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**Schnell et al.**

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(54) **DIAPHRAGM PRESSURE POD FOR MEDICAL FLUIDS**

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**C02F 1/44** (2006.01)

(52) **U.S. Cl.** ..... **604/6.11**; 604/4.01; 210/741

(58) **Field of Classification Search** ..... 604/4.01, 604/6.09, 6.11, 6.16, 65-67; 210/645, 739, 210/741

See application file for complete search history.

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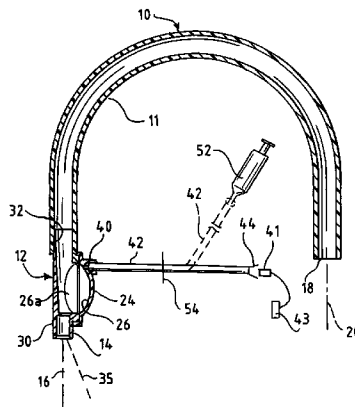
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(57) **ABSTRACT**

A tubular medical fluid flow set comprises a pressure sensing chamber connected in flow-through relation to fluid flow tubing of the set. The pressure sensing chamber defines a movable, flexible, impermeable diaphragm dividing the chamber into two separate compartments. The fluid flow tubing communicates with one of the compartments and is isolated from the other of the compartments. A port is carried on the chamber, the port having a seal therein, and communicating with the other of the compartments. Thus, the other of the compartments is hermetically sealed until the port is opened for connection with a pressure measuring device, to keep the flexible diaphragm in a desired, initial position prior to opening of the seal.

**28 Claims, 7 Drawing Sheets**



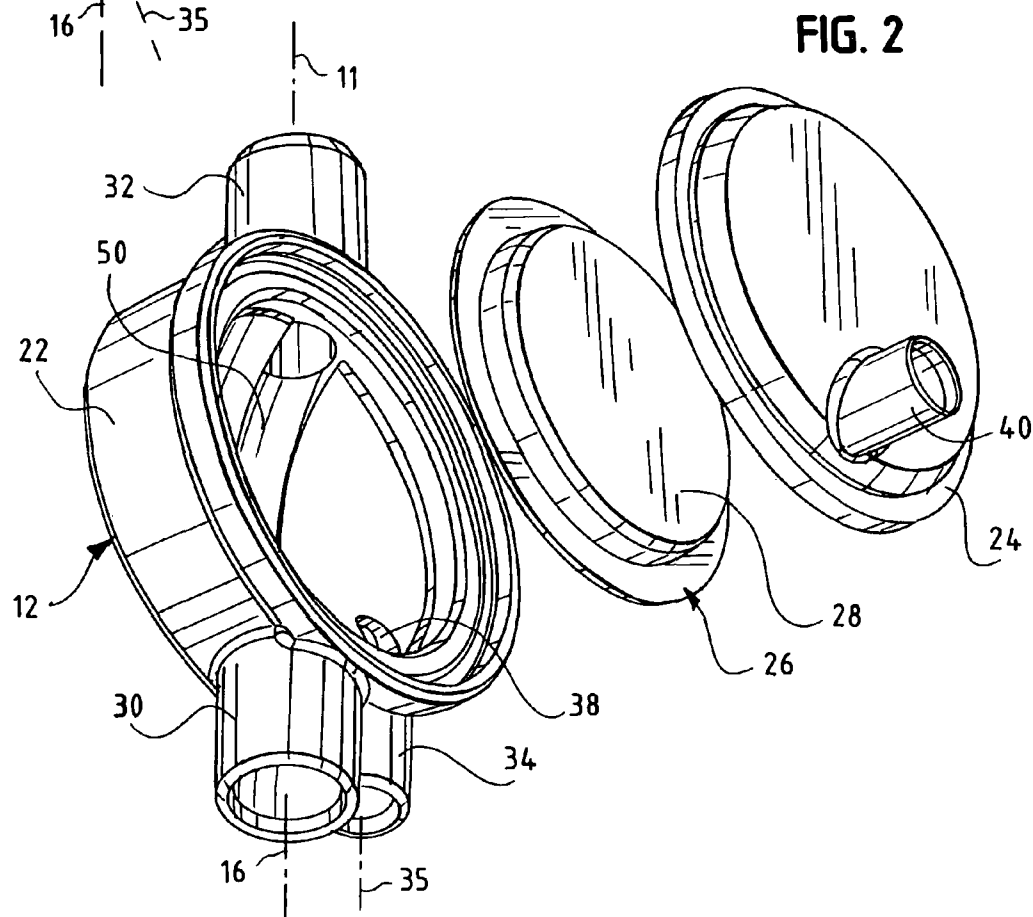
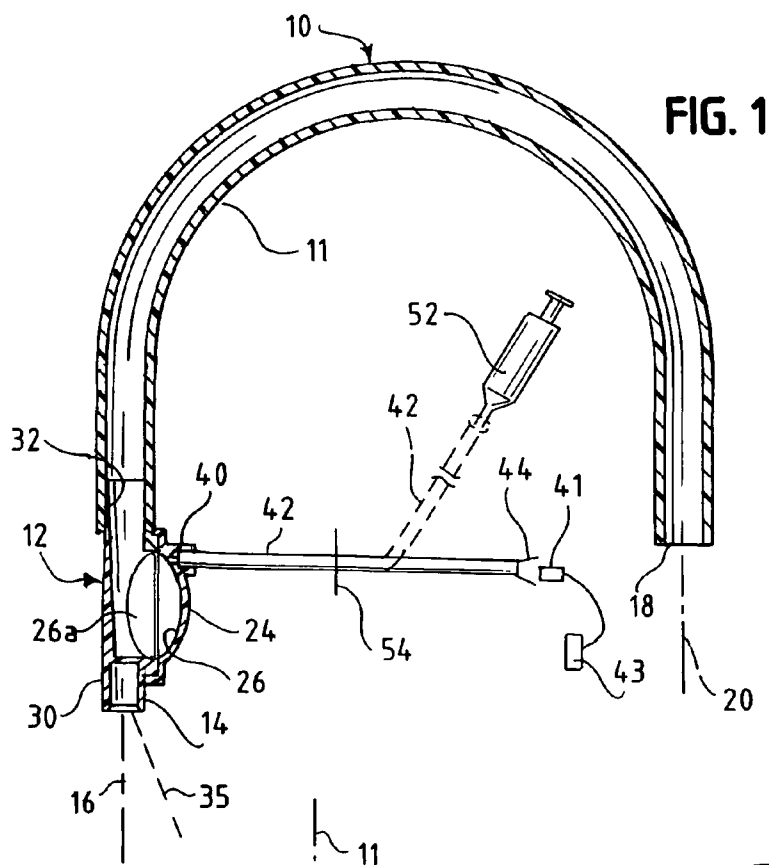


FIG. 3

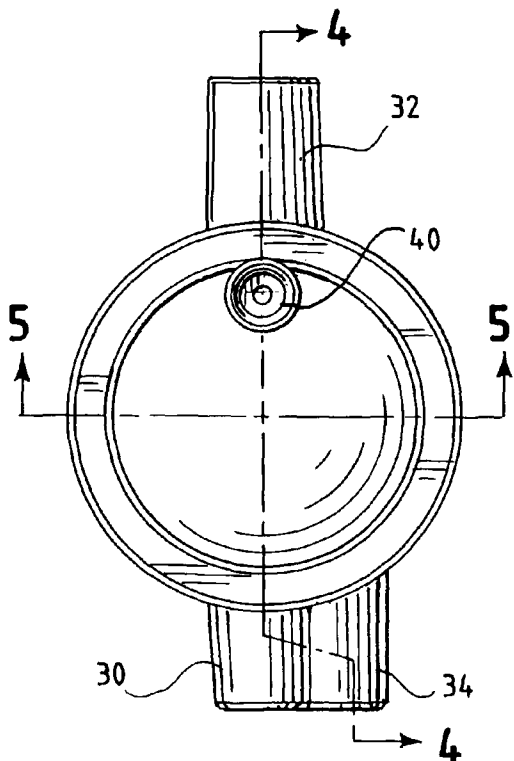


FIG. 4

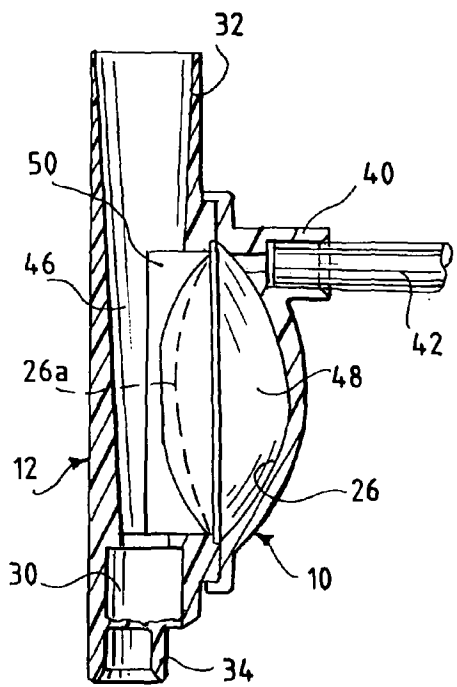


FIG. 6

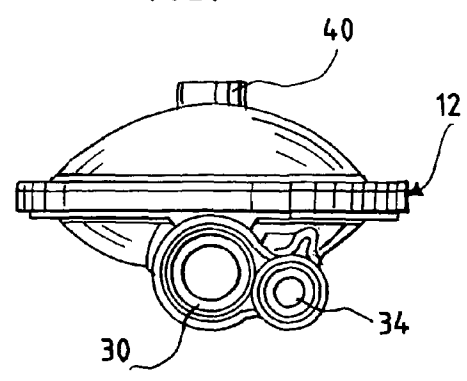


FIG. 5

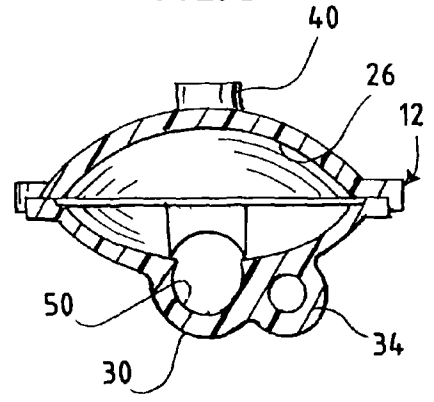


FIG. 7

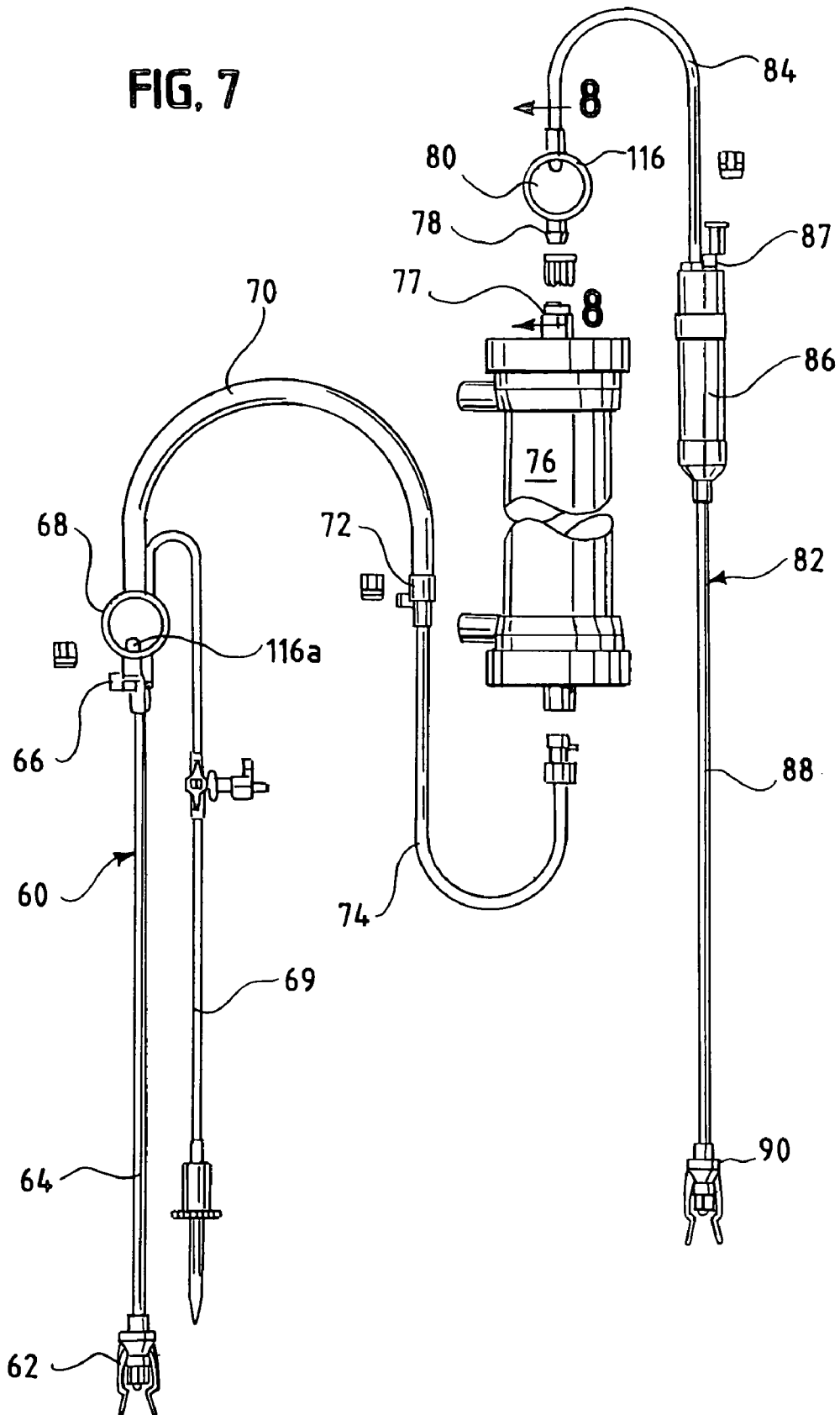


FIG. 8

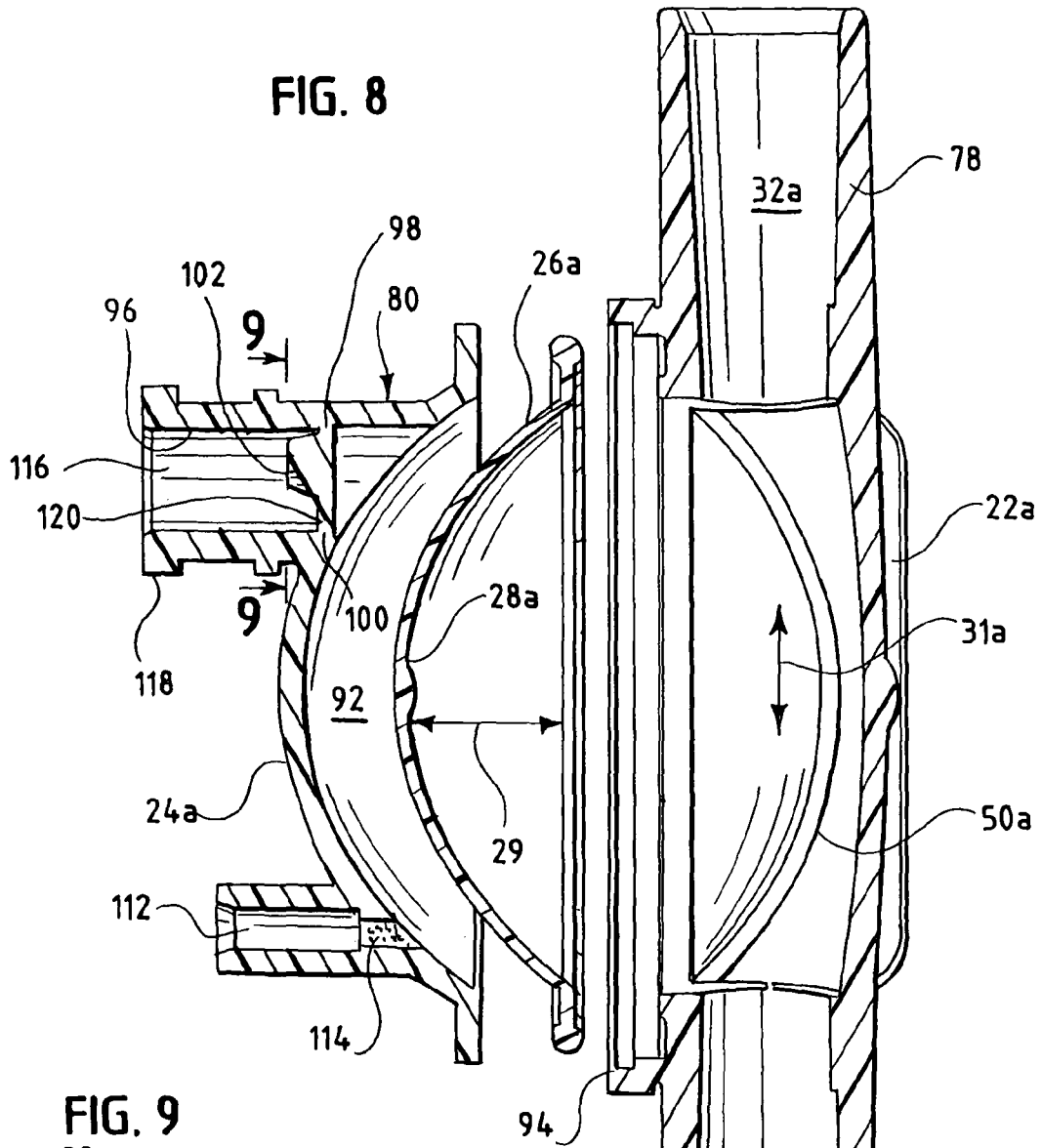
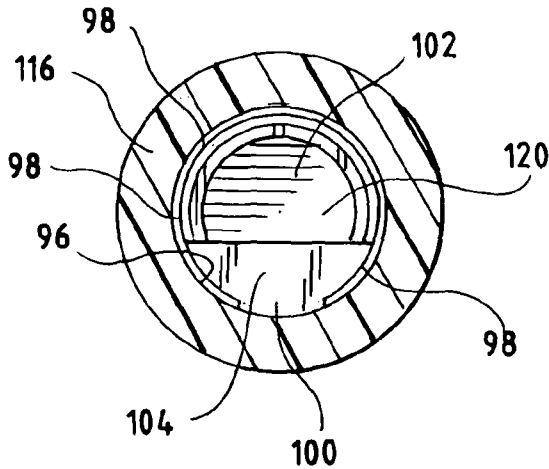


FIG. 9



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