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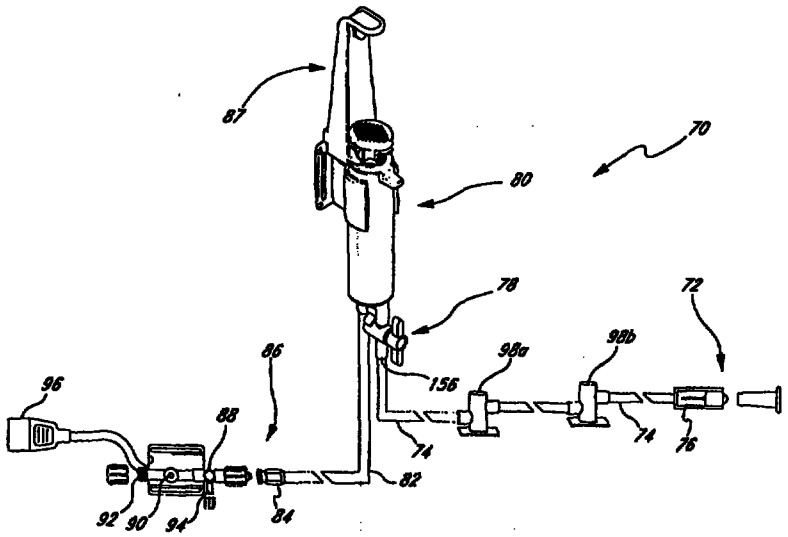
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(54) Title: CLOSED, ONE–HANDED BLOOD SAMPLING SYSTEM



(57) Abstract

A one–handed blood sampling reservoir (80) for an infusion line (74, 82) having a configuration which allows fluid to be drawn into the reservoir and then returned to the patient. Both drawing and returning steps are performed by squeezing two of a plurality of finger grips (180, 274, 126, 180) provided on the reservoir (80). The reservoir may include a bracket (87) which enables one–handed operation in either a hand–held or a pole–mounted configuration. In the alternative, the reservoir and finger grips may be formed by telescoped inner (322) and outer housings (306) without a bracket. The reservoir desirably includes a syringe–like body forming a chamber (102) and a plunger/piston assembly (104) reciprocal therein to vary the volume of the chamber. A narrow gap (G) is provided in the chamber open to both inlet and outlet ports when the piston is fully seated to ensure a consistent and minimum flush volume in the chamber. The reservoir is preferably placed within an infusion line having a pressure transducer (90) therein, and a spring–loaded piston (110, 114) may be adjustable to vary the dynamic response of the fluid pressure system.