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(54) Title: VOLUME-BASED FLOW RATE COMPENSATION TECHNIQUE FOR INFUSION THERAPY

(57) Abstract: An infusion pump is provided for pumping fluid through an administrative set at a desired flow rate over a specified duration, and includes a pumping mechanism for releasably receiving and for exerting a pulsing force on the administrative set, thus pressurizing a portion of the set for creating a flow of fluid from a set outlet. A controller is connected to and is configured for operating the pumping mechanism, the controller determines a pulse frequency based on a volume of fluid infused over a portion of the specified duration and the desired flow rate, outputs a control signal to the pumping mechanism for operating the pumping mechanism based on the determined pulse frequency, determines a first pulse frequency based on the desired flow rate; and adjusts the first pulse frequency based on the volume of fluid infused to provide a second pulse frequency being different from the first pulse frequency.

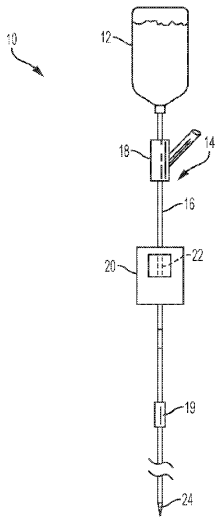


FIG. 1

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