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(54) Title: APPARATUS AND METHOD FOR THE SEPARATION AND STRIPPING OF FLUID CATALYST CRACKING PARTICLES FROM GASEOUS HYDROCARBONS

(57) Abstract

Integrated disengager and stripper (2) for separating solid particles suspended in vapour and for stripping adsorbed and entrained residue from the solid particles comprising: a disengager vessel (3) having a primary fluidized-bed zone (10), and a primary injector (12) for injecting into the primary fluidized-bed zone (10) a gas for fluidizing or stripping solid particles; a vertical primary cyclone (6), which has a cylindrical side wall (15) and is closed at its upper end by means of a cover (17) provided with an outlet opening (19) and open at its lower end, which primary cyclone (6) is further provided with an inlet (24) for receiving a suspension of solid particles and vapour; and a first outlet conduit (30) for providing a flow path from the outlet opening (19) of the primary cyclone (6), wherein the open lower end (32) of the primary cyclone (6) projects downwardly into the primary fluidized-bed zone (10) so as to form a secondary fluidized-bed zone (35) within the open lower end (32) of the primary cyclone (6), and wherein suitably there is provided a secondary injector (41) for injecting into the secondary fluidized-bed zone (35) a gas for fluidizing or stripping solid particles.

