

Title (en)
Electric vacuum cleaner

Title (de)
Elektrischer Staubsauger

Title (fr)
Aspirateur électrique

Publication
EP 1836941 B1 20140212 (EN)

Application
EP 07004691 A 20070307

Priority
• JP 2006068898 A 20060314
• JP 2006073826 A 20060317

Abstract (en)
[origin: EP1836941A2] An electric vacuum cleaner, including: a dust separating section (52) to separate a dust sucked from a suction opening with air; a dust-collecting chamber (73) for collecting the dust separated at the dust separating section (52); a light emitting diode (D1) for emitting a light into the dust-collecting chamber (73); a light receiving diode (D2) for receiving the light through the dust-collecting chamber (73); a control device (200) for judging an amount of the dust through the suction opening /or judging whether or not the dust collected in the dust-collecting chamber (73) reached to a predetermined amount based on a light receiving condition of the light receiving device (D2); a display unit (17) for displaying the amount of the dust judged with the judging device and a alarm device (1000) for alarming in response with the judging amount detected by the control device (200).

IPC 8 full level
A47L 9/19 (2006.01); **A47L 9/28** (2006.01)

CPC (source: EP KR US)
A47L 9/10 (2013.01 - KR); **A47L 9/19** (2013.01 - EP KR US); **A47L 9/2815** (2013.01 - EP US); **A47L 9/2842** (2013.01 - EP US); **A47L 9/2857** (2013.01 - EP US)

Cited by
CN102379658A; GB2469046A; GB2469046B; AU2010231175B2; EP3026423A3; CN105982612A; CN106510552A; CN102342805A; EP2517610A1; EP2407074A3; EP2407077A3; EP2407076A3; AT12830U3; EP3901944A1; US8434193B2; US9622635B2; US8695155B2; US9015897B2; USD840615S; US9974421B2; WO2012092565A1; WO2012000991A1; US8474091B2; US8707508B2; US10524629B2; US8650704B2; US9095244B2; USD844265S; US9649000B2; US9949608B2; US9955841B2; US10244915B2; US10070764B2; US10299652B2; US11498438B2; US8516652B2; US8756751B2; US9027199B2; US9186030B2; US10028631B2; US10531772B2; US8572802B2; US8590101B2; US8646148B2; US8707507B2; US8742926B2; US9826872B2; US10244913B2; US10758104B2; US11607637B2

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DOCDB simple family (application)
EP 07004691 A 20070307; KR 20070024450 A 20070313; RU 2007109267 A 20070313; US 71686207 A 20070312