

What is claimed is:

1. A shock absorbing container to protect cryogenically frozen biological material comprising:

an outer case including a first outer panel and a second outer panel, the first outer panel and the second outer panel movable relative to each other between a closed position and an open position, the first outer panel and the second outer panel defining a storage space in the closed position, the first outer panel having a first side facing the storage space, the second outer panel having a first side facing the storage space, wherein moving the first outer panel and the second outer panel into the open position creates or enlarges an opening to access the storage space;

a first foam panel on the first side of the first outer panel, the first foam panel including reticulated foam; and

a second foam panel on the first side of the second outer panel, the second foam panel including reticulated foam; the reticulated foam, at ambient temperature, can receive a bag of biological fluid, adapt to its shape accordingly, then be cryogenically frozen to become rigid relative to the first and second foam panels at ambient temperature.

~~2. The shock absorbing container of claim 1, wherein the first foam panel and the second foam panel include reticulated foam.~~

~~3. The shock absorbing container of claim 1, wherein the outer case is metallic.~~

~~4. The shock absorbing container of claim 1, wherein the outer case is rigid relative to the first foam panel at ambient temperature.~~

~~5. The shock absorbing container of claim 1, wherein the first outer panel and the second outer panel are approximately parallel to each other in the closed position.~~

~~6. The shock absorbing container of claim 1, wherein the outer panel includes a pivot joint to pivot the first outer panel with respect to the second outer panel.~~

76. The shock absorbing container of claim 1, wherein the outer case, the first foam panel, and the second foam panel are configured and sized to uniformly compress a bag of biological fluid.
87. The shock absorbing container of claim 1, wherein the outer case includes a locking element to lock the first panel and the second panel in the closed position.
98. The shock absorbing container of claim 1, further comprising a pouch at least partially enclosing the first foam panel.
109. The shock absorbing container of claim 98, wherein the pouch is fastened to the first outer panel, and the first foam panel is between the pouch and the first outer panel.
110. The shock absorbing container of claim 98, wherein the pouch includes a hydrophilic material.
121. The shock absorbing container of claim 1, further comprising a liquid-absorbing liner adjacent the first foam panel.
132. The shock absorbing container of claim 1, further comprising a third foam panel connecting the first panel and the second panel.
1413. The shock absorbing container of claim 1, wherein the outer case in the closed position is shaped like a three-dimensional parallelepiped and has a length, a width, and a thickness, wherein the first outer panel and the second outer panel are each positioned in a respective plane defined by the length and the width, and wherein the length and the width are greater than the thickness.
1514. The shock absorbing container of claim 1, wherein the first foam panel is connected to the second foam panel.
1615. A shock absorbing container for storing or transporting a frozen bag of biological fluid, comprising:
- an outer case defining an internal volume and having a closable opening to insert to or remove from the internal volume a bag of biological fluid, the outer case having an open position and a closed position, the outer case having a length, a

width, and a thickness in the closed position, the length and the width greater than the thickness, the closable opening configured to open a greater amount than the thickness; and

a first foam dampener on a first at least two opposing peripheral sides of the internal volume, the first foam dampener including reticulated foam; and

a second foam dampener on a second peripheral side of the internal volume, the second foam dampener including reticulated foam,

the first peripheral side and the second peripheral side being opposing peripheral sides of the internal volume; the reticulated foam, at ambient temperature, can receive a bag of biological fluid, adapt to its shape accordingly, then be cryogenically frozen to become rigid relative to the first and second foam panels at ambient temperature.

~~17. The shock absorbing container of claim 16, wherein the foam dampener is reticulated.~~

~~16.~~ 16. The shock absorbing container of claim ~~16~~15, wherein the first foam dampener has an internally facing surface facing into the internal volume, and the shock absorbing container further comprises a liner adjacent the internally facing surface.

~~17.~~ 17. The shock absorbing container of claim ~~16~~16, wherein the liner includes a sealable opening for insertion or removal of the first foam dampener.

~~18.~~ 18. The shock absorbing container of claim ~~16~~15, wherein the first foam dampener has an internally facing surface facing into the internal volume, and the shock absorbing container further comprises a liquid-absorption layer adjacent the internally facing surface.

19. A shock absorbing container to protect cryogenically frozen biological material comprising:

an outer case including a first outer panel and a second outer panel, the first outer panel and the second outer panel movable relative to each other between a closed position and an open position, the first outer panel and the second outer

5 panel defining a storage space in the closed position, the first outer panel having a first side facing the storage space, the second outer panel having a first side facing the storage space, wherein moving the first outer panel and the second outer panel into the open position creates or enlarges an opening to access the storage space;

a first foam panel on the first side of the first outer panel;

a second foam panel on the first side of the second outer panel; and

10 a pouch at least partially enclosing the first foam panel, the pouch being fastened to the first outer panel, and the first foam panel being between the pouch and the first outer panel.

20. A shock absorbing container to protect cryogenically frozen biological material comprising:

15 an outer case including a first outer panel and a second outer panel, the first outer panel and the second outer panel movable relative to each other between a closed position and an open position, the first outer panel and the second outer panel defining a storage space in the closed position, the first outer panel having a first side facing the storage space, the second outer panel having a first side facing the storage space, wherein moving the first outer panel and the second outer panel into the open position creates or enlarges an opening to
20 access the storage space;

a first foam panel on the first side of the first outer panel;

a second foam panel on the first side of the second outer panel; and

a pouch at least partially enclosing the first foam panel, the pouch including a hydrophilic material.

25 21. A shock absorbing container to protect cryogenically frozen biological material comprising:

- 5 an outer case including a first outer panel and a second outer panel, the first outer panel and the second outer panel movable relative to each other between a closed position and an open position, the first outer panel and the second outer panel defining a storage space in the closed position, the first outer panel having a first side facing the storage space, the second outer panel having a first side facing the storage space, wherein moving the first outer panel and the second outer panel into the open position creates or enlarges an opening to access the storage space;
- 10 a first foam panel on the first side of the first outer panel;
- a second foam panel on the first side of the second outer panel; and
- a third foam panel connecting the first panel to the second panel.