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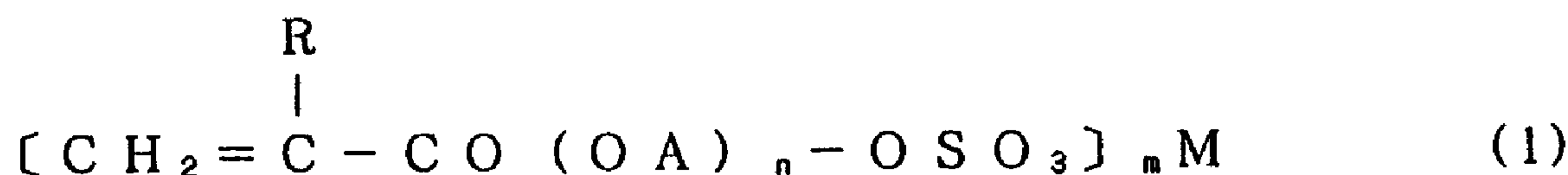
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(54) Title: MODIFIER COMPOSITION AND A MODIFIED POLYMER



(57) Abrégé/Abstract:

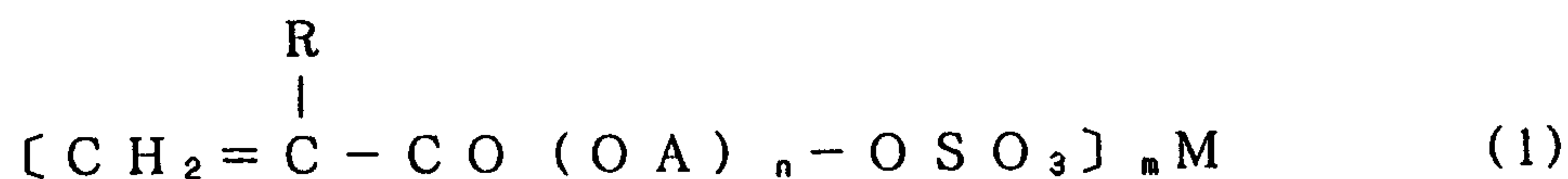
A composition suitable as a modifier for polymer, is disclosed, for example, which composition comprises: (1) a compound illustrated bellow by the general formula: (1) (see formula 1) wherein, R is hydrogen atom or methyl group, A is an alkylene group having 2-4 carbon atoms, (OA)_n indicates a poly

ABSTRACT OF THE DISCLOSURE

A composition suitable as a modifier for polymer, is disclosed, for example, which composition comprises:

(1) a compound illustrated bellow by the general formula:

(1)



wherein, R is hydrogen atom or methyl group, A is an alkylene group having 2-4 carbon atoms, (OA)_n indicates a polyoxyalkylene group, M is a monovalent or divalent cation, n is 2-30, and m is 1 or 2 ;

(2) 50-3,000 ppm, based on the weight of the composition, of hydroquinone monomethyl ether as an organic polymerization inhibitor ; and

(3) 0.01-20 ppm of copper ion based on the weight of the composition.

The modifier composition of the present invention has an excellent thermal shelf stability at an ordinary temperature.

TITLE OF THE INVENTION

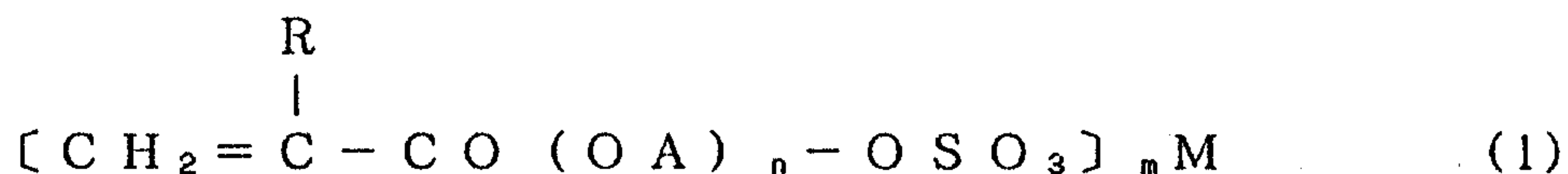
A MODIFIER COMPOSITION AND A MODIFIED POLYMER

BACKGROUND OF THE INVENTIONField of the Invention

10 This invention relates to a composition suitable as a modifier for polymer of ethylenically unsaturated monomer, a modified polymer, and a process for producing a modifier polymer, wherein the modifier composition has excellent thermal shelf stability.

Description of the Prior Art:

20 It is known to use sulfated esters or its salt as a modifier for polymer, illustrated below by a general formula (a), in order to modify polymers; particularly a polymer or copolymer of ethylenically unsaturated monomer, such as (meth)acrylonitriles (represent acrylonitrile and methacrylonitrile, similar expressions are used hereinafter), styrene, butadiene, (meth)acrylic acid and salts and esters thereof, vinyl chloride, vinylidene chloride and the like
30 (Japanese Patent KOKAI Nos. 170611/1985 and 34947/1987).



wherein, R is hydrogen atom or methyl group, A is an alkylene group having 2-4 carbon atoms, (OA)_n indicates a polyoxyalkylene group, M is a monovalent or divalent cation, n is 2-30, and m is

1 or 2.

However this sulfated ester or its salt have poor thermal shelf stability against polymerization, therefore it needs to be stored at a lower temperature. Furthermore, even at a lower temperature storage, the ester may cause to produce an undesirable partial polymerization as a by-product, and may result in the reduced effect of modification.

SUMMARY OF THE INVENTION

It is an object of the invention to provide a modifier composition of an improved thermal shelf stability.

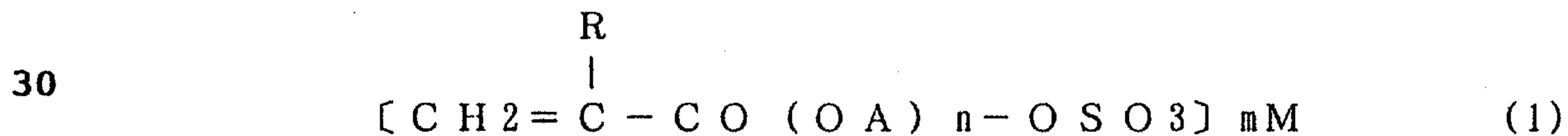
Another object is to obtain an improved modified polymer.

Briefly, the above-mentioned objects of this invention will become more readily apparent by the following aspect of the invention:

A composition suitable as a modifier for polymer, comprising;

(1) a compound illustrated below by the general formula

(1)



wherein, R is hydrogen atom or methyl group, A is an alkylene group having 2-4 carbon atoms, (OA)_n indicates a polyoxyalkylene group, M is a monovalent or divalent cation, n is 2-30, and m is 1 or 2 ;

(2) 50-3,000 ppm, based on the weight of the composition, of an organic polymerization inhibitor selected from the group

