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(21) International Application Number: PCT/US98/24161 (22) International Filing Date: 12 November 1998 (12.11.98) (30) Priority Data: 08/968,588 13 November 1997 (13.11.97) US (71) Applicant: UNIVERSAL PROPULSION COMPANY, INC. [US/US]; 25401 North Central Avenue, Phoenix, AZ 85027-7899 (US). (72) Inventor: OLANDER, Donald, E.; 210 E. Calle de Arcos, Tempe, AZ 85284 (US). (74) Agents: FARLEY, Mark, A. et al.; Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, NY 10036 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, 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: COMPOSITIONS AND METHODS FOR SUPPRESSING FLAME (57) Abstract The invention relates to flame suppression compositions including an inorganic halogen-containing component including bromine, iodine, or a mixture thereof, and an organic binder system having a heat of formation of less than about 200 cal/g, wherein the composition is solid at a temperature below 100 °C and combusts at a temperature between about 160 °C to 1200 °C to produce a plurality of reaction products capable of suppressing a flame upon application thereto and wherein substantially all the halogen is converted to a solid form after suppressing the flame. The invention also relates to methods of suppressing flames by combining an inorganic halogen-containing component including bromine, iodine, or a mixture thereof, with an organic binder system having a heat of formation of less than about 200 cal/g to form a solid composition, generating a plurality of reaction products from the composition in a substantially gaseous form, wherein the reaction products have a velocity, and applying the reaction products at a temperature of between about 160 °C to 1200 °C to at least one flame in an amount sufficient to suppress the flame, wherein substantially all the halogen is solid after suppressing the flame.		