one gaming chip, determine a purpose of the gaming chip being placed on the game table.