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(54) **Title:** METHODS, SYSTEMS, AND APPARATUS FOR CONDUCTING A CALIBRATION OPERATION FOR A PLURALITY OF MASS FLOW CONTROLLERS (MFCs) OF A SUBSTRATE PROCESSING SYSTEM

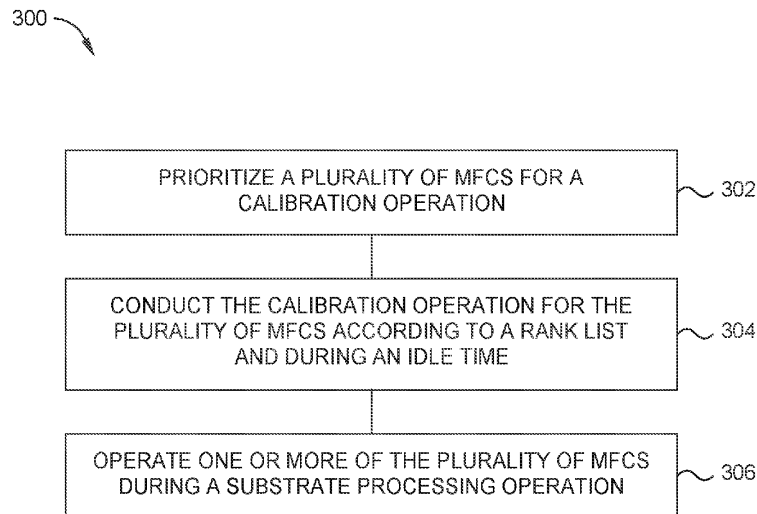


FIG. 3A

(57) **Abstract:** Aspects generally relate to methods, systems, and apparatus for conducting a calibration operation for a plurality of mass flow controllers (MFCs) of a substrate processing system. In one aspect, a corrected flow curve is created for a range of target flow rates across a plurality of setpoints. In one implementation, a method of conducting a calibration operation for a plurality of mass flow controllers (MFCs) of a substrate processing system includes prioritizing the plurality of MFCs for the calibration operation. The prioritizing includes determining an operation time for each MFC of the plurality of MFCs, and ranking the plurality of MFCs in a rank list according to the operation time for each MFC. The method includes conducting the calibration operation for the plurality of MFCs according to the rank list and during an idle time for the substrate processing system.

[Continued on next page]



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