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(54) **METHOD AND DEVICE FOR DETERMINING STATE OF HEALTH OF THE BATTERY, AND
BATTERY POWER SUPPLY SYSTEM**

VERFAHREN ZUR BEURTEILUNG DES VERSCHLECHTERUNGSZUSTANDS EINER BATTERIE,
VERSCHLECHTERUNGSBEURTEILUNGSEINRICHTUNG UND STROMVERSORGUNGSSYSTEM

PROCÉDÉ POUR ÉVALUER L'ÉTAT DE DÉTÉRIORATION D'UNE BATTERIE, DISPOSITIF
D'ÉVALUATION DE DÉTÉRIORATION ET SYSTÈME D'ALIMENTATION

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(56) References cited:

**JP-A- 2000 299 137 JP-A- 2002 525 586
US-A- 6 002 238**

- **CHAMPLIN K S ET AL: "A fundamentally new
approach to battery performance analysis using
DFRA<TM>/DFIS <TM> technology",
TELECOMMUNICATIONS ENERGY
CONFERENCE, 2000. INTELEC. TWENTY-
SECOND INTERNATIONAL SEPTEMBER 10-14,
2000, PISCATAWAY, NJ, USA, IEEE, 10
September 2000 (2000-09-10), pages 348-355,
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- TENNO A ET AL: "Battery impedance and its relationship to battery characteristics", INTELEC 2002. 24TH. INTERNATIONAL TELECOMMUNICATIONS ENERGY CONFERENCE. MONTREAL, QUEBEC, CANADA, SEPT. 29 - OCT. 3, 2002; [INTELEC. INTERNATIONAL TELECOMMUNICATIONS ENERGY CONFERENCE], NEW YORK, NY : IEEE, US, vol. CONF. 24, 29 September 2002 (2002-09-29), pages 176-183, XP010614619, DOI: 10.1109/INTLEC.2002.1048653 ISBN: 978-0-7803-7512-3