[0004]

On the other hand, different values are defined for different types of game tokens, and techniques for detecting the values of the game tokens have also been proposed in order to automate the table games. For example, there is known a method of embedding into a game token an RFID tag recorded with information on a type or a value of the game token and reading the information with an RFID reader to detect the value of the game token (for example, see JP 2008-246103 A).

[0005]

Embodiments of the present invention seek to provide a novel game token that enables determination of authenticity thereof based on an image obtained by shooting by a camera, and an inspection system of inspecting the game token.

[0005a]

An aspect of the present invention provides an inspection system for game tokens for games using a game table, comprising a recording device configured to record types and authenticity of the game tokens using a camera; and an inspection device configured to determine authenticity of the game tokens using a result recorded by the recording device, wherein each of the game tokens is provided with a unique ID for individual identification in appearance, the inspection device reads the unique ID of a target game token for inspection among the game tokens using the camera, and determines authenticity of the target game token based on the read unique ID, and the unique ID for individual

identification or for individual identification in a specific group unit is formed by irradiating an ID mark region that is formed of a UV ink or an infrared absorbing material with laser light to partially denature the UV ink or the infrared absorbing material that forms the ID mark region, so that the irradiated part is denatured so as not to emit light even when irradiated with ultraviolet light or absorb infrared rays.

[0005b]

Another aspect of the present invention provides a game token comprising a unique ID for individual identification provided on an outer layer of the game token, wherein the unique ID is read by a camera and allows determination of authenticity of the game token based on the unique ID read, and the unique ID for individual identification or for individual identification in a specific group unit is formed by irradiating an ID mark region that is formed of a UV ink or an infrared absorbing material with laser light to partially denature the UV ink or the infrared absorbing material that forms the ID mark region, so that the irradiated part is denatured so as not to emit light even when irradiated with ultraviolet light or absorb infrared rays.

[0005c]

Another aspect of the present invention provides an inspection system for inspecting a game token, comprising a game token that includes an ID mark region entirely covered with an ink, and is provided with code information by irradiating a part of the ID mark region with laser light, so that the irradiated part is denatured so as not to emit light

even when irradiated with ultraviolet light or absorb infrared rays; a camera for shooting the game token; and an inspection device configured to read the code information and determine authenticity of the game token based on an image shot by the camera.

[0005d]

Another aspect of the present invention provides a game token comprising a display surface that displays at least a value of the game token; and an ID mark region provided on the display surface and entirely covered with an ink, wherein a part of the ID mark region is irradiated with laser light so that the irradiated part is denatured so as not to emit light even when irradiated with ultraviolet light or absorb infrared rays to add first code information to the game token.

[0006]

According to the present disclosure, there is provided an inspection system for game tokens for games using a game table, including: at least one camera configured to shoot the game tokens; a recording device configured to record types and authenticity of the game tokens using the camera; and an inspection device configured to determine authenticity of the game tokens using a result recorded by the recording device, each of the game tokens is provided with a unique ID for individual identification in appearance, the inspection device reads the unique ID of a target game token for inspection among

the UV camera.

[0014]

In the above inspection system, the unique ID provided on each of the game tokens may be a code expressed by a character or a mark.

[0015]

With this configuration, the unique ID is expressed by a character or a mark.

[0016]

In the inspection system, the unique ID provided on each of the game tokens may be transparent.

[0017]

This configuration makes it possible to add the unique ID without deteriorating the design of each of the game tokens and also improve security.

[0018]

According to the present disclosure, there is provided a game token comprising a unique ID for individual identification provided on an outer layer of the game token, the unique ID is read by a camera and allows determination of authenticity of the game token, and the unique ID for individual identification or for individual identification in a specific group unit is formed by irradiating an ID mark region that is included in the game token and is formed of a UV ink or an infrared absorbing material with laser light to partially denature or remove the UV ink or the infrared absorbing material that forms

CLAIMS

Claim 1

An inspection system for game tokens for games using a game table, comprising:

a recording device configured to record types and authenticity of the game tokens using a camera; and

an inspection device configured to determine authenticity of the game tokens using a result recorded by the recording device,

wherein each of the game tokens is provided with a unique ID for individual identification in appearance,

the inspection device reads the unique ID of a target game token for inspection among the game tokens using the camera, and determines authenticity of the target game token based on the read unique ID, and

the unique ID for individual identification or for individual identification in a specific group unit is formed by irradiating an ID mark region that is formed of a UV ink or an infrared absorbing material with laser light to partially denature the UV ink or the infrared absorbing material that forms the ID mark region, so that the irradiated part is denatured so as not to emit light even when irradiated with ultraviolet light or absorb infrared rays.

Claim 2

The inspection system according to claim 1,

wherein the unique ID is associated with any one of a machine used for manufacture, a sequence of manufacture, time of manufacture, and manufacturing information in a database.

Claim 3

The inspection system according to claim 1 or 2,

wherein each of the game tokens further includes an RFID or an ID code aside from the unique ID for individual identification that is provided on an outer layer of the game token,

the inspection system further includes a database configured to associate the unique ID provided on the outer layer with the RFID or the ID code, and

the inspection device reads the unique ID added to the target game token for inspection using the camera, and determines authenticity of the target game token based on a result of comparison of the read unique ID and the RFID or the ID code with contents of the database.

Claim 4

The inspection system according to claim 1 or 2,

wherein the inspection device is configured to determine authenticity of the game tokens using a normal camera, and an infrared camera or a UV camera.

Claim 5

The inspection system according to claim 1 or 2,

wherein the unique ID provided on each of the game tokens is a code expressed by a character or a mark.

Claim 6

The inspection system according to claim 1 or 2,

wherein the unique ID provided on each of the game tokens is transparent.

Claim 7

A game token comprising a unique ID for individual identification provided on an outer layer of the game token,

wherein the unique ID is read by a camera and allows determination of authenticity of the game token based on the unique ID read, and

the unique ID for individual identification or for individual identification in a specific group unit is formed by irradiating an ID mark region that is formed of a UV ink or an infrared absorbing material with laser light to partially denature the UV ink or the infrared absorbing material that forms the ID mark region, so that the irradiated part is denatured so as not to emit light even when irradiated with ultraviolet light or absorb infrared rays.

Claim 8

The game token according to claim 7,

wherein the unique ID is associated with any one of a machine used for manufacture, a sequence of manufacture, time of manufacture, and manufacturing information by a database.

Claim 9

The game token according to claim 7 or 8,

further comprising an RFID or an ID code aside from the unique ID for individual identification that is provided on the outer layer of the game token,

wherein, by using a database configured to associate the unique ID provided on the outer layer of the game token with the RFID or the ID code, authenticity of the target game token is determined based on a result of comparison of the unique ID assigned to the target game token and the RFID or the ID code with contents of the database.

Claim 10

The game token according to any one of claims 7 or 8,

wherein the unique ID provided on the game token is a code expressed by a character or a mark.

Claim 11

The game token according to any one of claims 7 or 8,

wherein the unique ID provided on the game token is transparent.

Claim 12

An inspection system for inspecting a game token, comprising:

a game token that includes an ID mark region entirely covered with an ink, and is provided with code information by irradiating a part of the ID mark region with laser light, so that the irradiated part is denatured so as not to emit light even when irradiated with ultraviolet light or absorb infrared rays;

a camera for shooting the game token; and

an inspection device configured to read the code information and determine authenticity of the game token based on an image shot by the camera.

Claim 13

The inspection system according to claim 12,

wherein the ink that entirely covers the ID mark region is an invisible ink,

the inspection system further includes a lamp configured to irradiate the game token with light for visualizing the invisible ink, and

the inspection device reads the code information that has been visualized by the irradiation with the light.

Claim 14

A game token comprising:

a display surface that displays at least a value of the game token; and

an ID mark region provided on the display surface and entirely covered with an ink,

wherein a part of the ID mark region is irradiated with laser light so that the irradiated part is denatured so as not to emit light even when irradiated with ultraviolet light or absorb infrared rays to add first code information to the game token.

Claim 15

The game token according to claim 14,

wherein the game token is manufactured by being cut out from a game token original plate,

the game token further includes second code information added with the ink,

the first code information is information that uniquely identifies the game token original plate, and

the second code information is information that specifies a position in the game token original plate.