

(19)



(11)

EP 1 943 935 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
07.10.2009 Bulletin 2009/41

(51) Int Cl.:
A47L 9/20 (2006.01)

(43) Date of publication A2:
16.07.2008 Bulletin 2008/29

(21) Application number: **08250030.7**

(22) Date of filing: **04.01.2008**

(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 MT NL NO PL PT
RO SE SI SK TR**
Designated Extension States:
AL BA MK RS

(30) Priority: **12.01.2007 JP 2007004431**

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(54) **Electric vacuum cleaner**

(57) A pleated filter is provided higher than an upper opening of a dust collecting unit. An introduction hole is provided on the downstream side of the pleated filter. When switching to a dust moving state, the outside air introduced from an introduction hole spreads to the entirety of the pleated filter when passing through the pleated filter and evenly cleans dust adhering to the entirety, and when micro dust removed from the pleated filter is moved to the dust collecting unit, this movement is supported by gravity by using the weight of micro dust. The pleated filter is prevented from being clogging by reliably moving micro dust removed from the pleated filter to the dust collecting unit, and when switching to a suctioning state, a suction air amount to pass through the first air passage is secured, whereby reduction in suction power over time can be suppressed.

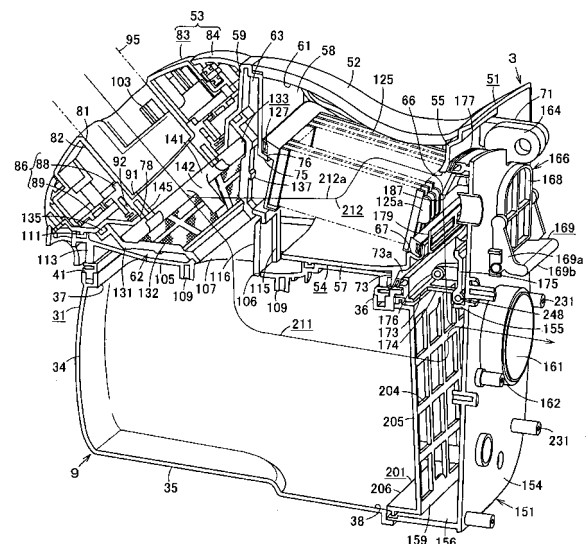


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 08 25 0030

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 1 554 965 A1 (TOSHIBA TEC KK [JP]) 20 July 2005 (2005-07-20) * paragraph [0045] - paragraph [0047] * * paragraph [0053] - paragraph [0056] * * paragraph [0062] - paragraph [0067] * * paragraph [0105] - paragraph [0122] * * figures 3,5-11 *	1-2	INV. A47L9/20
A	US 2 500 832 A (KIRBY JAMES B) 14 March 1950 (1950-03-14) * figures *	1	
A	JP 02 159233 A (TAITO SHOJI KK) 19 June 1990 (1990-06-19) * abstract * * figures *	1	
A,D	JP 56 032637 U (.) 31 March 1981 (1981-03-31) * figures *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			A47L
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 August 2009	Examiner Cabral Matos, A
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			

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EPO FORM 1503 03/82 (P04C01)

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

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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
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26-08-2009

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1554965	A1	20-07-2005	CA 2500156 A1 13-05-2004
			CN 1684621 A 19-10-2005
			WO 2004039232 A1 13-05-2004
			KR 20050049511 A 25-05-2005
			US 2005166560 A1 04-08-2005

US 2500832	A	14-03-1950	NONE

JP 2159233	A	19-06-1990	JP 1771688 C 14-07-1993
			JP 4055699 B 04-09-1992

JP 56032637	U	31-03-1981	NONE
