

ABSTRACT

ARRANGEMENT FOR IDENTIFYING UNCONTROLLED EVENTS AT THE PROCESS MODULE LEVEL AND METHODS THEREOF

A process-level troubleshooting architecture (PLTA) configured to facilitate substrate processing in a plasma processing system is provided. The architecture includes a process module controller. The architecture also includes a plurality of sensors, wherein each sensor of the plurality of sensors communicates with the process module controller to collect sensed data about one or more process parameters. The architecture further includes a process-module-level analysis server, wherein the process-module-level analysis server communicates directly with the plurality of sensors and the process module controller. The process-module-level analysis server is configured for receiving data, wherein the data include at least one of the sensed data from the plurality of sensors and process module and chamber data from the process module controller. The process-module-level analysis server is also configured for analyzing the data and sending interdiction data directly to the process module controller when a problem is identified during the substrate processing.

Fig. 3