

Title (en)  
SELF-PROPELLED VACUUM CLEANER

Title (de)  
SELBSTANGETRIEBENER STAUBSAUGER

Title (fr)  
ASPIRATEUR AUTOPROPULSÉ

Publication  
**EP 3679847 A4 20210310 (EN)**

Application  
**EP 17923582 A 20170904**

Priority  
JP 2017031740 W 20170904

Abstract (en)  
[origin: EP3679847A1] An autonomous vacuum cleaner is provided which can clean efficiently around a vacuum cleaner body. An autonomous vacuum cleaner (1) includes a vacuum cleaner body (2) having a wheel (121) for travelling autonomously, a surroundings sensor (32) for detecting an obstacle around the vacuum cleaner body (2), a pivoting cleaner (3) that can clean around the vacuum cleaner body (2), and a controller (5) that controls the surroundings sensor (32) and the pivoting cleaner (3). The pivoting cleaner (3) includes an arm (21) that protrudes outward from the vacuum cleaner body (2), a motor (22) that drives the arm (21), and a load sensor (23) that detects a load acting on the arm (21) from the outside. The motor (22) is controlled and driven on the basis of the presence or absence of an obstacle detected by the surroundings sensor (32), and travel of the vacuum cleaner body (2) is controlled on the basis of a load detected by the load sensor (23).

IPC 8 full level  
**A47L 9/28** (2006.01)

CPC (source: EP US)  
**A47L 9/2805** (2013.01 - EP US); **A47L 9/2852** (2013.01 - EP); **A47L 2201/04** (2013.01 - EP US)

Citation (search report)

- [XY] EP 1852761 A2 20071107 - SAMSUNG ELECTRONICS CO LTD [KR]
- [A] EP 2583610 A2 20130424 - SAMSUNG ELECTRONICS CO LTD [KR]
- [YA] EP 2781180 A2 20140924 - SAMSUNG ELECTRONICS CO LTD [KR]
- [A] DE 102007060750 A1 20090625 - VORWERK CO INTERHOLDING [DE]
- See references of WO 2019043937A1

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US11648898B2

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

DOCDB simple family (publication)  
**EP 3679847 A1 20200715; EP 3679847 A4 20210310**; CN 111093451 A 20200501; CN 111093451 B 20211102; JP 6935943 B2 20210915; JP WO2019043937 A1 20200409; US 2020405110 A1 20201231; WO 2019043937 A1 20190307

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**EP 17923582 A 20170904**; CN 201780094080 A 20170904; JP 2017031740 W 20170904; JP 2019538902 A 20170904; US 201716643934 A 20170904