ABSTRACT

SYSTEMS FOR DETECTING UNCONFINED-PLASMA EVENTS

A system for detecting unconfined-plasma events in a plasma processing chamber is disclosed. The system may include a sensor disposed in the plasma processing chamber for providing a current when unconfined plasma is present in the plasma processing chamber. The system may also include a converter for converting the current into a voltage and a filter for removing noise from the voltage to provide a first signal. The system may also include a detector for determining presence of the unconfined plasma using an amplified level of the first signal and/or the first signal. The system may also include a conductor for coupling the sensor and the converter to conduct the current from the sensor to the converter. The system may also include a shield for enclosing at least a portion of the conductor to at least reduce electromagnetic noise received by the conductor.

FIG. 2