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(54) Title: GAS-PHASE POLYMERIZATION PROCESS WITH WET ZONE

(57) Abstract: The present disclosure is directed to a process for producing olefin-based polymer in a gas phase polymerization reactor. The process includes forming a wet zone in the gas phase polymerization reactor. The wet zone is formed by maintaining a temperature less than or equal to the fluidizing medium dew point temperature + 2°C in a region of the reactor. The region is defined as the region extending from the distributor plate to 2.5 meters above the distributor plate. Injection of a high activity catalyst composition in the wet zone produces olefin-based having a settled bulk density greater than 23.5 lb/ft3.

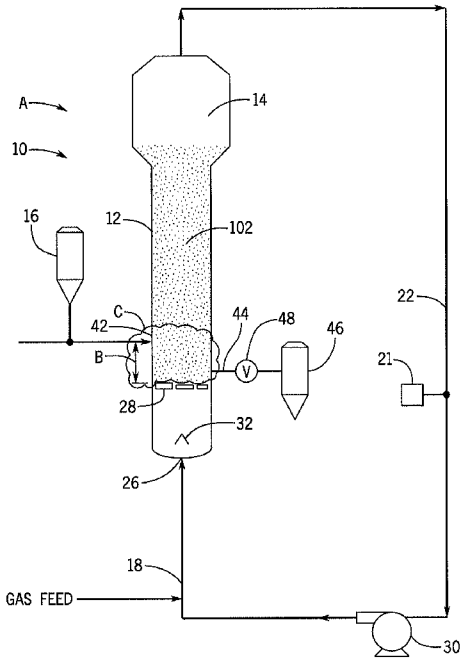


FIG. 1

WO 2015/038696 A1