

Title (en)

Motor, fan and filter arrangement for a vacuum cleaner

Title (de)

Motor, Ventilator und Filteranordnung für einen Staubsauger

Title (fr)

Agencement de filtre, ventilateur et moteur pour un aspirateur

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Application

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Abstract (en)

In a first aspect, the present invention provides a motor, fan and filter arrangement for a vacuum cleaner, comprising: a motor (10); a fan (20) connected to an output shaft (12) of the motor and having an axial intake; and a filter (30, 230, 330); wherein the fan (20) is arranged with its axial intake facing the motor (10); and the motor (10) is housed within the filter (30, 230, 330). Such an arrangement makes much more efficient use of space than a conventional arrangement and allows the motor to be positioned within the filter in a reversed direction in comparison to conventional arrangements, so that clear air from the filter can be drawn over the motor before encountering the fan. This also has the beneficial side-effect of cooling the motor with the filtered air. In a second aspect, the present invention also provides vacuum cleaners (100, 200, 300) comprising such a motor, fan and filter arrangement. Preferred embodiments of such vacuum cleaners are described, including a pivotable stick vac and different hand-holdable vacuum cleaners.

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