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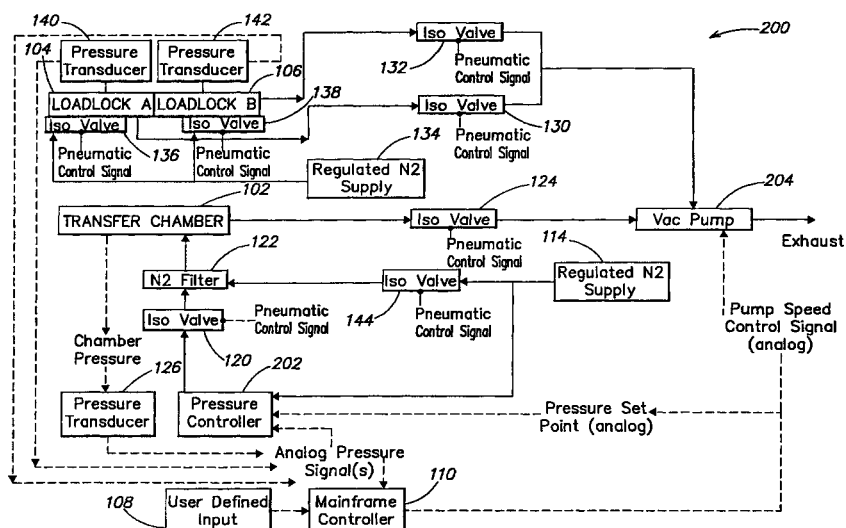
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(57) Abstract: A system including a chamber; (102) a variable speed vacuum pump (204) coupled to the chamber; and a pressure controller (202) coupled to the chamber. The pressure controller (202) compares a set point pressure with a pressure measurement for the chamber and adjusts a flow of gas through the pressure controller based on a difference between the pressure measurement and the set point pressure. The system includes a pressure measurement device coupled (126) to the chamber and to the pressure controller, and a main controller coupled to the variable speed vacuum pump, the pressure controller and the pressure measurement device. The pressure measurement device measures a pressure within the chamber and provides a pressure measurement to the pressure controller and the main controller. The main controller adjusts a speed of the variable speed vacuum pump (204); and provides the set point pressure to the pressure controller.