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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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(54) Title: FLAME RETARDANT, ADDITIVE COMPOSITIONS, AND FLAME RETARDANT POLYURETHANES

(57) Abstract: Provided are new flames retardants and liquid flame retardant additive compositions of low viscosity for use in flexible polyurethane foams. The new flame retardants are the reaction product of at least one brominated aromatic diester diol with at least one alcohol-reactive agent. Preferred liquid flame retardant additive compositions are capable of minimizing visible scorching of the foam during its production. Flexible flame retardant polyurethane foams and methods for their production are also provided. The flame retardant additive compositions are formed at least from (a) at least one reaction product of a brominated aromatic diester diol and an alcohol-reactive agent; (b) at least one hindered amine antioxidant; and (c) at least one phenolic antioxidant in which the phenolic ring is substituted by an alkanolic acid alkyl ester group in which alkanolic acid moiety has in the range of 2 to about 4 carbon atoms and the alkyl group has in the range of 6 to 16 carbon atoms.



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