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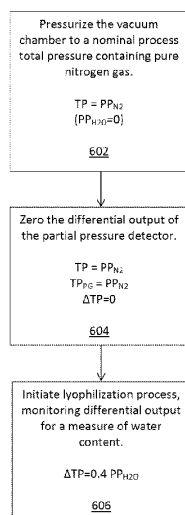
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(54) Title: METHOD AND APPARATUS FOR PARTIAL PRESSURE DETECTION



(57) Abstract: A partial pressure detector and methods of detecting a partial pressure are provided, in which a thermal conductivity gauge, such as a Pirani gauge, is configured to sense a pressure of a mixture of gases within a vacuum chamber. An input of the partial pressure detector is configured to receive a total pressure reading from a species-independent pressure sensor of the mixture of gases in the vacuum chamber, and a controller configured to provide an output representing an amount of a species of gas in the vacuum chamber as a function of the pressure as sensed by the thermal conductivity gauge and the received total pressure reading. The controller has a resolution, and a range of the resolution is scaled to a range of expected partial pressures of the species. The output can be a partial pressure or a weighted partial pressure of the gas species.

FIG. 6

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