

Title (en)  
CLEANING IMPLEMENT

Title (de)  
REINIGUNGSGERÄT

Title (fr)  
APPAREIL DE NETTOYAGE

Publication  
**EP 4284224 A1 20231206 (EN)**

Application  
**EP 22704223 A 20220128**

Priority  
• US 202163143433 P 20210129  
• US 2022014200 W 20220128

Abstract (en)  
[origin: WO2022165100A1] A cleaning implement including a foot, a motor, and an eccentric mass. The foot has a foot plate and an oscillation plate movably coupled to the foot plate. The motor is coupled to at least one of the foot plate and the oscillation plate. The motor rotates about a motor axis extending at a non-perpendicular transverse angle relative to the surface. The eccentric mass is coupled to the motor to generate an oscillating force between the foot plate and the oscillation plate upon operation of the motor. The oscillating force has a planar component parallel to the oscillation plate and a perpendicular component perpendicular to the oscillation plate.

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

CPC (source: EP US)  
**A47L 11/307** (2013.01 - EP US); **A47L 11/4011** (2013.01 - EP US); **A47L 11/4036** (2013.01 - EP US); **A47L 11/4069** (2013.01 - EP US);  
**A47L 11/408** (2013.01 - EP); **A47L 11/4083** (2013.01 - US); **A47L 11/4088** (2013.01 - 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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**WO 2022165100 A1 20220804**; AU 2022214909 A1 20230727; CN 116867414 A 20231010; EP 4284224 A1 20231206;  
US 2024115099 A1 20240411

DOCDB simple family (application)  
**US 2022014200 W 20220128**; AU 2022214909 A 20220128; CN 202280015013 A 20220128; EP 22704223 A 20220128;  
US 202218262471 A 20220128