

TUBULAR REACTOR AND METHOD FOR MULTI-PHASE POLYMERIZATION

Abstract

The present invention relates to a tubular reactor (14) for multi-phase polymerization, in particular for producing butyl rubber, comprising a pipe piece (16) for radially delimiting a reactor volume between an inlet (18) and an outlet (20), a stirrer (22) for generating a flow (27) in the radial direction of the pipe piece (16), wherein the stirrer (22) is dimensioned and operable such that the flow (27) is impartable with a centrifugal force which generates a concentration distribution in the radial direction inside the pipe piece (16) and an outlet conduit (32) for discharging a concentrated radially inner part (30) of the flow (27, 28). Enrichment of polymer particles in the radially inner part (30) of the flow (27, 28) avoids gumming of the pipe piece (16) by the polymer particles so that the risk of a blockage is reduced.

(Fig.1)