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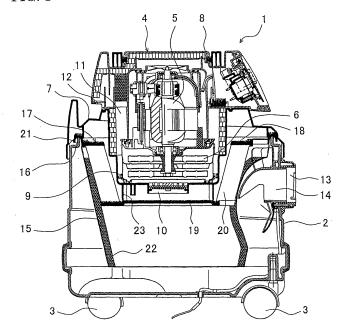
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(54) **Dust collector**

(57) A dust collector which can brush off dust in a primary filter (15) automatically. A bag-shaped pre-filter (15) is installed on an upper opening of a tank (2) of a dust collector (1), and a powder filter (17) protruding towards an inner portion of the pre-filter (15) so as to partition a main body (4) and a suction tube (13), is installed over the upper opening of the tank (2) on an inner side

of the pre-filter (15). A damper (22) corresponding to a plate-shaped sponge is interposed between the pre-filter (15) and the powder filter (17) in such a manner as to cover an inner side surface of the pre-filter (15) over its entire periphery. In accordance with contraction and restoration motion of the pre-filter (15) and of the damper (22) that result from operation and cessation of operation, dust attached to the pre-filter (15) can be brushed off.

FIG. 1



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EUROPEAN SEARCH REPORT

Application Number EP 06 01 4399

	DOCUMENTS CONSIDER	ED TO BE RELEVANT		
Category	Citation of document with indica of relevant passages		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Υ	US 5 651 811 A (FREY I 29 July 1997 (1997-07- * column 2, line 21 -	-29)	1,2,4-7, 11,12	INV. A47L9/20 A47L9/14 A47L5/36
Υ	US 5 690 710 A (STEPH, 25 November 1997 (1997) * column 1, line 36 -	7-11-25)	1,2,4-7, 11,12	
A	US 4 297 114 A (HUTCH: 27 October 1981 (1981 * column 1, line 46 -	-10-27)	1-12	
A	US 6 219 880 B1 (WORD) AL) 24 April 2001 (200 * column 1, lines 44-6	01-04-24)	1-12	
A	US 6 015 452 A (NEPSUI AL) 18 January 2000 (2 * column 1, line 38 -	2000-01-18)	1-12	
D,A	JP 2002 045318 A (HIT/ 12 February 2002 (2002 * the whole document *	2-02-12)	1-12	TECHNICAL FIELDS SEARCHED (IPC) A47 L
	The present search report has been	drawn up for all claims Date of completion of the search		Examiner
	Munich	20 November 2007	MAR	TIN GONZALEZ, G
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS ioularly relevant if taken alone cularly relevant if combined with another iment of the same category nological background written disolosure mediate document	T: theory or principle E: earlier patent door after the filing date D: document cited in L: document cited for a:: member of the sai document	ument, but publis the application rother reasons	shed on, or

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-11-2007

5.10	Patent document ed in search report		Publication date	Patent family member(s)	Publication date
US	5651811	Α	29-07-1997	US 5593479 A	14-01-1
US	5690710	Α	25-11-1997	NONE	
US	4297114	Α	27-10-1981	NONE	
US	6219880	B1	24-04-2001	US 2001005919 A1	05-07-2
US	6015452	A	18-01-2000	AU 3664197 A BR 9710351 A CA 2259199 A1 EP 0910456 A1 JP 2000514356 T KR 20000023636 A PL 331093 A1 WO 9802232 A1 US 5858044 A ZA 9706132 A	09-02-1 17-08-1 22-01-1 28-04-1 31-10-2 25-04-2 21-06-1 22-01-1 11-01-1
JP	 2002045318	 A	12-02-2002	NONE	