

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

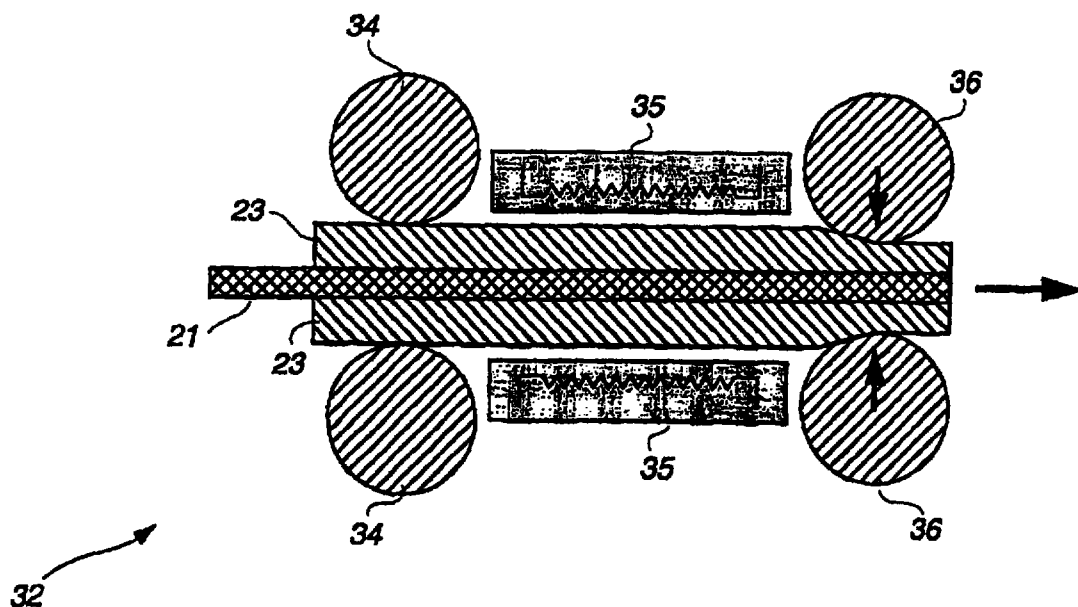


1205 copy
+
IPER
+
ANNEXES

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : H01M 10/12	A1	(11) International Publication Number: ✓ WO 98/12765 (43) International Publication Date: 26 March 1998 (26.03.98)
(21) International Application Number: PCT/US97/16428 ✓ (22) International Filing Date: 16 September 1997 (16.09.97) ✓ (30) Priority Data: 08/710,481 18 September 1996 (18.09.96) ✓ US (71) Applicant: BELL COMMUNICATIONS RESEARCH, INC. [US/US]; 445 South Street, Morristown, NJ 07960-6438 (US). (72) Inventors: GOZDZ, Antoni, S.; 46 Danbury Road, Tinton Falls, NJ 07754 (US). WARREN, Paul, C.; P.O. Box 212, Far Hills, NJ 07931 (US). (74) Agents: GIORDANO, Joseph et al.; Bell Communications Research, Inc., RM1G112R, 445 South Street, Morristown, NJ 07960 (US).		(81) Designated States: AU, CA, CN, IL, JP, MX, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

(54) Title: APPARATUS AND METHOD FOR MAKING LAMINATED RECHARGEABLE BATTERY CELLS



(57) Abstract

Formation of a unitary laminate rechargeable battery (20) comprising electrode (23) and separator/electrolyte elements (21) of polymer composition utilizes apparatus comprising compression rollers (36) of sufficient hardness to resist deformation during laminating contact with such elements (21, 23). Maximum progressive compression short of lateral deformation of battery elements (21, 23) ensures expulsion of interfacial entrapments and optimum functional contact between laminate elements. Battery structures (20) fabricated with the apparatus may comprise active particulate component ratios in excess of about 75 % by weight.