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Hollis

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[54] **SYSTEM FOR ACTUATING FLOW CONTROL VALVES IN A TEMPERATURE CONTROL SYSTEM**

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[52] **U.S. Cl.** **123/41.55**; 137/340; 251/29; 123/41.08

[58] **Field of Search** 123/41.08, 41.55; 137/340; 251/29, 30.01

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[57] **ABSTRACT**

A pressurization system for controlling actuation of flow control valves in a temperature control system is disclosed. The pressurization system includes a housing which has a chamber formed in it. An input injector is in communication with the housing and is adapted to channel a flow of pressurized fluid into the chamber. An output injector is also in communication with the housing and is adapted to channel a flow of pressurized fluid out of the chamber. Fluid flow control means is connected to the housing and has at least one fluid outlet. The fluid outlet is adapted to direct a flow of pressurized fluid to a flow control valve to control actuation of the valve. The fluid flow control means has an open position for allowing a flow of pressurized fluid out of the fluid outlet and a closed position for preventing fluid flow out of the fluid outlet. The fluid flow control means receives signals from an engine computer for controlling actuation of the fluid flow control means between its open and closed positions. First and second solenoids are preferably connected to the injectors and receive signals from the engine computer for controlling actuation of the injectors between their open and closed positions. In one embodiment, the fluid control means includes a solenoid with three outlets formed in it. Each outlet directs a flow of pressurized fluid to a prescribed flow control valve.

25 Claims, 11 Drawing Sheets