a transparent substrate, the stack comprising a first dielectric layer over at least a portion of the substrate; a first discontinuous metal layer over at least a portion of the first dielectric layer; and a first primer layer over at least a portion of the first discontinuous metal layer; and flashing the transparency at a temperature ranging from 10ºC to 50ºC or ranging from 20ºC to 30ºC, with a single flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm2 to 7 J/cm2 for a pulse length of up to 10 ms, thereby increasing visible light transmittance of the transparency.

[0007a] In one aspect, the present disclosure refers to A method of producing a coated transparency, comprising

a. depositing a stack of thin layers on a transparent substrate, the stack comprising a first dielectric layer over at least a portion of the substrate; a first discontinuous metal layer over at least a portion of the first dielectric layer; and a first primer layer over at least a portion of the first discontinuous metal layer, thereby forming the coated transparency; and
b. flashing the coated transparency of the depositing step at room temperature, with more than one flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm^2 to 7 J/cm^2 for a pulse length of above 0 ms and up to 10 ms, thereby increasing visible light transmittance of the coated transparency.

[0008] According to another example of the disclosure, a method of flash annealing a transparency is provided wherein, the transparency comprises: a transparent substrate, a first dielectric layer over at least a portion of the substrate, a first continuous metal layer over at least a portion of the first dielectric layer, a first primer layer over at least a portion of the first metal layer, a second dielectric layer over at least a portion of the first primer layer, a second continuous metal layer over at least a portion of the second dielectric layer, and a second primer over at least a portion of the second metal layer, comprising, flashing the transparency at a temperature ranging from 10ºC to 50ºC or ranging from 20ºC to 30ºC, with a flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm^2 to 7 J/cm^2 for a pulse length of up to 10 ms, thereby increasing visible light transmittance or decreasing emissivity of the transparency.

[0008a] In another aspect, the present disclosure refers to a method of flash annealing a transparency, the transparency comprising: a transparent substrate, a first dielectric layer over at least a portion of the substrate, a first metal layer over at least a portion of the first dielectric layer, a first primer layer over at least a portion of the first metal layer, a second dielectric layer over at least a portion of the first primer layer, a second metal layer over at least a portion of the

second dielectric layer, and a second primer over at least a portion of the second metal layer, comprising, flashing the transparency at room temperature, with more than one flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm^2 to 7 J/cm^2 for a pulse length of above 0 ms and up to 10 ms, thereby increasing visible light transmittance or decreasing emissivity of the transparency.

[0008b] In another aspect, the present disclosure refers to a method of flash annealing a transparency, the transparency comprising: a transparent substrate, a first dielectric layer over at least a portion of the substrate, a first metal layer over at least a portion of the first dielectric layer, a first primer layer over at least a portion of the first metal layer, a second dielectric layer over at least a portion of the first primer layer, a second metal layer over at least a portion of the second dielectric layer, a second primer layer over at least portion of the second metal layer, a third dielectric layer over at least a portion of the second primer layer, a third metal layer over at least a portion of the third dielectric layer, a third primer layer over at least a portion of the third metal layer, a fourth dielectric layer over at least a portion of the third primer layer, a fourth metal layer over at least a portion of the fourth dielectric layer, a fourth primer layer over at least a portion of the fourth metal layer, and a protective layer over at least a portion of the fourth primer layer; wherein the second or third metal layer is a discontinuous metal layer, comprising, flashing the transparency at room temperature, with more than one flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm^2 to 7 J/cm^2 for a pulse length of above 0 ms and up to 10 ms, thereby increasing visible light transmittance or decreasing emissivity of the transparency.

[0009] According to yet another example of the disclosure, a non-tempered transparency is provided, the method comprises

a. a float glass substrate;
b. a first dielectric layer over at least a portion of the glass substrate;
c. a first silver layer over at least a portion of the first dielectric layer;
d. a first titanium layer over at least a portion of the first silver layer and having a thickness ranging from 1 to 2 nm;
e. a second dielectric layer over at least a portion of the first titanium layer;
f. a second silver layer over at least a portion of the second dielectric layer;
g. a second titanium layer over at least a portion of the second silver layer and having a thickness ranging from 1 to 2 nm; a first dielectric layer over at least a portion of the glass substrate;
h. a third dielectric layer over at least a portion of the second titanium layer;
i. a third silver layer over at least a portion of the third dielectric layer;

We claim

1. A method of producing a coated transparency, comprising
   a. depositing a stack of thin layers on a transparent substrate, the stack comprising a first dielectric layer over at least a portion of the substrate; a first discontinuous metal layer over at least a portion of the first dielectric layer; and a first primer layer over at least a portion of the first discontinuous metal layer, thereby forming the coated transparency; and
   b. flashing the coated transparency of the depositing step at room temperature, with more than one flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm^2 to 7 J/cm^2 for a pulse length of above 0 ms and up to 10 ms, thereby increasing visible light transmittance of the coated transparency.
2. The method of claim 1, wherein a primer layer has a thickness ranging from 1 nm to 2 nm.
3. The method of claim 1, wherein the non-coherent light source is a xenon flash lamp.
4. The method of claim 1, wherein the flash pulse ranges from 0.2ms to 2ms.
5. The method of claim 1, wherein the first primer comprises metallic titanium, an austenitic nickel-chromium alloy, or a cobalt-chromium alloy.
6. A method of flash annealing a transparency, the transparency comprising: a transparent substrate, a first dielectric layer over at least a portion of the substrate, a first metal layer over at least a portion of the first dielectric layer, a first primer layer over at least a portion of the first metal layer, a second dielectric layer over at least a portion of the first primer layer, a second metal layer over at least a portion of the second dielectric layer, and a second primer over at least a portion of the second metal layer, comprising, flashing the transparency at room temperature, with more than one flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm^2 to 7 J/cm^2 for a pulse length of above 0 ms and up to 10 ms, thereby increasing visible light transmittance or decreasing emissivity of the transparency.
7. The method of claim 6, wherein the transparency the transparency further comprises: a third dielectric layer over at least a portion of the second primer layer; a third metal layer over at least a portion of the third dielectric layer; a third primer layer over at least a portion of the third metal layer; and a protective layer over at least a portion of the third primer layer.
8. The method of claim 6, wherein the first metal layer and the second metal layer comprise silver.
9. The method of claim 7, wherein the transparent substrate is a float glass substrate; wherein the first metal layer comprises silver; wherein the first primer layer comprises titanium having a thickness ranging from 1 nm to 2 nm; wherein the second metal layer comprises silver;

wherein the second primer layer comprises titanium having a thickness ranging from 1 to 2 nm; wherein the third metal layer comprises silver; and wherein the third primer layer comprises titanium having a thickness ranging from 1 to 2 nm.

10. The method of claim 6, further comprising placing a mask between the source of the more than one flash of non-coherent light and the transparency such that at least a portion of each flash of the more than one flash is mased such that the non-coherent light from each flash of the more than one flash is partially blocked by the mask from reaching the transparency, and reaches only a portion of the transparency, thereby producing a pattern of reflected color, transmitted color, differential sheet resistance, and/or emissivity in the transparency.

11. A method of flash annealing a transparency, the transparency comprising: a transparent substrate, a first dielectric layer over at least a portion of the substrate, a first metal layer over at least a portion of the first dielectric layer, a first primer layer over at least a portion of the first metal layer, a second dielectric layer over at least a portion of the first primer layer, a second metal layer over at least a portion of the second dielectric layer, a second primer layer over at least portion of the second metal layer, a third dielectric layer over at least a portion of the second primer layer, a third metal layer over at least a portion of the third dielectric layer, a third primer layer over at least a portion of the third metal layer, a fourth dielectric layer over at least a portion of the third primer layer, a fourth metal layer over at least a portion of the fourth dielectric layer, a fourth primer layer over at least a portion of the fourth metal layer, and a protective layer over at least a portion of the fourth primer layer; wherein the second or third metal layer is a discontinuous metal layer, comprising, flashing the transparency at room temperature, with more than one flash of non-coherent light in the visible spectrum with an intensity ranging from 1 J/cm^2 to 7 J/cm^2 for a pulse length of above 0 ms and up to 10 ms, thereby increasing visible light transmittance or decreasing emissivity of the transparency.

12. The method of claim 1, wherein the coated transparency has a sheet resistance which is decreased to 2 Ω/□ or less after flashing.