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(54) **Title:** MEDICAL TREATMENT SYSTEM AND METHODS USING A PLURALITY OF FLUID LINES

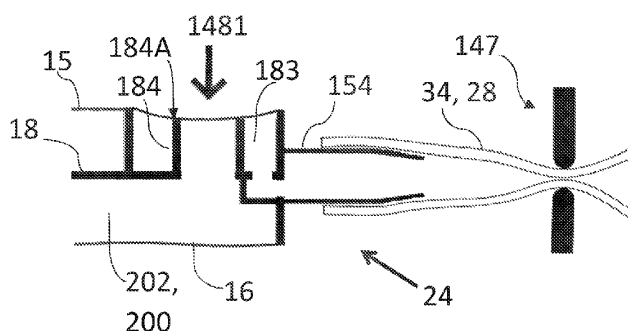


FIG. 55A

(57) **Abstract:** Improvements in a fluid pump systems are disclosed for a disposable pump cassette with pneumatically actuated diaphragm pumps and valves in general, and a peritoneal dialysis cyclor using a disposable pump cassette in particular. Pump fluiding is improved by detecting leaks in one or more port valves. A method to flush a leaking port valve to reduce leakage at the port valve is disclosed. The method to flush the port valve starts by occluding the line connected to the port valve, then alternately pumping liquid toward the port valve and then pulling liquid from the leaking valve. The port valve may be open while liquid is pumped toward the port valve and closed while liquid is pulled from the port valve.



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