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(54) Title: LOAD-LOCK GAUGE

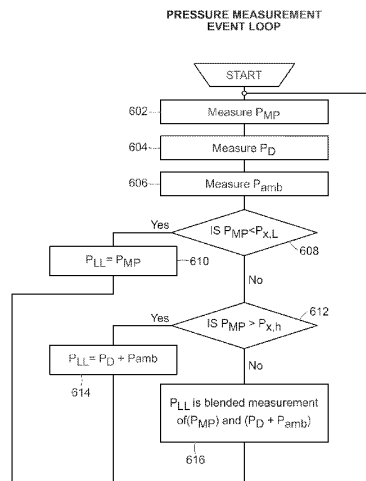


FIG. 6

(57) Abstract: A load lock pressure gauge comprises a housing configured to be coupled to a load lock vacuum chamber. The housing supports an absolute vacuum pressure sensor that provides instantaneous high vacuum pressure signal over a range of high vacuum pressures and a differential diaphragm pressure sensor that provides an instantaneous differential pressure signal between load lock pressure and ambient pressure. The housing further supports an absolute ambient pressure sensor. A low vacuum absolute pressure is computed from the instantaneous differential pressure signal and the instantaneous ambient pressure signal. A controller in the housing is able to recalibrate the differential diaphragm pressure sensor based on measured voltages of the sensor and a measured ambient pressure during normal operation of the pressure gauge with routine cycling of pressure in the load lock.

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