OAK RIDGE NATIONAL LABORATORY
Managed by UT-Battelle for the Department of Energy

Extreme Filter for Low-Output Thermocouples in High EMI Environments

Disclosure Number

201303163

Technology Summary

The invention relates to measurement systems and more specifically to a filter for improving thermocouple accuracy. A technology has been developed that filters extraneous electromagnetic interference signals from low voltage, low-frequency thermocouple signals. The filter has significant application in thermomagnetic processing that uses induction heating. The technology is extensible allowing designs of varying degrees of reduction of the electromagnetic interference depending on the application. The resulting filter fabricated with this technology introduces no appreciable measurement offset bias or noise of its own. The filter can be fabricated in a range of physical sizes to suit a variety of applications.

Inventor

KISNER, ROGER A

Measurement Science & Systems Engr Div

Licensing Contact

SPEIGHT II, MELVIN D

Room 143, 4500N

1 Bethel Valley Road 6196

Oak Ridge, TN 37831

Office Phone: (865) 241-6564

E-Mail: