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(54) **Title:** A REDOX FLOW BATTERY SYSTEM

(57) **Abstract:** A redox flow battery system having an electrochemical cell and an energy reservoir. The system includes a cathodic compartment, an anodic compartment, a separator that divides the two compartments, and an energy reservoir which contains an electro-active material, electro-active ions, an electrolyte, and a redox mediator. The reservoir is connected to either the cathodic compartment or the anodic compartment via an inlet-outlet pair for circulating the electrolyte from the energy reservoir to the cathodic compartment or the anodic compartment.



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