

A BLIND PATCH STRUCTURE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a blind patch structure. In particular, this
5 invention relates to a blind patch structure having an airtight sealing strip receiving space.

2. Description of the Related Art

In order to produce high technology products, a clean working space is required. For example, in the semiconductor industry, the manufacturing
10 process has to be executed in a clean room to assure a quality product. The clean working space usually is vital to the semiconductor industry, the food industry, the electronic products production process, the precision industry, the medical industry, and clean rooms, etc.

Air-conditioning devices, pipes, and electrical lines are usually installed
15 in the ceiling frame of a clean room. Above the operating area, a blind patch is disposed. The blind patch is a board body for sheltering the redundant space between the devices located on the ceiling frame.

FIG. 1 shows a blind patch structure of the prior art. The board body 10a is placed on the ceiling frame 20a. Because there is gap between the board
20 body 10a and the ceiling frame 20a, dust will drop into the clean room via the gap. Therefore, when the ceiling of the clean room is built, the airtight sealing strip 30a is installed between the board body 10a and the ceiling frame 20a. Due to the board body 10a and the airtight sealing strip 30a being sealed, the blind patch structure prevents dust and impurities from dropping into the clean

room.

However, when the airtight sealing strip 30a is being installed, the workers cannot clearly see the relative position between the board body 10a and the airtight sealing strip 30a. The process of construction is difficult, and the airtight sealing strip 30a cannot be installed to a precise position. The airtight seal between the board body 10a and the airtight sealing strip 30a is affected. The airtight seal and the dustproof effect cannot be assured.

SUMMARY OF THE INVENTION

One particular aspect of the present invention is to provide a blind patch structure having an airtight sealing strip receiving space. The user installs the airtight sealing strip on the blind patch in advance. When the blind patch is installed on the ceiling frame, the user does not need to assemble the airtight sealing strip in the working place. It is convenient and rapid for the user to install the blind patch. The dustproof effect is good and the manufacturing time is reduced.

The blind patch structure includes a board body, and a receiving part. The receiving part surrounds the board body. The receiving part has an opening, and the opening is interlinked with the receiving part.

For further understanding of the invention, reference is made to the following detailed description illustrating the embodiments and examples of the invention. The description is only for illustrating the invention and is not intended to be considered limiting of the scope of the claim.

BRIEF DESCRIPTION OF THE DRAWINGS

The drawings included herein provide a further understanding of the

invention. A brief introduction of the drawings is as follows:

FIG. 1 is a schematic diagram of the blind patch structure assembled with the ceiling frame of the prior art;

FIG. 2 is a perspective view of the preferred embodiment of the blind
5 patch structure of the present invention;

FIG. 3 is a schematic diagram of the preferred embodiment of the blind patch structure of the present invention assembled with the ceiling frame; and

FIG. 4 is a schematic diagram of another embodiment of the blind patch structure of the present invention assembled with the ceiling frame.

10 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Reference is made to FIGs. 2 and 3, which show the preferred embodiment of the blind patch structure of the present invention. The blind patch structure includes a board body 10, and a receiving part 11. The board body 10 is a rectangular thin board.

15 The receiving part 11 surrounds the board body 10. At a lower side of the receiving part, there is an opening 111. The opening 111 is interlinked with the receiving part 11. The cross-section of the receiving part 11 has a “ㄇ” shape. The receiving part 11 has a top board 112. A side board 113 individually extends downward from two sides of the top board 112. The side board 113
20 that is adjacent to the inner part of the board body 10 is interlinked with the board body 10.

The airtight sealing strip 20 has a circular shape. The shape of cross-section of the airtight sealing strip 20 can be square, circular, or elliptic. The airtight sealing strip 20 is received in the receiving part 11 via the opening 111,

and protrudes slightly out of the bottom of the board body 10 so that the airtight sealing strip 20 is installed in the receiving part 11 located around the board body 10. When the ceiling of the clean room is built, the board body 10 having been installed with the airtight sealing strip 20 is placed on the ceiling frame 30. The airtight sealing strip 20 is tightly pressed on the ceiling frame 30 by utilizing the weight of the board body 10. Thereby, a ceiling of the clean room having a good dustproof effect is constructed.

Reference is made to FIG. 4, which shows another receiving part 11. On a lower side of the receiving part 11, there is an opening 114 interlinked with the receiving part 11. The cross-section of the receiving part 11 has an inverse-U shape. The receiving part 11 has an arc top board 115. A side board 116 individually extends downward from two sides of the top board 115. The side board 116 that is adjacent to the inner part of the board body 10 is interlinked with the board body 10.

The present invention installs the airtight sealing strip 20 in the receiving part 10 in advance. When the clean room is being built, the board body 10 can be directly used for constructing the ceiling of the clean room. The worker does not need to install the air-sealing strip 20 between the board body 10 and the ceiling frame 30 of the clean room. It is convenient and rapid to construct the clean room. Even though there is a little displacement between the board body 10 and the ceiling frame 30, the airtight seal between the board body 10 and the ceiling frame 30 is not affected. The airtight seal is good and the dustproof effect is stable.

The description above only illustrates specific embodiments and

examples of the invention. The invention should therefore cover various modifications and variations made to the herein-described structure and operations of the invention, provided they fall within the scope of the invention as defined in the following appended claims.

WHAT IS CLAIMED IS:

1. A blind patch structure, that is assembled with a ceiling frame of a clean room, comprising:

a board body; and

5 a receiving part surrounding the board body, wherein the receiving part has an opening, and the opening is interlinked with the receiving part.

2. The blind patch structure as claimed in claim 1, wherein the cross-section of the receiving part has a “ Γ ” shape, the receiving part has a top board, a side board individually extends downward from two sides of the top
10 board, and the side board of the receiving part is interlinked with the board body.

3. The blind patch structure as claimed in claim 1, wherein the cross-section of the receiving part has an inverse-U shape, the receiving part has an arc top board, a side board individually extends downward from two sides of
15 the top board, and the side board of the receiving part is interlinked with the board body.