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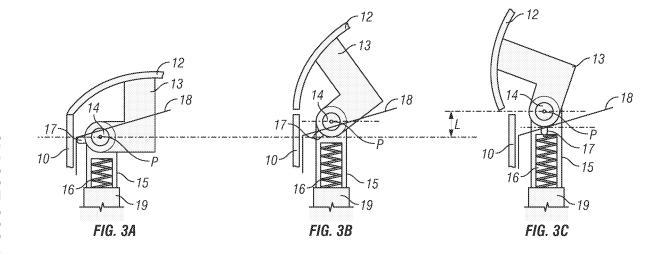
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#### (54) Hinge assembly

(57) A vacuum cleaner comprises a closure (12) having a first hinge portion (13) and body (10) having a second hinge portion (15) displaceably mounted thereon, the first portion (13) is pivotally connected to the second portion (15) for rotation of the closure (12) about a rotational axis (A-A) relative to the body (10). The vacuum cleaner further comprises an axially projecting cam (17) on the first portion (13) having a cam surface disposed radially outwardly of the rotational axis (A-A), and a fixed

abutment surface (18) disposed remote from the hinge portions (13,15). The surface of the cam (17) is biased against the abutment surface (18) by a spring (16) acting on the second hinge portion (15), the cleaner being arranged such that rotation of the first hinge portion (13) about the rotational axis (A-A) causes the cam (17) to ride over the abutment surface (18) under the applied bias allowing upward translatory movement of the rotational axis (A-A) of the closure.





## **EUROPEAN SEARCH REPORT**

Application Number EP 07 27 0024

`	Citation of document with indicati	on, where appropriate.	Relevant	CLASSIFICATION OF THE
Category	of relevant passages	,	to claim	APPLICATION (IPC)
X	EP 0 124 410 A (RENAUL		1,3-8,	INV.
	7 November 1984 (1984-	11-07)		E05D3/02
Υ	* page 3 - page 6 *		2,9,10,	A47L9/00
	* figures 1 6 *		14	
	* figures 1-6 *			
x	FR 2 741 845 A (OMEGAL	SA [FR])	1,3-8,	
	6 June 1997 (1997-06-0	6)	11,12,15	
	* page 4, line 14 - page	ge 5, line 3 *		
	* figures 1-4 *			
γ	GB 2 343 915 A (RALPH	RAYMOND [GB1)	2,9,10,	
	24 May 2000 (2000-05-2	4)	14	
	* page 5, line 3 - line	e 21 *		
	* figures 1-6 *			
				TECHNICAL FIELDS
				SEARCHED (IPC)
				E05D
				A47L
	The present search report has been o	drawn un for all claime		
	Place of search	Date of completion of the search		Examiner
The Hague		23 April 2008	Van	Kessel, Jeroen
C	ATEGORY OF CITED DOCUMENTS	T : theory or principle	underlying the in	vention
	icularly relevant if taken alone	E : earlier patent door after the filing date	ument, but publisi	hed on, or
Y : part	icularly relevant if combined with another iment of the same category	D : document cited in L : document cited for	the application	
A : tech	inological background -written disclosure			corresponding
	-wriπen disclosure rmediate document	& : member of the sar document	ne patent ramily,	corresponding

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

EP 07 27 0024

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.

23-04-2008

	Patent document ed in search report		Publication date		Patent family member(s)	Publication date
EP	0124410	Α	07-11-1984	DE FR	3461437 D1 2544261 A1	15-01-198 19-10-198
FR	2741845	Α	06-06-1997	NONE		
GB	2343915	Α	24-05-2000	EP	1004734 A2	31-05-200
			fficial Journal of the Euro			