CLAIMS

1. A recognition system for recognizing a chip used on a game table of a game house, the chip configured to at least partially have a specific color indicative of a value of the chip, the recognition system comprising:

a recording device that uses a camera and records a state of the chip as an image;

an image analysis device that subjects the image so recorded to image analysis and recognizes at least two colors being the specific color and a reference color that is present in the image and differs from the specific color; and

a recognition device at least including an artificial intelligence device that uses a result of the image analysis by the image analysis device and specifies the specific color of the chip, wherein

the artificial intelligence device of the chip recognition device has been subjected to teaching using, as training data, a plurality of images of the chip and the reference color irradiated with different illumination intensities.

2. The recognition system according to claim 1, wherein

the chip at least has the specific color, which is indicative of the value of the chip, at a predetermined position or with a predetermined shape.

3. The recognition system according to claim 1, wherein

the recognition device specifies the specific color of the chip to specify a quantity in which the chip is provided.

4. The recognition system according to claim 1, wherein

the recognition device specifies specific colors of a plurality of the chips chip-by-chip to specify a quantity of chips of each of the specific colors.

5. The recognition system according to any one of claims 1 to 4, wherein

the artificial intelligence device of the recognition device has been subjected to teaching using, as training data, a plurality of images of the reference color and the chip irradiated under different lighting environments.

6. The recognition system according any one of claims 1 to 4, wherein

the artificial intelligence device of the recognition device determines the specific color of the chip by using a relative relation with the reference color.

7. The recognition system according to any one of claims 1 to 4, wherein

the recognition device determines specific colors of a plurality of the chips stacked one on top of another, and is configured to be capable of determining the specific colors or a quantity of the chips even when some of the chips are in hidden state due to a dead angle of the camera.

8. A recognition system for recognizing an article, the article at least partially having, on the article itself or a wrapping of the article, a specific color enabling the article or the wrapping to be specified, the recognition system comprising:

a recording device that uses a camera and records a state of the article as an image;

an image analysis device that subjects the image so recorded to image analysis and recognizes at least two colors being the specific color and a reference color that is present in the image and differs from the specific color; and

a recognition device at least including an artificial

intelligence device that uses a result of the image analysis by the image analysis device and specifies the specific color of the article itself or the wrapping, wherein

the artificial intelligence device of the recognition device has been subjected to teaching using, as training data, a plurality of images of the reference color and the specific color of the article itself or the wrapping irradiated with different illumination intensities.

9. The recognition system according to claim 8, wherein

the article itself or the wrapping at least partially has the specific color, which enables the article or the wrapping to be specified, at a predetermined position or with a predetermined shape.

10. The recognition system according to claim 8, wherein

the recognition device specifies the specific color of the article itself or the wrapping to specify a quantity in which the article is provided.

11. The recognition system according to claim 10, wherein

the recognition device specifies specific colors of a plurality of the articles themselves or the wrappings of the articles article-by-article to specify a quantity of articles of each of the specific colors.

12. The recognition system according to any one of claims 8 to 11, wherein

the artificial intelligence device of the recognition device has been subjected to teaching using, as training data, a plurality of images of the reference color and the specific color of the article itself or the wrapping irradiated under different lighting environments.

13. The recognition system according to any one of claims 8 to 11, wherein

the artificial intelligence device of the recognition device determines the specific color of the article itself or the wrapping by using a relative relation with the reference color.

14. The recognition system according to any one of claims 8 to 11, wherein

the recognition device determines specific colors of a plurality of the articles stacked one on top of another or the wrappings of the articles, and is configured to be capable of determining the specific colors even when some of the articles are in hidden state due to a dead angle of the camera.

15. The recognition system according to any one of claims 8 to 11, wherein

the recognition device determines specific colors of a plurality of the articles stacked one on top of another or the wrappings of the articles, and is configured to be capable of determining a total quantity of the articles or a quantity of the articles of each of the specific colors even when some of the articles are in hidden state due to a dead angle of the camera.