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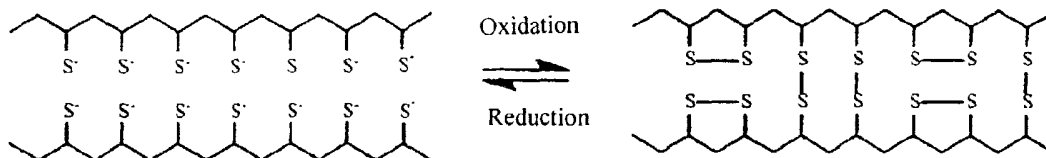
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(54) Title: REDOX MATERIAL FOR CATHODES IN NON-AQUEOUS BATTERIES



(57) Abstract: A cathode material featuring PVM for use in rechargeable electrochemical cells. It has been discovered that the polymer backbone of PVM, which consists solely of carbon atoms, is not subject to scission during repeated charge-discharge cycles, such that the cathode material remains substantially insoluble in standard liquid electrolytes. As a result, cells containing PVM as the cathode material and liquid electrolyte are genuinely electrochemically reversible. The use of PVM overcomes the problems associated with organosulfides of the background art, with which dissolution of anions in the liquid electrolyte during discharging results in migration from the cathode and contamination of the anode/electrolyte surface and ultimately leads to degradation of the electrolyte and/or deterioration of the anode-electrolyte interface.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :H01M 4/02, 4/36

US CL :429/212, 213, 218.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 429/212, 213, 218.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST 2.0 (US, JP, EP, Derwent)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, P	US 6,090,504 A (SUNG et al.) 18 July 2000.	1
A, P	US 6,057,056 A (KIM et al.) 2 May 2000.	1
A	US 5,162,175 A (VISCO et al.) 10 November 1992.	1
A	US 4,833,048 A (DEJONGHE et al.) 23 May 1989.	1
A	US 4,664,991 A (PERICHAUD et al.) 12 May 1987.	1



Further documents are listed in the continuation of Box C.



See patent family annex.

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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
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