face of the game token money.

[0004]

The game token money of the related art is manufactured through injection molding, and a material having a color different from those of other portions is injected to the filler portions. As a result, a game token money in which the color on the side face is changed between the filler portions 191 and other portions along the circumferential direction is obtained.

[0005]

The applicant proposed a method of manufacturing a game token money having a multilayered structure by overlapping a plurality of sheet-shaped members, thermocompressively bonding the sheet-shaped members to form a multilayered lamination plate, and punching the multilayered lamination plate (for example, PCT/JP 2016/072673). In such a multilayered lamination plate, by coloring a plurality of sheet-shaped members with different colors, it is possible to recognize a plurality of layers having different colors on the side face of the game token money obtained through punching.

[0006]

Embodiments of the invention seek to provide a game token money having a layered structure provided with filler portions recognizable on the front face and the side face, and a method of manufacturing the game token money.

[0007]

According to an aspect of the invention, there is provided a game token money comprising a plurality of plastic layers laminated through thermocompression bonding to form a strip pattern in a layering direction on a side face of the game token money, the plurality of plastic layers including a middle colored layer to specify a value of the game token money, a first pale color layer laminated on a first side of the middle colored layer, and a second pale color layer laminated on a second side of the middle colored layer, so that the middle colored layer is interposed between the first pale color layer and the second pale color layer; a radio-frequency identification (RFID) embedded in a layer other than the outermost layer of the plurality of plastic layers; a first classification part positioned within a part of the first pale color layer; and a second classification part positioned within a part of the second pale color layer; wherein: the first and second classification parts indicate a classification of the game token money and are recognizable from a side face of the game token money; one of the first and second classification parts is recognizable from a front face of the game token money; the RFID contains information regarding the value and the classification of the game token money; and at least a portion of the middle colored layer extends circumferentially about an entirety of the side face of the game token money without interruption by either of the first and second classification parts.

According to another aspect of the present invention, there is provided a game token money comprising an indication for indicating a value of the game token money on a front face of the game token money; a middle colored layer forming a stripe of a stripe pattern in a layering direction on a side face of the game token money, the value of the game token money being specified by the colored layer; a first classification part that at least partly occupies, and is recognizable from, the side face; and a second classification part that at least partly occupies, and is recognizable from, the side face; wherein: the middle colored layer is interposed between the first and second classification parts in the layering direction; at least a portion of the middle colored layer extends circumferentially about an entirety of the side face of the game token money without interruption by either of the first and second classification parts; each of the first and second classification parts is formed in a color different from a color of the middle colored layer; one of the first and second classification parts is recognizable from the front face; and the first and second classification parts indicate a classification, other than the value, of the game token money.

According to another aspect of the present invention, there is provided a game token money comprising a plurality of layers that are laminated together, the plurality of layers including a first surface layer including an outer edge in which there is a notch, a second surface layer including an outer edge in which there is a notch, wherein each of the first and second surface layers includes a respective visually recognizable front face, and a middle layer positioned between the first and second surface layers; a first classification part filled in the notch of the first surface layer to indicate a classification of the game token money; and a second classification part filled in the notch of the second surface layer to indicate the classification of the game token money; wherein at least a portion of the middle layer extends circumferentially about an entirety of a side face of the game token money without interruption by either of the first and second classification parts; and the first and second surface layers, the first and second classification parts, and the middle layer are visually recognizable on the side face of the game token money.

The present disclosure also provides a game token money including: a plurality of plastic layers

[0010]

In the game token money described above, the classification part may have a plurality of different colors.

[0011]

In the game token money described above, the classification part may indicate a classification of the game token money regarding whether the game token money is for a very important person (VIP) or for a common person.

[0012]

In the game token money described above, the classification part may indicate a classification of the game token money regarding whether the game token money is for a cash chip, for a rolling chip, or for a promotion chip.

[0013]

In the game token money described above, a plurality of the classification parts may be arranged at an equiangular interval in a circumferential direction of the game token money. In this configuration, it is possible to visually recognize the classification part on the side face regardless of the angle of the circumferential direction of the game token money.

[0014]

According to the present disclosure, there is also provided a method of manufacturing a game token money, including: providing a plurality of plastic layers including a colored layer and a pale color layer; forming a classification part insertion layer by filling a classification part indicating a classification of the game token money in the pale

[0016]

The manufacturing method described above may further include creating a database for associating information of the RFID with a value of the game token money and a classification of the game token money indicated by the classification part. In this configuration, it is possible to specify the value information and the classification information of the game token money associated with the information of the RFID by referencing the database.

[0017]

According to the present disclosure, there is also provided a game token money including: an indication for indicating a value of the game token money on a front face; at least a colored layer provided in the middle to form a stripe pattern in a layering direction on a side face, the value of the game token money being specified by the colored layer; and a classification part formed in a color different from a color of the colored layer and filled in a position recognizable from a side face and a front face, the classification part indicating a classification other than the value of the game token money. In this configuration, it is possible to recognize the classification part on any one of the side face and the front face and specify the classification of the game token money.

[0018]

The game token money described above may further include an RFID embedded inside, wherein the RFID contains information regarding a value of the game token money and a classification

of the game token money indicated by the classification part. In this configuration, it is possible to acquire information associated with the value and the classification by reading the RFID.

[0019]

In the game token money described above, the colored layer and the classification part may be externally recognized by a camera, and a value and a classification of the game token money obtained from the camera may be inspected in combination with information obtained from the RFID. In this configuration, it is possible to inspect the game token money using a combination of the value and classification and the RFID.

[0020]

In the game token money described above, a plurality of the classification parts may be arranged at an equiangular interval in a circumferential direction of the game token money. In this configuration, it is possible to visually recognize the classification part on the side face regardless of the angle of the circumferential direction of the game token money.

[0021]

According to the present disclosure, there is also provided a game token money obtained by laminating a plurality of layers including a surface layer having a visually recognizable front face and a middle layer positioned inward of the surface layer, the game token money including: a notch formed in an outer edge of the surface layer; and a classification part filled in the notch to indicate a

classification of the game token money, wherein the surface layer and the classification part are visually recognizable on the front face of the game token money, and the surface layer, the classification part, and the middle layer are visually recognizable on a side face of the game token money.

[0022]

According to the present disclosure, there is also provided a method of manufacturing a game token money, the method including: providing a surface layer having a sheet shape having a blank portion; forming a classification part insertion layer by filling a classification part in the blank portion; forming a multilayered lamination plate by performing thermocompression bonding for a plurality of layers including the classification part insertion layer and a sheet-shaped middle layer; and obtaining a game token money by punching the multilayered lamination plate such that a punching line crosses the classification part.

[0023]

According to the present disclosure, there is also provided an inspection system for inspecting the game token money described above, including: a camera configured to create a front face image by photographing a front face of the game token money; a camera configured to create a side face image by photographing a side face of the game token money; and an inspection device configured to specify a color of the classification part from the front face image and specify a color of the classification part from the side

What is claimed is:

1. A game token money comprising:

a plurality of plastic layers laminated through thermocompression bonding to form a strip pattern in a layering direction on a side face of the game token money, the plurality of plastic layers including a middle colored layer to specify a value of the game token money, a first pale color layer laminated on a first side of the middle colored layer, and a second pale color layer laminated on a second side of the middle colored layer, so that the middle colored layer is interposed between the first pale color layer and the second pale color layer;

a radio-frequency identification (RFID) embedded in a layer other than the outermost layer of the plurality of plastic layers;

a first classification part positioned within a part of the first pale color layer; and

a second classification part positioned within a part of the second pale color layer;

wherein:

the first and second classification parts indicate a classification of the game token money and are recognizable from a side face of the game token money;

one of the first and second classification parts is recognizable from a front face of the game token money;

the RFID contains information regarding the value and the classification of the game token money; and

at least a portion of the middle colored layer extends circumferentially about an entirety of the side face of the game token money without interruption by either of the first and second classification parts.

2. The game token money according to claim 1, wherein each of the first and second classification parts has a color different from a color of the middle colored layer.

3. The game token money according to claim 1, wherein each of the first and second classification parts has a color similar to a color of the middle colored layer.

4. The game token money according to claim 1, wherein each of the first and second classification parts has a plurality of different colors.

5. The game token money according to claim 1, wherein each of the first and second classification parts indicates a classification of the game token money regarding whether the game token money is for a very important person (VIP) or for a common person.

6. The game token money according to claim 1, wherein each of the first and second classification parts indicates a classification of the game token money regarding whether the game token money is for a cash chip, for a rolling chip, or for a promotion chip.

7. The game token money according to claim 1, wherein a plurality of instances of the first classification part are arranged at an equiangular interval in a circumferential direction of the game token money, and a plurality of instances of the second classification part are arranged at the equiangular interval in the circumferential direction of the game token money.

8. A method of manufacturing the game token money according to claim 1, the method comprising:

providing the plurality of plastic layers;

forming a first classification part insertion layer by inserting the first classification part into the first pale color layer;

forming a second classification part insertion layer by inserting the second classification part into the second pale color layer;

forming a multilayered lamination plate by arranging the middle colored layer between the first and second classification part insertion layers;

laminating the first and second classification part insertion layers on both sides of the middle colored layer so that the middle colored layer is interposed between the first and classification part insertion layers;

arranging an RFID between the plurality of plastic layers;

compressively bonding all of the layers through

thermocompression bonding; and

punching the multilayered lamination plate into individual game token moneys including the game token money of claim 1,

wherein the multilayered lamination plate is punched in the punching such that:

a punching line for punching the multilayered lamination plate into game token moneys crosses the first and second classification parts; and

the first and second classification parts are recognizable from the side face and the front face of the game token money after the punching.

9. The method according to claim 8, wherein, in the forming of the first classification part insertion layer, a plurality of instances of the first classification par are filled at an equiangular interval in a circumferential direction of the game token money to be punched, and in the forming of the second classification part insertion layer, a plurality of instances of the second classification part are filled at an equiangular interval in the circumferential direction of the game token money to be punched.

10. The method according to claim 8, further comprising creating a database for associating information of the RFID with the value of the game token money and the classification of the game token money indicated by the classification parts.

11. An inspection system for inspecting the game token money according to claim 1, the system comprising:

a database;

a camera to obtain an image of the game token money; and

a processor, wherein the processor is configured to:

identify a category of a user to whom the game token money is assigned based on the first and second classification parts as they are represented in the obtained image and based on information in the database; and

output a warning signal based on the identified category.

12. An inspection system for inspecting the game token money according to claim 1, the system comprising:

a database;

a camera to obtain an image of the game token money; and

a processor, wherein the processor is configured to:

identify that the game token money is a cash chip, a rolling chip or a promotion chip based on the first and second classification parts as they are represented in the obtained image and based on information in the database; and

output a warning signal based on the identification.

13. An inspection system for inspecting the game token money according to claim 1, the system comprising:

a database;

a camera to obtain an image of the game token money; and

a processor, wherein the processor is configured to:

identify the color of the middle colored layer based on the obtained image;

determine the value of the game token money based on the identified color and information in the database; and

output a warning signal based on the determined value.

14. A game token money comprising:

an indication for indicating a value of the game token money on a front face of the game token money;

a middle colored layer forming a stripe of a stripe pattern in a layering direction on a side face of the game token money, the value of the game token money being specified by the colored layer;

a first classification part that at least partly occupies, and is recognizable from, the side face; and

a second classification part that at least partly occupies, and is recognizable from, the side face;

wherein:

the middle colored layer is interposed between the first and second classification parts in the layering

direction;

at least a portion of the middle colored layer extends circumferentially about an entirety of the side face of the game token money without interruption by either of the first and second classification parts;

each of the first and second classification parts is formed in a color different from a color of the middle colored layer;

one of the first and second classification parts is recognizable from the front face; and

the first and second classification parts indicate a classification, other than the value, of the game token money.

15. The game token money according to claim 14, further comprising an RFID that contains information regarding the value of the game token money and the classification of the game token money indicated by the first and second classification parts.

16. The game token money according to claim 15, wherein the colored layer and the first and second classification parts are externally recognized by a camera, and wherein the value and the classification of the game token money obtained from the camera can be inspected in combination with information obtained from the RFID.

17. The game token money according to claim 14, wherein a plurality of instances of the first classification par are

arranged at an equiangular interval in a circumferential direction of the game token money, and a plurality of instances of the second classification part are arranged at the equiangular interval in the circumferential direction of the game token money.

18. A game token money comprising:

a plurality of layers that are laminated together, the plurality of layers including:

a first surface layer including an outer edge in which there is a notch;

a second surface layer including an outer edge in which there is a notch, wherein each of the first and second surface layers includes a respective visually recognizable front face; and

a middle layer positioned between the first and second surface layers;

a first classification part filled in the notch of the first surface layer to indicate a classification of the game token money; and

a second classification part filled in the notch of the second surface layer to indicate the classification of the game token money;

wherein:

at least a portion of the middle layer extends circumferentially about an entirety of a side face of the game token money without interruption by either of the first and second classification parts; and

the first and second surface layers, the first and second classification parts, and the middle layer are visually recognizable on the side face of the game token money.

19. A method of manufacturing the game token money according to claim 18, the method comprising:

providing the first and second surface layers, each having a sheet shape and a blank portion;

forming a first classification part insertion layer by inserting the first classification part into the blank portion of the first surface layer;

forming a second classification part insertion layer by inserting the second classification part into the blank portion of the second surface layer;

forming a multilayered lamination plate by performing thermocompression bonding for a plurality of layers including the first and second classification part insertion layers and a sheet-shaped interposing layer; and

obtaining the game token money by punching the multilayered lamination plate such that a punching line crosses the first and second classification parts.

20. An inspection system for inspecting the game token money according to claim 18, comprising:

a camera configured to create a front face image by photographing one of the front faces of the game token money;

a camera configured to create a side face image by

photographing the side face of the game token money; and

an inspection device configured to specify a color of the first and second classification parts from each of the front face image and the side face image.