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(54) **Title**: CUSTOMIZABLE DISPENSE SYSTEM WITH SMART CONTROLLER

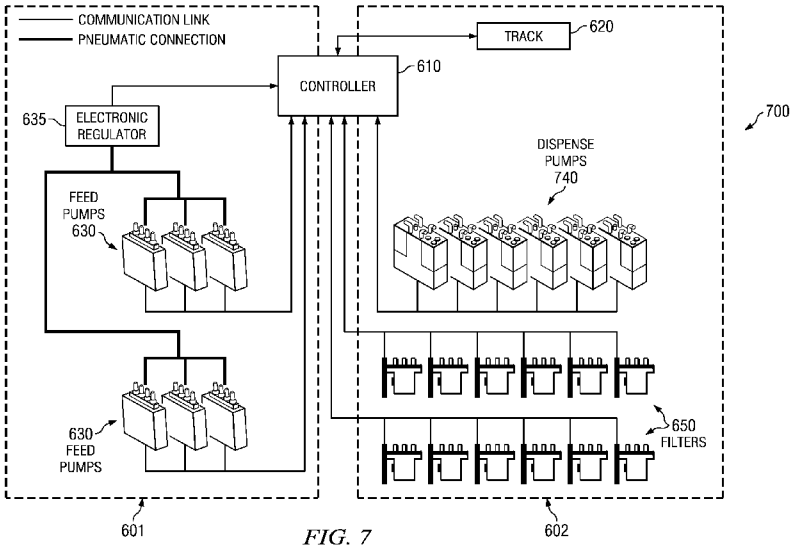


FIG. 7

(57) **Abstract**: Embodiments disclosed provide a customizable dispense system implementing modular architecture, the customizable dispense system comprising a smart controller configured to operate various pneumatic pumps and motor pumps in various semiconductor manufacturing processes that are sensitive to defects in printed patterns. The smart controller is configured to, upon switching from communicating with a first pump to a second pump, automatically recognize the second pump and apply a control scheme to control the second pump, which may be a motor pump or a pneumatic pump. The s witching may be due to physical disconnection of the first pump and physical connection of the second pump or it can be entirely done via software. The smart controller may be connected to track and a variety of devices, including smart filters.

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