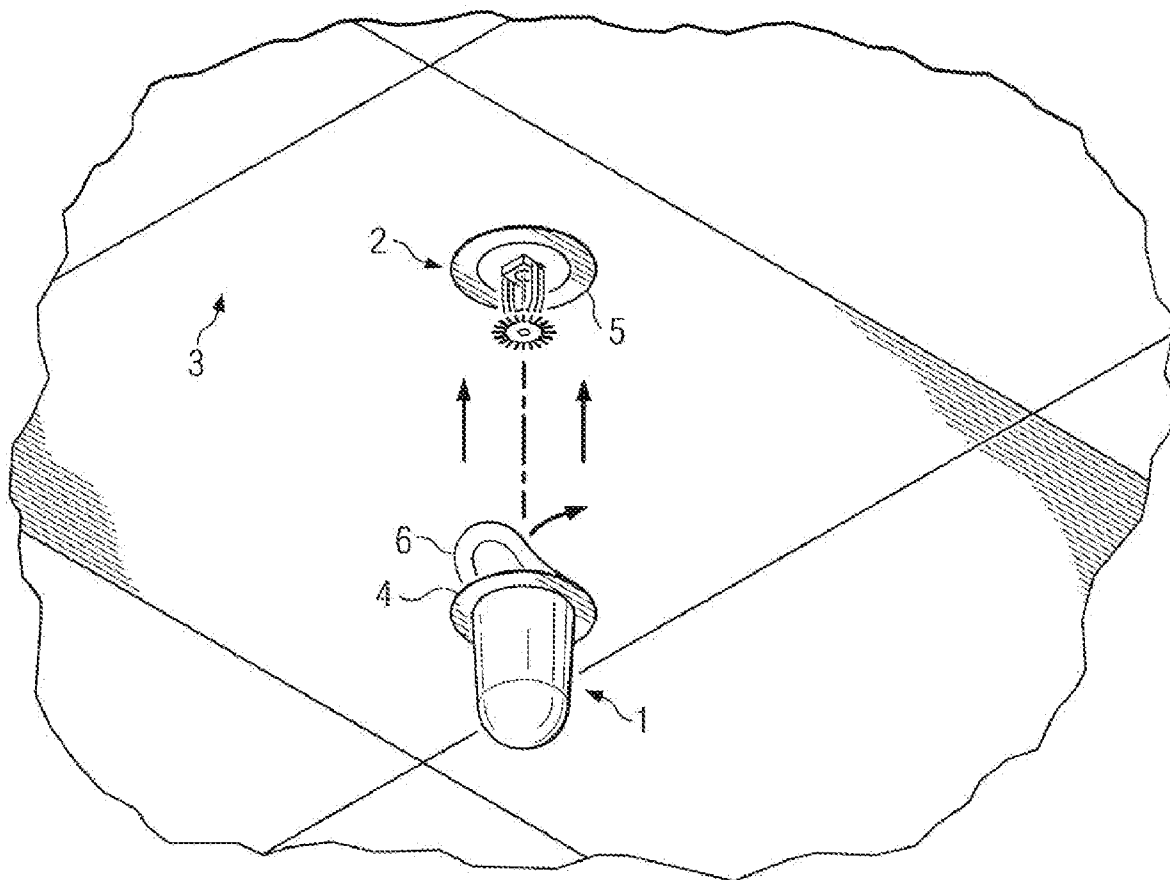




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(19) **United States**(12) **Patent Application Publication**
McKay et al.(10) **Pub. No.: US 2008/0197133 A1**(43) **Pub. Date: Aug. 21, 2008**(54) **FIRE SPRINKLER HEAD PAINT COVER****Publication Classification**(76) Inventors: **Donald Robert McKay**, Forney,
TX (US); **Darrell Edward**
Fletcher, Richardson, TX (US)(51) **Int. Cl.**
B65D 41/02 (2006.01)(52) **U.S. Cl.** **220/359.1**Correspondence Address:
ONEIL, MICHAEL
Suite 820, 5949 Sherry Lane
Dallas, TX 75225(57) **ABSTRACT**

An easily removable fire sprinkler head paint cover to be temporarily installed over and around a fire sprinkler head so as to prevent paint or other finishing materials from coming into contact with a fire sprinkler head and to allow for uniform and systematic painting or finishing of walls or ceilings in which fire sprinkler heads are installed.

(21) Appl. No.: **11/676,596**(22) Filed: **Feb. 20, 2007**

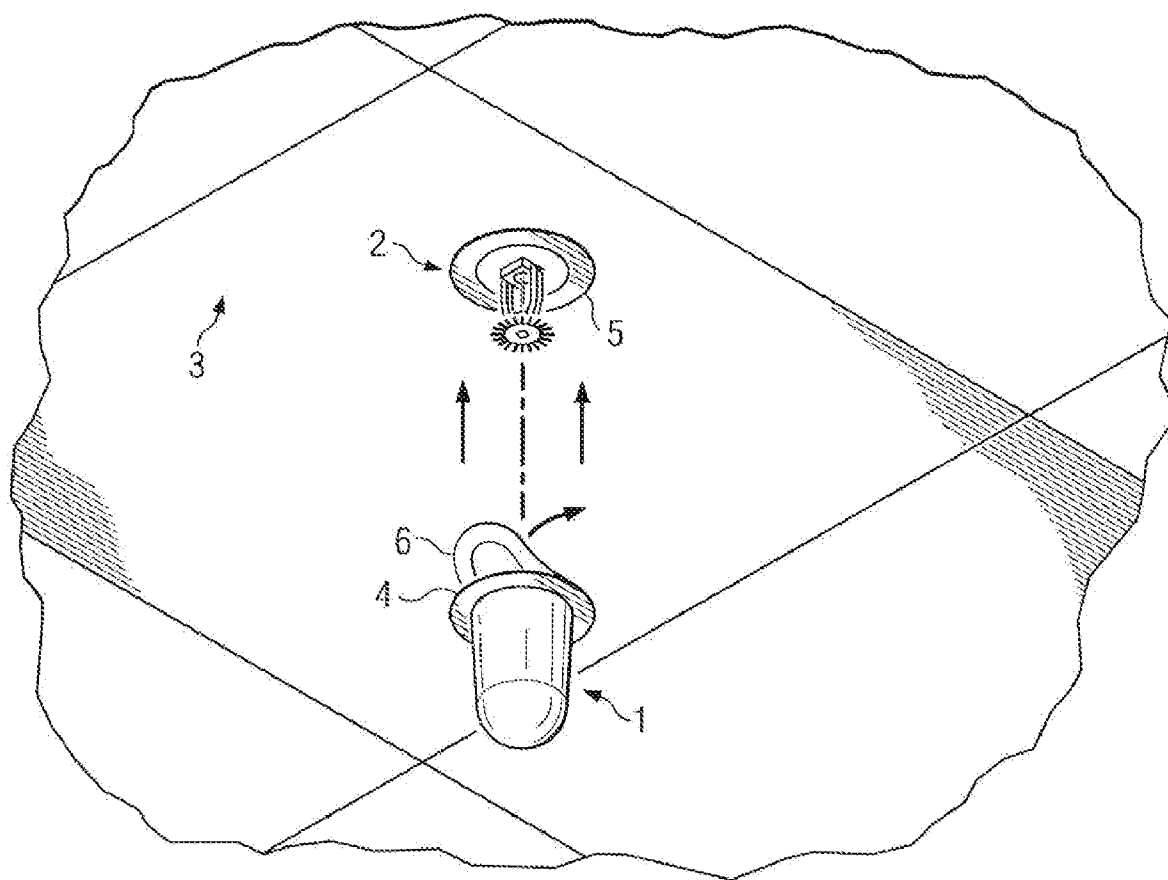


FIG. 1

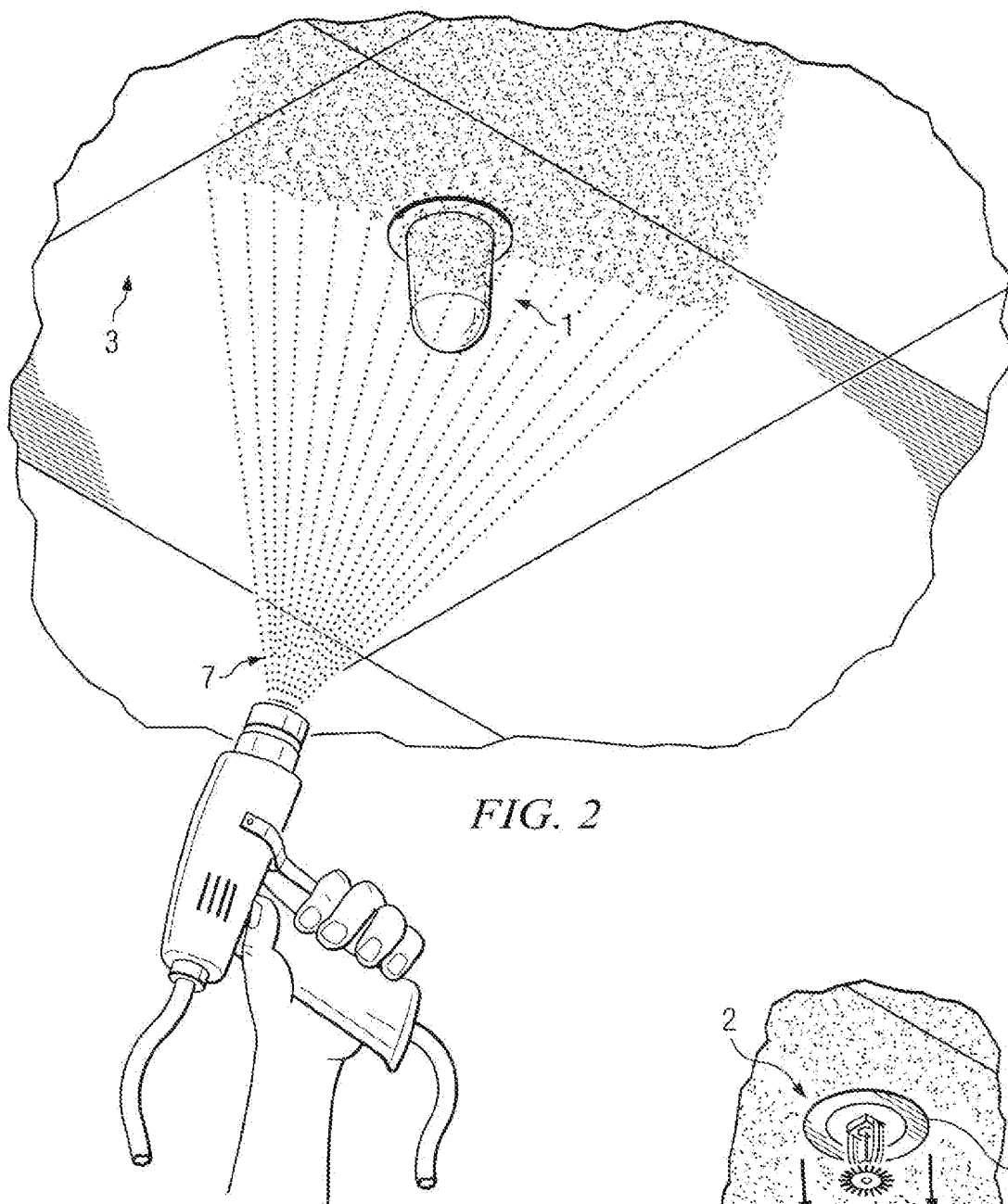


FIG. 2

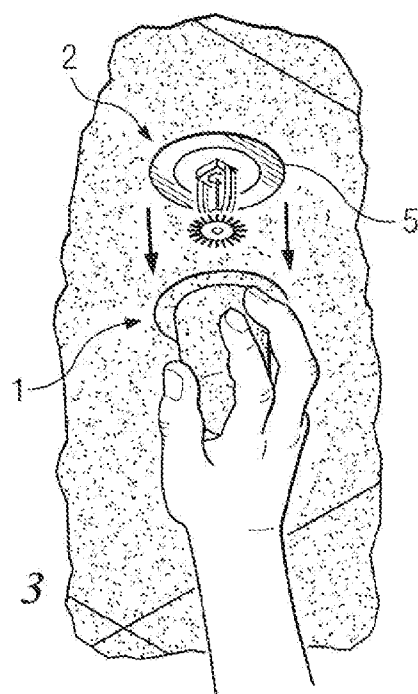


FIG. 3

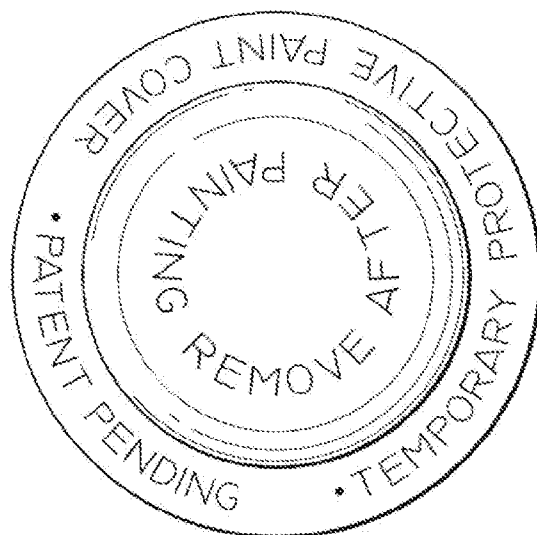
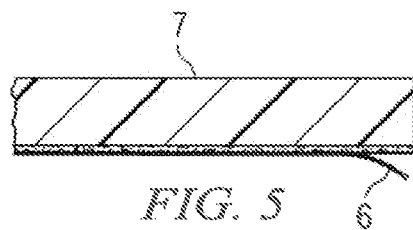
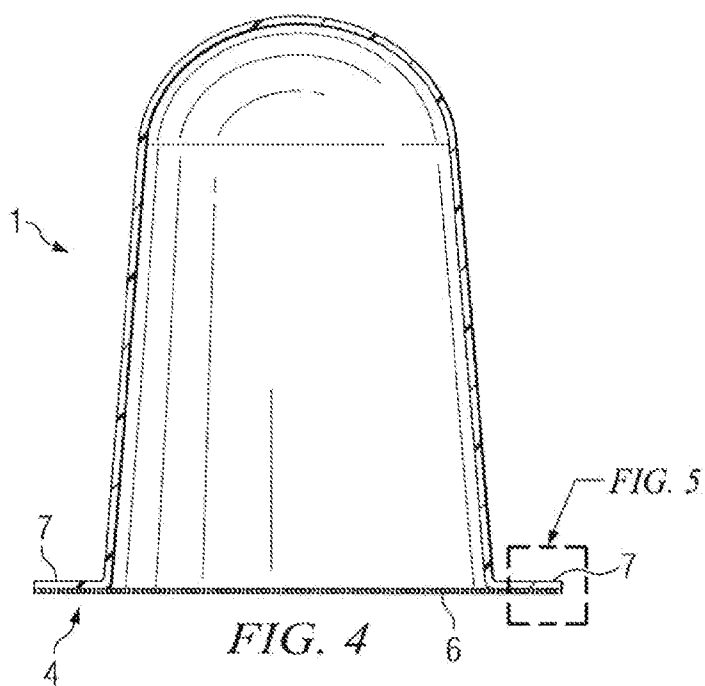


FIG. 6

FIRE SPRINKLER HEAD PAINT COVER**TECHNICAL FIELD**

[0001] This invention relates to the painting of surfaces having fire sprinkler heads installed therein, and more particularly, to the protection of fire sprinkler heads during painting operations.

BACKGROUND AND SUMMARY OF THE INVENTION

[0002] As is well known, city, state, and federal regulations mandate the use of automated fire sprinkler systems in public and private buildings. Modern automated fire sprinkler systems comprise fire sprinkler heads which are typically of two types. The first type comprises a fusible solder link that prevents a plug from releasing and dispersing pressurized water. The fusible solder link melts at a predetermined temperature which allows the plug to release the pressurized water and put out a fire. The second and most common type of fire sprinkler head comprises a glass vial that prevents a plug from releasing and dispersing pressurized water. The glass vial contains a chemical that expands at a predetermined temperature thereby breaking the glass and allowing the plug to release the pressurized water and put out a fire.

[0003] Fire sprinkler heads are installed in surfaces, typically ceilings but also including walls. As will be apparent the surfaces having fire sprinkler heads installed therein require painting, both during initial construction and subsequently during remodeling, etc.

[0004] The painting of surfaces having fire sprinkler heads therein involve inherent danger that the fire sprinkler heads will be damaged thereby releasing pressurized water. Heretofore fire sprinkler heads have been protected during painting operations by means of conventional masking materials which are secured in place utilizing conventional masking tape. Particularly in the case of glass vial type fire sprinkler heads the removal of the masking materials following painting operations involves the inherent danger that the vial will be broken and pressurized water released.

[0005] The present invention comprises a fire sprinkler head paint cover which overcomes the foregoing and other shortcomings long since associated with the prior art. In accordance with the broader aspects of the invention a fire sprinkler head paint cover comprises a dome which receives the operating instrumentalities of the fire sprinkler head and a planar ring extending radially outwardly from the dome for engagement with the trim ring of the fire sprinkler head. The rim is provided with means for securing the fire sprinkler head paint cover to the fire sprinkler head during painting operations thereby protecting the fire sprinkler head against damage due to paint over spray, etc. When the painting of the surface comprising the fire sprinkler head has been completed the securing means facilitates disengagement of the fire sprinkler head paint cover from the fire sprinkler head without danger of damage thereto.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] A more complete understanding of the present invention may be had by reference to the following Detailed Description when taken in connection with the accompanying Drawings, wherein:

[0007] FIG. 1 is diagrammatic illustration showing the application of the present invention over a fire sprinkler head;

[0008] FIG. 2 is a diagrammatic illustration showing the present invention in use;

[0009] FIG. 3 is a diagrammatic illustration showing removal of the present invention from a fire sprinkler head;

[0010] FIG. 4 is a cross-sectional view of the present invention;

[0011] FIG. 5 is an expanded view of a portion of FIG. 4; and

[0012] FIG. 6 is a plan view of the present invention.

DETAILED DESCRIPTION

[0013] Referring to the drawings, and particularly to FIG. 1 thereof, a fire sprinkler head paint cover 1 comprising the present invention is illustrated. The fire sprinkler head paint cover 1 is configured so as to allow its application or placement over a fire sprinkler head 2 of an automatic fire sprinkler system. Here, the fire sprinkler head 2 is installed in a surface comprising a ceiling 3 it being understood that fire sprinkler heads are also installed in walls and other surfaces.

[0014] In the embodiment shown, the fire sprinkler head paint cover 1 is cylindrical or conical in shape, however, it is envisioned that the fire sprinkler head paint cover 1 can be of any shape and/or size conceivable, thereby enabling it to be placed over variously shaped fire sprinkler heads and/or fire sprinkler heads with different configurations. The fire sprinkler head paint cover 1 can be constructed of plastic or any other suitable material as desired, so long as the material is of proper weight, etc. so as to allow for engagement with a fire sprinkler head or ceiling or wall surface in which a fire sprinkler head is installed.

[0015] In the embodiment shown, the fire sprinkler head paint cover 1 is a hollow receptacle which receives a fire sprinkler head 2 therein. The fire sprinkler head paint cover 1 has a planar flange 4 at its base which allows a seal to be formed between the fire sprinkler head paint cover 1 and the trim ring 5 of the fire sprinkler head 2. The flange 4 is also capable of being engaged directly with a wall or ceiling surface to which a fire sprinkler head is installed and to differently shaped fire sprinkler head housings.

[0016] The fire sprinkler head paint cover 1 is placed around the fire sprinkler head 2 so as to allow for complete painting adjacent surfaces. As shown in FIG. 1, the fire sprinkler head paint cover 1 is positioned around the fire sprinkler head 2. In one embodiment of the invention the fire sprinkler head paint cover 1 is held in place over the fire sprinkler head 2 by an adhesive. In the embodiment shown, the adhesive utilized to hold the fire sprinkler head paint cover 1 in place over the fire sprinkler head 2 is a non-permanent adhesive such as a non-permanent, residue free glue. However, any non-permanent adhesive sufficient to hold the fire sprinkler head paint cover 1 in place over the fire sprinkler head 2 can be used, so long as the adhesive utilized allows for the fire sprinkler head paint cover 1 to be easily removed. In another embodiment of the invention the flange 4 of the fire sprinkler head paint cover 1 is magnetically secured to the trim ring 5 of the fire sprinkler head 2.

[0017] In accordance with the first embodiment the adhesive is exposed by peeling back or removing a protective layer 6, comprised of cellophane or other such material(s). Once the protective layer 6 is removed, thereby exposing the adhesive, the fire sprinkler head paint cover 1 is ready to be placed over the fire sprinkler head 2, allowing for paint or other finishing materials to be applied to the surface 3 in which the fire sprinkler head 2 is installed.

[0018] Referring now to FIG. 2, the fire sprinkler head paint cover 1 has been placed over the fire sprinkler head 2 and is shown adhesively secured to the trim ring 5 of same. Once a connection has been made between the fire sprinkler head paint cover 1 and the trim ring of a fire sprinkler head or the wall or ceiling to which a fire sprinkler head has been installed, the fire sprinkler head is sealed off from the outside environment. As shown in FIG. 2, paint 7 is being applied to the ceiling 3. The fire sprinkler head paint cover 1 prevents the paint 7 from coming in contact with the fire sprinkler head 2. This is desirable as paint could clog or otherwise foul the fire sprinkler head 2.

[0019] Referring now to FIG. 3, removal of the fire sprinkler head paint cover 1 is shown, subsequent to the application of paint or other finish materials. Here, the fire sprinkler head paint cover 1 is removed from the trim ring 5 of the fire sprinkler head 2 by pulling down on the fire sprinkler head paint cover 1. The connection then gives way, thereby breaking the seal between the fire sprinkler head paint cover 1 and the housing 5 of the fire sprinkler head 2, and the fire sprinkler head paint cover 1 is removed. In the event the fire sprinkler head paint cover 1 is installed in direct contact with a wall or ceiling in which a fire sprinkler head is installed, the fire sprinkler head paint cover 1 is likewise removed.

[0020] Referring now to FIG. 4, a cross-section of the fire sprinkler head paint cover 1 is shown. In the embodiment shown, the adhesive layer 7 is located on the flange portion 4 of the fire sprinkler head paint cover 1. Depending on the shape and configuration of the specific fire sprinkler head paint cover, the adhesive can be placed at various locations so as to provide the best possible adhesion between the fire sprinkler head paint cover and a fire sprinkler head or wall or ceiling in which a fire sprinkler head is installed.

[0021] FIG. 5 shows an expanded view of the adhesive layer 7. Again, the adhesive layer 7 is exposed by peeling back or removing the protective layer 6. Once the protective layer 6 is removed, the fire sprinkler head paint cover 1 is ready to be installed or placed over a fire sprinkler head in order to paint or otherwise finish a wall or ceiling in which a fire sprinkler head is installed.

[0022] Referring now to FIG. 6, a top view of the fire sprinkler head paint cover 1 is shown. In the embodiment shown, the fire sprinkler head paint cover 1 is stamped so as to indicate that it is temporary and to be removed, thereby ensuring that it is so removed and allowing a fire sprinkler head over which a fire sprinkler head paint cover has been installed to properly function in the event of a fire.

[0023] Although preferred embodiments of the invention have been illustrated in the accompanying Drawings and described in the foregoing Detailed Description, it will be understood that the invention is not limited to the embodiments disclosed, but is capable of numerous rearrangements, modifications, and substitutions of parts and elements without departing from the spirit of the invention.

1. A fire sprinkler head paint cover comprising:
means for covering and sealing off a fire sprinkler head installed in a wall or ceiling to be painted or finished; and
means for securing the covering and sealing means to a fire sprinkler head, wall, or ceiling.
2. The fire sprinkler head paint cover of claim 1, wherein the fire sprinkler head paint cover is easily removable.
3. The fire sprinkler head paint cover of claim 1 wherein the fire sprinkler head paint cover is generally round in cross section.
4. The fire sprinkler head paint cover of claim 1 wherein the securing means is a non-permanent, residue free glue.
5. The fire sprinkler head paint cover of claim 4 wherein the securing means for adhering is exposed by removing a protective layer.
6. The fire sprinkler head paint cover of claim 1 wherein the securing means comprises at least one magnet.
7. A method for covering and sealing off a fire sprinkler head installed in a wall or ceiling to be painted or finished comprising:
providing means for covering and sealing off a fire sprinkler head installed in a wall or ceiling to be painted or finished; and
providing means for securing the covering and sealing means to a fire sprinkler head, wall, or ceiling.

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