

Title (en)

METHOD OF REGENERATING BATTERY CELLS AND REGENERATIVE AGENT FOR LEAD BATTERIES

Title (de)

VERFAHREN ZUR REGENERIERUNG VON BATTERIEZELLEN UND REGENERIERUNGSMITTEL FÜR BLEIBATTERIEN

Title (fr)

PROCEDE DE REGENERATION D'ELEMENTS D'ACCUMULATEUR ET AGENT REGENERATEUR POUR DES BATTERIES AU PLOMB

Publication

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Application

EP 04718901 A 20040310

Priority

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Abstract (en)

[origin: WO2004082038A2] The electrochemical regeneration of lead and alkaline battery cells during which, after the treatment of the battery by some of the regeneration additives on the basis of an aqueous solution of hydrogen peroxide and after the basic charging, they are alternately or intermittently charged and discharged. Above the limit located above the level of the full charge it is charged with a current of 1.1 % - 4% and discharged with a current of 0% - 5% related to the nominal value of the capacity of the cell or storage battery, or else the charging is carried out in two phases or by a constant current. Under the limit located below the level of the permitted discharging it is discharged with a current of 1 % to 4% and subsequently charged with a current of 3% - 10% related to the value of the capacity of the battery to a decrease in the voltage to 1.6 V of the cell or any of the battery's cells. Then the battery supplies 10% - 15% of its nominal capacity and this entire procedure is repeated 2 - 5 times. The regenerative agent contains, for each liter of aqueous solution 40% of hydrogen peroxide, 1 ml to 70 ml of sulfuric acid with a density of 1 to 1.32 g.cm⁻³, 0.1 g to 10 30 g of saccharides in solids and/or aldehydes or their derivatives, 0.1 g to 10 g of sodium and/or potassium bicarbonate and/or at least one hydroxide from the group of alkali metal hydroxides in solids, or else a mixture containing 0.1 g to 10 g of peroxoborate or tetraborate or sodium pyrophosphate in solids and also containing 0.1 g to 20 g, with an advantage 0.5 g to 2 g, of bisodium dinaphtylmethane disulfonic acid salt.

IPC 8 full level

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