

ABSTRACT

A method of continuously producing an ethylene-vinyl acetate copolymer in a polymerization vessel containing a reaction liquid containing

5 ethylene, vinyl acetate, a polymerization initiator and methanol, the polymerization vessel being connected via piping to a heat exchanger circulating a coolant, the method includes the steps of: supplying ethylene, the polymerization initiator and methanol to the polymerization vessel; introducing pressurized gas containing ethylene present in a gas phase portion of the

10 polymerization vessel into the heat exchanger; supplying vinyl acetate cooled to between -50°C and 23°C to an upper portion of the heat exchanger; flowing vinyl acetate down in the heat exchanger while absorbing ethylene; letting vinyl acetate dissolving ethylene out of a bottom portion of the heat exchanger and adding to the reaction liquid in the polymerization vessel; and taking the

15 reaction liquid out of the polymerization vessel. This provides a method of efficiently removing heat during polymerization of an ethylene-vinyl acetate copolymer.