SYSTEM FOR CLEARANCE MEASUREMENT AND METHOD OF OPERATING THE SAME

ABSTRACT

A clearance sensing system (110) is disclosed. The system (110) includes a probe (112) separated from a test object (114) by a variable distance d (116). The system (110) also includes an alternating current (AC) source (118) for supplying a current through the probe (112), wherein the AC source (118) and the probe (112) are configured to generate a controlled plasma channel (120) between a tip of the probe (112) and the test object (114). The system (110) further includes a processing unit (124) configured to determine the variable distance d (116) based on a voltage difference between the tip of the probe (112) and the test object (114).

Fig. 5