INTERCHANGEABLE ART TILES SYSTEM

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ABSTRACT
The present invention provides a system for readily interchanging one tile or panel or set of panels with another tile or panel or set of panels so that the tiles or panels to be layered or mounted onto each other and a user can thereby change out the color, design, style and/or size of the panels at will. The present invention includes a first panel having a front surface, a second panel having a back surface, a block attachment having a front surface and a back surface, the back surface being attached to the back surface of the second panel, and an attachment device having a first part that detachably connects to a second part. The first part of the attachment device is attached to the front surface of the first panel and the second part is either attached to the front surface of the block attachment or is defined in the front surface of the block attachment. Additional attachment devices may also be utilized.
INTERCHANGEABLE ART TILES SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS


BACKGROUND OF THE INVENTION

[0002] This invention relates generally to art tiles and, more particularly, to an inexpensive and versatile system for users to display art.

[0003] Wall art brings warmth and personality to any home or office space. It is an essential part of any interior design concept, whether it is for a business or an individual’s home. However, other home and business expenses often leave owners with no choice but to cut corners when it comes to interior decor. Also, because many furnishings fall into the luxury goods category, even those with a substantial budget for their design projects can find themselves priced out of the market. Wall art in particular, especially unique art and large art pieces, can cost significantly more than the average home or business owner can afford.

[0004] It is a common occurrence for people to change the decor in their homes and businesses. A change in décor often includes a change in the color scheme. Large art pieces or canvases are often very expensive and therefore, some people simply paint a large square directly on their wall to create a “background” for photos or artworks that are smaller in size. When a change in the color scheme occurs, however, the background color may no longer be optimal. Also, it is common for people to place groupings of framed photos or artwork on the wall resulting in many nail holes in the drywall requiring repairs when the photos or artwork is changed.

SUMMARY OF THE INVENTION

[0005] This system provides for readily interchanging one tile or panel or set of panels with another tile or panel or set of panels. The system allows for several art tiles or panels to be layered or mounted on each other so that a user can change out the color, design, style and/or size at will. The art tiles or panels can be used alone as art or as a background for the art of others.

[0006] In one aspect, the present invention includes a first panel having a front surface, a second panel having a back surface, a block attachment having a front surface and a back surface, the back surface being attached to the back surface of the second panel, and an attachment device having a first part that detachably connects to a second part that detachably connects to a mating part defined in the front surface of the block attachment. Additional attachment devices may also be utilized.

DESCRIPTION OF DRAWINGS

[0008] The accompanying drawings illustrate the invention. In such drawings:

[0009] FIG. 1 is a front view of a panel according to one embodiment of the invention.

[0010] FIG. 2 is a side view of the panel of FIG. 1.

[0011] FIG. 3 is a front view of block attachment according to one embodiment of the invention.

[0012] FIG. 4 is a side view of the block attachment of FIG. 3.

[0013] FIG. 5 is a front view of the panel of FIGS. 1 and 2 with the block attachment of FIGS. 3 and 4 attached thereon.

[0014] FIG. 6 is a side view of the panel and block attachment of FIG. 5.

[0015] FIG. 7 is a front view of a panel with a part of an attachment device secured thereon.

[0016] FIG. 8 is a side view of two panels and a block attachment together according to one embodiment of the present invention.

[0017] FIG. 9 is a side view of a panel with a block attachment mounted to its back surface and a self tapping screw inserted into its front surface in accord with one embodiment of the present invention.

[0018] FIG. 10 is a front view of three panels interlocked or layered according to one embodiment of the present invention.

[0019] FIG. 11 is an exploded side view of the three interlocked panels of FIG. 10.

[0020] FIG. 12 is a side view of the three interlocked panels of FIG. 10.

[0021] FIG. 13 is a front view of a large rectangular interchangeable art tile system according to an embodiment of the present invention with three interchangeable panels mounted to a forth panel.

[0022] FIG. 14 illustrates a side view of the system shown in FIG. 13.

[0023] FIG. 15 is a back view of the system shown in FIG. 13.

[0024] FIG. 16 is a front view of block attachment according to another embodiment of the invention.

[0025] FIG. 17 is a side view of the block attachment of FIG. 16.

[0026] FIG. 18 is a front view of the panel of FIGS. 1 and 2 with the block attachment of FIGS. 16 and 17 attached thereon.

[0027] FIG. 19 is a side view of the panel and block attachment of FIG. 18.

[0028] FIG. 20 is a front view of a panel with two parts of an attachment device secured thereon.

[0029] FIG. 21 is a side view of a panel with a block attachment mounted to its back surface and two screws with plastic sleeve spacers inserted into its front surface in accord with one embodiment of the present invention.

[0030] FIG. 22 is a side view of two panels and two block attachments together according to one embodiment of the present invention.
FIG. 23 is a front view of two panels interlocked or layered according to one embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

This invention is not limited in its application to the details of construction and the arrangement of components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced or of being carried out in various ways. Also, the phraseology and terminology used herein is for the purpose of description and should not be regarded as limiting. The use of “including,” “comprising,” or “having,” “containing,” “involving,” and variations thereof herein, is meant to encompass the items listed thereon and equivalents thereof as well as additional items.

As shown in FIGS. 1 and 2, an art tile or panel 101 has two sides, a front surface 102, and a back surface 104. A panel 101 may be constructed of 0.25” medium density fiberboard, but could alternatively be constructed of glass, fabric, plastic, foam, foam board, cardboard, wood, plywood, hardwood, underlayment, poly resin, polyethylene product, metal, tin, upholstery, paper, vinyl, or any comparable material.

The front surface 102 and back surface 104 of the panel 101 can be painted in a multitude of colors such as black, brown, brass, white, pink, red, blue, cream, silver, or any other color. Hammered or textured paint could also be used. An artistic design can be painted on the front surface 102 and back surface 104 of the panel 101. The front surface 102 and the back surface 104 of the panel 101 can be plain, only a primed surface, allowing the user to paint or design their own. The front surface 102 and the back surface 104 of the art tile or panel 101 can be covered in fabric (upholstered) and buttons, decorative wood, plastic, glass, rock or other design materials used to create designs. It should be understood by those skilled in the art that the interchangeable art tiles may be painted and/or designed in any way and may be constructed of materials other than the ones listed.

As shown in FIG. 1, the art tile or panel 101 may be square in construction; however, it should be understood by those skilled in the art that the panel 101 may be any shape and that the provision of a square art tile is for illustration purposes only. For example, the panel 101 may take the form of a circle, an oval, a diamond, a rectangle or any other type of geometric or unusual shape.

As shown in FIGS. 3 and 4, block attachment 111 has two sides, a front surface 114 and a back surface 106. FIG. 3 is a view of the back surface 106 of a block attachment 111 having the first part of an attachment device 108 secured thereon. The block attachment 111 can be constructed of the same material that is used for the panel 101, mentioned earlier, although it may be but not necessarily constructed of a thicker material, such as 0.75” medium density fiberboard. As shown, the block attachment 111 may be square in construction; however, it should be understood by those skilled in the art that the block attachment may be any shape and that the provision of a square block attachment 111 is for illustration purposes only. For example, the block attachment 111 may take the form of a circle, an oval, a diamond, a rectangle or any other type of geometric or unusual shape. The block attachment 111 can be primed only or painted in the same colors as the panel 101 as described earlier.

With continued reference to FIG. 3, in this embodiment of the present invention, the first part of the attachment device 108 is a keyhole hanger which is attached to the back surface 106 of the block attachment 111 but may also be attached directly to the back surface 104 of the panel 101. The keyhole hanger 108 is mounted using screw fasteners 112, and it should be understood that nails or other types of fasteners may be employed for securing each keyhole hanger 108 to the back surface 104 of the panel 101 or back surface 106 of the block attachment 111. The keyhole hanger 108 may include other components to ensure that the panel 101 is mounted level with respect to a generally horizontal plane, if necessary.

The keyhole hanger 108 shown in FIG. 3 may be fabricated from stamped metal, such as steel. Other materials may be used, such as other types of metal alloys, rigid plastics and the like, which are suitable to support the panel 101 or block attachment 106 may also be employed.

As shown in FIG. 3, the main body of the keyhole hanger 108 includes a keyhole-shaped opening 113 with a relatively large, centrally located opening 107 having a slot portion 109. It should be understood by those skilled in the art that the keyhole-shaped opening 113 may be shaped differently and that a different type of hanger may be used and mounted in a location other than the center and still fall within the scope of the present invention. Also falling within the scope of the present invention is if no hanger is used and the block is drilled to provide a hanging mechanism. Any type of hanging or mounting mechanism or device can be used and still fall within the scope of the present invention.

The keyhole hanger 108 is attached to the back surface 106 of the block attachment 111 (or directly to the back surface 104 of the panel 101) and used to flush mount the panel 101 to a structure, such as a wall, or to another art tile or panel 101. It should be understood by those skilled in the art that the panels 101 do not have to be mounted flush to a surface as other methods can be used and still fall into the scope of this invention.

Continuing with FIG. 3, cork pads 110 are also attached to the back surface 106 of the block attachment 111. Cork pads 110 are used to steady the panel 101 or the object on which the block attachment 111 is mounted. It should be understood by those skilled in the art that the cork pads 110 could be any type of product used to protect surfaces and steady the art tile or objects and that more or less than four pads can be used. For example, the cork pads 110 could also be felt pads or rubber pads or any other product used to steady and protect surfaces such as walls. These pads could also be placed in areas other than the four corners and this shall still fall within the scope of the present invention.

Referring to FIGS. 5 and 6, in one embodiment of the present invention, a block attachment 111 is mounted onto the back surface 104 of a panel 101. The block attachment 111 may be attached using any number of methods. For example, the block attachment 111 may be attached using wood glue, heavy duty double sided tape or any other comparable material used for permanent adhesion. Alternatively, a temporary method of adhesion could be used to allow for easy removal, such as a hook and loop attachment device or an interchangeable linking method that can be snapped, such as using a plastic rivet, or screwed on, or a hanging method.

FIG. 7 is a view of the front surface 102 of a panel 103 having a second part of an attachment device 118 secured thereon. In this embodiment, the second part of the attach-
ment device 118 is a self tapping screw that is inserted into the center of the front surface 102. It should be understood that the self-tapping screw 118 cooperates with the keyhole hanger 108 to allow for a second panel 101 or object (determined by the user) having a block attachment 111 to be attached, mounted or layered to the front surface 102 of the panel 101 as shown in FIG. 8.

[0044] It should be understood by those skilled in the art that the self tapping screw 118 could also be a different type of attachment and mounted in a different position than the center of the front surface 102 of the panel 101 and still fall within the scope of the present invention. For example, the self tapping screw 118 could be a nail or other interlocking system. It should also be understood that the two parts of the attachment device 108, 118 could also be a hook and loop attachment device or an interchangeable linking method that can be snapped on, such as using a plastic rivet, or screwed on, or an alternative hanging method. A non-permanent method allows for easier interchanging of the panels but adhesion could be permanent if necessary.

[0045] FIG. 9 illustrates a side view of a panel 101 according to the second embodiment of the present invention having a block attachment 111 mounted on the back surface 104 and a self tapping screw 118 inserted directly in the center of the front surface 102 of the panel 101. This arrangement allows multiple panels to be layered one upon the other.

[0046] For example, as shown in FIGS. 10, 11, and 12, according to this second embodiment of the present invention, three panels 101, 120, 124 may be layered. The largest panel 101 is square in shape and is mounted directly to the wall 127 (as shown in FIGS. 11 and 12) or surface desired using the block attachment 111, which is mounted to the back surface 104 of the largest panel 101. A smaller square shaped panel 120 is attached to the front surface 102 of the largest panel 101 using a block attachment 128 which would be hung on a self tapping screw 118 that has been inserted into the center of the front surface 102 of the largest panel 101. A panel that is circular in shape 124 is attached to the front surface 122 of the smaller square shaped panel 120 using desired method of attachment, ideally using a block attachment 130 which is mounted to the back surface 125 of the circular panel 124 and hung on a self tapping screw 134 that has been inserted into the center of the front surface 122 of the second art tile 120.

[0047] It should be understood by those skilled in the art that the size and shapes of the panels could be any size and/or shape and the number of art tiles can be layered at the user’s discretion and still fall within the scope of the present invention. The limitation as to the number of interchangeable art tiles that can be added or mounted should be approximately four to five tiles as any number larger than five would appear to be more weight than recommended.

[0048] Continuing with FIGS. 11 and 12, the panel 101 is square in shape and the largest tile of the system. A block attachment 105 is mounted to the back surface 104 of the panel 101. This allows the panel 101 to be hung on a surface 127, such as a wall or desired surface using a hanger method, such as a screw 132, but any method used to hang decorative items to a wall can be used and still fall within the scope of the invention. The head 129 of the screw 132 is inserted into the large opening 107 (see FIG. 3) of the keyhole hanger 108 located on the back surface 106 of the block attachment 111 and slides into the smaller slot section 109 (see FIG. 3) of the keyhole hanger 108 to rest in place. A self tapping screw 118 is inserted directly in the center of the front surface 102 of the panel 101.

[0049] A smaller square shaped panel 120 is hung on the self tapping screw 118 using a block attachment 128, which has been mounted on the back surface 121 of the panel 120. The block attachment 105, which includes a keyhole hanger 108 (see FIG. 3) is used to hang the art tile. The head of the self tapping screw 134 is inserted into the large opening 107 of the keyhole hanger 108 and slides into the smaller slot section 109 of the keyhole hanger 108 to rest in place.

[0050] A self tapping screw 134 is inserted directly in the center of the front surface 122 of the second panel 120. A panel that is circular in shape 124 is attached to the smaller square shaped panel 120 using a block attachment 130, which is mounted using an appropriate method, such as wood glue, on the back surface 125 of the panel 124.

[0051] The block attachment 130 is used to hang the panel 124. The head 133 of the self tapping screw 134 is inserted into the large opening 107 of the keyhole hanger 108 and will slide into the smaller slot section 109 of the keyhole hanger 108 to rest in place.

[0052] It should be understood by those skilled in the art that the panels can be interchanged as desired with different shapes and sizes, that the size and shapes could be any size and/or shape and the number of art tiles, and that the panels can be layered at the users discretion and still fall within the scope of the present invention. The interchangeable panels are basically stacked or layered to create a three dimensional look and can be easily interchanged at will.

[0053] FIGS. 13, 14 and 15, show yet another embodiment of the present invention. In these figs a large rectangular interchangeable art tile system 200 has three interchangeable designer panels 214, 218, 222. The front surface 216 of the first panel 214 is designed, either with paint or covered with upholstery and buttons, and is attached to the front surface 202 of the large rectangular panel 201 by using a block attachment 217 mounted to the back surface 215 of the panel 214.

[0054] The front surface 220 of the second panel 218 is also designed, either with paint or covered with upholstery and buttons, and is attached to the front surface 202 of the large rectangular panel 201 by using a block attachment mounted to the back surface of the panel 222. The third panel 222 is then hung on the self tapping screw 226, which has been inserted into the front surface 202 of the large rectangular panel 201 in the position desired by the user.

[0055] The third panel 222, designed either with paint or covered with upholstery and buttons on the front surface 224, is attached to the front surface 202 of the large rectangular panel 201 by using the block attachment mounted on the back surface of the panel 222. The third panel 222 is then hung on the self tapping screw 226, which has been inserted into the front surface 202 of the large rectangular panel 201 in the position desired by the user.

[0056] FIG. 15 is a back view of the large rectangular art tile system 200. The back surface 204 of the panel 201 is shown with the addition of two block attachments 212. This demonstrates one method for how the panel 201 can be mounted to a wall, other surface or other panel.

[0057] FIGS. 16 and 17 show another embodiment of the block attachment 305. In this embodiment of the present invention, the block attachment 305 contains two separate keyhole hangers that are routed directly into the block attachment 305. The main body of the keyhole hangers include a keyhole shaped opening with a relatively large opening (308 and 310) having a slot portion (307 and 309). It should be
understood by those skilled in the art that the keyhole-shaped openings may be shaped differently and that a different type of hanger may be used and mounted in a location other than the center and still fall within the scope of the present invention. Also falling within the scope of the present invention is if no hanger is used and the block is drilled to provide a hanging method. Any type of hanging or mounting mechanism or device can be used and still fall within the scope of the present invention.

[0058] Referring to FIGS. 18 and 19, in one embodiment of the present invention, a block attachment 311 is mounted onto the back surface 304 of a panel 301. The block attachment 311 may be attached using any number of methods. For example, the block attachment 311 may be attached using wood glue, heavy duty double sided tape or any other comparable material used for permanent adhesion. Alternatively, a temporary method of adhesion could be used to allow for easy removal, such as a hook and loop attachment device or an interchangeable linking method that can be snapped, such as using a plastic rivet, screwed on, or a hanging method.

[0059] FIG. 20 is a view of the front surface 302 of a panel 303 having two parts of an attachment device 318 and 319 secured thereon. In this embodiment, the attachment devices 318 and 319 are two screws with ¼” plastic sleeve spacers inserted into the front surface 302. It should be understood that the two screws 318 and 319 cooperate with the keyhole hangers (307, 308, 309, 310) to allow for a second panel 301 or object (determined by the user) having a block attachment 311 to be attached, mounted or layered to the front surface 302 of the panel 301 as shown in FIG. 22.

[0060] It should be understood by those skilled in the art that the two screws with ¼” spacers 318 and 319 could also be a different type of attachment and mounted in a different position than the center of the front surface 302 of the panel 301 and still fall within the scope of the present invention. For example, the two screws 318 and 319 could be nails or other interlocking system. It should also be understood that the parts of the attachment device could also be a hook and loop attachment device or an interchangeable linking method that can be snapped on, such as using a plastic rivet, screwed on, or an alternative hanging method. A non-permanent method allows for easier interchanging of the panels but adhesion could be permanent if necessary.

[0061] FIG. 21 illustrates a side view of a panel 301 according to this embodiment of the present invention having a block attachment 311 mounted on the back surface 304 and two screws 318 and 319 inserted directly in the front surface 302 of the panel 301. This arrangement allows multiple panels to be layered one upon the other.

[0062] As shown in FIG. 23, according to this embodiment of the present invention, two panels 301 and 303 may be layered. The largest panel 301 is square in shape and is mounted directly to the wall 127 (as shown in FIGS. 11 and 12) or surface desired using the block attachment 311, which is mounted to the back surface 304 of the largest panel 301.

[0063] It should be understood by those skilled in the art that the size and shapes of the panels could be any size and/or shape and the number of art tiles can be layered at the user’s discretion and still fall within the scope of the present invention. The limitation as to the number of interchangeable art tiles that can be layered or mounted should be approximately four to five tiles as any number larger than five would appear to be more weight than recommended.

[0064] Having thus described several aspects of this invention, it is to be appreciated various alterations, modifications, and improvements will readily occur to those skilled in the art. Such alterations, modifications, and improvements are intended to be within the spirit and scope of the invention. Accordingly, the foregoing description and drawings are by way of example only.

What is claimed is:
1. An art tile system comprising:
   a first panel having a front surface and a back surface;
   a second panel having a front surface and a back surface;
   a block attachment having a front surface and a back surface;
   the back surface being attached to the back surface of the second panel; and
   an attachment device having a first part that detachably connects to a second part, the first part being attached to the back surface of the block attachment and the second part being attached to the front surface of the first panel.

2. The art tile system of claim 1 wherein the front surface of the second panel has a photograph attached thereto.

3. The art tile system of claim 1 wherein the front surface of the second panel has a painting attached thereto.

4. The art tile system of claim 1 wherein the first and second parts of the attachment device are components of a hook and loop fastener.

5. The art tile system of claim 1 wherein the first panel further comprises a back surface having a mounting device attached thereto for mounting the first panel on a vertical surface.

6. The art tile system of claim 1 wherein the back surface of the block attachment is removably attached to the back surface of the second panel.

7. The art tile system of claim 1 further comprising a mounting device attached to the back surface of the first panel for mounting the system to a vertical surface.

8. An art tile system comprising:
   a first panel having a front surface and a back surface;
   a second panel having a front surface and a back surface;
   a first block attachment having a front surface and a back surface, the back surface being attached to the back surface of the second panel; and
   an attachment device that is attached to the front surface of the first panel and that detachably connects to a mating part defined in the front surface of the block attachment.

9. The art tile system of claim 8 wherein the front surface of the second panel has a photograph attached thereto.

10. The art tile system of claim 8 wherein the front surface of the second panel has a painting attached thereto.

11. The art tile system of claim 8 wherein the first attachment device is a screw and the mating part is a keyhole defined to receive the screw.

12. The art tile system of claim 8 wherein the first attachment device is a nail and the mating part is a keyhole defined to receive the nail.

13. The art tile system of claim 8 wherein the back surface of the first block attachment is removably attached to the back surface of the second panel.

14. The art tile system of claim 8 further comprising a second block attachment having a front surface and a back surface, the back surface being attached to the back surface of the first panel; and
a second attachment device having a first part that detachably connects to a second part, the first part being attached to the back surface of the first panel and the second part attached to a vertical surface for mounting the system to the vertical surface.

15. The art tile system of claim 14 wherein the first and second parts of the second attachment device are components of a hook and loop fastener.

16. The art tile system of claim 14 wherein the back surface of the first block attachment is removably attached to the back surface of the second panel.

17. The art tile system of claim 14 wherein the back surface of the second block attachment is removably attached to the back surface of the second panel.

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