Claims

1. An article useful as the body of a container for containing gas under pressure, comprising
a hollow container body, having an external surface and having an opening through which gas can enter or leave the interior of the hollow container body;
a layer of fiber-reinforced polymer around the exterior of the container body, attached to the external surface of the container body and having an external surface; and
a layer of elastomer around and sealed to the external surface of the layer of fiber-reinforced polymer, wherein said layer of fiber-reinforced polymer does not contain said elastomer, and said layer of elastomer does not contain said fiber-reinforced polymer, and a layer comprising a mixture of said elastomer and said fiber-reinforced polymer is present between said layer of fiber-reinforced polymer and said layer of elastomer.

2. An article according to claim 1 wherein said elastomer is selected from the group consisting of polyurethanes and polyureas.

3. A container useful for containing gas under pressure, comprising an article useful as the body of a container for containing gas under pressure, comprising
a hollow container body, having an external surface and having an opening through which gas can enter or leave the interior of the hollow container body;
a layer of fiber-reinforced polymer around the exterior of the container body, attached to the external surface of the container body and having an external surface; and
a layer of elastomer around and sealed to the external surface of the layer of fiber-reinforced polymer, and further comprising a valve connected to said opening which can selectively prevent passage of gas through said opening and can controllably control the flow of gas through said opening, wherein said layer of fiber-reinforced polymer does not contain said elastomer, and said layer of elastomer does not contain said fiber-reinforced polymer, and a layer comprising a mixture of said elastomer and said fiber-reinforced polymer is present between said layer of fiber-reinforced polymer and said layer of elastomer.

4. A container according to claim 3 wherein said elastomer is selected from the group consisting of polyurethanes and polyureas.

5. A container according to claim 3 containing gas within said hollow container body at a pressure of 1000 pounds per square inch to 8000 pounds per square inch.

6. A container according to claim 3 containing gas within said hollow container body at a pressure of at least 1000 pounds per square inch.

7. A container according to claim 3 containing gas within said hollow container body at a pressure of at least 4000 pounds per square inch.