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(21) International Application Number: PCT/US00/06103 (22) International Filing Date: 9 March 2000 (09.03.00) (30) Priority Data: 09/266,229 10 March 1999 (10.03.99) US (71) Applicant: ALLISON ENGINE COMPANY, INC. [US/US]; P.O. Box 420, Indianapolis, IN 46206 (US). (72) Inventors: NAIK, Subhash, K.; 3721 Doty Lane, Carmel, IN 46032 (US). KLOTZ, James, M.; 7700 Richlandtown Road, Quakertown, PA 18951 (US). BARBER, Michael, J.; 8100 Mallard Landing, Indianapolis, IN 46278 (US). (74) Agents: THOMAS, Timothy, N. et al.; Woodard, Emhardt, Naughton, Moriarty & McNett, Suite 3700, Bank One Center/Tower, 111 Monument Circle, Indianapolis, IN 46204 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: SILICONE RESIN BONDED DRY FILM LUBRICANTS		
(57) Abstract Dry film lubricant coatings are provided by using a silicone resin binder, either as an aqueous emulsion or in a solvent-based system, to fix an alkaline earth metal fluoride to a substrate. The compositions used to apply the coatings may also include relatively minor amounts of xylene, ammonium benzoate, a wetting agent, and/or a porosity-inducing agent – although none of those additives remains in the cured coating. Multi-layer dry film lubricant coatings are also disclosed, with the multi-layer coating having a basecoat layer as described above, and a topcoat layer made of a layer-lattice solid such as graphite or molybdenum disulfide, and a silicone resin, aluminum phosphate or an alkali metal silicate binder.		