

Title (en)
Vacuum cleaner.

Title (de)
Staubsauger.

Title (fr)
Aspirateur de poussières.

Publication
EP 0458057 A1 19911127 (EN)

Application
EP 91105964 A 19910415

Priority
• JP 9766690 A 19900416
• JP 10031990 A 19900418
• JP 10032090 A 19900418

Abstract (en)
A fan motor (FM,17,38,39) such as a brushless motor and a static pressure sensor (8) are provided on a cleaner main body (2) and a nozzle motor (26) is brush. A kind of a cleaning surface (1) to be cleaned is estimated according to a fluctuation width of a peak value in current of the nozzle motor (26) or a fluctuation width of an output value the static pressure sensor (8). A kind of a suction nozzle is estimation according to a speed and a load current of the fan motor (FM,17,38,39) or a wind amount and a mean value of the output value of the pressure sensor (8). In response to the estimated result of the kind of the cleaning surface (1) to be cleaned and the kind of the suction nozzle, inputs of the fan motor (FM,17,38,39) and the nozzle motor (26) are controlled automatically. The input of the fan motor is adjusted automatically through a detection of a mean value of the peak value in current of the nozzle motor. The wind amount and a static pressure are calculated according to the load current and the speed of the fan motor, and in accordance with this calculation result a speed command of the fan motor is determined. <IMAGE>

IPC 1-7
A47L 9/28

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

CPC (source: EP KR)
A47L 9/28 (2013.01 - KR); **A47L 9/2821** (2013.01 - EP); **A47L 9/2831** (2013.01 - EP); **A47L 9/2842** (2013.01 - EP); **A47L 9/2847** (2013.01 - EP); **A47L 9/2857** (2013.01 - EP)

Citation (search report)
• EP 0264728 B1 19920115
• EP 0362894 A2 19900411 - HITACHI LTD [JP]
• GB 2063659 A 19810610 - DUEPRO AG
• US 4654924 A 19870407 - GETZ EDWARD H [US], et al
• DE 8901003 U1 19890406
• EP 0320878 A2 19890621 - HITACHI LTD [JP]
• EP 0136357 A1 19850410 - MATSUSHITA ELECTRIC IND CO LTD [JP]

Cited by
US8776307B2; DE102018128838A1; CN111938508A; FR2720258A1; CN105491932A; SG94830A1; KR20220123353A; EP3970584A1; US2022273150A1; US12029380B2; CN109106286A; EP3632282A4; DE102007025388A1; EP1997417A3; US2010300489A1; US9301665B2; US11896176B2; US11944248B2; EP3120744A1; EP4218524A1; WO9602179A1; WO2009068299A1; WO2012013483A3; WO2022216257A1; US11369244B2; US11779181B2; WO2006018599A1; WO2008128751A1; EP2875767B1; EP3643215B1

Designated contracting state (EPC)
DE GB

DOCDB simple family (publication)
EP 0458057 A1 19911127; EP 0458057 B1 19950201; DE 69107119 D1 19950316; KR 0161987 B1 19981201; KR 910017996 A 19911130

DOCDB simple family (application)
EP 91105964 A 19910415; DE 69107119 T 19910415; KR 910005976 A 19910415