

Title (en)  
Autonomous cleaning device

Title (de)  
Selbstständige Reinigungsvorrichtung

Title (fr)  
Dispositif de nettoyage autonome

Publication  
**EP 2689701 A3 20171220 (EN)**

Application  
**EP 13176994 A 20130718**

Priority  
• KR 20120081487 A 20120725  
• KR 20120085321 A 20120803

Abstract (en)  
[origin: EP2689701A2] An autonomous cleaning device (10) that may reduce noise caused by friction with a floor includes: a main body (11) having an opening; a brush unit (50) that is rotatably disposed in the opening of the main body (11); and a blade assembly (80) that guides introduction of dust swept up by the brush unit (50), the blade assembly (80) including: a blade (82) that guides dust toward an inner side of the main body (11); a support member (83) that is coupled to the blade (82) so as to support the blade (82) and that has one side in which a coupling groove (91b) is formed; and an insertion member (90) that is inserted into the coupling groove (91b) of the support member. The autonomous cleaning device (10) can prevent noise from occurring due to abnormal contact between the blade (82) and the floor while the autonomous cleaning device (10) travels.

IPC 8 full level  
**A47L 7/00** (2006.01); **A47L 9/04** (2006.01); **A47L 9/06** (2006.01); **A47L 11/40** (2006.01)

CPC (source: EP US)  
**A47L 9/0081** (2013.01 - EP US); **A47L 9/0411** (2013.01 - EP US); **A47L 9/0606** (2013.01 - EP US); **A47L 9/0626** (2013.01 - EP US); **A47L 9/1409** (2013.01 - EP US); **A47L 9/19** (2013.01 - EP US); **A47L 9/281** (2013.01 - EP US); **A47L 9/2842** (2013.01 - EP US); **A47L 9/2852** (2013.01 - EP US); **A47L 11/4041** (2013.01 - US); **A47L 11/4044** (2013.01 - EP US); **A47L 11/4097** (2013.01 - US); **A47L 2201/00** (2013.01 - EP US)

Citation (search report)  
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• [A] WO 2006068403 A1 20060629 - YUJIN ROBOTICS CO LTD [KR], et al  
• [A] WO 02069775 A2 20020912 - KAERCHER GMBH & CO ALFRED [DE], et al  
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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)  
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DOCDB simple family (publication)  
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DOCDB simple family (application)  
**EP 13176994 A 20130718**; CN 201310316800 A 20130725; JP 2013153569 A 20130724; US 201313949615 A 20130724