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(54) Title: GUIDED FLOW VALVE ASSEMBLY AND SYSTEM INCORPORATING SAME

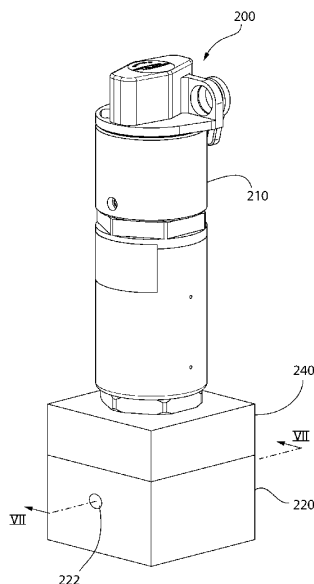


FIG. 6

(57) Abstract: Apparatuses for controlling fluid flow are important components for delivering process fluids for semiconductor fabrication. These apparatuses for controlling fluid flow frequently rely on valves which can provide flows at different rates and in a minimally turbulent manner. In one embodiment, a valve assembly is disclosed, the valve assembly having a valve body, a closure member, a seat, and a radial flow guide. The radial flow guide has a plurality of flow passages. The closure member has a needle, the needle having a plurality of grooves therein. The resulting valve assembly enables improved control of fluid and reduces turbulence in the resultant flow.

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