

Title (en)

Apparatus for separating material from a flow of air in a vacuum cleaner.

Title (de)

Vorrichtung zum Abscheiden von Stoff aus einem Luftstrom im Staubsauger.

Title (fr)

Appareil pour la séparation de matière d'un courant d'air dans un aspirateur de poussière.

Publication

EP 0357189 A2 19900307 (EN)

Application

EP 89306732 A 19890703

Priority

US 23782888 A 19880829

Abstract (en)

A wet-dry vacuum cleaner includes a liquid separator (52) having an end wall (54) facing air flow from an inlet chute (50). The end wall (54) is surrounded by a top shelf (60), lateral sidewalls (58) and a lower shelf (62) to define a pocket (64) within which moisture droplets entrained in the flow of air are encouraged to precipitate. Turbulence fences (68, 70, 72) within the pocket (64) induce eddies in the air flow to further induce moisture precipitation. The top shelf (60) forces swirling air from the inlet chute (50) to contact the top shelf (60) before entering the air inlet (66), thereby reducing the tendency for swirling air flow to carry moisture directly into the air inlet (66). An entry step (84) at the bottom of the air inlet (66) inhibits moisture precipitated on the top shelf (60) from passing into the air inlet (66). Additional ribs and/or turbulence fences (86, 88) may be disposed on an inner surface of the dust bowl housing (42).

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IPC 8 full level

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CPC (source: EP)

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Cited by

CN114468879A; DE19651477C2; EP0847721A3; GB2286113A; GB2286113B; AU675084B2; US5634238A; WO9408501A1; WO2014187471A1

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