

Non-Intrusive Sensing Technique for State-of-Health Monitoring of Batteries

Disclosure Number

201202858

Technology Summary

The invention relates to inspection systems and more specifically to inspection systems for state of health of batteries. The goal is to apply noise measurement techniques and signal processing to develop a novel nondestructive and unobtrusive sensing method to monitor the state of health (SOH) for lithium-ion cell that can be further extended to the battery module and pack level. Effective monitoring of the cell state of charge (SOC) and SOH under dynamic conditions will detect early cell failures and enable mitigation. This sensor technology could enrich modeling and simulation, enable greater utilization of the battery capacity (Depth of Discharge), improve safety, and extend cycle life which will improve cost and warranty of battery packs.

Inventor

FUGATE, DAVID L

Measurement Science & Systems Engr Div

Licensing Contact

SPEIGHT II, MELVIN D

UT-Battelle, LLC

Oak Ridge National Laboratory

Room 143, 4500N, MS: 6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 241-6564

E-mail: DSPEIGHT@ORNL.GOV

Note: The technology described above is an early stage opportunity. Licensing rights to this intellectual property may be limited or unavailable. Patent applications directed towards this invention may not have been filed with any patent office.