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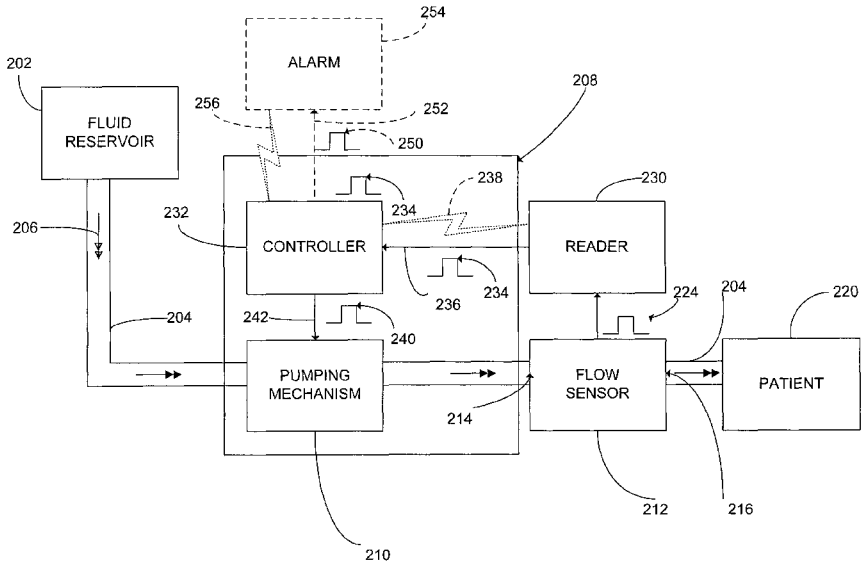
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(54) **Title:** FLUID DELIVERY SYSTEM WITH CLOSED-LOOP FLOW CONTROL AND METHOD



(57) **Abstract:** A fluid delivery system having a closed-loop control process for delivering a medical fluid to a patient (120,220). A fluid infusion system includes a pump (100,208) for delivering a fluid to a patient via an administration tube (122,206). A flow sensor (126,212) associated with the administration tube provides an indication of the actual flow rate (224) of fluid in the administration tube. Such a flow sensor may comprise a positive displacement flow sensor (402) constructed using micro-fabrication and/or micro-molding techniques. A reader (230) reads the actual flow rate signal and provides an indication (234) to a controller (232) for controlling the pump. The flow rate information can also be used for providing status information, such as the existence of a blockage (250) in the fluid delivery system.

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