



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
23.12.2009 Bulletin 2009/52

(51) Int Cl.:
A47L 9/00 (2006.01)

(43) Date of publication A2:
06.08.2008 Bulletin 2008/32

(21) Application number: **07290857.7**

(22) Date of filing: **09.07.2007**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK RS

(30) Priority: **05.02.2007 KR 20070011659**

(71) Applicant: **Samsung Gwangju Electronics Co., Ltd.**
Gwangju-city (KR)

(72) Inventor: **Jeon, Kyong-Hui**
Seosan-si, Chungcheongnam-do (KR)

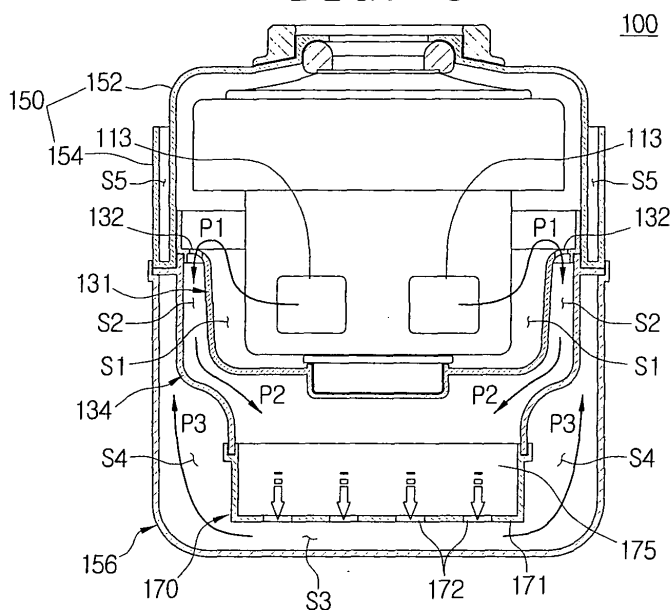
(74) Representative: **Habasque, Etienne J. Jean-François et al**
Cabinet Lavoix
2, place d'Estienne d'Orves
75441 Paris Cedex 09 (FR)

(54) **Motor assembly and vacuum cleaner having the same**

(57) A motor assembly and a vacuum cleaner having the motor assembly are provided. The motor assembly includes a suction motor (110); at least one inner case (131, 134) which is configured to enclose the suction motor (110); at least one outer case (150) which is configured to enclose the suction motor (110) and the inner

case (131, 134); and exhaust passages which are formed between the suction motor (110) and the inner case (131, 134) and between the inner case and the outer case (150), through which an exhaust air discharged from the suction motor (110) is enabled to flow. Areas of the exhaust passages are configured to be repeatedly enlarged or reduced in a direction in which the exhaust air flows.

FIG. 3





EUROPEAN SEARCH REPORT

Application Number
EP 07 29 0857

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 720 074 A (LEE JAE-DUCK [KR]) 24 February 1998 (1998-02-24) * column 1, line 44 - column 2, line 63; figure 5 *	1-3,7	INV. A47L9/00
P,X	EP 1 797 808 A (SAMSUNG KWANGJU ELECTRONICS CO [KR]) 20 June 2007 (2007-06-20) * paragraph [0022] - paragraph [0034]; figures 1,2 *	1-3,7	
D,X	EP 1 721 557 A (SAMSUNG KWANGJU ELECTRONICS CO [KR]) 15 November 2006 (2006-11-15) * paragraph [0030] - paragraph [0034]; figure 1 *	1-3,7	
A	DE 38 15 320 A1 (LICENTIA GMBH [DE] AEG HAUSGERÄTE GMBH [DE]) 16 November 1989 (1989-11-16) * column 2, line 52 - column 3, line 46; figure 2 *	1-7	TECHNICAL FIELDS SEARCHED (IPC) A47L
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 11 November 2009	Examiner Clarke, Alister
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

 2
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 07 29 0857

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

11-11-2009

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5720074	A	24-02-1998	CN 1144075 A	05-03-1997
			IN 191548 A1	06-12-2003
			JP 2934598 B2	16-08-1999
			JP 9066007 A	11-03-1997

EP 1797808	A	20-06-2007	AU 2006213954 A1	05-07-2007
			CN 1981690 A	20-06-2007
			RU 2337604 C2	10-11-2008
			US 2007136982 A1	21-06-2007

EP 1721557	A	15-11-2006	AU 2006201908 A1	30-11-2006
			CN 1866683 A	22-11-2006
			KR 20060117711 A	17-11-2006
			US 2006257269 A1	16-11-2006

DE 3815320	A1	16-11-1989	NONE	
