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(71) Applicant *(for all designated States except US)*: **BAR ILAN UNIVERSITY** [IL/IL]; 52900 Ramat Gan (IL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GOFER, Yosef** [IL/IL]; 11/3 Haoranim St., 45263 Hod Hasharon (IL). **BELOSTOTSKII, Anatoly, M.** [IL/IL]; 7/8 Harav Reines St., 95427 Jerusalem (IL). **AURBACH, Doron** [IL/IL]; 62 Uziel St., 51646 Bnei Brak (IL).

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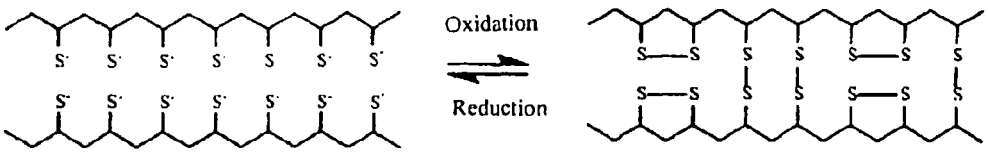
ACTION

(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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