

Aqueous Electrolyte For Lithium-Air Battery

Abstract

5 The present invention relates to an electrochemical device, in particular a lithium-air battery with an aqueous electrolyte, comprising: a negative electrode compartment containing lithium metal; a positive electrode compartment comprising at least one positive air electrode making contact with an aqueous solution containing lithium hydroxide; and a solid electrode separating, in a gas- and fluid-tight manner, the
10 negative electrode compartment from the positive electrode compartment, characterized in that the aqueous solution containing the lithium hydroxide furthermore contains at least one additive decreasing the solubility of the lithium ions. The invention also relates to a method for storing and releasing electrical energy using a lithium-air battery according to the invention.

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(Figure 3)