

## ABSTRACT OF THE DISCLOSURE

### OLEFIN POLYMERIZATION REACTOR, POLYOLEFIN PRODUCTION SYSTEM, AND POLYOLEFIN PRODUCTION PROCESS

An olefin polymerization reactor of the present invention includes a cylinder which extends vertically, and a decreasing diameter member which is formed on the cylinder, has an inside diameter that decreases progressively downward and has a gas inlet orifice at a bottom end thereof. A spouted bed is formed inside a reaction zone enclosed by an inside surface of the decreasing diameter member and an inside surface of the cylinder above the decreasing diameter member.

Figure 1