Title (en)

ELECTRIC BATTERIES, ACCUMULATORS AND GENERATORS WITH NON-METALLIC OR SOLUTION ELECTRODES.

Title (de)

ELEKTRISCHE BATTTERIEN, AKKUMULATOREN UND GENERATOREN MIT NICHT-METALLISCHEN ODER FLÜSSIGKEITSELEKTRODEN.

Title (fr)

PILES, ACCUMULATEURS ET GENERATEURS ELECTRIQUES A ELECTRODES NON METALLIQUES OU EN SOLUTION.

Publication

EP 0016792 A1 19801015 (FR)

Application

EP 79900770 A 19800225

Priority

FR 7820637 A 19780711

Abstract (en)

[origin: WO8000284A1] Batteries, accumulators or electrochemical generators of electrical energy, of which the negative electrode (anode) is comprised of at least an alkaline halide, in aqueous or alkaline solution, or of a metal halide, and a current collecting auxiliary electrode. The positive electrode (cathode) is comprised of at least an oxide or a metal hydroxide which may be in solution into the electrolyte and which, preactivated or regenerated permanently by the presence of air or oxygen introduced into the alkaline solution wherein the cathode is dipped, provides the hydroxyl ions necessary to the oxidation of the halide forming the anode. Further, certain compounds of the anode may be thermally or photonically regenerated. Various applications of these devices, in particular sea water, may be carried out for electrical energy supply, using a readily available and cheap fuel.

Abstract (fr)

Piles, accumulateurs ou generateurs electrochimiques d'energie electrique, dont l'electrode negative (anode) est constituee d'au moins un halogenure alcalin, en solution aqueuse ou alcaline, ou d'un halogenure metallique, et d'une electrode auxiliaire collectrice du courant. L'electrode positive (cathode) est constituee d'au moins un oxyde ou un hydroxyde metallique qui peut etre en solution dans l'electrolyte et qui, pre-active ou regenere en permanence par la presence d'air ou d'oxygene introduit dans la solution alcaline qui baigne la cathode, fournit les ions hydroxyles necessaires a l'oxydation de l'halogenure constituant l'anode. En outre, certains composes de l'anode, suivant l'invention, peuvent etre regenerees thermiquement ou photoniquement, Des applications diverses de ces dispositifs, en particulier l'eau de mer, peuvent etre mises en oeuvre pour la fourniture d'energie electrique, utilisant un combustible facilement disponible et peu couteux.

IPC 1-7

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IPC 8 full level

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