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(54) **VALVE-MANIFOLD LABORATORY GLASSWARE FOR CHEMICAL LABORATORY AUTOMATION AND OTHER APPLICATIONS**

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(57) **ABSTRACT**

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(63) Continuation of application No. 14/287,179, filed on May 26, 2014, now Pat. No. 9,586,202, which is a continuation of application No. 12/899,531, filed on Oct. 6, 2010, now Pat. No. 8,734,736.

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An article of laboratory glassware for directing the flow of chemical materials is described. The article includes a manifold having a plurality of input ports and at least one output port, and a plurality of stopcocks. Each stopcock has an inlet port and an outlet port connected by a passageway through the plug. Each of the stopcock output ports is connected to one of the manifold input ports, and each of the stopcock input ports is connected with one end of a hollow glass tube, and the other end of the hollow glass tube is connected to a ground glass joint. The output ports of the manifold are terminated to a ground glass joint. Each stopcock is fitted with a plug comprising a longitudinally-movable gate whose position is driven by a stepper or D.C. electrical motor where the gate position can be monitored by a sensor and can be computer-controlled.

