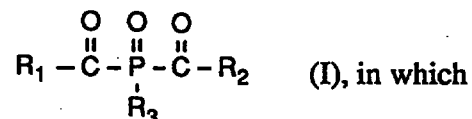


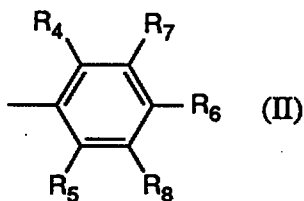
Abstract

Alkoxyphenyl-substituted bisacylphosphine oxides

Alkoxyphenyl-substituted bisacylphosphine oxides of the formula I



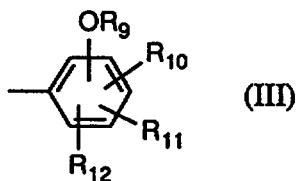
R_1 and R_2 are identical or different and are a radical of the formula II



in which

R_4 and R_5 independently of one another are C_1 - C_{12} alkyl or C_1 - C_{12} alkoxy, and R_6 , R_7 and R_8 independently of one another are hydrogen, C_1 - C_{12} alkyl, C_1 - C_{12} alkoxy or halogen,

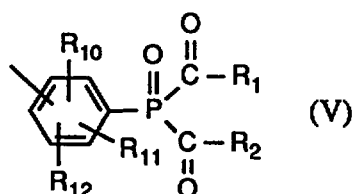
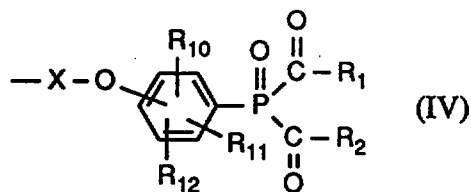
R_3 is a radical of the formula III



in which

R_9 is C_1 - C_{20} alkyl, C_2 - C_{20} alkyl, C_5 - C_6 cycloalkyl, phenyl, naphthyl, phenyl- C_1 - C_5 alkyl,

C_2 - C_{12} alkenyl, $-CF_3$ or $-CH_2CH(O)CH_2$, or R_9 is a radical of the formula IV or V

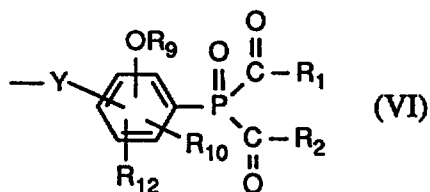


in which

X is for example C₁-C₁₆alkylene, C₄-C₁₂alkenylene or is xylylene,

R₁₀ is for example hydrogen, C₁-C₂₀alkyl, C₂-C₁₂alkenyl, cyclopentyl, cyclohexyl, phenyl with 1 or 2 C₁-C₄alkyl and/or C₁-C₄alkoxy groups, or is -OR₉,

R₁₁ is hydrogen, C₁-C₂₀alkyl, C₂-C₁₂alkenyl, cyclopentyl, cyclohexyl, phenyl, or is -OR₉, or is a radical of the formula VI



or

R₉ and R₁₁ in the formula III together are ethylene, -CH₂CR₁₄R₁₅- or -C(CH₃)₂CH=CH-,
or

R₁₀ and R₁₁, together with the atoms to which they are attached, for example form a benzene ring,

R₁₂ is hydrogen or -OR₉,

R₁₃ is C₁-C₄alkyl,

R₁₄ and R₁₅ independently of one another are hydrogen, C₁-C₈alkyl, phenyl or -CH₂OR₁₃,
or R₁₄ and R₁₅, together with the carbon atom to which they attached, form a

C₅-C₆cycloalkyl ring,

Y is for example a single bond, -CR₁₆R₁₇- or -CH=CH-, R₁₆ is hydrogen, methyl or ethyl,

R₁₇ is hydrogen or C₁-C₄alkyl,

R₁₈ is hydrogen, C₁-C₁₂alkyl or phenyl, and

m is a number from 2-12, with the proviso that if the radical -OR₉ in the formula III is in

the p-position of the phenyl ring and R_9 is methyl, at least one of the radicals R_{10} , R_{11} and R_{12} is not hydrogen, are suitable for the photopolymerization of compounds containing ethylenically unsaturated bonds.