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(54) Title: ACTIVE DIVERT PRESSURE TUNING

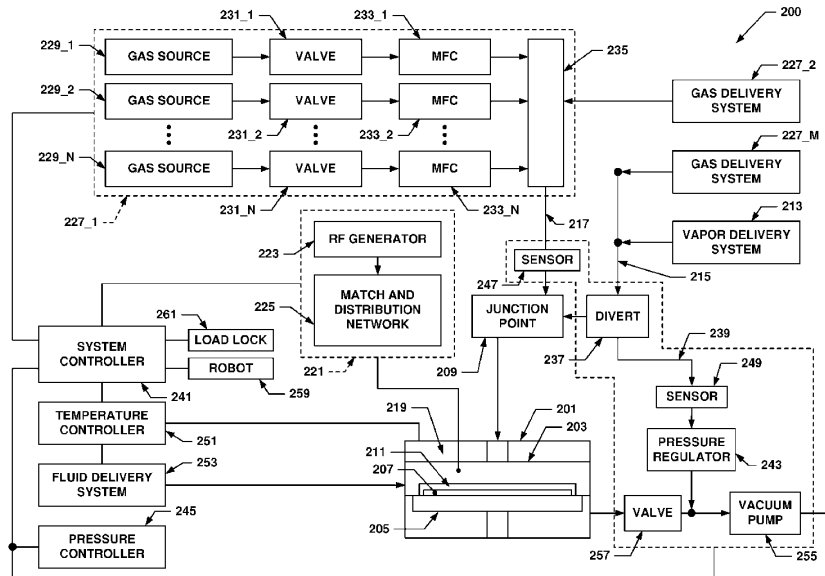


FIG. 2

(57) Abstract: An apparatus for semiconductor processing including a junction point, a gas delivery system, a precursor delivery system, a divert valve, and a pressure regulator. The gas delivery system is fluidically connected with the junction point via a conduit and configured to supply at least one process gas to the junction point. The precursor delivery system is fluidically connected with the junction point and configured to supply at least one precursor to the junction point in a vapor and/or gaseous phase. The divert valve includes a first inlet fluidically connected with the precursor delivery system, a first outlet fluidically connected with the junction point, and a second outlet fluidically connected with an exhaust via another conduit. The pressure regulator is fluidically interposed between the second outlet and the exhaust, and configured to control pressure in at least a portion of the other conduit based on pressure in the conduit.

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