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(54) Title: SYSTEMS AND METHODS FOR DETECTING MALFUNCTIONS WITHIN A GAS DISTRIBUTION SYSTEM

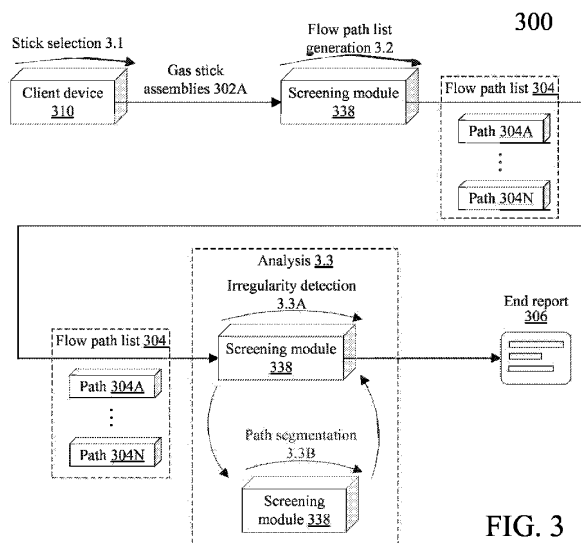


FIG. 3

(57) Abstract: Systems and methods for monitoring and detecting a malfunction within a gas distribution system are provided. A system may first enable, by a controller, gas flow through a flow path of the gas distribution system. Afterwards, the system may receive data including pressure data and/or flow rate data associated with the flow path of the gas distribution system while gas flow is enabled through the flow path. The system may process the data to determine whether the first flow path of the gas distribution system includes a malfunction. Responsive to determining that the flow path includes a malfunction, the system may determine a relative location of the malfunction within the flow path, with respect to a mass flow controller (MFC) or sensor within the flow path. The system may generate a report indicating whether the flow path includes a malfunction and a relative location of any determined malfunction.

[Continued on next page]

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