United States Patent [19]

Henne et al.

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[54] ACYLPHOSPHINE OXIDES AND THEIR USE

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[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** **430/281**; 430/285; 430/923; 204/159.15; 204/159.23; 260/931

[58] **Field of Search** 430/281, 285, 913, 914, 430/915, 916, 923, 919; 204/159.15, 159.23; 260/931

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,715,293	2/1973	Sandner et al.	204/159.23
3,801,329	4/1974	Sandner et al.	430/281
4,265,723	5/1981	Hesse et al.	204/159.23
4,292,152	9/1981	Lechtken et al.	204/159.15
4,298,738	11/1981	Lechtken et al.	546/22
4,324,744	4/1982	Lechtken et al.	546/21
4,385,109	5/1983	Lechtken et al.	430/281 X

FOREIGN PATENT DOCUMENTS

7086	1/1980	European Pat. Off. .
7508	2/1980	European Pat. Off. .
2261383	6/1973	Fed. Rep. of Germany .
2830927	1/1980	Fed. Rep. of Germany .
2909994	2/1980	Fed. Rep. of Germany .
3020092	12/1981	Fed. Rep. of Germany .

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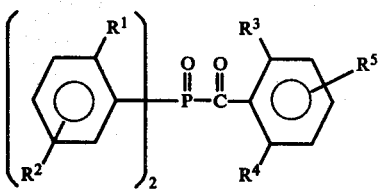
[57] **ABSTRACT**

Acylphosphine oxides of the general formula



where R^1 is methyl or ethyl, R^2 is a branched or straight-chain alkyl radical or chlorine, alkoxy or hydrogen, R^3 and R^4 are identical or different, and are each alkyl, alkoxy, alkylthio or chlorine and R^5 is hydrogen, chlorine, alkoxy, alkylthio or alkyl, may be used as photoinitiators in photopolymerizable materials.

6 Claims, No Drawings