



Non-Invasive Corrosion Sensor

Available for: Licensing, Collaboration

Key Words: *Corrosion, sensor, heat measurement, inspection, monitoring*

The Innovation:

The Non-Invasive Corrosion Sensor

accurately and reliably measures the heat produced during the corrosion process. This sensor detects the thermal output of active corrosion and differentiates the output from surrounding environmental conditions. An array of corrosion sensors would be placed during fabrication/installation in inaccessible areas of high corrosion impact as determined by prior finite element analysis. Data, in the form of current output, is collected and monitored for changing trends. Costly and time consuming invasive inspections can be scheduled based upon data collected instead of arbitrary schedules.

Potential Markets:

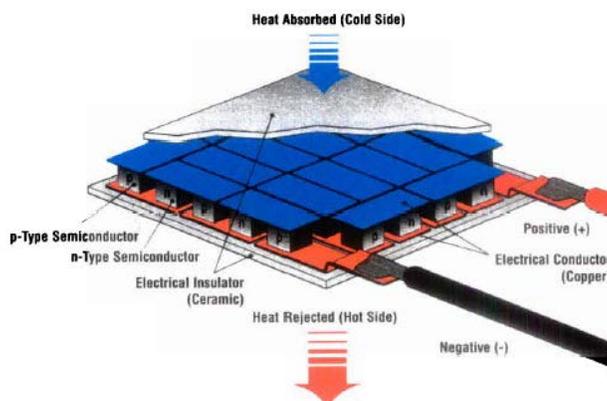
storage tanks, bridges, pipelines, and/or other infrastructure requiring corrosion inspection and monitoring.

Technical Readiness Level (TRL): 5

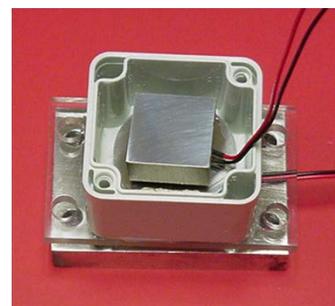
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Thermoelectric Module



Thermoelectric Module (cutaway)



Sensor (top view)

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