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(54) Title: CYCLONE SEPARATOR

(57) Abstract

Cyclone separator (1) comprising a vertical housing (2) open at its lower end (4) provided with a cover (5) at its upper end having a central opening (6), an inlet duct (10) for tangential entry of a mixture of gas and catalyst particles from the outlet (12) of a riser reactor (15) of a fluid-bed catalytic cracking plant, a particles discharge duct (16) communicating with the open lower end (4) of the vertical housing (2), and a gas outlet duct (18) having a vertical section (20) which extends through the central opening (6) in the cover (5), which cyclone separator (1) further comprises an open-ended pipe (23) arranged in the central opening (6) so as to define an annular gas inlet conduit (25) between the vertical section (20) and the open-ended pipe (23), and swirl imparting means (30) arranged in the annular gas inlet conduit (25).

