

Phase Discriminating Capacitive Array Sensor System

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DESCRIPTION

This phase discriminating capacitive sensor array system provides multiple sensor elements which are maintained at a phase and amplitude based on a frequency reference provided by a single frequency stabilized oscillator. Sensor signals provided by the multiple sensor elements are controlled by multiple phase control units, which correspond to the multiple sensor elements, to adjust the sensor signals from the multiple sensor elements based on the frequency reference. The adjustment made to the sensor signals is indicated by output signals which indicate the proximity of the object. The output signals may also indicate the closing speed of the object based on the rate of change of the adjustment made, and the edges of the object based on a sudden decrease in the adjustment made.

FEATURES AND BENEFITS

- The technology provides proximity sensing in industrial environment with no limit on proximity of adjacent sensors and no cross talk between elements.

APPLICATIONS

- Aviation
- Machinery Vibration Monitoring
- Air-Craft Warfare
- Conveyer Systems
- Mobile Phones

FOR MORE INFORMATION

If you are interested in more information or want to pursue transfer of this technology, GSC-13460-1, please contact:

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