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(54) Title: HALOGEN-FREE FLAME RETARDANT COMPOUNDS

(57) Abstract: The invention relates to a compound of the general formula: $Z_1-O-[m(R_1PO_3)_n(R_2HPO_3)]-Z_2$, in which $[m(R_1PO_3)_n(R_2HPO_3)]$ represent a copolyphosphate, with $m(R_1PO_3)_n$ units and $n(R_2HPO_3)$ units; R_3 represents an ammonium building block; R_2 represents a 1,3,5-triazine building block; Z_1 and Z_2 represent ammonium or 1,3,5-triazine building blocks, to be chosen independently of each other; m and n represent whole numbers greater than or equal to 1; and $m+n$ numbers greater than 3. The invention further relates to a method for the preparation of the above compound and to flame-retardant polymer compositions in which compounds with the above formula are applied as flame retardant, the use of the halogen-free compound in a coating composition and a substrate containing a coating formed from the coating composition that has been cured.



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