

METHOD OF TERMINATING GAS PHASE POLYMERIZATION OF OLEFIN,
METHOD OF INITIATING THE POLYMERIZATION AND APPARATUS
THEREFOR

ABSTRACT

A method of terminating a gas phase polymerization of an olefin to be conducted subsequent to producing a polyolefin by feeding a gaseous olefin into a fluidized bed reactor to polymerize the gaseous olefin while holding solid particles containing a catalyst in a fluid state, said method comprising introducing a deactivator in the fluidized bed reactor through at least two deactivator introduction ports of the fluidized bed reactor so as to terminate the gas phase polymerization. The height of the fluidized bed is generally at least 3 m. The deactivator is preferably introduced through deactivator introduction ports disposed at heights $H_a = -0.3D$ to $0.3D$ (a) and $H_b = 0.3D$ to $2.0D$ (b) (D is the inside diameter of the fluidized bed reactor (cm)). After the termination of the polymerization, the gas phase polymerization can directly be resumed. Formation of the product during the termination period can be minimized and the gas phase polymerization can rapidly be terminated even if the amount of the deactivator is small. Also, an apparatus which is suitable for the above termination and resumption of gas phase polymerization is provided.

Figure 1