

US 20070095997A1

### (19) United States (12) Patent Application Publication (10) Pub. No.: US 2007/0095997 A1

#### (10) Pub. No.: US 2007/0095997 A1 (43) Pub. Date: May 3, 2007

## (54) APPARATUS AND METHOD FOR HANGING

Case

AN ITEM ON A WALL

(76) Inventor: Robert Case, Mesa, AZ (US)

Correspondence Address: WRIGHT LAW GROUP, PLLC 7201 WEST OAKLAND SUITE 2 CHANDLER, AZ 85226 (US)

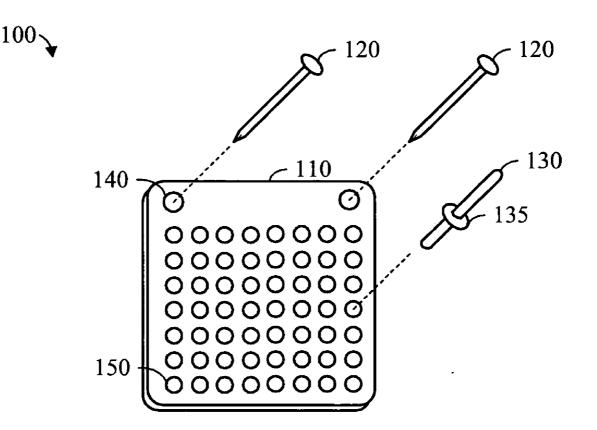
- (21) Appl. No.: 11/260,930
- (22) Filed: Oct. 27, 2005

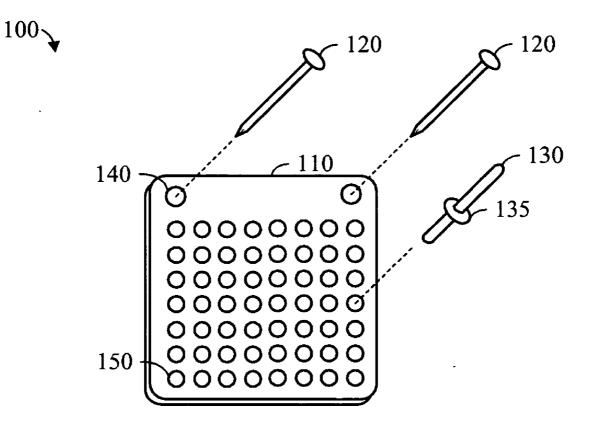
#### **Publication Classification**

- (51) Int. Cl.

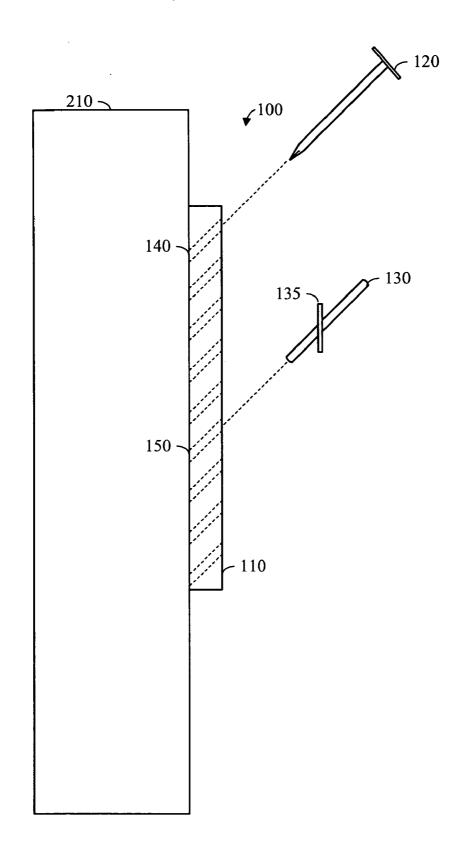
#### (57) **ABSTRACT**

An appartus for hanging items on a wall comprises a backing plate with a substantially square mounting plate portion and a plurality of apertures formed in the backing plate. The backing plate is anchored in a wall and then a supporting peg is inserted into one of the plurality of apertures. An item can then be hung on the supporting peg. By selectively adjusting the position of the supporting peg, the exact hanging location for the item can be quickly and easily adjusted, without altering the position of the backing plate.





# **FIG.** 1



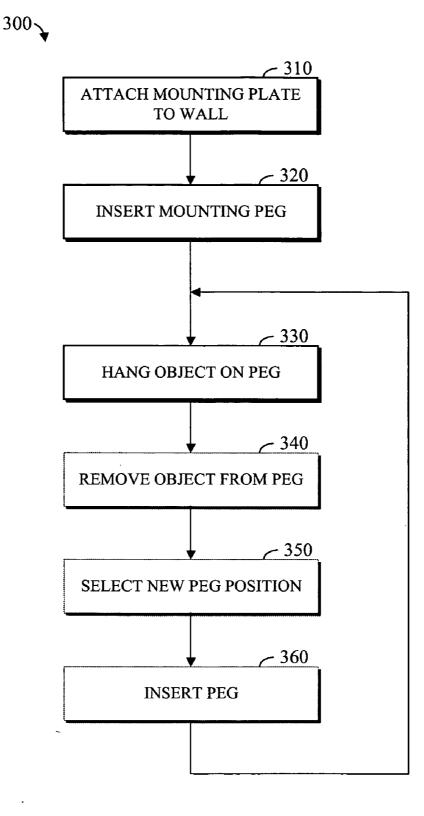


FIG. 3

#### APPARATUS AND METHOD FOR HANGING AN ITEM ON A WALL

#### BACKGROUND OF THE INVENTION

[0001] 1. Technical Field

**[0002]** The present invention relates generally to the field of decorating and more particularly to the field of hanging various decorative items on a wall.

#### [0003] 2. Background Art

[0004] One popular method of decorating a home or an office is to hang pictures, posters, diplomas, etc. on a wall. For the most part, this is a fairly straightforward proposition. However, it can be a very difficult thing to do very well. For example, one of the most common methods for hanging items on a wall is to simply pound a nail or some other anchor point into the wall in the desired location. While the act of pounding a nail into the wall is a very simple task, getting the nail in the desired location can be somewhat challenging. It often seems that the nail is just a little too low, a little too high, too far to the left or two far to the right. This problem can be exacerbated when hanging a large item that requires two or more anchor points in the wall. In this situation, any misalignment in the location of the anchor points can make it very difficult to get the item to hang with the appropriate horizontal alignment.

**[0005]** To alleviate the difficulties associated with the hanging of items on a wall, various methods and devices have been adopted. For example, the use of measuring tapes and other tools are commonly employed to accurately located the desired anchor points for hanging an item on the wall. Additionally, the use of lasers and other light sources to ensure horizontal alignment has become quite common.

**[0006]** While a number of tools and devices have been developed for accurately locating an anchor point for hanging an item on the wall, the overall process is still somewhat "hit and miss." The main problem is that once an anchor point has been placed in the wall, the movement and relocation of the anchor point inevitably leaves an unsighly hole that must be covered or repaired. It is not uncommon to see a series of holes made in a wall where numerous attempts are required to find the most desirable postion for the anchor point. This can be the result of hitting a stud in the wall, inadvertent misalignment of the anchor points, etc.

**[0007]** As shown by the previous discussion, without additional improvements in the methods for hanging objects on a wall, the efficiency and effectiveness of the process will continue to be suboptimal.

#### BRIEF SUMMARY OF THE INVENTION

**[0008]** An appartus for hanging items on a wall comprises a backing plate with a substantially square mounting plate portion and a plurality of apertures formed in the backing plate. The backing plate is anchored in a wall and then a supporting peg is inserted into one of the plurality of apertures. An item can then be hung on the supporting peg. By selectively adjusting the position of the supporting peg, the exact hanging location for the item can be quickly and easily adjusted, without altering the position of the backing plate. **[0009]** The preferred embodiments of the present invention will hereinafter be described in conjunction with the appended drawings, wherein like designations denote like elements and:

**[0010]** FIG. **1** is a perspective view of an appartrus for hanging an item on a wall in accordance with a preferred exemplary embodiment of the present invention;

**[0011]** FIG. **2** is a side view of an apparatus for hanging an item on a wall in accordance with a preferred exemplary embodiment of the present invention; and

**[0012]** FIG. **3** is a flow chart for a method of hanging an item on a wall in accordance with a preferred exemplary embodiment of the present invention.

#### DETAILED DESCRIPTION

**[0013]** An appartus for hanging items on a wall comprises a backing plate with a substantially square mounting plate portion and a plurality of apertures formed in the backing plate. The backing plate is anchored in a wall and then a supporting peg is inserted into one of the plurality of apertures. An item can then be hung on the supporting peg. By selectively adjusting the position of the supporting peg, the exact hanging location for the item can be quickly and easily adjusted, without altering the position of the backing plate.

[0014] Referring now to FIG. 1, an apparatus 100 for hanging an item on a wall in accordance with a preferred embodiment of the present invention. As shown in FIG. 1, apparatus 100 includes a mounting plate 110 with two mounting apertures 140 and a plurality of supporting apertures 150 formed in mounting plate 110. Mounting fasteners 120 are inserted through mounting apertures 140 and then into a wall, thereby affixing substantially square mounting plate 110 to the wall. Once mounting plate 110 has been affixed to the wall, mounting peg 130 can be removably inserted into any of supporting apertures 150 and a picture or other item may then be hung from mounting peg 130. If the first selected location for mounting peg 130 is not quite right, then it can be quickly and easily removed from the first supporting apeture 150 and relocated to a more suitable supporting apeture 150. In this fashion, a single mounting plate 110 can be used for multiple locations of mounting peg 130.

[0015] In order to maximize the probability of success for the desired location of mounting peg 130, the size and shape of mounting plate 110 and the number of supporting apertures 150 formed in mounting plate 110 can be varied as desired. In the most preferred embodiments of the present invention, mounting plate 110 is substantially square with at least 25-50 supporting apertures formed in a substantially square mounting plate 110. However, those skilled in the art will recognize that the size and shape of mounting plate 110 and the number of supporting apertures 150 are highly variable and are not limited by any exemplary embodiments set forth herein. Mounting fasteners 120 are preferrably nails that are pounded into the wall until the heads of the nails are flush with the surface of mounting plate 110. Additionally, while mounting fasteners 120 are depicted in FIG. 1 and described herein as nails, those skilled in the art will recognize that screws and other suitable types of fasteners may also be used.

[0016] Mounting peg 130 is most preferably a slender device with a retaining collar 135 positioned approximately halfway between the endpoints of mounting peg 130. Retaining collar 135 serves to prevent mounting peg from being over inserted into mounting plate 110 while ensuring that an appropriate amount of mounting peg 130 is available for hanging a picture or other item on the mounting peg 130. The diameter of retaining collar 135 is manufactured so as to be slightly larger than the diameter of supporting apertures 150. This prevents mounting peg 130 from being overinserted into supporting apertures 150.

[0017] Referring now to FIG. 2, a side view of apparatus 100 from FIG. 1 is depicted attached to a wall section 210. As shown in FIG. 2, mounting apertures 140 and supporting apertures 150 are formed in mounting plate 110 at approximately a 45° angle to the surface of mounting plate 110 and the surface of wall section 210. In this fashion, fasteners 120 and mounting peg 130 are inserted at a 45° angle to the surface of wall portion 210, thereby allowing the force of gravity to assist in the supporting of mounting plate 110 and, in turn, the object that is hung on mounting peg 130. This is similar to the inserting of a nail at a  $45^{\circ}$  angle when pounding a nail into wall 210 to support a picture or other item on the nail. Those skilled in the art will recognize that the angle for forming mounting apertures 140 and supporting apertures 150 in mounting plate 110 may vary substantially from 45° without departing from the spirit and scope of the present invention.

[0018] Referring now to FIG. 3, a method 300 for hanging an item on a wall in accordance with a preferred embodiment of the present invention is depicted. As shown in FIG. 3, the first step is to attach or affix a mounting plate to a wall in approximately the desired location (step 310). Once the mounting plate is attached to the wall, a mounting peg can be inserted into one of the supporting apertures (step 320) and an object may be hung from the mounting peg (step 330). If the object is not hanging in the desired location on the wall, then the object can be removed from the mounting peg (step 340), a new location for the mounting peg can be selected (step 350) and then the mounting peg can be inserted into the new location by inserting the mounting peg into the appropriate supporting aperture (step 360). Then the object can be once again hung on the mounting peg (step 330). As shown in FIG. 3, step 330-360 can be repeated as necessary until the object is positioned in the desired location.

[0019] In summary, the present invention provides an apparatus and method for hanging items on a wall without undue effort or trial-and-error. By implementing one or more of the preferred embodiments disclosed herein, varous items can be quickly and easily hung on a wall in the desired location. Lastly, it should be appreciated that the illustrated embodiments are preferred exemplary embodiments only, and are not intended to limit the scope, applicability, or configuration of the present invention in any way. Rather, the foregoing detailed description provides those skilled in the art with a convenient road map for implementing the preferred exemplary embodiments of the present invention. Accordingly, it should be understood that various changes may be made in the function and arrangement of elements described in the various preferred exemplary embodiments without departing from the spirit and scope of the present invention as set forth in the appended claims.

- 1. An apparatus comprising:
- a mounting plate for hanging an item on a wall, the mounting plate comprising a plurality of supporting apertures;
- a selectivley removable and repositionable supporting peg removably inserted into one of the supporting apertures.

**2**. The apparatus of claim 1 further comprising an object hanging from the supporting peg.

**3**. The apparatus of claim 1 wherein the selectivley removable and repositionable supporting peg comprises:

a first end;

a second end; and

a collar positioned approximately midway between the first end and the second end.

**4**. The apparatus of claim 1 further comprising at least two mounting apertures formed in said mounting plate.

**5**. The apparatus of claim 4 further comprising at least two nails inserted through the mounting apertures into a wall, thereby affixing the mounting plate to the wall.

**6**. The apparatus of claim 1 wherein the mounting plate comprises a substantially square mounting plate.

7. The apparatus of claim 6 wherein said supporting peg comprises:

- a first end;
- a second end; and
- a collar positioned approximately midway between the first end and the second end.

**8**. The apparatus of claim 1 wherein the supporting apertures form approximately a  $45^{\circ}$  angle with a surface of the mounting plate.

9. The apparatus of claim 4 wherein the mounting apertures form approximately a  $45^{\circ}$  angle with a surface of the mounting plate.

10. The apparatus of claim 1 wherein the supporting apertures form approximately a  $45^{\circ}$  angle with a surface of the mounting plate and the mounting apertures form approximately a  $45^{\circ}$  angle with a surface of the mounting plate.

**11**. An apparatus for hanging items on a wall, the apparatus comprising:

- a substantially square mounting plate, the substantially square mounting plate comprising:
  - a first mounting aperture formed in the mounting plate;
  - a second mounting aperture formed in the mounting plate; and
  - a plurality of supporting apertures formed in the mounting plate;
- a first mounting nail, the first mounting nail being inserted through the first mounting aperture and into the wall;
- a second mounting nail, the second mounting nail being inserted through the second mounting aperture and into the wall;
- a selectivley removable and repositionable supporting peg, the supporting peg comprising:
  - a first end;
  - a second end; and

- a collar positioned approximately midway between the first end and the second end the supporting peg being inserted into one of the plurality of supporting apertures; and
- an item hanging from and being supported by the supporting peg.

**12**. A method for hanging an item on a wall comprising the steps of:

- affixing a mounting plate to the wall, the mounting plate comprising a plurality of mounting apertures and a plurality of supporting apertures by inserting at least two mounting nails through at least two of the plurality of mounting apertures; and
- inserting a selectivley removable and repositionable supporting peg into one of the plurality of apertures;

**13**. The method of claim 12 wherein the step of affixing a backing plate to the wall comprises the steps of:

inserting a first mounting nail through a first mounting aperture; and

inserting a second mounting nail through a second mounting aperture.

**14**. The method of claim 12 wherein the supporting peg comprises:

- a first end;
- a second end; and

- a collar positioned approximately midway between the first end and the second end.
- **15**. The method of claim 12 further comprising the step of hanging an item on the supporting peg.

**16**. The method of claim 12 wherein said backing plate is a substantially square backing plate.

**17**. The method of claim 12 further comprising the steps of:

removing the selectively removable supporting peg from one of the apertures;

selecting a different aperture;

inserting the selectivley removable supporting peg into the different aperture; and

hanging an item on the supporting peg.

18. The method of claim 13 where in the step inserting a first mounting nail through a first mounting aperture comprises the step of inserting the first mounting nail through the first mounting aperture at approximately a  $45^{\circ}$  angle with a surface of the mounting plate and the step inserting the second mounting nail through the second mounting aperture comprises the step of inserting the second mounting nail through the second mounting aperture at approximately a  $45^{\circ}$  angle with a surface of the mounting plate.

\* \* \* \* \*