US008771856B2

(12) **United States Patent**
Li et al.

(10) **Patent No.: US 8,771,856 B2**
(45) **Date of Patent: Jul. 8, 2014**

(54) **FE-V REDOX FLOW BATTERIES**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 785 days.

(21) Appl. No.: **12/892,698**

(22) Filed: **Sep. 28, 2010**

(65) **Prior Publication Data**

US 2012/0077067 A1 Mar. 29, 2012

(51) **Int. Cl.**
H01M 8/18 (2006.01)
H01M 8/20 (2006.01)

(52) **U.S. Cl.**
CPC ***H01M 8/184*** (2013.01); ***H01M 8/188*** (2013.01); *H01M 8/20* (2013.01)
USPC **429/105**; 429/204

(58) **Field of Classification Search**
CPC H01M 8/20; H01M 8/188; H01M 8/184
USPC 429/105, 204
See application file for complete search history.

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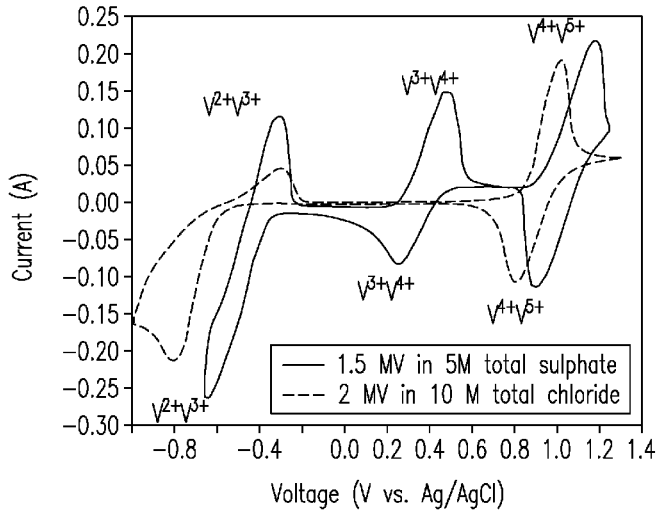
(57) **ABSTRACT**

A redox flow battery having a supporting solution that includes Cl^- anions is characterized by an anolyte having V^{2+} and V^{3+} in the supporting solution, a catholyte having Fe^{2+} and Fe^{3+} in the supporting solution, and a membrane separating the anolyte and the catholyte. The anolyte and catholyte can have V cations and Fe cations, respectively, or the anolyte and catholyte can each contain both V and Fe cations in a mixture. Furthermore, the supporting solution can contain a mixture of SO_4^{2-} and Cl^- anions.

18 Claims, 11 Drawing Sheets