

Abstract

METHOD FOR PRODUCING BRANCHED CONJUGATED DIENE-BASED
POLYMER

Disclosed is a method for producing a branched conjugated diene-based polymer comprising: a polymerization step of continuously polymerizing a conjugated diene compound or copolymerizing a conjugated diene compound and a vinyl aromatic compound in a hydrocarbon solvent using an alkali metal-based initiator in a polymerization vessel to obtain a living polymer or copolymer; a coupling step of performing a coupling reaction by reacting the living polymer or copolymer with a polyfunctional compound in a coupling reactor connected to the polymerization vessel via a pipe provided at an outlet of the polymerization vessel, from which the living polymer or copolymer is discharged, and connected to a discharging pipe having an opening-degree adjusting unit; and a solvent removal step, wherein the living polymer or copolymer is reacted with the polyfunctional compound within 5 minutes after the polymerization step, and a pressure at the outlet of the polymerization vessel is controlled to 0.5 to 2 MPaG by the opening-degree adjusting unit.