METHOD FOR PRODUCING MODIFIED CONJUGATED DIENE-BASED POLYMER, AND METHOD FOR PRODUCING VULCANIZED POLYMER

BACKGROUND OF THE INVENTION

Field of the Invention

[0001]

The present invention relates to a method for producing a modified conjugated diene-based polymer, and a method for producing a vulcanized polymer.

Description of the Related Art

[0002]

With the increased interest in environmental problems, requirements for fuel saving of automobiles have recently increased, and it has been requested for a rubber composition to be used in an automobile tire to be superior in fuel economy. A rubber composition containing a conjugated diene-based polymer such as polybutadiene or styrene-butadiene copolymer, and a reinforcing agent is used as a rubber composition for an automobile tire, and a conjugated diene-based polymer to be used as a rubber component has been studied so as to improve performances as a rubber composition for a tire.

[0003]

For example, JP-A-1-217047 proposes a conjugated diene-based polymer in which a butadiene-styrene copolymer is

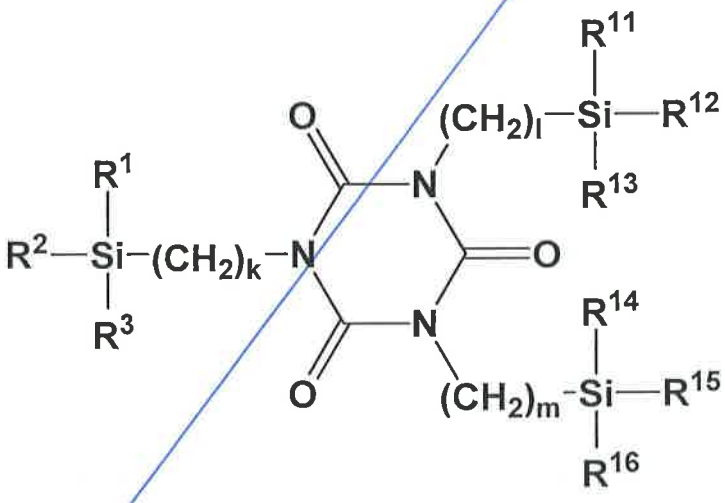
Abstract

METHOD FOR PRODUCING MODIFIED CONJUGATED DIENE-BASED POLYMER, AND METHOD FOR PRODUCING VULCANIZED POLYMER

A method for producing a modified conjugated diene-based polymer, wherein the method comprises:

a first step of producing a conjugated diene-based polymer by polymerizing monomers comprising a conjugated diene compound in a hydrocarbon solvent using an organoalkali metal compound and

a second step of adding (I) a compound having a carbonyl group and a substituted amino group and (II) a compound represented by Formula (II-A) to a hydrocarbon solvent containing the conjugated diene-based polymer.



(II-A)

DIENE-BASED POLYMER MODIFIED IN TWO STEPS WITH A COMPOUND COMPRISING A CARBONYL GROUP AND SUBSTITUTED AMINO GROUP AND A SILYL-COMPRISING ISOCYANURATE AND A VULCANIZED POLYMER THEREOF

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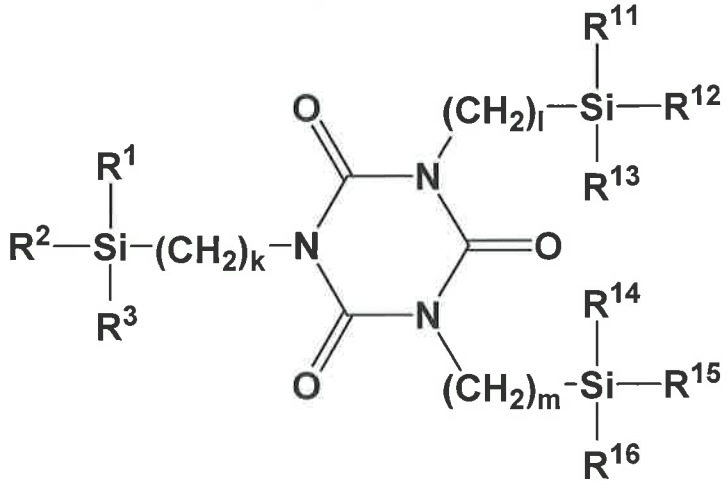
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Abstract

A method for producing a modified conjugated diene-based polymer, wherein the method comprises: a first step of producing a conjugated diene-based polymer by polymerizing monomers comprising a conjugated diene compound in a hydrocarbon solvent using an organoalkali metal compound and a second step of adding a compound having a carbonyl group and a substituted amino group and a compound represented by Formula (II-A) to a hydrocarbon solvent containing the conjugated diene-based polymer. Also provided is a method for producing a vulcanized polymer, the method comprising heating a vulcanizable polymer produced by the method described above.



(II-A)