



US 20060228523A1

(19) **United States**

(12) **Patent Application Publication**
Cronin

(10) **Pub. No.: US 2006/0228523 A1**

(43) **Pub. Date: Oct. 12, 2006**

(54) **LIGHT CANVAS**

Related U.S. Application Data

(76) Inventor: **Daniel J. Cronin**, Delmar, NY (US)

(60) Provisional application No. 60/667,012, filed on Mar. 31, 2005.

Publication Classification

Correspondence Address:

HOFFMAN WARNICK & D'ALESSANDRO,
LLC

75 STATE STREET
14TH FLOOR
ALBANY, NY 12207 (US)

(51) **Int. Cl.**
D06N 7/00 (2006.01)

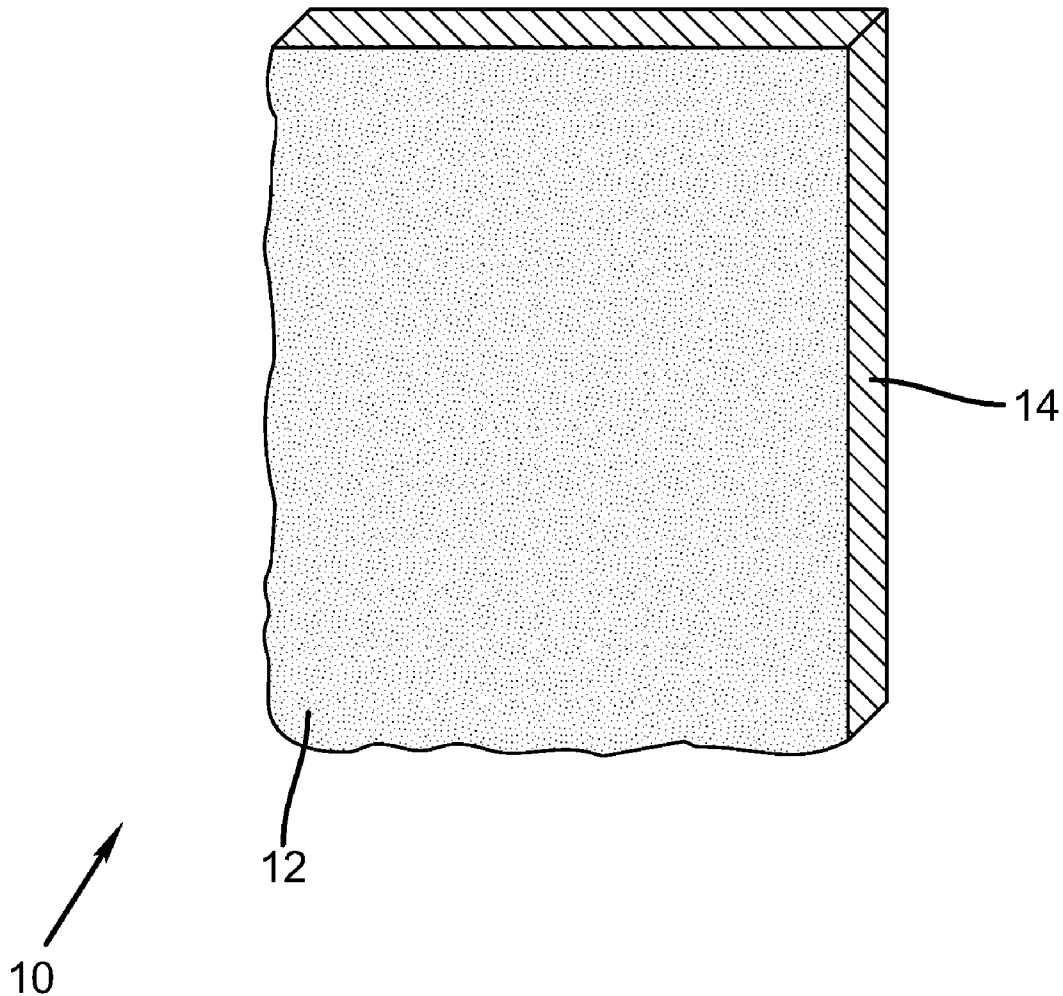
(52) **U.S. Cl.** **428/142**

(57) **ABSTRACT**

A light conducting substrate, method for forming a light conducting substrate "light canvas", and kit for creating a light conductive substrate. The light canvas includes: a transparent or translucent (or opaque) underlying substrate having a surface; and a surface treatment that includes a mixture of frit with transparent or translucent filler.

(21) Appl. No.: **11/394,821**

(22) Filed: **Mar. 31, 2006**



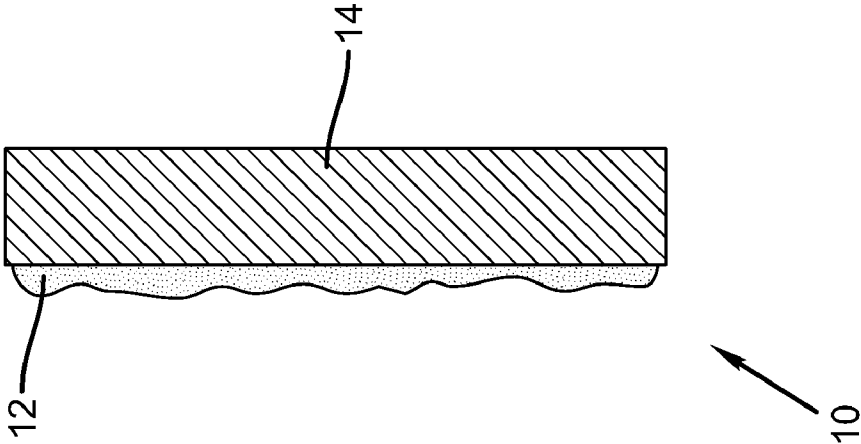


FIG. 1

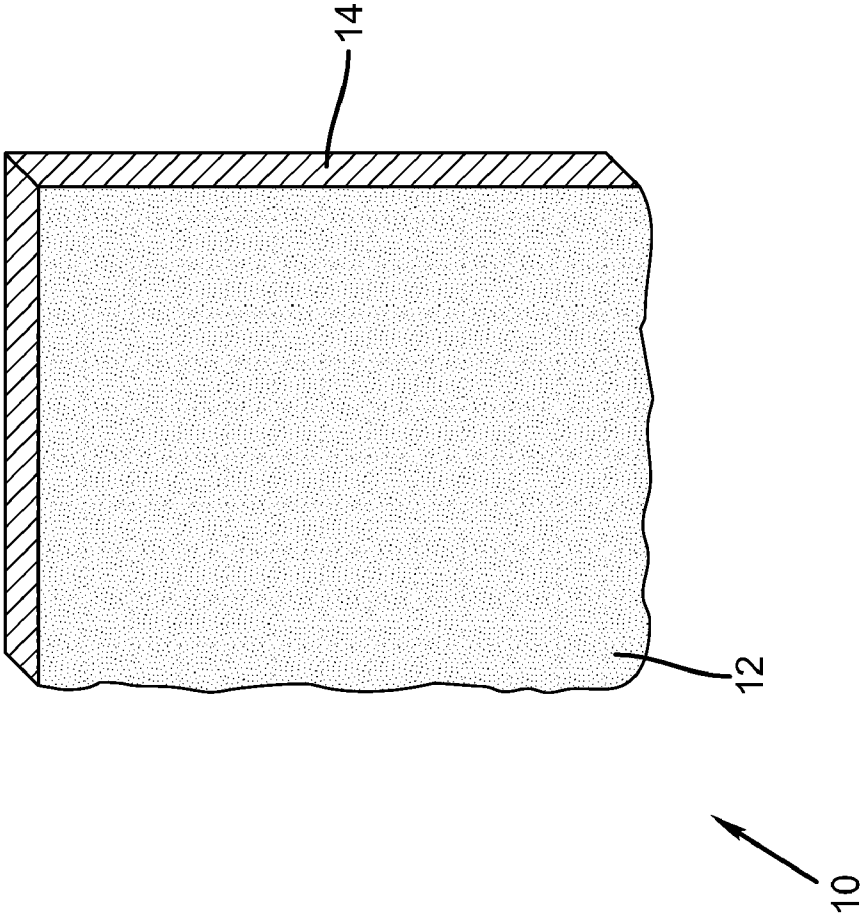


FIG. 2

FIG. 3

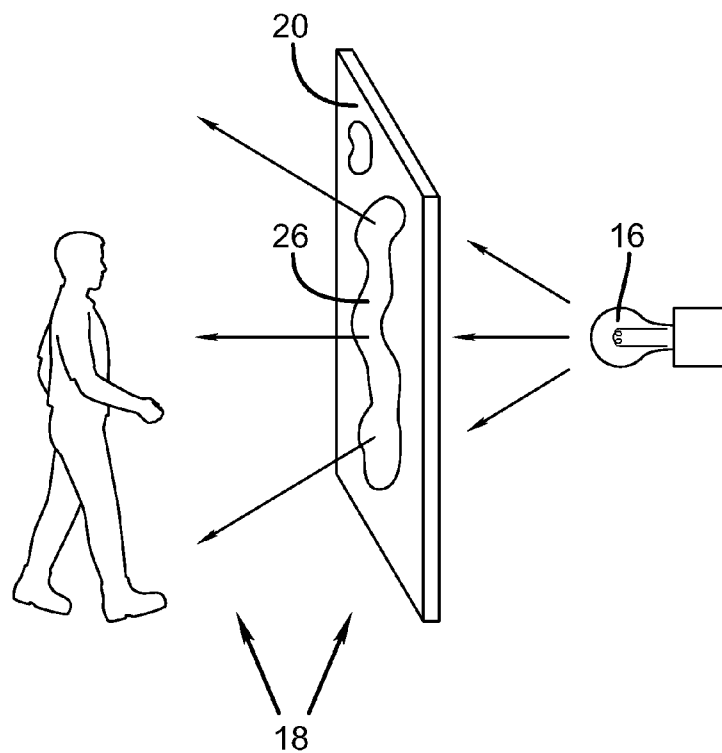
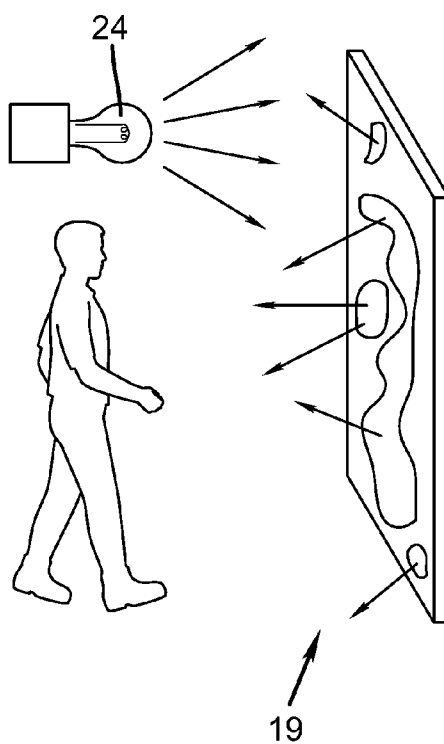


FIG. 4



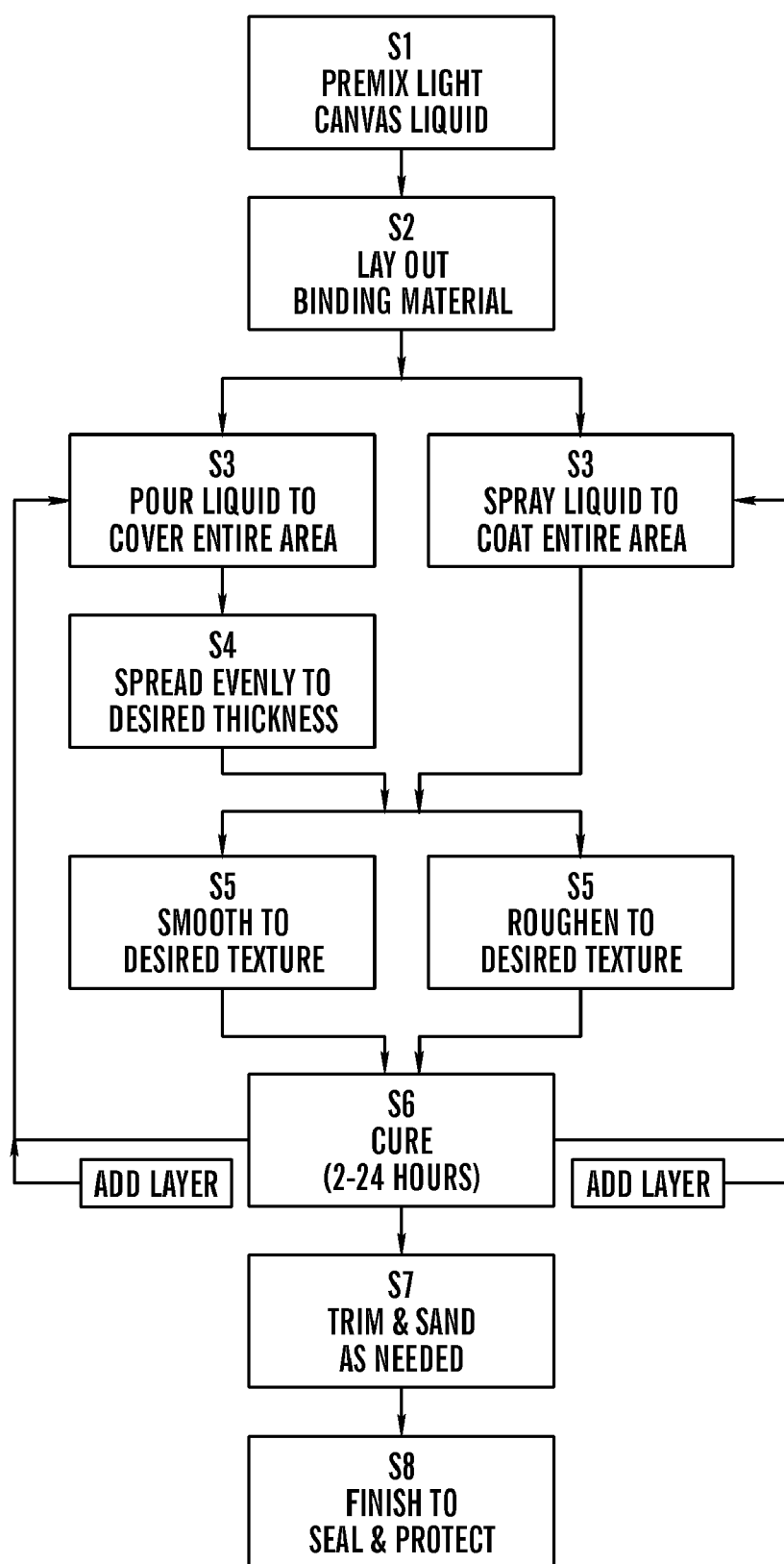


FIG. 5

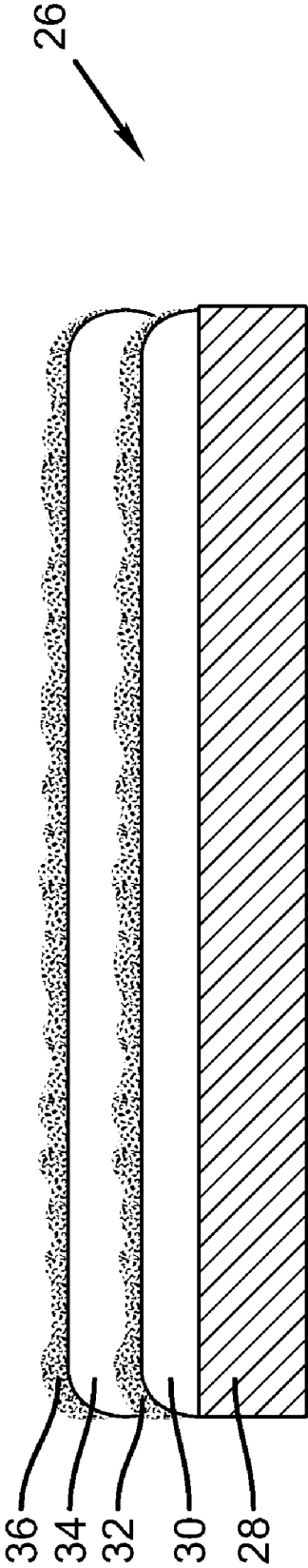


FIG. 6

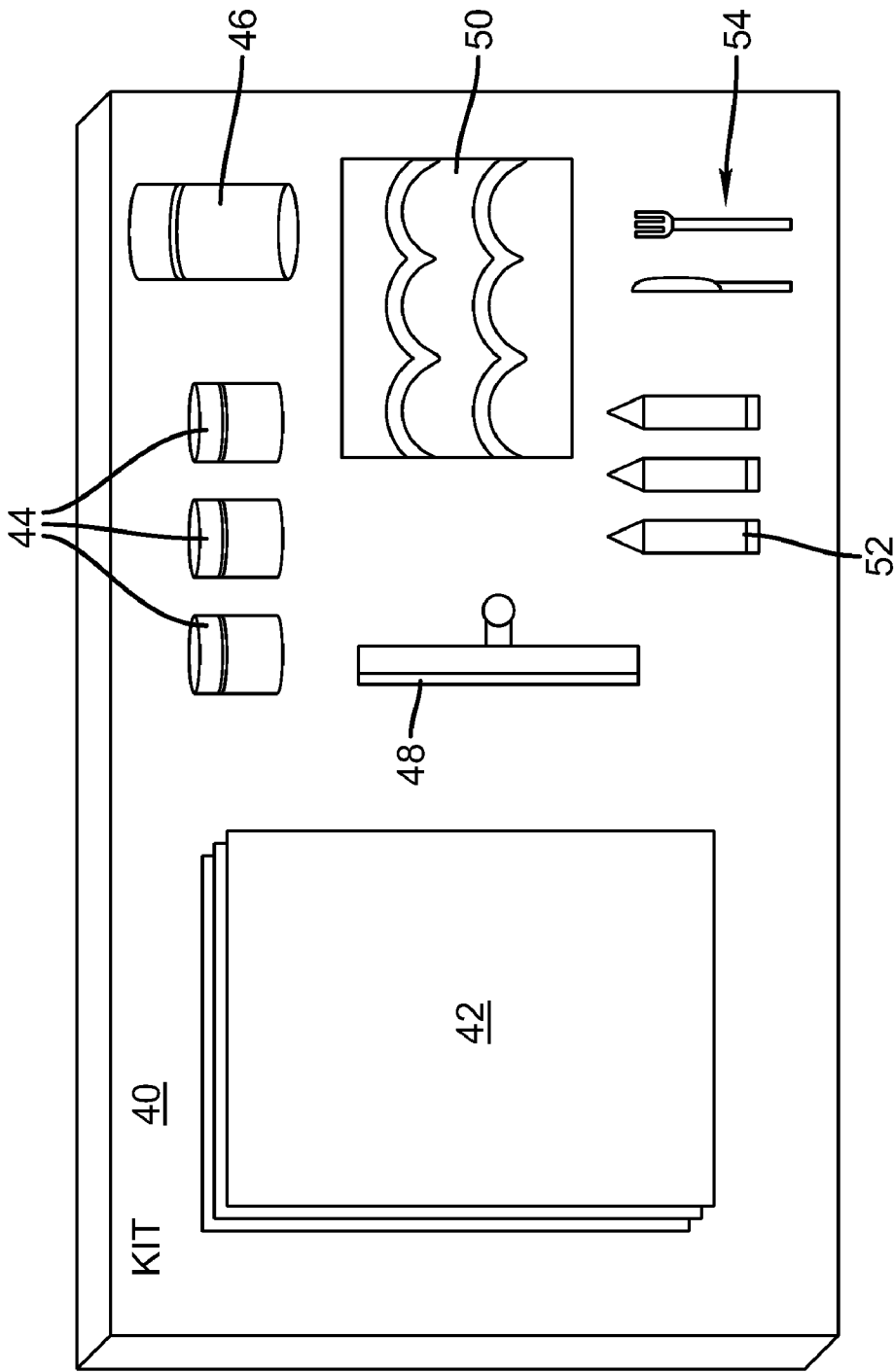


FIG. 7

LIGHT CANVAS

[0001] This application claims priority to co-pending U.S. provisional application Ser. No. 60/667,012, entitled LIGHT PARCHMENT OVERVIEW, filed on Mar. 31, 2005, the contents of which is hereby incorporated by reference.

FIELD OF THE INVENTION

[0002] The present invention relates generally to the arts, and more specifically relates to a system and method for preparing and coloring a surface to create a light enhanced surface and image.

BACKGROUND OF THE INVENTION

[0003] Any number of techniques exist for preparing a surface for decoration. For instance, an artist may add plaster to a canvas before painting to create a three dimensional feel. Depending on how the surface is prepared, different effects can be achieved with the final product.

[0004] Unfortunately, little effort has been made to develop surface preparation techniques that exploit light, either being shown behind or in front of the surface. Accordingly, a need exists for a unique formulation to produce a thin, textured, light-reflecting surface, or substrate, that, when painted, drawn, printed or stained on to create an image, pattern or design, will cast a brilliant luminous glow upon exposure to light; in either natural or artificial light and at minimal exposure, any image "painted" on this light-reflecting surface appears to "come alive" with vibrant colors—like stained glass.

SUMMARY OF THE INVENTION

[0005] The present invention addresses the above-mentioned problems, as well as others, by providing an easy-to-use surface to create a custom hand-painted or hand-applied work of fine art, commercial or craft art, and which can be used as a medium to create affordable finished fine art or commercial art products reproduced from a single original design, as in posters, lithographs or serigraphs.

[0006] In a first aspect, the invention provides a light conducting substrate, comprising: a transparent or translucent underlying substrate having a surface; and a surface treatment that includes a mixture of frit with transparent or translucent filler.

[0007] In a second aspect, the invention provides a method of creating a light canvas, comprising: providing an underlying substrate; applying a coating to a surface of the underlying substrate, wherein the coating includes frit and a transparent or translucent filler; curing the coating to create surface treatment on the underlying substrate; and sealing the surface treatment.

[0008] In a third aspect, the invention provides a kit for creating a light canvas, comprising: at least one underlying substrate; at least one type of coating, wherein the coating includes frit and a transparent or translucent filler; at least one device for applying the coating to a surface of the underlying substrate to create a surface treatment; and a sealant for sealing the surface treatment.

[0009] The finished light conductive substrate of the present invention absorbs paints, gels, stains, dyes or inks in such a way as to enable application by any typical art tools

or implements—pens, markers, brushes, sponges, cloths, palette knives, block prints, stamps and dies, etc.; allows for the image quality, the level of fine detail, and the full range and control of application and painting effects comparable to that of a cloth art canvas or even a paper surface; enables one to easily hand-paint or machine print or silk screen on glass or plastic surfaces, without time-consuming or costly procedures (such as sandblasting and subsequent baking of painted object at high temperatures to achieve permanence). Even when coated on traditional, non-transparent or translucent medium—such as cloth canvas (in particular, non-translucent cloth), papers or wood—and painted or printed with high pigment paints or inks, the light-reflecting surface heightens luminosity when exposed to light. The technique provides a more vibrant and realistic appearance in a faux stain glass effect than commercially available alternatives (such as printed latex or plastic), with the added capabilities of being easily hand or machine "painted". The technique is exceptionally more cost-effective, flexible and marketable than traditional stained glass, and can be used for many more art, craft, decorative or privacy applications than traditional stained glass.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] These and other features of this invention will be more readily understood from the following detailed description of the various aspects of the invention taken in conjunction with the accompanying drawings in which:

[0011] **FIG. 1** depicts a front view of a prepared substrate in accordance with an embodiment the present invention.

[0012] **FIG. 2** depicts a side view of a prepared substrate in accordance with an embodiment the present invention.

[0013] **FIG. 3** depicts a finished work with a light source located behind the work.

[0014] **FIG. 4** depicts a finished work with a light source located in front of the work.

[0015] **FIG. 5** depicts a flow chart of a method of creating a prepared substrate in accordance with an embodiment the present invention.

[0016] **FIG. 6** depicts a side view of a further embodiment of a prepared substrate in accordance with an embodiment the present invention.

[0017] **FIG. 7** depicts a kit for creating a prepared substrate and final work in accordance with an embodiment the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0018] The inventor has discovered that by mixing a light-reflecting compound, such as ground, crushed, powdered or flaked finished glass, commonly known as frit, with virtually any transparent or translucent polymer, or copolymer, that dries clear (referred to herein as the binding or filler), a coating can be produced that can be adhered to an underlying substrate and cured to form a thin, translucent surface treatment that can serve as a light-reflecting painting, printing, staining or dyeing surface. Once cured and adhered to an underlying substrate, a prepared light conductive substrate or "Light Canvas" is created that has the intense illumination properties described herein.

[0019] The underlying substrate may comprise any stable material. In the illustrative embodiments described herein the underlying substrate comprises a transparent or translucent material through which light can pass. Illustrative binding materials may include, e.g., Polyvinyl acetate (PVA) or Polyvinyl chloride (PVC) adhesives, resins, thermoplastics, and some acrylic, urethane, polyurethane, polyethylene, or silicone-based polymers, as well as any porous fast-drying cements.

[0020] FIGS. 1 and 2 depict a front and side view of a prepared substrate or light canvas 10 that includes an underlying substrate 14 and a surface treatment 12 formulated from a mixture of frit and a binding material. The light canvas 10 is ready to be painted to create a finished work. For the purpose of this disclosure, the term paint or painted may include any type of coloring applied to the light canvas. Examples include traditional paints, dyes, printing, magic marker, etc. In this case, the surface treatment 12 covers the entire underlying substrate 14. In other embodiments, the surface treatment 12 may only cover a portion of the underlying substrate 14, e.g., as determined by a stencil (not shown).

[0021] FIG. 3 depicts a finished work 18 in which a first portion 26 includes a painted surface treatment 26 and a second portion 20 is left untreated and comprises just the underlying substrate. In this case, a light source 16 is disposed behind the finished work such that the light passes through the finished work for viewing by an individual. In this configuration, the underlying substrate is preferably transparent or translucent. FIG. 4 depicts a further arrangement in which a light source 24 is placed in front of a finished work 19, such that the light reflects off of the painted surface treatment. In the arrangement of FIG. 4, the underlying substrate could preferably be opaque, transparent or translucent.

[0022] This luminous, glowing stained glass effect is achieved by virtue of the light-reflecting particles imbedded within or layered onto the polymer filler and which is then dried clear to form the thin surface treatment 12; any form of pigments applied to the surface treatment 12 are fully absorbed and effectively coat the particles so that they enhance light reflection, or luminosity, to excite and radiate an explosion of vivid, vibrant colors—like stained glass. Whatever image is “painted” on the surface treatment 12—either an image applied by hand, or one designed with the aid of a computer program (digitized) and applied by machine, as in an offset printing, or a silk-screen or decal appliqué process—appears to come alive with light, particularly when viewed from the reverse side of the dominant light source (backlit) and when the surface is adhered to a transparent or translucent material (plastic, acetate, glass, translucent cloth, etc.).

[0023] Should a “painted” Light Canvas be lit from the front and seen from the front, as one normally views a painting on canvas hung, perhaps framed, directly on a wall, then the light-reflecting qualities of the Light Canvas surface will, in fact, enhance the luminosity of the piece, however the effect would not be as dramatic as when backlit, and viewed from the front.

[0024] As a fine art, commercial or craft art medium, the light-reflecting surface treatment 12 absorbs paints uniformly well, allowing for rich color and fine detail without

surface runoff, pooling or bleeding. An added feature of the light-reflecting substrate is that it turns opaque when “painted”—the unpainted material is translucent—which is highly desirable for a number of privacy window applications. For example, consider an exterior window of a house coated with Light Canvas and painted with a decorative image. Sunlight streaming through the window will cause the image to “light up” and glow, especially when seen from inside the house; but a person standing outside the window, who would normally be seen if the window were clear glass, would not be seen through Light Canvas.

[0025] Described in detail below are two aspects, namely: 1) the formulation(s) of the coating in liquid form, so called Light Canvas Liquids; and 2) the fabrication of the finished, light-reflecting surface, or Light Canvas. These two related aspects are described as follows:

[0026] Formulations of Light Canvas Liquids

[0027] The formulation of the base material, Light Canvas Liquids, refers to the wet or liquid raw material or “coating” used to fabricate the prepared substrate, or Light Canvas. There are two core ingredients to the formulation—a light-reflecting material compound, such as ground glass (frit), and a binding material, which is typically fast-setting, dries clear and strong and is to some degree porous when dry, such as is generally described as a polymer in the class of an emulsion of polyvinyl acetate (PVA) in water. Through testing, the inventor has found that water-based PVA or PVC adhesives, when combined with frit, create an effective “painting” medium, given the porous nature of the adhesive allowing pigments to be absorbed and for each particle of frit to be thoroughly coated. Other forms of adhesives, such as non-porous urethanes or acrylics tend to act as sealants, thereby closing any pores and are appropriate for protecting the surface once paints, gels, stains, inks or dyes have been applied.

[0028] The base formulation can be augmented with chemical additives to create or enhance specific properties of the resulting Light Canvas surface in both of its primary states—as a finished yet unpainted medium, and a finished, painted medium. Such additives may include, but are not limited to: 1) additives to improve the water-resistance properties or to create a water-proof surface when cured, either of which may be requirements for different application uses; 2) additives to improve the longevity (shelf-life) of the resulting Light Canvas surface prior to “painting”; these additives will effectively inhibit the predictive drying out of the water-soluble filler when exposed to the elements over time; 3) additives to improve the scratch or tear resistance of the resulting surface, which would effectively increase its elasticity. The inventor cites these additives as potentially useful, but feels they do not, either in part or taken as a whole, alter or affect the purpose or uniqueness of the invention in any material way.

[0029] When using a PVA adhesive as filler, the type—and brand—used in the formulation can also have a major impact on the level of water-resistance of the finished surface, in addition to having different fabrication characteristics. A major industry distinction among adhesives is its Type classification; in general Type I adhesives offer no water-resistance, whereas Type II adhesives are in fact water-resistant. (By definition of the Federal Government’s hazardous materials ASTM labeling standards, water-resis-

tance is achieved when a glued, cured object is completely immersed in water for a minimum of 30 minutes without the glue breaking down, dissolving.)

[0030] The level of viscosity in a given brand of PVA material over another also plays a role in the efficiency of fabrication, namely in achieving a smooth spreading of the liquid, or in controlling consistency of thickness across a large area of the finished surface.

[0031] The inventor has experimented with numerous classes, types and combinations of materials for each of these two core ingredients; to date it appears that the above mentioned general purpose materials work most optimally for creating the desired glowing, light-reflecting effect of the "painted" surface, and for the purpose of enabling novice users (one with little or no knowledge of chemistry, or one with little or no knowledge of glass-making) to create a similar light-reflecting surface themselves from the base formulation of Light Canvas Liquids, and can do so in a safe—non-toxic, with no hazardous exposure to heavy metals or toxic chemicals as typically tested for by U.S. toxicologists following ASTM guidelines and for soluble heavy metals following the European EN-71 testing method. The use of frit allows the formulation to be easy-to-use and apply; it allows easy cleanup (simply with soap and water), and is cost-effective to produce.

[0032] Other formulation may likewise be utilized, such as glass batch—generally described as weighted and mixed raw materials. The batch is melted in furnaces at high heat, with annealing points roughly above 800 degrees Fahrenheit and softening points at roughly above 1200 degrees Fahrenheit to form the glass. Such batch formulations are often agglomerated (palletized) for easier, safer storage and use. Even though the primary purpose of agglomeration is to prevent the segregation of materials (unmixing) during shipping and storage, this process also increases safety of the toxic materials used in glass batch by reducing (though not eliminating) the dustiness of the materials in comparison to loose batch. While generally more inexpensive a material to use, and while palletized form has proven effective in producing the desired light-reflecting qualities when combined with pigments, this raw form of glass batch contains an abundance of hazardous chemicals. Other alternatives to frit, including sand-blasting sand, pure Silica, ground Quartz, diamond and Zircon dust, could likewise be used.

[0033] Lastly, the proportional mixture of the primary ingredients can change the desired texture and the degree of light-reflection in the resulting surface. As one increases the amount of the dry frit material without increasing the amount of wet filler, the proportionally higher frit content will thicken the formulation and tend to create a more highly textured and slightly (put perceptively) brighter luminosity in the light-reflecting effect of the resulting surface. The proportional measurement is referred to as the grit-to-filler ratio.

[0034] One can control texturing of the surface a number of ways, the most common being to adjust the granularity of the frit particles used in the formulation. The surface texture created by manipulation of the frit compound is known as the inherent texture of the surface. Adjusting the grit-to-filler ratio is another method for altering the inherent texture of the surface. To create a highly textured surface with high peaks and valleys, for example, you would use a coarser-

grained frit (bigger particles); and to ensure a rougher texture distributed more uniformly across the area of the surface you would then use a higher grit-to-filler ratio. The grit-to-filler ratio also plays a part in the degree of luminosity—seen as the "brightness" of colors. Typically the higher the grit content, the brighter the effect, but there is a point at which adding more grit will cease to increase luminosity. This point or threshold is actually a function of the purity of the pigments being reflected, and not the volume of grit. By definition, pure pigments—thus colors of paints or inks based on pure pigments, such as cadmiums, quinacridones and phthalos—will achieve a higher luminosity than non-pure pigments, as luminosity is the measure of the degree of light and its interaction with the purity of pigment. If the output of the light source is equal, a pure pigment color applied to a light-reflecting surface with higher frit content will appear brighter than on a surface with lower frit content.

[0035] With respect to the various mediums used to "paint" the surface, mediums processed as pure pigments—such as watercolor concentrates, inks or dyes, even magic marker inks, which have not been packaged or processed with fillers (both chemical and natural) to create volume and bulk, among other things—will react to the Light Canvas by reflecting the truest color value, hue and representations when illuminated; most brands of paints or gels—acrylics, oils and enamels—contain filler additives that when coating the light-reflecting particles will tend to turn the color to a grayish tint of the original color. This is particularly prevalent in lighter colors—whites, yellows, golds, tans, etc. In some applications, that the colors appear different when lit and unlit, would be desirable. Or is simply a matter of aesthetic or creative choice. For other applications, retention of pure color value, hue and representation will be critical.

[0036] A higher frit content, thus a higher grit-to-filler ratio, will enable a thicker surface for each single coat, but will also increase the opacity of the unpainted surface. (One can always add multiple coats to increase the thickness of the resulting surface as well.)

[0037] By adjusting up or down the grit-to-filler ratio, you can control the effective translucency or opacity as required for the application. For finished art works, the degree of translucency is both a practical and aesthetic consideration; examples of this include controlling the degree of light penetration necessary to achieve a particular look, manipulating image luminosity or transparency to achieve a certain color balance or to create contrast in light and shadows or in elements, and in calibrating depth or values of color and brightness of hues, among others. Owing to the limitations of light penetration through various colors and through solid objects, one must also take into account the thickness of the transparent or translucent materials to which the Light Canvas is adhered.

[0038] Fabricating & Finishing Light Canvas Surfaces

[0039] The fabrication process used to make the prepared substrate, or Light Canvas, is straightforward. The fabrication and finishing process can be performed manually, with hand tools, but can also be automated for volume production with the aid of industrial manufacturing equipment of kinds generally available. Some equipment, such as spreaders, or compression air guns may require minor adjustments or modifications.

[0040] The fabrication process differs depending on the type of material to which Light Canvas Liquids is being

adhered. In general, there are two primary fabrication methods—the first for flat binding surfaces, and the second for contoured, three-dimensional surfaces.

[0041] Binding Flat Surfaces

[0042] For binding the substrate to flat material—e.g., a sheet of glass, plastic or vinyl of any thickness or to fabrics—fabrication involves a few basic steps, as described below and illustrated in the process flow diagram which follows. A manual process is assumed in this description, which is shown in **FIG. 5**.

[0043] Step S1. Pre-mix a formulation of Light Canvas Liquids to achieve the desired viscosity (thickness of the slurry) and desired inherent texture, all the while balancing levels of luminosity and translucency/opacity. As previously discussed, there are various ways to control these, such as in choice of adhesive and in adjusting the grit-to-filler ratio. Also, some PVA adhesives are high viscous, copolymer formulations, which can be thinned or thickened as necessary to better control spreading and curing time, and to increase use by thinning with water.

[0044] Step S2. Lay out the sheet(s) of binding material (i.e., the underlying substrate) on a flat, sturdy work surface; ensure that the work surface is only so wide as to give you access to the entire coverage area, allowing for hand touch up. Binding material must be secure and cannot shift or slide.

[0045] One can also lay out the sheets with an aim toward utilizing stencils to “carve out” an image or pattern, merely coating only the stenciled image (or reverse, coating the non-stenciled area) and leaving the rest of the sheet clear. The coated area becomes of course a raised surface, similar to embossing, which allows this area to stand out against the backdrop of the clear surface. The “clear” portion may be a colored or patterned plastic or glass depending on the particular application.

[0046] Steps S3. Either pour liquid or spray, e.g., using a compressor airbrush to apply liquid Canvas. Apply the desired amount of raw material to cover the entire binding surface area. When pouring, it may be preferable to start from the center and work outwards. When airbrushing, use steady, repetitive sweeping motions to produce a flat, even surface—unless introducing bumps or mounds, slubs, clumps (of frit) or wrinkles intentionally for the sake of texturing interest and effect.

[0047] Step S4. Spread the coating evenly to a desired thickness when poured. Using a squeegee or trowel-like utensil of appropriate width.

[0048] Step S5. Smooth out surface—or roughen surface intentionally to desired texture. If smooth surface is desired, work out air pockets, slubs, wrinkles and any other blemishes. If a more textured surface is required, there are a several techniques and tools (household utensils and artist tools) that can be used to create a variety of texture stylizations or patterns.

[0049] Tools such as palette knives, scrapers, nails, screws, dried leaves, sponges, wire and hair brushes, combs of varying teeth size and number, graters, unsharpened pencils, coins, etc. can be used to create unusual and interesting patterns that add new dimensions to the “painted” image caught under the light-reflecting surface.

[0050] Step S6. Stand surface to dry. Actual curing time can range from 2 hours to 24 hours, depending on several factors. The most salient factors are coverage area, liquid viscosity, class and brand of adhesive, evenness of the spread, etc. On average, an 8×10" area with a single coat, a Type 1 adhesive, and a fine-grained texture (a 1:4 part, grit-to-filler ratio) would cure completely in 2-3 hours.

[0051] Step S7. Trim surface edges as necessary. Sanding roughened areas is possible with a fine grade paper. If the surface tears, it can be “patched” with liquid canvas, similar to using spackle on stucco.

[0052] Step S8. Apply finishing gently to seal and protect the surface; typically the finishing treatment is no more than a light spray of acrylic sealant, or a thinned coat of glazing or medium. Light finishing preserves moisture to extend the shelf life of the surface. All exposed edges, however, should be better protected using a couple of coats of sealant. (Drying occurs from the edges inward to the center.)

[0053] Alternative Fabrication:

[0054] Layering Process to Create Rugged Surface Texture

[0055] Through experimentation, the inventor has discovered an alternate fabrication method, which not only achieves an exaggerated roughness to the surface texture, but also heightens the luminosity effect. This method does not require pre-mixing a formulation, but rather is a layering method, and is shown in **FIG. 6**. In this case, a treated substrate **26** is provided by layering material onto the underlying substrate **28**. Frit particles are layered, not immersed in the liquid filler. The process involves spreading a first layer of liquid polymer **30** as a basecoat to the underlying substrate **28**, then dusting a first layer of frit **32** atop the first layer **30**. As one thickens the layer of frit, the surface will roughen proportionately. With a more rugged texture, your “painted” images convey a different look, feeling, sense of depth, tension and visual impact. For more depth of luminosity, but sacrificing translucency, one can build multiple layers once each undercoat layer has cured; the rough-hewn texture, and irregular depth and “hills” can yield intriguing light reflection characteristics. Thus, a second layer of liquid polymer **34** is applied over the first layer of frit **32**. Then, a second layer of frit **36** is dusted onto the second layer of polymer **34**.

[0056] Interestingly, one-of-a-kind textured designs (stylizations) may be achieved with this layered method, which are appear radically different than textures in the original, pre-mixed formulation; with discipline, these one-of-a-kind stylizations can be reproduced in volume. For example, one can briefly lift up the Canvas to a vertical position when wet to form unique patterns of fissures, eddies and pockets as the wet surface “slides” and the dampened frit bunches and rolls. Another example is to create circular swirls by turning a semi-dry canvas upside down and, while applying light pressure, spinning the canvas clockwise one full rotation, and then quickly—with a single, fast motion—lifting the canvas up quickly.

[0057] Binding Contoured Surfaces

[0058] Contoured objects such as glasses, vases, bowls, hurricane lamps, and so forth, can all be coated and “painted” to produce stunning, light-reflecting works that

come alive with light. While the fabrication and finishing process is generally the same as for flat surfaces, it has a few differences. Spreading of the liquid to coat and bind to a shaped object in the same manner as with a flat surface may be difficult. Rather it may be preferable to brush, sponge, or swipe with cloth on the shaped surfaced, and may require repeated strokes to ensure even coating and a minimal of "lifting" (that portion of the material that is lifted up and dragged along at the start of a brush stroke).

[0059] For larger pieces, it may be more practical to dip the object into a container of Light Canvas Liquids, with the container deep enough for the object to be fully immersed. When removing the piece, it may be turned briskly once or twice to keep material runoff to a minimum. If the object has a hollow center with an opening, the opening must be sealed off prior to dipping, or valuable Canvas material shall be wasted.

[0060] Typical applications for such coated objects include beautifully hand-painted or printed vases in which a dramatic light source (e.g., light emitting diodes (LEDs), cathode ray tubes, EL wiring, light pipes or incandescent or halogen lights) is configured in the center of the piece.

[0061] Various applications of the techniques and processes described herein may include, but are not limited to:

[0062] 1) Fine Arts and Crafts, containing both supplies and finished products for fine arts, commercial and photographic arts, and supplies and finished products for folk, craft and decorative arts; more particularly, the invention relates to:

[0063] a) Fine arts and crafts supplies, which are typically sold and used by professionals, students or hobbyists of the arts, and which include the paints and paint mixing materials, painting or sculpting preparation materials (coatings, such as gesso or pre-mixes, plasters, fillers, clays, bonds and pastes, etc.) finishes (stains, sealants, glazing, mediums, lacquers, extenders, etc.), finished art canvases and canvas making materials (synthetic or natural cloth stretched over a frame, or sheets of acrylic, polycarbonate (such as lexan), acetate or vinyl plastic, glass, foam or woods), all of which are used to create finished products of fine arts, commercial arts, and/or folk, craft and decorative arts; the invention also in particular relates to

[0064] b) Shaped, finished glass or plastic objects and flat sheets of glass or plastic that can be directly painted on (with oils, enamels, acrylics, watercolors and pure pigment oils or dyes), drawn on (with pastels, chalks, magic markers) or printed on (with inks or dyes) or stained on (with stains);

[0065] c) Translucent milled natural cloth or synthetic fabrics;

[0066] 2) Commercial art and commercial art supplies, and more particularly, the invention relates to:

[0067] a) printing, reproduction, duplication and computer-generation of finished commercial art, including posters, lithographs, serigraphs, photocopies, silk-screening, etc.;

[0068] b) art framing service and supplies;

[0069] c) commercial art supplies for the printing, reproduction, duplication and computer-generation or rendering of finished commercial art; the art framing markets;

[0070] 3) Home and office furniture and furnishings, decorations and design, and more particularly relates to:

[0071] a) Home and office furniture (tables, desks, chests, armoires, chairs);

[0072] b) Home and office furnishings, accents and decor accessories;

[0073] c) Interior and exterior privacy and decorative windows and coverings;

[0074] d) Skylights;

[0075] e) Light fixtures and coverings;

[0076] f) Wall hangings (art and decorative pieces);

[0077] g) Aquarium and tank decorations;

[0078] h) Decorative floor coverings;

[0079] i) Floor and wall tiles;

[0080] j) Bath and shower doors;

[0081] k) Home privacy or decorative screens; and

[0082] l) Office and office cubicle partitions.

[0083] FIG. 7 depicts an illustrative embodiment in which a kit 40 is provided to create a treated substrate and then create final work. Kit 40 includes a set of unfinished substrates 42, coating 44 (which may be of different grit-to-filler ratios to provide different results), a spreader 48, stencils 50, paints 52, tools/brushes 54, and a spray sealant 46. Obviously, the specific contents of kit 40 could vary without departing from the scope of the invention. For example, rather than including premixed coatings 44, kit 40 could include a supply of frit and a supply of filler that could be mixed by the user as desired.

[0084] The foregoing description of the invention has been presented for purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed, and obviously, many modifications and variations are possible. Such modifications and variations that may be apparent to a person skilled in the art are intended to be included within the scope of this invention as defined by the accompanying claims.

1. A light canvas, comprising:

a transparent or translucent underlying substrate having a surface; and

a surface treatment that includes a mixture of frit with a transparent or translucent filler.

2. The light canvas of claim 1, further comprising a sealant applied over the surface treatment.

3. The light canvas of claim 2, further comprising a decoratively painted image on the surface treatment.

4. The light canvas of claim 3, further comprising a second sealant applied over the decoratively painted image.

5. The light canvas of claim 4, further comprising a light source disposed behind the light conducting substrate.

6. The light canvas of claim 1, wherein the underlying substrate is selected from the group consisting of: glass, plastic, and plexi-glass.

7. The light canvas of claim 1, wherein the transparent or translucent filler is selected from the group consisting of: a polyvinyl acetate (PVA) or polyvinyl chloride (PVC) adhesive, a resin, a thermoplastic, an acrylic, a urethane, a polyurethane, a polyethylene, a silicone-based polymer, and a fast-drying cement.

8. The light canvas of claim 1, wherein the surface treatment covers only a portion of the underlying substrate.

9. A method of creating a light canvas, comprising:

providing an underlying substrate;

applying a coating to a surface of the underlying substrate, wherein the coating includes frit and a transparent or translucent filler;

curing the coating to create surface treatment on the underlying substrate; and

sealing the surface treatment.

10. The method of claim 9, wherein the coating is premixed.

11. The method of claim 9, wherein the underlying substrate is opaque, translucent or transparent.

12. The method of claim 9, wherein the coating is applied with a stencil.

13. The method of claim 9, further comprising the step of painting the surface treatment.

14. The method of claim 9, further comprising the step of disposing a light source behind the light canvas.

15. The method of claim 9, wherein the step of applying the coating includes smoothing or roughening the coating to a desired texture.

16. The method of claim 9, wherein the step of applying the coating includes:

applying a layer of filler; and

applying a dusting of frit onto the layer of filler.

17. A kit for creating a light canvas, comprising:

at least one underlying substrate;

at least one type of coating, wherein the coating includes frit and a transparent or translucent filler;

at least one device for applying the coating to a surface of the underlying substrate to create a surface treatment; and

a sealant for sealing the surface treatment.

18. The kit of claim 17, wherein the at least one underlying substrate is transparent or translucent.

19. The kit of claim 17, further comprising means for providing coatings of different frit-to-filler ratios.

20. The kit of claim 17, further comprising paints for coloring the surface treatment.

* * * * *