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(21) International Application Number: PCT/US96/18439 (22) International Filing Date: 18 November 1996 (18.11.96) (30) Priority Data: 60/007,834 1 December 1995 (01.12.95) US (71) Applicants (for all designated States except US): E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US); THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 21st floor, 300 Lakeside Drive, Oakland, CA 94612-3550 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DEVLIN, David, James [US/US]; 365 Cheryl Avenue, Los Alamos, NM 87544 (US); COATES, Don, Mayo [US/US]; 14 West Wildflower Drive, Santa Fe, NM 87501-8505 (US); ARCHULETA, Thomas, Arthur [US/US]; R.R. 1327 Upper San Pedro Road, Espanola, NM 87532 (US). See P.F. 8. (74) Agents: SCHAEFFER, Andrew, L. et al.; E.I. Dupont de Nemours and Company, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).	(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SI, SK, TJ, TM, TR, TT, UA, US, 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. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	
(54) Title: DIAMOND-LIKE-CARBON COATED ARAMID FIBERS HAVING IMPROVED MECHANICAL PROPERTIES		
(57) Abstract A process for improving the mechanical properties, particularly the flexural rigidity, of aramid fibers by directly depositing a diamond-like-carbon coating onto the surface of the fibers. Diamond-like-carbon (DLC) coated aramid fibers having increased flexural rigidity are also disclosed. DLC coated aramid fibers show an increase in flexural rigidity and suppression of low yielding behavior when compared to uncoated aramid fibers.		