



- (51) International Patent Classification:
C08J 5/04 (2006.01) *D21H 13/50* (2006.01)
D04H 13/00 (2006.01)
- (21) International Application Number:
PCT/US2010/040571
- (22) International Filing Date:
30 June 2010 (30.06.2010)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/222,754 2 July 2009 (02.07.2009) US
61/222,702 2 July 2009 (02.07.2009) US
61/222,728 2 July 2009 (02.07.2009) US
- (71) Applicant (for all designated States except US): **E. I. du Pont de Nemours and Company** [US/US]; 1007 Market Street, Wilmington, Delaware 19898 (US).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **BOOZE, J., David** [US/US]; 4 Perth Drive, Wilmington, Delaware 19803 (US). **WEISHAMPEL, James, E.** [US/US]; 927 Jonathan Street, Amherst, Ohio 44001 (US).
- (74) Agent: **SEBREE, Chyrrea, J.**; E. I. du Pont de Nemours and Company, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, Delaware 19805 (US).

[Continued on next page]

(54) Title: ORIENTED COMPOSITE

FIG. 2A

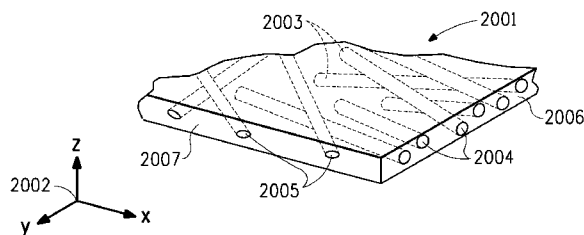


FIG. 2B

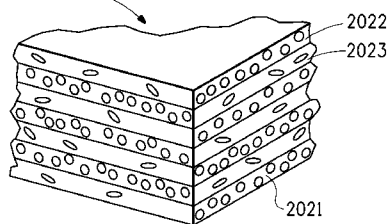
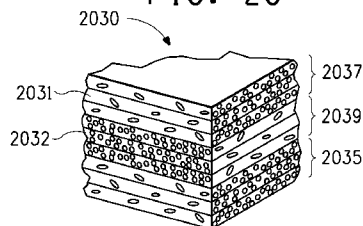


FIG. 2C



(57) Abstract: Disclosed herein are processes for making a consolidated or densified composite article comprising polymer, particularly fluoropolymer, and oriented carbon fiber, which provides suitability for use in chemical-mechanical applications.



(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))