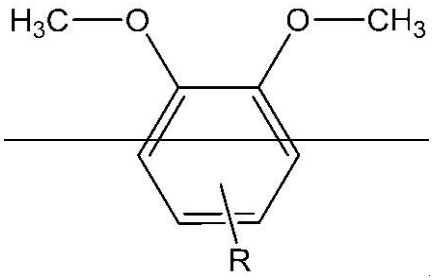
~~What is claimed is~~Claims:

~~1. A method for producing a conjugated diene-based polymer, the method comprising polymerizing monomer components comprising a conjugated diene compound and an aromatic vinyl compound using an alkali metal based polymerization initiator in the presence of a hydrocarbon solvent and an ether compound represented by the following formula (1):~~



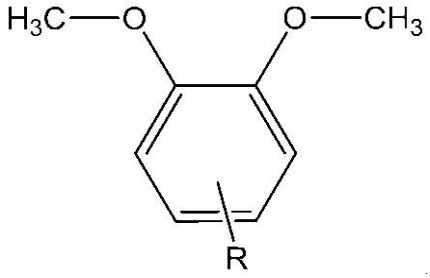
~~(1)~~

~~wherein R represents an alkyl group having 1 to 8 carbon atoms.~~

~~2. The method according to claim 1, wherein the monomer components further comprise a compound containing a nitrogen atom and/or a silicon atom and a hydrocarbyl group having a polymerizable carbon carbon double bond.~~

~~3~~1. A method for producing a modified conjugated diene-based polymer, the method comprising polymerizing monomer components comprising a conjugated diene compound and an aromatic vinyl compound using an alkali metal-based polymerization initiator in the presence of a hydrocarbon solvent and an ether compound represented by the following formula (1) to obtain a

conjugated diene-based polymer, and then causing a compound containing a nitrogen atom and/or a silicon atom to react with an active end of the conjugated diene-based polymer:



(1)

wherein R represents an alkyl group having 1 to 8 carbon atoms.

~~4~~2. The method according to claim ~~3~~ 1, wherein the monomer components further comprise a compound containing a nitrogen atom and/or a silicon atom and a hydrocarbyl group having a polymerizable carbon-carbon double bond.