

Title (en)
METHOD FOR DETERMINING AN OPERATING STATE OF ELECTRICAL POWER STORAGE MEANS CONSISTING OF AT LEAST ONE ULTRACAPACITOR

Title (de)
VERFAHREN ZUR BESTIMMUNG EINES BETRIEBSZUSTANDES VON STROMSPEICHERVORRICHTUNGEN AUS MINDESTENS EINEM ULTRAKONDENSATOR

Title (fr)
PROCEDE DE DETERMINATION D'UN ETAT DE FONCTIONNEMENT DE MOYENS DE STOCKAGE D'ENERGIE ELECTRIQUE CONSTITUES D'AU MOINS UN SUPERCONDENSATEUR

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Application
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Abstract (en)
[origin: WO2011030024A1] The invention relates to a method for determining the operating state of electrical power storage means consisting of at least one ultracapacitor. When charging said electrical power storage means, the invention involves: measuring the voltage in the terminals of said means and measuring the time interval τ required for said means to be charged with an initial voltage "U_{init}" at a final voltage set value "U_{final}" at a given constant current I; calculating the charge speed of said means in V/s; comparing said charge speed with at least one given speed threshold value; when the measured charge speed is less than said threshold value, determining that the means have a so-called "good health" operating state; and when the charge is greater than that same threshold value, determining that the means have a so-called "end of life" operating state. The invention can be used in vehicles provided with an "A & R" system.

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Citation (search report)
See references of WO 2011030024A1

Citation (examination)
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• EL BROUJI H ET AL: "Comparison between changes of ultracapacitors model parameters during calendar life and power cycling ageing tests", MICROELECTRONICS AND RELIABILITY, ELSEVIER SCIENCE LTD, GB, vol. 48, no. 8-9, 1 August 2008 (2008-08-01), pages 1473 - 1478, XP024525814, ISSN: 0026-2714, [retrieved on 20080813], DOI: 10.1016/J.MICROREL.2008.07.022

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