

Title (en)

SEPARATOR DEVICE PROVIDED WITH A CYCLONE CHAMBER WITH A CENTRIFUGAL UNIT, AND VACUUM CLEANER PROVIDED WITH SUCH A SEPARATOR DEVICE

Title (de)

TRENNVORRICHTUNG MIT EINER EINE ZENTRIFUGENEINHEIT BEINHALTENDE ZYKLONKAMMER, UND STAUBSAUGER MIT EINER SOLCHEN TRENNVORRICHTUNG

Title (fr)

SEPARATEUR COMPORTANT UNE CHAMBRE A CYCLONE POURVUE D'UNE UNITE CENTRIFUGE ET ASPIRATEUR COMPORTANT UN TEL SEPARATEUR

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Application

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Abstract (en)

[origin: WO9843721A1] A separator device (3) provided with a cyclone chamber (11, 79) for separating solid and/or liquid particles from a gas flow. The cyclone chamber (11, 79) has an upper wall (49) in which an outlet opening (15) is present, and a substantially rotationally symmetrical side wall (47, 81) in which an inlet opening (13) is present adjacent the upper wall (49). A discharge opening (17, 85) for the separated solid and/or liquid particles is present at a side (55, 83) of the cyclone chamber (11, 79) remote from the upper wall (49). According to the invention, a rotatable annular centrifugal unit (61, 87) is arranged in the cyclone chamber (11, 79) around the outlet opening (15) near the upper wall (49), by means of which unit a short-circuit flow running directly from the inlet opening (13) to the outlet opening (15) in the cyclone chamber (11, 79) is prevented. The efficiency of the separator device (3) is considerably improved thereby. In a first embodiment, the centrifugal unit (61) comprises a rotatable annular disc (65) positioned adjacent and parallel to the upper wall (49). In a second embodiment, the centrifugal unit (87) comprises a rotatable rim of blades (89) which is partly countersunk into a recess (95) in the upper wall (49). The separator device (3) can be used in a cyclone vacuum cleaner (1).

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