



Europäisches  
Patentamt  
European  
Patent Office  
Office européen  
des brevets



(11) EP 1 743 557 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
11.07.2007 Bulletin 2007/28

(51) Int Cl.:  
A47L 9/14 (2006.01)

(43) Date of publication A2:  
17.01.2007 Bulletin 2007/03

(21) Application number: 06290376.0

(22) Date of filing: 07.03.2006

(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 NL PL PT RO SE SI  
SK TR**  
Designated Extension States:  
**AL BA HR MK YU**  
(30) Priority: 12.07.2005 US 698391 P  
19.08.2005 KR 20050076485  
(71) Applicant: **Samsung Gwangju Electronics Co., Ltd.**  
**Gwangju-city (KR)**

(72) Inventors:  

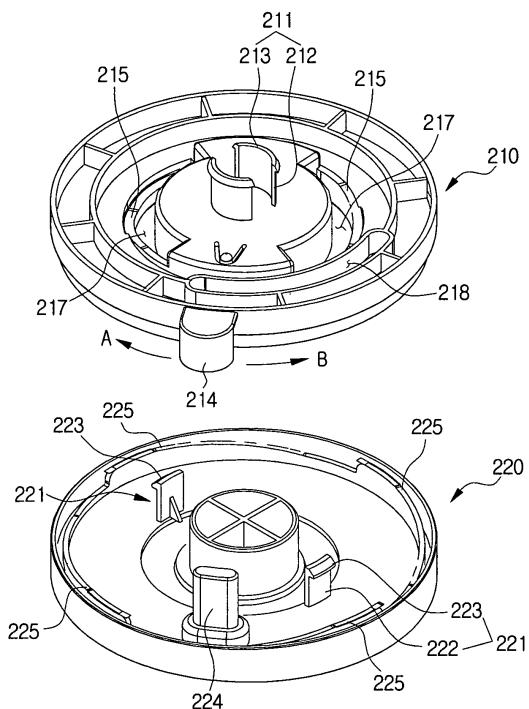
- Moon, Joo-Sung  
Seoul (KR)
- Yoo, Dong-Hun  
Gwangju-city (KR)

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

(54) **Locking/unlocking device for dust-collector and upright vaccuum cleaner having the same**

(57) A dust-collector locking/unlocking device to lock or unlock a dust-collector removably mounted in a cleaner body. The dust-collector locking/unlocking device includes a first member and a second member connected with a lower portion of the first member and serving as a cover for the dust-collector. The first member includes a first hook that is rotatably connected with an upper wall of the cleaner body, a manipulation lever that protrudes from an outer circumference of the first member for rotation of the first member by a user, and first cam parts formed on a lower portion of the first member. The second member includes a second hook movably connected with guide cams formed on the first member, and second cam parts engaged with the first camp part. The second member is moved up and down by the rotational movement of the manipulation lever and thereby lock or unlock the dust-collector.

FIG. 2





DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	GB 2 365 325 A (HOOVER LTD [GB]) 20 February 2002 (2002-02-20) * page 1, line 1 * * page 6, line 16 - page 8, line 28 * * figures 2,4A-4F * -----	1,2,5,6	INV. A47L9/14
A,D	US 2002/178535 A1 (OH JANG-KEUN [KR] ET AL) 5 December 2002 (2002-12-05) * the whole document * -----	1-8	
A	US 3 097 673 A (HUNT DAVID H) 16 July 1963 (1963-07-16) * the whole document * -----	1-8	
A	US 2005/138761 A1 (PARK TAE J [KR] ET AL) 30 June 2005 (2005-06-30) * page 1, left-hand column, paragraph 3 * * page 1, right-hand column, paragraph 15 - paragraph 18 * * page 3, left-hand column, paragraph 40 - page 4, left-hand column, paragraph 63 * * figures 2-4 * -----	1-8	TECHNICAL FIELDS SEARCHED (IPC)
			A47L
The present search report has been drawn up for all claims			
4	Place of search	Date of completion of the search	Examiner
	Munich	24 May 2007	REDELSPERGER, C
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			

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

EP 06 29 0376

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.

24-05-2007

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
GB 2365325	A	20-02-2002		NONE		
US 2002178535	A1	05-12-2002	AU 755590 B1 CA 2387942 A1 GB 2376175 A KR 20020092563 A		19-12-2002 04-12-2002 11-12-2002 12-12-2002	
US 3097673	A	16-07-1963		NONE		
US 2005138761	A1	30-06-2005	KR 20050066913 A		30-06-2005	