EQUIPMENT COVER FOR PREVENTING CONTAMINATION FROM BLOODBORNE PATHOGENS AND CONTRAST MATERIALS

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Publication Classification

Int. Cl. 
B65D 65/02 (2006.01)

U.S. Cl. 150/154

ABSTRACT

An apparatus and method for protecting equipment from contamination are provided. The apparatus may include a sleeve having a first open end and a second open end, an elastic mechanism disposed around at least a portion of the first open end, and a closure mechanism near the second open end. The closure mechanism may be operable to close the second open end around at least a portion of the equipment.
REMOVE PRE-MADE BAG/COVER FROM PACKAGING

GRASPING THE ELASTIC END OF THE BAG/COVER PULL OVER THE INJECTOR HEAD

STRETCH THE ELASTIC BAND AND SECURE UNDER THE BASE AND ABOVE THE WHEELS

PULL UPPER PORTION OF BAG/COVER UPWARDS AND GATHER EXCESS PLASTIC AROUND STAND

PULL TAB OFF OF THE DOUBLE-FACED SECURING TAPE AND FASTEN BAG/COVER TIGHTLY AROUND STAND NEAR THE TOP OF THE INJECTOR

INSTALLATION COMPLETE (BAG/COVER SHOULD BE CHANGED DAILY)

FIG. 3

PULL APART DOUBLE-FACED TAPE TO ALLOW BAG/COVER TO SLIGHTLY UN-FOLD

GRASP THE ZIPPER RAZOR LOCATED AT THE ELASTIC END OF THE BAG/COVER AND PULL BRISKLY IN AN UPWARD DIRECTION

HOLDING THE INSIDE OF THE BAG/COVER FROM THE CUT YOU JUST MADE, ROLL THE BAG/COVER AWAY FROM THE INJECTOR AND INTO A BALL ENSURING NO CONTAMINATION TO THE USER OR TO THE UNIT

DISPOSE OF THE BAG/COVER UTILIZING THE DISPOSAL PROCEDURE FOR YOUR FACILITY

FIG. 4
EQUIPMENT COVER FOR PREVENTING CONTAMINATION FROM BLOODBORNE PATHOGENS AND CONTRAST MATERIALS

BACKGROUND OF THE INVENTION

The present invention generally relates to equipment protection, and more specifically relates to an equipment cover for covering medical equipment to prevent contamination of the medical equipment by bloodborne pathogens and contrast materials.

In a medical environment, such as a hospital, keeping equipment sterile and preventing equipment from being contaminated are of utmost importance. However, blood splatter, contrast materials, as well as other fluids that are regularly found in medical environments may carry bloodborne pathogens and other impurities that may contaminate equipment within the medical environment.

As can be seen, there is a need for an apparatus to protect equipment from contamination.

SUMMARY OF THE INVENTION

In one aspect of the present invention, an apparatus adapted to protect an equipment from contamination comprises a sleeve having a first open end and a second open end; an elastic mechanism disposed around at least a portion of the first open end; and a closure mechanism near the second open end, the closure mechanism operable to close the second open end around at least a portion of the equipment.

In another aspect of the present invention, a method for protecting an equipment from contamination comprises fitting a sleeve over the equipment through a first open end of the sleeve; securing the first open end of the sleeve to the equipment using an elastic mechanism disposed around at least a portion of the first open end; and closing a second open end of the sleeve around at least a portion of the equipment using a closure mechanism near the second open end.

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

FIG. 1 shows a perspective view of an equipment cover in use to cover a piece of equipment in accordance with an embodiment of the present invention;

FIG. 2 shows an exploded perspective view of the equipment cover of FIG. 1 in use to cover the piece of equipment of FIG. 1;

FIG. 3 shows a flowchart of a method for installing an equipment cover over a piece of equipment in accordance with an embodiment of the present invention; and

FIG. 4 shows a flowchart of a method for removing an equipment cover from a piece of equipment in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of 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.

Various inventive features are described below that can each be used independently of one another or in combination with other features.

Broadly, embodiments of the present invention generally provide an equipment cover that may prevent the covered equipment from contamination due to blood borne pathogens and contrast materials. The equipment cover may be easily secured to the equipment and may be easily removed without splattering or dripping any collected contaminants from the cover onto the covered equipment.

Referring to FIGS. 1 and 2, an equipment cover 10 may be used to cover a piece of equipment 20 in order to protect the equipment 20 against contamination from bloodborne pathogens and contrast materials, thereby helping to keep the equipment 20 sterile.

The equipment cover 10 may be a sleeve that may be cylindrical in shape with first and second open ends 10A and 10B, respectively. In one embodiment, the equipment cover 10 may be made of polyethylene and may be about 54-inches long and have a circumference of about 44-inches. The equipment cover 10 may have an elastic mechanism 12, such as an elastic band, that is disposed around at least a portion of the first open end 10A. The equipment cover 10 may also have a closure mechanism 16, such as an adhesive, sticky-face tape, hook and loop system, tie, rubber band, or any other appropriate mechanism, near its second open end 10B.

A removal mechanism, such as a razor 18, may be included with or attached to the equipment cover 10 to slice open the equipment cover 10 for easy removal after use. For example, the razor 18 may be attached to the elastic mechanism 12. Alternatively, other removal mechanisms, such as a zipper, may be used to easily secure and remove the equipment cover 10.

In accordance with an embodiment of the present invention, the equipment cover 10 may be used in a medical setting to cover a piece of equipment 20 that may include a computed tomography (CT) injector 26, a base 22, a stand 24, and wheels 28. When the CT injector 26 is in use, the equipment cover 10 may cover the base 22 and the stand 24 while leaving the CT injector 26 uncovered, so that the CT injector 26 may be used while preventing contrast and blood splatter from reaching the base 22 and the stand 24.

FIG. 3 shows a flowchart of a method for installing the equipment cover 10 over the piece of equipment 20. At 302, the equipment cover 10 may be removed from any packaging and may be unfolded. At 304, a user installing the equipment cover 10 may grasp the first open end 10A of the equipment cover 10 and pull the equipment cover 10 over the CT injector 26 through the first open end 10A. At 306, the user may continue pulling the equipment cover 10 so that the first open end 10A reaches the base 22 of the equipment 10 and may stretch the elastic mechanism 12 to secure the elastic mechanism 12 under the base 22 and above any wheels 28 under the base 22.

At 308, any excess material in the upper portion of the equipment cover 10 may be pulled upwards and gathered around the stand 24. At 310, the closure mechanism 16, such as double-faced securing tape, may be used to fasten or adhere the equipment cover 10 tightly around the stand 24 so that the second open end 10B is closed around the stand 24. At 312, the installation of the equipment cover 10 may be complete. The equipment cover 10 may be changed daily to ensure a sanitary environment.
FIG. 4 shows a flowchart of a method for removing the equipment cover 10 from the piece of equipment 20. The method is described below with further reference to FIGS. 1 and 2. At 402, the closure mechanism 16 may be pulled apart to allow the equipment cover 10 to slightly unfold. At 404, the razor 18 attached to the equipment cover 10 may be used to slice the equipment cover 10 from the first open end 10A upwards towards the second open end 10B. Alternatively, if the equipment cover 10 includes a zipper that runs from the first open end 10A to the second open end 10B, the zipper may be unzipped. At 406, the equipment cover 10 may be held from the inside and may be rolled outwards away from the equipment 20 into a ball, thereby preventing any contaminants from reaching the user or the equipment 20. At 408, the used equipment cover 20 may be disposed of following appropriate procedures.

It should be understood, of course, that the foregoing relates to exemplary 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. An apparatus adapted to protect equipment from contamination, comprising:
   a sleeve having a first open end and a second open end;
   an elastic mechanism disposed around at least a portion of the first open end; and
   a closure mechanism near the second open end, the closure mechanism operable to close the second open end around at least a portion of the equipment.

2. The apparatus of claim 1, further comprising: a razor for cutting open the sleeve.

3. The apparatus of claim 1, wherein the closure mechanism comprises an adhesive.

4. The apparatus of claim 1, wherein the closure mechanism comprises a hook and loop system.

5. The apparatus of claim 1, wherein the elastic mechanism comprises an elastic band.

6. A method for protecting equipment from contamination, comprising:
   fitting a sleeve over the equipment through a first open end of the sleeve;
   securing the first open end of the sleeve to the equipment using an elastic mechanism disposed around at least a portion of the first open end; and
   closing a second open end of the sleeve around at least a portion of the equipment using a closure mechanism near the second open end.

7. The method of claim 6, further comprising:
   slicing the sleeve with a razor blade to remove the sleeve from the equipment.

8. The method of claim 6, further comprising:
   unzipping the sleeve to remove the sleeve from the equipment.

9. The method of claim 6, wherein securing the first open end of the sleeve to the equipment further comprises securing the first open end of the sleeve under a base of the equipment.

10. The method of claim 6, wherein closing the second open end of the sleeve further comprises adhering a portion of the sleeve near the second open end to the equipment.

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