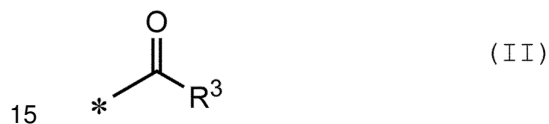


ABSTRACT

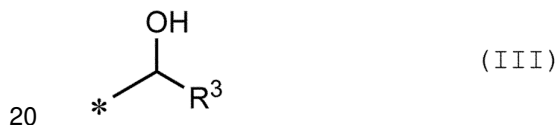
A method of producing a polymer comprises a polymerization step of obtaining a polymer by controlled radical polymerization of a monomer (Y) in the presence of an organic compound (A) represented by a formula (I) below and a radical generator (B), wherein a molar ratio (B/A) of (B) to (A) is from 0.5 to 20. The production method allows synthesis of a highly safe polymer with a high molecular weight while precisely controlling the molecular sequence, the end structure, and the like. In addition, the production method is low in toxicity, environmentally friendly, and operated at low costs.



[In the formula (I), R¹ denotes an alkenyl group or an aryl group, R² denotes a group represented by a formula (II) or (III) below, and R¹ and R² optionally form a ring by coupling with each other.]



[In the formula (II), R³ denotes a hydrogen atom, a halogen atom, an alkyl group, an aryl group, an alkenyl group, an alkoxy group, an amino group, a nitro group, a cyano group, an acetyl group, a trifluoromethyl group, or a hydroxyl group, and * denotes a bond.]



[In the formula (III), R³ is the same as that in the formula (II) above and * denotes a bond.]