

Title (en)
PORTABLE SUCTION ASSEMBLY AND SUCTION DEVICE

Title (de)
TRAGBARES SAUGAGGREGAT UND SAUGGERÄT

Title (fr)
ENSEMBLE D'ASPIRATION PORTABLE ET APPAREIL D'ASPIRATION

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Abstract (en)
[origin: WO2021043433A1] The invention relates to a portable suction assembly for simultaneously suctioning up different waste fractions by means of an air intake flow, said portable suction assembly comprising a fan unit (1) for generating the air intake flow and a waste collection container (2) having: an air inlet channel system (21) defining an air inflow direction (LE) into an air flow deflection section (3); an air outlet channel system (22) defining an air outflow direction (LA) out of the air flow deflection section (3); and a collection container volume (23) arranged fluidically between the air inlet channel system (21) and the air outlet channel system (22); wherein the fan unit (1) is structurally coupled to the waste collection container (2) in such a way that the air intake flow enters the collection container volume (23) via the air inlet channel system (21), travels through the air flow deflection section (3) and exits the collection container volume (23) via the air outlet channel system (22), and wherein the air inlet channel system (21), the air outlet channel system (22) and the collection container volume (23) are designed and arranged in such a way that an air intake flow deflection of more than 40 degrees occurs fluidically in the air flow deflection section (3) between the air inflow direction (LE) and the air outflow direction (LA), which brings about a gravity/inertia-based sifting between different waste fractions. According to the invention, a mechanical separating unit (4) having a plurality of openings (40) for the air intake flow is arranged between the air inlet channel system (21) and the air outlet channel system (2) in such a way that a waste fraction suctioned against an incident flow surface of the mechanical separating unit (44) and held by the air intake flow is moved into the collection container volume (23) due to gravity after the air intake flow has been switched off.

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