

Title (en)  
CLEANING APPLIANCE

Title (de)  
REINIGUNGSVORRICHTUNG

Title (fr)  
APPAREIL DE NETTOYAGE

Publication  
**EP 3809935 A1 20210428 (EN)**

Application  
**EP 19811940 A 20190521**

Priority  
• KR 20180062623 A 20180531  
• KR 2019006074 W 20190521

Abstract (en)  
[origin: WO2019231157A1] A cleaning appliance comprises a housing provided in a hollow cylinder shape, having an intake unit and an exhaust unit; a fan provided to include an impeller located in the housing, a rotary shaft to which the impeller is fixed, and a motor rotating the rotary shaft, moving the air entering the housing through the intake unit to the exhaust unit; a particle separator provided inside the housing to provide a path for guiding the air entering the intake unit to the impeller, separating particles from the air by using a centrifugal force; a battery housing located at a point spaced apart from a point where the intake unit is located, as much as 180°, in a space provided by a circumferential surface of the housing and protruded to be far away from the circumferential surface of the housing; a battery provided in the battery housing, supplying a power to the motor; and a handle provided to connect the circumferential surface of the housing with the battery housing, wherein the rotary shaft is inclined at an angle greater than 0° and smaller than 90° toward a direction where the handle is located based on a vertical line passing through the center of gravity of the particle separator.

IPC 8 full level  
**A47L 5/24** (2006.01); **A47L 9/16** (2006.01); **A47L 9/22** (2006.01); **A47L 9/28** (2006.01); **A47L 9/32** (2006.01)

CPC (source: EP KR US)  
**A47L 5/24** (2013.01 - EP KR US); **A47L 9/12** (2013.01 - EP); **A47L 9/122** (2013.01 - EP US); **A47L 9/1625** (2013.01 - EP US); **A47L 9/1641** (2013.01 - EP); **A47L 9/1658** (2013.01 - KR); **A47L 9/1666** (2013.01 - EP US); **A47L 9/1683** (2013.01 - EP US); **A47L 9/22** (2013.01 - EP KR US); **A47L 9/2884** (2013.01 - EP KR US); **A47L 9/322** (2013.01 - EP KR US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2019231157 A1 20191205**; EP 3809935 A1 20210428; EP 3809935 A4 20220330; KR 102074288 B1 20200206; KR 20190136643 A 20191210; TW 202000110 A 20200101; TW I728366 B 20210521; US 2021137336 A1 20210513

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**KR 2019006074 W 20190521**; EP 19811940 A 20190521; KR 20180062623 A 20180531; TW 108117738 A 20190522; US 201917059322 A 20190521