

(11) **EP 2 218 385 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **06.03.2013 Bulletin 2013/10**

(51) Int Cl.: **A47L** 9/04^(2006.01)

A47L 9/06 (2006.01)

(43) Date of publication A2: **18.08.2010 Bulletin 2010/33**

(21) Application number: 10250253.1

(22) Date of filing: 15.02.2010

(84) Designated Contracting States:

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 SE SI SK SM TR

Designated Extension States:

AL BA RS

(30) Priority: 16.02.2009 KR 20090012454

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

(72) Inventor: Oh, Jang-keun Seo-gu, Gwangju-city (KR)

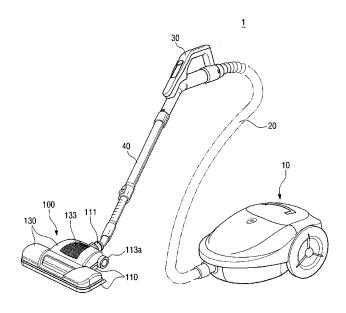
 (74) Representative: Jaeger, Michael David et al Withers & Rogers LLP
 4 More London Riverside London SE1 2AU (GB)

(54) Nozzle unit for a vacuum cleaner

(57) A nozzle unit (100), having a brush body (110), a brush cover (130) mounted on the brush body, a suction port (115) formed on the brush body, and a hair removal unit (150), is provided. The hair removal unit (150) includes at least two hair removal members (151, 153) that

are disposed apart from each other; and the at least two hair removal members rotate with respect to the brush body (110) when the nozzle unit (100) moves forward and backward, alternately contacting a surface (50) being cleaned, thereby removing dirt or fibrous contaminants from the surface.

FIG. 1



EP 2 218 385 A3



EUROPEAN SEARCH REPORT

Application Number EP 10 25 0253

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X A	AL NGUYEN TOM MINH 28 June 2007 (2007-		1-5,9,10	INV. A47L9/04 A47L9/06
	figures 11-14 *	- paragraph [0099];		
Х		MSUNG KWANGJU SAMSUNG ELECTRONICS CO per 2008 (2008-12-31)	1,2	
Α		- paragraph [0045];	12	
А	GB 2 187 377 A (NIF 9 September 1987 (1 * figures 1,3,6-11	.987-09-09)	1-9,12, 14,15	
Α	JP 8 019493 A (SANY 23 January 1996 (19 * abstract *		1	TECHNICAL FIELDS
	^ abstract ^			TECHNICAL FIELDS SEARCHED (IPC)
				A47L
	The present search report has	'		
	Place of search	Date of completion of the search	<u> </u>	Examiner
	Munich	25 January 2013	Mas	set, Markus
X : part Y : part docu A : tech	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category inological background	L : document cited fo	ument, but publis e n the application or other reasons	hed on, or
A : tech O : non				

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

EP 10 25 0253

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.

25-01-2013

US 2007143954 A1 28-06-2007 AU 2008200887 A1 25-09-2
CA 2625754 A1 11-12-2 EP 2008563 A1 31-12-2 KR 20080108752 A 16-12-2 US 2008301901 A1 11-12-2 GB 2187377 A 09-09-1987 CA 1274359 A1 25-09-1 FR 2595233 A1 11-09-1 GB 2187377 A 09-09-1 HK 76290 A 05-10-1 JP 4025104 Y2 15-06-1 JP 62143461 U 10-09-1 KR 910002479 Y1 20-04-1
FR 2595233 A1 11-09-1 GB 2187377 A 09-09-1 HK 76290 A 05-10-1 JP 4025104 Y2 15-06-1 JP 62143461 U 10-09-1 KR 910002479 Y1 20-04-1
US 4765012 A 23-08-1
JP 8019493 A 23-01-1996 NONE

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82