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(21) International Application Number: PCT/US92/04548 (22) International Filing Date: 28 May 1992 (28.05.92) (30) Priority data: 708,143 31 May 1991 (31.05.91) US (71) Applicant: CABOT CORPORATION [US/US]: 75 State Street, Boston, MA 02109-1806 (US). (72) Inventor: FIFE, James, A. ; P.O. Box 160, RD 2, Douglasville, PA 19518 (US). (74) Agents: KORIS, David, J. et al.; Cabot Corporation, 157 Concord Road, Billerica, MA 01821 (US).		(81) Designated States: AT, AT (European patent), AU, BB, B (European patent), BG, BR, CA, CH, CH (European patent), CS, DE, DE (European patent), DK, DK (European patent), ES, ES (European patent), FI, FR (European patent), GB, GB (European patent), GR (European patent), HU, IT (European patent), JP, KR, L, LU, LU (European patent), MC (European patent), MG, MN, MW, NL, NL (European patent), NO, P, RO, RU, SD, SE, SE (European patent). 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: FIBROUS TANTALUM AND CAPACITORS MADE THEREFROM



(57) Abstract

A method of making a tantalum capacitor of improved specific capacitance (and volumetric efficiency) is described. Tantalum fibers are precipitated out of a carrier liquid to form a felt, or tumbled to form fiber containing particles, and in some cases subsequently bonded so as to form a felt or particles containing the fibers in random orientation in substantially non-ordered array. These particles or felt are heated to bond the fibers together, purified and (optionally) cylindricalized them. The felt or particles can be processed in conventional fashion thereafter to form the capacitor. Cylindricalized fibers and pellets of increased surface area are also described.