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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H02J 7/10	A1	(11) International Publication Number: WO 97/03489 (43) International Publication Date: 30 January 1997 (30.01.97)
(21) International Application Number: PCT/US96/11466 (22) International Filing Date: 10 July 1996 (10.07.96) (30) Priority Data: 60/001,024 11 July 1995 (11.07.95) US (71) Applicant: ADVANCED CHARGER TECHNOLOGY, INC. [US/US]; Suite 3212, 1280 West Peachtree Street N.W., Atlanta, GA 30309 (US) (72) Inventors: PODRAZHANSKY, Yury, M.; 3778 Creekstone Drive, Norcross, GA 30092 (US). TSENER, Boris; 6632C Chelsea Park Lane, Norcross, GA 30092 (US). (74) Agents: WARNER, Charles, L., II, et al.; Jones & Askew, 37th floor, 191 Peachtree Street, N.E., Atlanta, GA 30303-1769 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report. PCT + PFI3 Amends	

(54) Title: CONTROL AND TERMINATION OF A BATTERY CHARGING PROCESS

(57) Abstract

A method and an apparatus for adjusting the process of charging a battery so as to charge the battery as rapidly as possible while avoiding overheating of or damage to the battery. The method provides for applying a charging pulse (C1) which provides an average charging current, applying a first depolarizing pulse (D1), waiting for a first rest period (DW1), measuring the voltage (V1) at a predetermined point within the first rest period, applying a second depolarizing pulse (D2), waiting for a second rest period (DW2), measuring the voltage (V2) at the predetermined point within the second rest period, determining a difference between the voltage (V1) and the voltage (V2), and decreasing the average charging current if the difference is greater than a predetermined amount. The present invention also provides for determining whether the battery is low on water.

