The present invention relates to systems and methods for providing illuminated signage in a public space. The system may have at least one window, each window having an exterior surface and an interior surface; at least one coat of a non-transparent coating in communication with the interior surface of the window; at least one projector which projects at least one reversed image on the inside surface of the window; and at least one host controller. The host controller may control the reversed images being protected onto the window. The image (in a non-reversed manner) is then viewable on the exterior surface.
SYSTEMS AND METHODS FOR PROVIDING PUBLIC SPACE ADVERTISING

[0001] The present invention relates generally to a system and method of advertising using pre-existing or standard windows.

[0002] In a crowded or city environment, advertisers are always looking for ways to advertise to large crowds of potential customers for their product. In many cities, billboards, printed vinyl sheets and other outdoor signage are preferred methods of attracting customers to a product. However, in many cities (e.g. New York City) the use of such traditional methods of outdoor advertising has become so widespread that advertisers are eager to utilize new techniques to make their advertisements stand out from the crowd. As such, a new method of advertising that is widely available is presently needed in urban settings.

[0003] Existing advertising methods include murals. A typical mural may use paint and may be applied to the side of buildings. Such a method of advertising is costly, as it requires scaffolding and the dangerous task of painting on the side of a building. This process must be repeated often, as the entire mural must be removed and replaced to change the advertisement. Another problem with murals is the static nature of the advertisement. Because they lack the ability to incorporate full-motion, dynamic video and other modern advertising techniques, murals do little to distinguish themselves in an ever-crowded outdoor advertising marketplace.

[0004] Another method of advertising that has gained recent attention is the use of flat screen televisions. Such televisions have been installed in store windows, in store interiors, as well as in numerous other places. Such installations, however, are expensive, fragile and prone to breakage.

[0005] In addition to flat screen televisions, advertisers seeking to target an urban audience have begun to use light emitting diode screens (“LED Screens”). While capable of displaying full motion video, LED screens are typically erected on the exterior of a building and, as such, require substantial construction costs. LED screens have also been installed outside of subway entrances in New York City. Due to the fact that they are placed outdoors, however, they must be manufactured so as to be able to withstand extreme weather conditions, thereby increasing the costs associated with their usage.

[0006] The present invention provides an easy to change, easily adaptable system and method that may use the interior of existing windows to provide full motion, dynamic, public space advertising viewable on the outside of the window.

SUMMARY OF THE INVENTION

[0007] The present invention relates to public space advertising and more particularly to systems and methods for converting existing windows into advertising space.

[0008] According to one embodiment of the present invention, a method of converting a window for use as an illuminated sign is disclosed, the method comprising the steps of: applying at least one coat of a non-transparent coating to an inside surface of a window; and projecting at least one reversed image from at least one projector on the inside surface of the window.

[0009] According to another embodiment, a method of converting two or more windows for use as a networked illuminated signage platform is disclosed. The method comprising the steps of: applying a non-transparent coating to the inside surface of the windows; projecting at least one reversed image from at least one projector on the inside surface of the windows; establishing a control connection between each of the projectors and a central host controller to provide an illuminated signage platform.

[0010] A system for providing illuminated signage, the system comprising: at least one window, each window having an exterior surface and an interior surface; a coating in communication with the interior surface of the window; at least one projector, wherein the projector projects at least one reversed image on the inside surface of the window; and at least one host controller.

[0011] These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 depicts the exterior of a building;

[0013] FIG. 2 depicts a side view according to the present invention;

[0014] FIG. 3 depicts the exterior of a building according to the present invention; and

[0015] FIG. 4 depicts a side view according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0016] The following detailed description is of the best currently contemplated modes of carrying out the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims.

[0017] FIG. 1 depicts the exterior of a typical building as may be used to provide an illuminated signage for advertisement. As shown, the building 10 may have numerous windows (e.g. 12, 14, 16, 18, 20, 22, 24, 26).

[0018] FIG. 2 depicts a side view of the window and the corresponding interior according to the present invention. As shown, the window may be converted for use as an illuminated sign. The window may be a typical window, as shown or a public space window. A public space window may be, for example, a window on the side of a store inside a mall. The term public space window may also include windows located in airports, train stations, or any other public gathering place.

[0019] According to one aspect of the present invention, a method of converting a window 12 for use as an illuminated sign is disclosed, the method comprising the steps of: applying at least one coat of a coating 15 to an inside surface 13 of a window 12, the coating may be non-transparent; and projecting at least one reversed image 17 from at least one projector 28 on the inside surface 13 of the window 12. The term inside surface typically means the surface on the interior of a building. However, the present invention is also
intended for public spaces, such as malls and the like. In this instance, the inside surface refers to the surface opposite of the surface that the image is viewed in a non-reversed image as both sides would be on the interior of the building. The reversed image 17 may be a reversed video image, a digital video image or any other image suitable for a large scale advertisement. The coating 15 may be an acrylic paint and have a viscosity poise between 200 and 675. The reversed image 17 may have a luminance of at least 1000 nits. The step of projecting the reversed image may be controlled by a host system 30. The host system may project a reversed image by playing back unique sequences in a programmable order.

According to another embodiment, a method of converting two or more windows for use as a networked illuminated signage platform is disclosed the method comprising the steps of: applying a coating 15 to the inside surface 13 of windows (e.g. 12, 14, 16, 18, 20, 22, 24, 25); projecting at least one reversed image 17 from at least one projector 28 on the inside surface of the windows; and establishing a control connection between each of the projectors and a central host controller 80 to provide an illuminated signage platform. As shown in FIG. 4, the central host control 80 is in communication with other host controllers (e.g. 30 and 60). It should be understood, that a single computer may control each projector or all the projectors, via a network (wireless, wired or other methods of networking may be used). A single integrated image may be projected onto two or more adjacent windows using a central host controller (e.g. 80). Also, an image may be projected simultaneously onto two or more windows located in separate buildings, adjacent or otherwise using the central host controller. By way of example, the advertisement may be a video of a boy throwing a ball and the ball may bounce from building to building around a city. The images may be digital video images and the host controller may play back unique sequences in a programmable order. The image may have a luminance of at least 1000 nits so as to be daylight visible. Typically, the advertisement or platform is used to promote a product or service.

There are a number of different ways in which it is envisioned that the present invention may be utilized as claimed. The most simple, is the projection of a single image onto a single window. This may involve multiple projectors, but, in such case, the projectors will each be projecting the same image, additional projectors being used solely to increase the brightness of the image. Another scenario involves multiple projectors projecting distinct images onto a single large window. These images would be synchronized in order to give the appearance of one integrated image projected onto the window. In a third situation, separate projectors would project images onto separate, adjacent windows. These adjacent windows would, again, be synchronized to form a coherent whole. Under yet another model, a network of projections (utilizing any of the previously mentioned methods) would be dispersed throughout the city, projecting the same content on windows located in distinct buildings. Thus, an advertiser could launch an advertising campaign that could be broadcast across the city simultaneously.

It should be understood that the foregoing relates to preferred embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.

We claim:
1. A method of converting a window for use as an illuminated sign, said method comprising the steps of:
   applying at least one coat of a coating to the inside surface of said window; and
   projecting at least one reversed image from at least one projector onto said inside surface of said window.
2. A method as in claim 1, wherein said reversed image is a reversed video image.
3. A method as in claim 2, wherein said reversed video image is a digital video image.
4. A method as in claim 1, wherein said step of projecting a reversed image is controlled by a host system.
5. A method as in claim 4, wherein said step of projecting a reversed image is further comprised of the steps of:
   playing back unique sequences in a programmable order.
6. A method as in claim 1, wherein said window is a public space window.
7. A method as in claim 1, wherein said sign is used to promote a product or service.
8. A method as in claim 1, wherein said reversed image has a luminance of at least 1000 nits.
9. A method as in claim 1, wherein said coating is a non-transparent coating.
10. A method as in claim 9, wherein said non-transparent coating is an acrylic paint.
11. A method as in claim 10, wherein said acrylic paint has a viscosity poise between 200 and 675.
12. A method of converting two or more windows for use as a networked illuminated signage platform, said method comprising the steps of:
   applying a coating to the inside surface of said windows;
   projecting at least one reversed image from at least one projector on said inside surface of said windows;
   establishing a control connection between each of said projectors and a central host controller to provide an illuminated signage platform.
13. A method as in claim 12, further comprising the step of:
   projecting onto two or more adjacent windows at least a portion of two of said reversed images using said central host controller to provide a single integrated image.
14. A method as in claim 12, further comprising the steps of:
   simultaneously projecting onto two or more windows located in separate buildings, adjacent or otherwise, at least one of said reversed images using said central host controller.
15. A method as in claim 12, wherein said reversed images are reversed video images.
16. A method as in claim 12, wherein said reversed video images are digital video images.
17. A method as in claim 12, wherein said central host controller plays back unique sequences in a programmable order.
18. A method as in claim 12, wherein each of said windows is a public space window.
19. A method as in claim 12, wherein said platform is used to promote a product or service.
20. A method as in claim 12, wherein said images have a luminance of at least 1000 nits.
21. A method as in claim 12, wherein said coating is a non-transparent coating.
22. A method as in claim 21, wherein said non-transparent coating is an acrylic paint.
23. A method as in claim 22, wherein said acrylic paint has a viscosity poise between 200 and 675.
24. A method as in claim 12, wherein said windows are not adjacent.
25. A system for providing illuminated signage, said system comprising:
   At least one window, each said window having an exterior surface and an interior surface;
   a coating in communication with said interior surface of said window;
   at least one projector, wherein said projector projects at least one reversed image on said inside surface of said window; and
   at least one host controller.
26. A system as in claim 25, further comprising:
   A control connection between each of said projectors and a central host controller to provide an illuminated signage platform.
27. A system as in claim 25, wherein said at least one window is at least two windows located in separate buildings, adjacent or otherwise, and at least one of said reversed images is controlled using said central host controller.
28. A system as in claim 25, wherein said reversed images are reversed video images.
29. A system as in claim 25, wherein said reversed images are digital video images.
30. A system as in claim 25, wherein said central host controller plays back unique sequences in a programmable order.
31. A system as in claim 25, wherein each of said windows is a public space window.
32. A system as in claim 25, wherein said platform is used to promote a product or service.
33. A system as in claim 25, wherein said reversed images have a luminance of at least 1000 nits.
34. A system as in claim 25, wherein said coating is a non-transparent coating.
35. A system as in claim 34, wherein said non-transparent coating is an acrylic paint.
36. A system as in claim 35, wherein said acrylic paint has a viscosity poise between 200 and 675.
37. A system as in claim 35, wherein said windows are not adjacent.

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