

distal end of upper bag portion **14a**. Such tubes are connectable to exhaust valves **30, 32** formed on the distal end **12b** of litter **12** that are coupled with a vacuum force to thus draw air from the proximal end of the isolation bag **14** to the distal end thereof, shown as the direction D in FIG. **5**. By directing the air forced into the chamber **50** to be drawn from the proximal end to the distal end thus causes the same to wash over the patient in a head-to-toe flow direction. As those skilled in the art will appreciate, air washing over the contaminated patient in such a manner advantageously provides for rapid removal of toxic and infectious residues on clothing and skin which, once removed from the chamber **50** and into exhaust valves **30, 32**, are filtered and decontaminated through an air recycle system contained within the litter **12** (not shown). Moreover, bathing the patient in air in such a manner eliminates dead air pockets which thus facilitates uniform heating, cooling and humidity control.

With respect to operation of the isolation bag **14** of the present invention, to the extent not already evident, such operation comprises the steps of removing the isolation bag **14** from its collapsed, packaged condition and attaching the bag bezel **52** to the ventilator nozzle **28**, the latter being formed as part of a ventilator system contained within the litter **12**. The lower bag portion **14b** is then draped over the platform surface **12c** of the litter **12** whereby the patient is then positioned thereupon. As will be recognized, to the extent additional medical devices, tubes, wiring and the like are to be deployed, the same are passed into the isolation bag opening and connected to the patient positioned thereupon.

Thereafter, the fastening device **20** is slid about the peripheral edges of the upper and lower bag portions to form an air-tight seal. Exhaust hoses **40, 42** are interconnected with the exhaust valves **30, 32** formed upon the litter. Environmental and decontamination systems contained within the litter **12** are then activated with air being passed from the ventilator contained within the litter **12**, through passageways **24, 26** and bezel **52**, and ultimately into the isolation bag **14**.

Air will thus flow over the patient in the head-to-toe manner discussed above and will be removed via exhaust hoses **40, 42**. While in such isolated state, the patient may be transported via conventional means and, upon arrival at a suitable medical facility, may be treated as necessary. To that end, the ventilator system need only be turned off and the sealable closure opened to thus gain access to the patient. Although not shown, the isolation bag **14** of the present invention may further be provided with patient access means, which may comprise a flexible hand sock-type portal which is formed upon the isolation bag **14** and strategically positioned for complete patient access. Such portal system, as those skilled in the art will appreciate, is preferably designed to be left hand/right hand independent and designed to maximize the care provider's hand manipulative abilities and finger functioning dexterity. Following use of the isolation bag **14**, the same may be discarded or, alternatively, decontaminated, sterilized and repackaged for reuse.

Although the invention has been described herein with specific reference to a presently preferred embodiment thereof, it will be appreciated by those skilled in the art that various additions, modifications, deletions and alterations may be made to such preferred embodiment without departing from the spirit and scope of the invention. Accordingly, it is intended that all reasonably foreseeable additions, modifications, deletions and alterations be included within the scope of the invention as defined in the following claims.

What is claimed is:

1. A system for isolating a medical patient from a contaminated environment and facilitating the removal of contaminants from said patient comprising:

- a) a flexible body capsule being formed from a material substantially impermeable to vapor fumes and contagions having an interior compartment;
- b) a sealing apparatus formed upon said body capsule for opening and closing said body capsule and respectively exposing or isolating said interior compartment from said contaminated environment;
- c) a source of contaminant-free pressurized air;
- d) a duct formed upon said body capsule for coupling with said source of contaminant-free pressurized air;
- e) a passageway formed upon said body capsule fluidly connected to said duct, said passageway having at least one inwardly facing aperture formed thereon such that when said passageway is supplied with said pressurized air, said air is caused to pass through said at least one aperture and into said interior compartment of said body capsule; and
- f) an exhaust valve formed upon said interior compartment of said body capsule, said exhaust valve being so formed upon said interior of said body capsule such that in use, said exhaust valve causes said air delivered into said interior chamber from said at least one aperture to selectively wash over said medical patient and force said contaminant adhering to said patient to rapidly remove therefrom and exit from said interior compartment through said exhaust valve.

2. The apparatus of claim **1** wherein said body capsule is comprised of first and second bag portions interconnectible to one another that cooperate to form said interior compartment and said sealing apparatus comprises a fastener for fastening said first and second bag portions to one another.

3. The apparatus of claim **1** wherein said passageway for receiving pressurized air comprises a plurality of tubular gas passageways fluidly connected to one another such that when said plurality of tubular passageways are supplied with pressurized air, said body capsule assumes an expanded position to form a semi-rigid structure.

4. The apparatus of claim **1** wherein said passageway has a plurality of inwardly facing apertures formed thereon, said plurality of apertures being designed and configured to deliver and distribute air into said interior compartment of said body capsule.

5. The apparatus of claim **1** wherein said apparatus is designed and configured to assume a first collapsed configuration for facilitating the transport and storage thereof, and a second expanded configuration when in use.

6. The apparatus of claim **1** wherein said body capsule is sized and adapted to assume a first collapsed position and a second expanded position when said capsule is in use for providing access to said medical patient.

7. The apparatus of claim **1** wherein said body capsule is formed from a transparent material.

8. The apparatus of claim **1** wherein said body capsule has a window formed thereon to allow visual examination of said interior compartment from said external environment.

9. The apparatus of claim **1** wherein said body capsule is formed to have proximal and distal ends such that when said medical patient is contained within the interior compartment thereof, the head of said medical patient is oriented toward said proximal end and the feet and legs of said medical patient are oriented toward said distal end, said exhaust valve being formed upon said distal end of said body capsule such that when pressurized air is delivered to said interior compartment, said air is caused to selectively wash over said patient in a head-to-toe fashion.

10. A system for isolating a casualty from a contaminated environment and for facilitating the removal of toxic and infectious residues therefrom comprising: