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Self-Cooling Thermo-Electrochemical Cell



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TECHNOLOGY READINESS LEVEL (TRL)

• TRL 4

PATENT/ GRANTED NUMBER

PI 2015701464

TECHNOLOGY OVERVIEW

The present invention disclosed a thermo-electrochemical cell with self-cooling mechanism to maintain thermal gradient naturally, thus, eliminates the need for an extraneous cooling mechanism. The self cooling thermoelectrochemical cell according to the present invention comprising a barrel which provides a space to fill a redox electrolyte solution so that the electrons could be flowed in the self cooling thermo-electrochemical cell; two sealants which help to seal the barrel so that the redox electrolyte solution would not flow out from the self cooling thermo-electrochemical cell body or the barrel; two electrodes which represent anode and cathode; a redox electrolyte solution; a rubber O-ring which assists in holding the polymer-based membrane and can be adjusted at different position; and an endothermic polymer membrane which provides a self-cooling mechanism in the thermo-electrochemical cell.

CONTACT US!

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