Abstract:
The present invention relates to paint which contains some ingredient where 3D effect can be observed either from visible sensation or tactile sensation after the paint being applied to an object's surface, and in particular 3D with wrought iron effect make the object's surface a luxury look wherein this present invention having self-drying features without any heating or baking process needed, thus the use of the present invention is seemed to be cost and time saving application and this present invented paint solely can be applied to different types of surface such as glass, paper, wood, plastic, metal, ceramic and others except for food where 3D wrought iron effect can be observed regardless of the painting material, and in particular this present invention can also be used in printing process where the main ingredients can be added to cartridge and 3D wrought iron effect rather flat image can be achieved.
3D HAMMERTONE EFFECT

TECHNICAL FIELD

This present invention relates to paint which contains some ingredients where 3D effect can be observed after the paint being applied to an object's surface, and in particular 3D with wrought iron effect make the object's surface a luxury look wherein this present invention having self-drying features without any heating or baking process needed.

This present invented paint solely can be applied to different types of surface such as glass, paper, wood, plastic, metal, ceramic and others except for food where 3D wrought iron effect can be observed regardless of the painting material, and in particular this present invention can also be used in printing process where the main ingredients can be added to cartridge and 3D wrought iron effect rather flat image can be achieved.

BACKGROUND ART

Paint had been used since pre-history. Over centuries, different types of color were being formulated as well as the method for painting. In the past, paint was only being used as decorative purposes, but now paints present a wide variety of usage. It is now being used as protection for wood from rotting and drying out, as a rust
preventative on metal, as a sign for parking structures and roadways directs and so on, other than the decorative purposes. With the discovering of painting purposes, producers and manufacturers started to develop and improve the existing coating method in order to make it easy to be applied and present the most desirable features. Throughout the years, the existing arts in the market include powder coating, normal painting, printing and glass coating and so on.

**POWDER COATING**

Powder coating is being considered as the solid paint or dry paint. In powder coating, the powdered paint may be applied by either two techniques: the item is lowered into a fluidised bed of the powder, which may or may not be electrostatically charged or the powdered paint is electrostatically charged and sprayed onto the part. After a product go through this process, it will present features such as tough, attractive and scratch resistance. This coating method will involve oven for drying, thus on-site job is not applicable.

In the first process, the metal substrate is cleaned and etched by heated water, chemical and pressure. This entire process is important for getting a lasting, quality powder coated finish. After pre-treatment, the product is ready for an electrostatic. The Electrostatic process of powder coating includes fluidization of the powder by means of a controlled air supply through a membrane in a hopper. The gun is then set for the proper air, spray pattern and electrical charge. When
the powder is introduced to the gun it is given an electrical charge and a pattern to provide the proper coverage and thickness required for each part. Once the powder is applied, the product is heated in an oven to correct the temperature, for a required time, dependent on the mass and powder type. Finally, the part is leaved to cool.

This finish is long-lasting and thus economical. In addition to that, the surface is resistance to chipping, scratching and fading. Due to a large variety of colors, the finish presents an attractive surface. Powder coating is environmental friendly, since it is a dry paint, it does not contain any volatile solvent, known as VOCs which will cause harm to the environment. Unlike above coating method, powder coating is having a wider application, but not restricted to only metal.

PAINT

Paint is used to protect, preserve, decorate (such as adding color), or add functionality to an object or surface by covering it with a pigmented coating. For normal paint, it is a liquid application to wood, metal, wall and so on. There are many types of paint exists in the market where the consumers can choose according to their needs. This liquid paint is widely used by household for decoration and protection, In order to achieve a good painting effect, mostly a person having painting skill will be employed for household painting and sometimes this is expensive.
Paint is usually consists of four components: liquid, pigments, additives and binder. Liquid (water or mineral spirits) allows the paint to be applied and then evaporates. The liquid for latex paint is ordinary water while in oil-based paints; it is mineral spirit or paint thinner; Pigments used to give the paint colour and hiding power. When mixed, it produces the described paint color; Additives used to modify the paint's characteristics. These are chemicals added to the paint to enhance its mildew resistance, ability to stick to the surface, and to make it flow more effectively; Binder is the plastic like material that binds the pigment and additives to the surface.

Typically, paint fall into two categories: water-based and oil-based. Oil based house paint is referred to as alkyd; while water based house paint is commonly called latex or acrylic. The main difference between the two are their drying processes, their finishes, and the ease or difficulty of clean up. Oil-based house paint takes longer to dry than the water based variety, but it contains additives to help speed up the drying process. Oil paints also create a harder, glossier finish, and require paint thinner or other chemicals for cleaning up.

As compared to oil-based paint, latex is flexible, thins and easy to be cleaned up with water, dries quickly, and has nontoxic fumes. For exterior applications, it has the ability to breathe, water vapor, and reduces peeling and blistering. Acrylic, however, have greater adhesion over smooth, non absorbent surfaces, such as...
plastics and metals. Besides, they can hold a greater percentage of solids, often allowing single-coat coverage.

Latex paint is the most common type of paint for home. This is because it can be easily cleaned up by using soap and water. Besides that, it is can prevent mildew and moisture. Its fast drying feature speed up the painting process. Nevertheless, latex paint provides extensive colour selections and also paints sheens. On the other hand, acrylic paint is more expensive than the latex paint and it requires chemical solvent for cleaning, unlike latex paint.

PRINTING

Printing is a process for reproducing text and image, typically with ink on paper using a printing press. Nowadays, printing is the most common activities either at home or office but not only restricted to large-scale industrial process. There are many types of printing technologies available in the market such as Blueprint, dot-matrix, inkjet, laser, line printing and so on. The printing color had been improved from traditional balck and white to photo printing which involved wide variety of color. Most of the time, the printing quality is depend on the types of paper used and also the tpe of printer being used, but commonly a flat and smooth image can be achieved.
GLASS PAINTING

Glass painting is often difficult to be done and less likely for DIY. This is because the process for glass painting often involved the use of kiln in order for the paint to bond permanently to the glass surface. Although there are several major types of traditional glass paints, including vinegar trace paint, matt paint, silver stain, and oil based paints, but the heating temperature needed to ensure the paint permanently bond to the surface is different for each of the paint, However, for oil paint and acrylic paint being used for glass painting, the use of kiln can be optional, But, the disadvantage is the paint on the glass may have the tendency to peel or chip when used on glass.

Although there are many painting or coating method and also different types of paint exist in the market but there is no one commonly used paint or method found which is suitable to be applied to all types of materials other than food. Besides that, all of the existing painting and coating methods provide only a flat and smooth surface and will not present 3D effect.

DISCLOSURE OF INVENTION

TECHNICAL PROBLEM
Accordingly, it is an object of the present invention to overcome the problems encountered in a conventional art.

It is another object of the present invention to provide paint contains the ingredients which will give 3D wrought iron effect to the painted object, and in particular having self-drying features without any heating or baking process needed.

It is another object where the present invention can solely be used and applied to any types of surface such as glass, paper, wood, plastic, metal, ceramic and so on except for food were 3D wrought iron effect can be observed regardlessly of the painting material, and in particular this paint can also be used in printing process where the main ingredients can be added to cartridge and 3D wrought iron effect rather flat image can be achieved.

TECHNICAL SOLUTION

To achieve the above objects, the two main ingredients to be added to this present paint are Coating Resin and Hammertone as the 3D wrought iron effect cannot be achieved in the absence of either one of the main ingredients; this present paint can be applied by using a spray gun, the paint roller or paint brush or any other painting tools and the 3D wrought iron effect will not be affected by the use of any tools in application and also the size of nozzle of spray gun.
Unlike some of the conventional art, oven or any other heating or baking equipments are not required for heating or baking purposes as the present invention equipped with self-drying component which save time and cost for baking or heating after applying it as this present invention may result in the wrought iron effect after being applied which require shorter processing time, is cheaper and is easy to be applied.

To achieve the above objects, the main components of made up the present invention are Synthetis Resin, pigments, solvents and additives and the uniqueness of the present invention is the ingredients' degree of adhesion which cause the present invention to be used in all types of surfaces such as glass, paper, wood, plastic, metal, ceramic and so on except for food and shall result in 3D wrought iron effect.

The ingredients of Coating Resin and Hammertone can be added to printing cartridge in order to achieve 3D wrought iron effect to the printing image which is normally a flat and smooth image where 3D effect is difficult to be generated through printing process; with the application of present invention, regardless to which types if printing material either soft or hard paper.

The rough surface presented after the invention being applied, either from the visible sensation or tactile sensation, a 3D effect may be noticed regardless to which type of surface whereas the distance of spraying the paint and the size of
nozzle of spraying gun will affect the 3D pattern and the 3D pattern will not be the same for each of the application.

After the present invention being applied, no matter to which types of the material surface, wrought iron effect will emerge wherein the finish will gives the impression of metal-made product, this is because of the color of the invention is seemed like the mixing of two colors which is similar to wrought iron application.

ADVANTAGEOUS EFFECTS

After the present invention being applied to an object's surface, a 3D wrought iron effect can be seen where all the while wrought iron presents a luxury look and most of the time being used as the decorative product and it is expensive due to the complicated process which involved the use of oven in the drying process and the size of the object applied will be restricted since the oven is required and furthermore on-site job is not applicable.

As the present invention is easy to be applied which can replaces the complicated process in presenting wrought iron surface, and in particular cost and time saving can be achieved as oven is not required for the drying process, in addition, the application of the present invention will not require many workers in the application and in particular to easy application, do-it-yourself (DIY) is encouraged.
In addition, this present invention can be applied to many different types of surface except for food and this is convenient for the household users as they do not have to buy different types of paint for different types of material since most of the paints cannot last for a long time and they can use this invention whenever they want as no technical expertise is required for application.

BRIEF DESCRIPTION OF THE DRAWINGS

This present invention will become better understood with reference to the accompanying drawings which are given only by way of illustration and thus are not limitative of the present invention, wherein;

Figure 1 is a front view and cross-sectional view illustrating the present invention being applied to material's surface.

Figure 2 is a front view illustrating the effect on glass before and after the present invention being applied to the surface.

Figure 3 is a front view illustrating the effect on paper before and after the present invention being applied to the surface.

Figure 4 is a front view illustrating the effect on wood furniture before and after the present invention being applied to the surface.
Figure 5 is a front view illustrating the effect on plastic furniture before and after the present invention being applied to the surface.

Figure 6 is a front view illustrating the effect on metal before and after the present invention being applied to the surface.

Figure 7 is a front view illustrating the effect on ceramic before and after the present invention being applied to the surface.

Figure 8 is a front view illustrating the effect on printing before and after the present invention being applied to the surface.

Figure 9 is a front view illustrating the effect on the surfaces in each of the application.

BEST MODE FOR CARRYING OUT THE INVENTION

The preferred embodiments of the present invention will be described with reference to the accompanying drawings.

Figure 1 is a front view and cross-sectional view illustrating the present invention being applied to material's surface, Figure 2, Figure 3, Figure 4, Figure 5, Figure
Figure 7 and Figure 8 are front view illustrating the effect on glass, paper, wood furniture, plastic furniture, metal, ceramic and printing before and after the present invention being applied to the surface. Figure 9 is a front view illustrating the effect on the surfaces in each of the application and Figure 10 is a cross-sectional view showing a spray gun using in applying spray gun.

As shown in the above drawings, (10) shows that the present invention no matter being applied to which types of material surface such as glass, paper, wood, plastic, metal, ceramic and others except for food where 3D wrought iron effect can be observed, and in particular 3D with wrought iron effect make the object's surface a luxury look wherein this present invention having self-drying features without any heating or baking process needed.

(11) Illustrate the present invention adhere to the material's surface. (112) is the present invention being applied to the material's surface of (111), where a rough surface of 3D wrought iron effect either from the visible sensation or tactile sensation, can be observed, and in particular the ingredients' degree of adhesion is the main concern for the present invention to be applied to different types of material's surface except food.

(20) is a glass where it commonly having a slip and hard surface where paint or color is hard to be applied to the surface and usually kiln will be needed in order for the colour to permanently or last longer on the surface.
The glass (21) shows the outcome of the glass (20) being applied the present invention and due to the ingredients' adhesiveness, this present invention can be applied to the surface and the 3D wrought iron effect can be observed, and this glass after the present invention being applied may shows luxury look as of the object is made by metal but not glass, in addition, since glass is transparent, after the present invention being applied to the outer surface of glass, the inner surface will look dark.

The present invention can be applied to glass as (21) through an easy application where kiln for heating and baking in order for the color to permanently bond to the glass surface is not needed as the present invention is having self-drying feature and thus heating process by using oven or kiln or any other heating or baking equipment is not applicable.

Paper (30) is plain and soft as color is easy to be applied to the surface since it has better absorbency than any other materials.

Paper (31) is the present invention after being applied to (30) showing its absorbing ability to the present invention result in showing 3D wrought iron effect to the paper surface (31) either from visible sensation or tactile sensation as this application may ease the producer as they can show this present invention by using a paper catalogue rather than any other materials.
Wood furniture (40) is the furniture before applying the present invention where normally wood is having better absorption after paper among other materials such as plastic, ceramic, glass, and metal and so on and thus the present invention can be applied easily to the wood surface.

Wood furniture (41) is the wood furniture of (40) after the present invention being applied, where 3D wrought iron effect can be observed as if the object is of metal but not wood, this is due to the color of the invention is seemed like the mixing of two coirs which is similar to wrought iron application, and this present invention having self-drying features without the need of oven or any other heating or baking equipment used for heating or baking purposes.

Plastic furniture (50) is normally difficult to be painted or applied color since it is having slip surface and light degree of absorbency.

Plastic furniture (51), after the present invention being applied to the surface, 3D wrought iron effect can be observed, and it makes the object's surface a luxury look and after this present invention being applied, it seems to add value to the material although the original cost of plastic is cheap.

Iron finish of (60) is the representative of metal where normally oven or any other heating or baking equipments will be needed in the paint drying process and the painting of iron is normally through wrought iron process which here be known as having complicated process.
Iron finish (61) after the present invention being applied, causes 3D wrought iron effect to the surface and the application of the present invention to metal surface will not required oven or any heating or baking equipment for the drying process and at the same time the wrought iron effect gives the surface a luxury look with lower cost of production as compared to the actual wrought iron process.

Ceramic (70) is similar to glass as it is also having slip and hard surface where paint or color is hard to be applied to the surface.

This present invention can be applied to the ceramic's surface as ceramic (71) where the 3D wrought iron effect can be observed after the application due to the adhesiveness of the paint's ingredients as the present invention is having self-drying feature and thus heating and baking process by using oven or any other heating or baking equipment is not applicable for the present invention to permanently bond to the surface.

Printing (80) is the outcome of original painting effect which 2D items are being shown on the paper and the 3D effect will not be achieved through printing. Printing (81) shows 3D effect being generated after printing wherein this present invention can also be used in printing process where the main ingredients of Coating Resin and Hammertone can be added to cartridge and 3D wrought iron effect rather flat surface can be achieved as the two main ingredients when mix
together will cause 3D effect to be noticed either from the visible sensation or tactile sensation.

(90) is the plain material's surface which the present invention have not been applied.

The application of present invention to the material's surface of (91) will cause the 3D wrought iron effect to be observed, wherein the 3D pattern on each of the material's surface is different which means that each time of the application will create different 3D pattern and thus shows the uniqueness of the application and this applied also to the surface of (92) and (93).

Furthermore, the different 3D pattern of the surface of (91), (92) and (93) is caused by the distance of spraying the present invention and the size of nozzle of spraying gun and so on which will affect the 3D pattern but the 3D wrought iron effect can be observed either from visible sensation or tactile sensation.
CLAIMS:

1. A mixture of the two main ingredients comprising a Synthetic Resin and Hammertone of the present invention means 3D effect material's surfaces where either from visible sensation or tactile sensation, a rough surface can be noticed without any heating or baking process needed for drying purposes; this present paint can be applied by using a spray gun, the paint roller or paint brush or any other painting tools and the 3D effect will not be affected by the use of any tool in application and also the size of spray gun.

2. The device of claim 1 characterized in that the mixture of Synthetic Resin and Hammertone contains the combination of Synthetic resin, pigments, solvents and additives.

3. The device of claim 1 characterized in that regardless to which type of the material's surface such as glass, paper, wood, plastic, metal, ceramic, printing and so on, the present invention being applied, 3D effect can be observed after application.

4. The device of claim 3 characterized in that can be applied to all types of surface except for food.
5. The device of claim 3 characterized in that can be applied to all types of surface due to the ingredients' adhesiveness.

6. The device of claim 1 characterized in that the Synthetic Resin and Hammertone can be added to printing cartridge or others printing material to be used in the printing process where 3D effect can be observed regardless to which types of the printing material either soft or hard paper mis present invention to be applied on.

7. The device of claim 1 characterized in that no oven and other heating or baking equipments needed in the present invention application process in achieving the finish product.

8. The device of claim 1 characterized in that the 3D effect will not be affected by the painting tools using for applying present invention but the size of the nozzle of spray gun will affect the 3D pattern resulted from the present invention being applied to a surface.

9. The device of claim 7 characterized in that 3D pattern will not be the same in each of the application due to the size of nozzle of spray gun and also the distance of applying the present invention.

10. The device of anyone of claim 1 to 9 characterized in that present invention after being applied to any types of surface except food will be having wrought iron
effect as the finished product will gives the impression of metal-made product; this
is because the color of the invention is seemed like the mixing of one or more
color which is similar to wrought iron application.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.

C09D 5/28 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI; EPODOC; USPTO Database; GOOGLE PATENTS; GOOGLE: (hammer+ w tone), hammertoe, (hammer+ w finish), hammerfinish, (crackle w paint), (crackle w finish), (hammer+ 3w (or paint+, +finish, +tone, coat+)), hammer+, print+, ink", coat+, paint+, film+, effect, texture

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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* Further documents are listed in the continuation of Box C

X See patent family annex

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more such documents, such combination being obvious to a person skilled in the art

& document member of the same patent family

Date of the actual completion of the international search 20 August 2010

Date of mailing of the international search report 25 AUG 2010

Name and mailing address of the ISA/AU

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## DOCUMENTS CONSIDERED TO BE RELEVANT

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*Form PCT/ISA/210 (continuation of second sheet) (July 2009)*
This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX