



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**22.12.2004 Bulletin 2004/52**

(51) Int Cl.7: **A47L 9/14, A47L 9/00**

(43) Date of publication A2:  
**30.10.2002 Bulletin 2002/44**

(21) Application number: **02252500.0**

(22) Date of filing: **06.04.2002**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventor: **Fumagalli, Silvano**  
**20052 Monza (IT)**

(74) Representative: **Evans, Huw David Duncan**  
**Urquhart-Dykes & Lord LLP**  
**Three Trinity Court,**  
**21-27 Newport Road**  
**Cardiff CF24 0AA (GB)**

(30) Priority: **17.04.2001 GB 0109397**

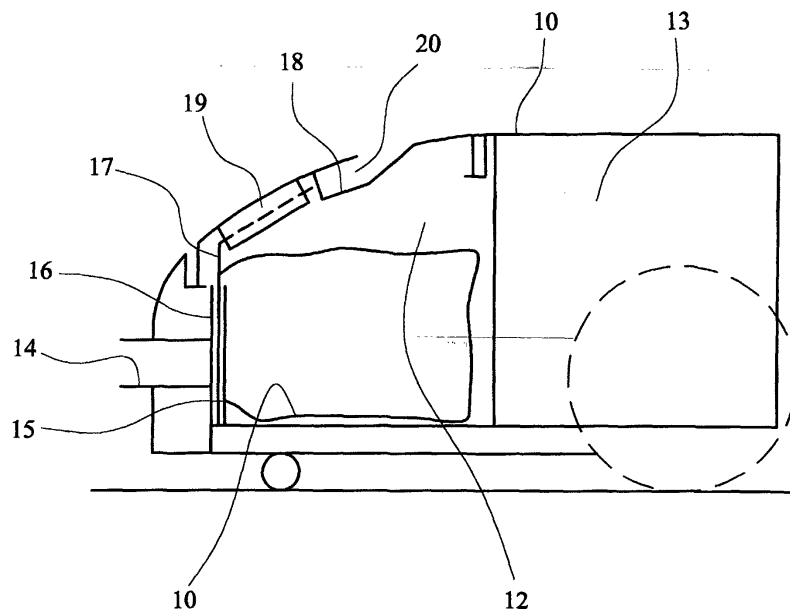
(71) Applicant: **HOOVER LIMITED**  
**Merthyr Tydfil, Mid Glamorgan CF48 1PQ (GB)**

(54) **Vacuum cleaner**

(57) A vacuum cleaner comprises a dust bag (10) mounted in a compartment (12) which is closed by a removable closure (18) which forms a part of the housing of the cleaner. The dust bag (10) comprises a cardboard collar (15) around its opening having a tab (17) which projects into a passageway (19) formed on the under

surface of the closure (18). The passageway is inclined relative to the vertical and thus the tab (17) becomes trapped as the closure is removed from the cleaner, thereby lifting the bag (10) out of the cleaner without the need for the user to touch the dirty bag.

As the bag (10) is removed, a shutter closes the inlet to the bag (10) to prevent the egress of dust.



**FIG. 1**



European Patent  
Office

EUROPEAN SEARCH REPORT

Application Number  
EP 02 25 2500

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	DE 199 42 483 C (MIELE & CIE) 22 February 2001 (2001-02-22) * column 2, line 14 - column 3, line 47; figures *	1-10	A47L9/14 A47L9/00
A	EP 0 997 098 A (AEG HAUSGERAETE GMBH) 3 May 2000 (2000-05-03) * column 2, paragraph 11 - column 3, paragraph 19; figures *	1-10	
A	EP 0 468 065 A (SIEMENS AG) 29 January 1992 (1992-01-29) * column 2, line 8 - column 3, line 48; figures *	1-10	
A	DE 88 03 516 U (SIEMENS AG) 13 July 1989 (1989-07-13) * the whole document *	1-10	
A	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 11, 29 November 1996 (1996-11-29) & JP 8 173360 A (FUJITSU GENERAL LTD), 9 July 1996 (1996-07-09) * abstract *	1-10	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A47L
A	PATENT ABSTRACTS OF JAPAN vol. 0143, no. 14 (C-0737), 5 July 1990 (1990-07-05) & JP 2 109530 A (MATSUSHITA ELECTRIC IND CO LTD), 23 April 1990 (1990-04-23) * abstract *	1-10	
A	US 2 804 164 A (BRACE GEORGE A) 27 August 1957 (1957-08-27) * column 3, line 48 - column 5, line 68; figures *	1-10	
		-/--	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 27 October 2004	Examiner Lodato, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>&amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/82 (P04C01)



European Patent  
Office

EUROPEAN SEARCH REPORT

Application Number  
EP 02 25 2500

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	EP 0 682 908 A (WOLF GMBH) 22 November 1995 (1995-11-22) * figures *  -----	7-9	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>27 October 2004</b>	Examiner <b>Lodato, A</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>&amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04/C01)

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

EP 02 25 2500

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.

27-10-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 19942483	C	22-02-2001	DE 19942483 C1	22-02-2001
			EP 1082936 A1	14-03-2001
EP 0997098	A	03-05-2000	EP 0997098 A2	03-05-2000
EP 0468065	A	29-01-1992	EP 0468065 A1	29-01-1992
			DE 59004149 D1	17-02-1994
DE 8803516	U	13-07-1989	DE 8803516 U1	13-07-1989
JP 8173360	A	09-07-1996	JP 3154316 B2	09-04-2001
JP 2109530	A	23-04-1990	NONE	
US 2804164	A	27-08-1957	GB 788578 A	02-01-1958
EP 0682908	A	22-11-1995	DE 9408349 U1	21-07-1994
			DE 59504304 D1	07-01-1999
			EP 0682908 A1	22-11-1995