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[54] **FLUID STORAGE AND DISPENSING SYSTEM**

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[52] **U.S. Cl.** **62/48.1**

[58] **Field of Search** 62/48.1–50.1, 62/48.4, 45.1

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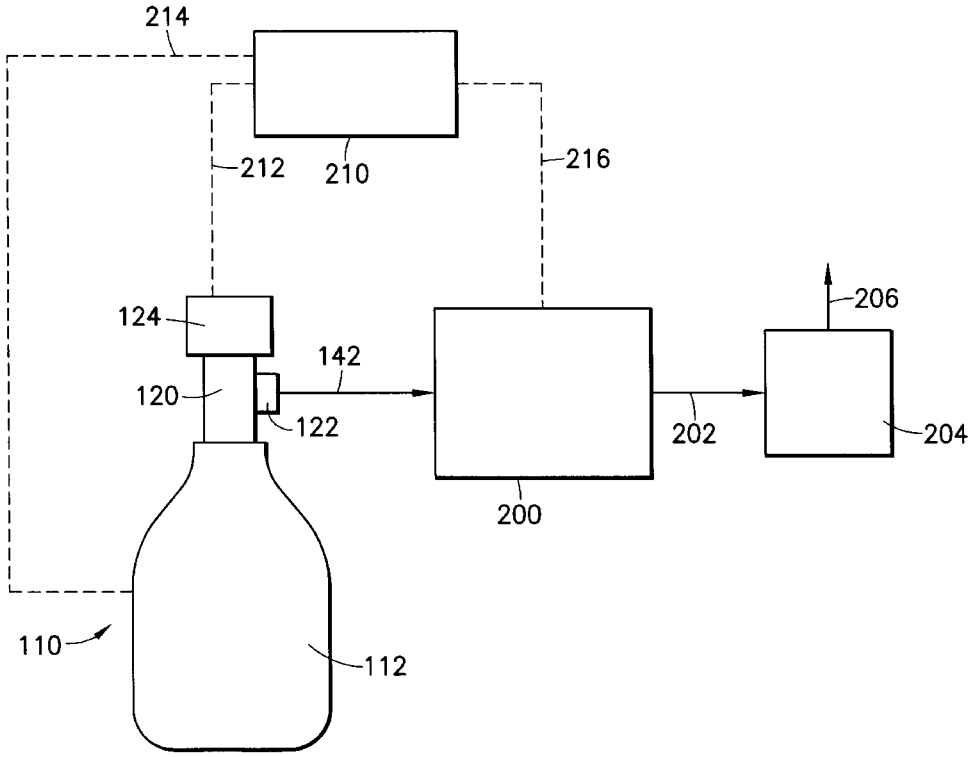
[57] **ABSTRACT**

A fluid storage and dispensing system comprising a vessel for holding a fluid at a desired pressure. The vessel has a pressure regulator associated with a port of the vessel, and set at a predetermined pressure. A dispensing assembly, e.g, including a flow control means such as a valve, is arranged in gas/vapor flow communication with the regulator, whereby the opening of the valve effects dispensing of gas/vapor from the vessel. The fluid in the vessel may be constituted by a liquid which is confined in the vessel at a pressure in excess of its liquefaction pressure at prevailing temperature conditions, e.g., ambient (room) temperature. A phase separator such as a gas/vapor-permeable liquid-impermeable membrane, may be associated with the regulator, as a barrier to flow of liquid into the regulator, when the contained fluid in the vessel is in a liquid state.

75 Claims, 2 Drawing Sheets