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(71) Applicant: **ICU MEDICAL, INC.** [US/US]; 951 Calle Amanecer, San Clemente, California 92673 (US).

(72) Inventor: **FISTER, Philipp, Marc**; 951 Calle Amanecer, San Clemente, California 92673 (US).

(74) Agent: **ALTMAN, Daniel, E.**; Knobbe, Martens, Olson & Bear, LLP, 2040 Main Street, 14th Floor, Irvine, California 92614 (US).

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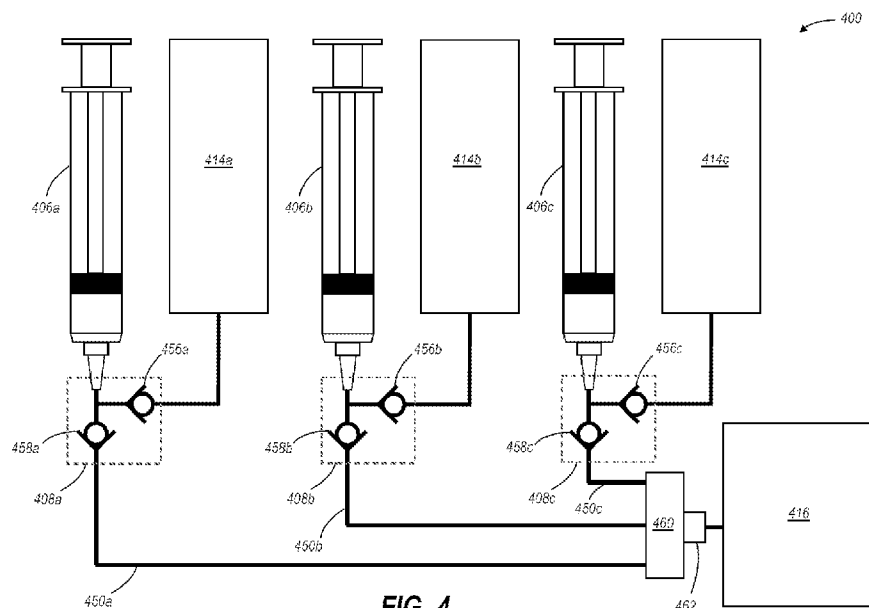
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(54) Title: MEDICAL FLUID COMPOUNDING SYSTEMS WITH COORDINATED FLOW CONTROL



(57) Abstract: A system for compounding precise amounts of fluid from one or more source containers into at least one target container is described. The fluid can be drawn from the one or more source containers via an intermediate measuring container such as a syringe pump actuated by a stepper motor or other electronic motor. A system controller can use a measured back EMF value of the motor to determine a pressure within a syringe pump, and control the operation of the motor based at least in part on the determined pressure. The determined pressures of a plurality of syringe pumps can be used to optimize the speed at which the syringe pumps dispense fluid from the source containers while avoiding an overpressure condition which can compromise a compounding process and damage one-way valves within the system.

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