

Title (en)  
AUTOMATIC CLEANING DEVICE

Title (de)  
AUTOMATISCHE REINIGUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE NETTOYAGE AUTOMATIQUE

Publication  
**EP 4272618 A1 20231108 (EN)**

Application  
**EP 21912906 A 20210609**

Priority  

- CN 202110004713 A 20210104
- CN 202110138563 A 20210201
- CN 2021099231 W 20210609

Abstract (en)

An automatic cleaning device, comprising: a mobile platform (100) configured to automatically move on an operation surface; and a cleaning module (150) provided the mobile platform (100) and comprising a dry cleaning module (151) configured to clean at least part of the operation surface in a dry cleaning mode and a wet cleaning module (400) configured to clean at least part of the operation surface in a wet cleaning mode, wherein the wet cleaning module (400) comprises a cleaning head (410) configured to clean the operation surface and a driving unit (420) configured to drive the cleaning head (410) to reciprocate along a target surface, the target surface being a part of the operation surface. The cleaning head (400) of the automatic cleaning device can move substantially in a reciprocating manner, such that repeated cleaning can be performed on a surface to be cleaned, and multiple cleaning can be achieved in a certain area at a time in the movement trajectory of a cleaning robot, such that the cleaning effect is greatly enhanced, especially for areas with relatively large stains, and the cleaning effect is obvious.

IPC 8 full level  
**A47L 11/24** (2006.01); **A47L 11/284** (2006.01); **A47L 11/40** (2006.01)

CPC (source: CN EP KR US)

**A47L 11/24** (2013.01 - CN EP US); **A47L 11/284** (2013.01 - CN US); **A47L 11/302** (2013.01 - EP); **A47L 11/40** (2013.01 - CN);  
**A47L 11/4013** (2013.01 - EP); **A47L 11/4036** (2013.01 - CN KR US); **A47L 11/4041** (2013.01 - EP); **A47L 11/4055** (2013.01 - US);  
**A47L 11/4066** (2013.01 - CN EP KR US); **A47L 11/4069** (2013.01 - KR US); **A47L 11/4072** (2013.01 - KR US); **A47L 11/4088** (2013.01 - CN US);  
**A47L 2201/00** (2013.01 - CN KR US); **A47L 2201/04** (2013.01 - EP US); **A47L 2201/06** (2013.01 - EP)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4272618 A1 20231108**; AU 2021411295 A1 20230824; CA 3204126 A1 20220707; CN 112690713 A 20210423;  
CN 112690713 B 20230113; CN 113693499 A 20211126; CN 115919194 A 20230407; EP 4331461 A1 20240306; JP 2024502834 A 20240123;  
KR 20230125812 A 20230829; TW 202243639 A 20221116; TW I830202 B 20240121; TW M633591 U 20221101; US 2024057837 A1 20240222;  
US 2024130595 A1 20240425; WO 2022142147 A1 20220707; WO 2022227782 A1 20221108

DOCDB simple family (application)

**EP 21912906 A 20210609**; AU 2021411295 A 20210609; CA 3204126 A 20210609; CN 2021099231 W 20210609;  
CN 202110138563 A 20210201; CN 202110483998 A 20210430; CN 2022075724 W 20220209; CN 202211678780 A 20210201;  
EP 22794263 A 20220209; JP 2023540845 A 20210609; KR 20237025546 A 20210609; TW 111114721 A 20220418;  
TW 111203946 U 20220418; US 202118270989 A 20210609; US 202218546647 A 20220209