

Title (en)  
SELF-PROPELLED FLOOR CLEANING DEVICE

Title (de)  
SELBSTTÄTIG VERFAHRBARES BODENREINIGUNGSGERÄT

Title (fr)  
APPAREIL MOBILE AUTOMATIQUE DE NETTOYAGE DE SOL

Publication  
**EP 2992803 B1 20170913 (DE)**

Application  
**EP 15174940 A 20150702**

Priority  
• DE 102014109666 A 20140710  
• DE 102014110875 A 20140731

Abstract (en)  
[origin: US2016007817A1] A mobile apparatus, particularly an autonomously mobile floor cleaning device, has a chassis and wheels, wherein at least one wheel is driven, and the driven wheel is connected to the chassis via a suspension element that supports the wheel and is movable relative to the chassis. In order to create an alternative mobile apparatus for negotiating an obstacle, the wheel for support on a subsurface over which the mobile apparatus can travel is influenced by a spring exerting a spring force and can be retracted and extended relative to the chassis with the aid of the suspension element, wherein the spring force is adjustable independently of an increase or decrease in the spring force caused by such extension or retraction, and in particular may be increased as the wheel is extended farther.

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

CPC (source: EP US)  
**A47L 9/009** (2013.01 - EP US); **A47L 11/4061** (2013.01 - EP US); **A47L 11/4066** (2013.01 - EP US); **A47L 11/4072** (2013.01 - EP US); **A47L 9/2852** (2013.01 - US); **A47L 2201/04** (2013.01 - EP US); **Y10S 901/01** (2013.01 - EP US)

Cited by  
WO2017194101A1; WO2017194102A1; US10448794B2; US10678251B2; US11474533B2; US10534367B2; US10499778B2; US10874271B2; DE102019003375A1; US11921517B2; US10518416B2; US10617271B2; DE202019101158U1; US10433697B2; US10877484B2; US10729297B2; US11099554B2; US10874274B2; US11122953B2; US11169533B2; US11712142B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**US 2016007817 A1 20160114; US 9687132 B2 20170627**; CN 105326442 A 20160217; CN 105326442 B 20200714; DE 102014110875 A1 20160128; EP 2992803 A1 20160309; EP 2992803 B1 20170913; ES 2651913 T3 20180130; JP 2016016321 A 20160201

DOCDB simple family (application)  
**US 201514793821 A 20150708**; CN 201510581658 A 20150710; DE 102014110875 A 20140731; EP 15174940 A 20150702; ES 15174940 T 20150702; JP 2015127179 A 20150625