

Title (en)  
Hand-held vacuum cleaner with filter indicator

Title (de)  
Handstaubsauger mit Filteranzeige

Title (fr)  
Aspirateur à main avec indicateur pour filtre

Publication  
**EP 1452118 A3 20050629 (EN)**

Application  
**EP 04004404 A 20040226**

Priority  
US 44998703 P 20030226

Abstract (en)  
[origin: EP1452118A2] A hand-held portable vacuum cleaner (10a) having a filter indicator (36) that is coupled to an outlet housing (32) and in fluid communication with a portion of the outlet housing between a fan inlet and an intake. The filter indicator includes a pressure differential indicator that is configured to indicate a pressure differential between air in the portion of the outlet housing and atmospheric air pressure. The filter indicator is employed to indicate to the user of the hand-held vacuum that replacement and/or cleaning of the filter (34) is required. <IMAGE>

IPC 1-7  
**A47L 5/24**; **A47L 9/19**

IPC 8 full level  
**A47L 5/14** (2006.01); **A47L 5/24** (2006.01); **A47L 7/04** (2006.01); **A47L 9/02** (2006.01); **A47L 9/19** (2006.01); **A47L 9/24** (2006.01)

CPC (source: EP)  
**A47L 5/14** (2013.01); **A47L 5/24** (2013.01); **A47L 7/04** (2013.01); **A47L 9/02** (2013.01); **A47L 9/19** (2013.01); **A47L 9/242** (2013.01)

Citation (search report)  
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• [Y] EP 0430146 A1 19910605 - MATSUSHITA ELECTRIC IND CO LTD [JP]  
• [Y] US 6125501 A 20001003 - YIP CHUNG LUN [HK]  
• [A] EP 1222891 A2 20020717 - ROYAL APPLIANCE MFG [US]  
• [A] EP 1070478 A2 20010124 - BLACK & DECKER INC [US]  
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Designated contracting state (EPC)  
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**EP 1452118 A2 20040901**; **EP 1452118 A3 20050629**; AU 2004216122 A1 20040910; CA 2459028 A1 20040826; CN 100446709 C 20081231; CN 101390726 A 20090325; CN 1644150 A 20050727; CN 1780577 A 20060531

DOCDB simple family (application)  
**EP 04004404 A 20040226**; AU 2004216122 A 20040226; CA 2459028 A 20040226; CN 200410033035 A 20040226; CN 200480011121 A 20040226; CN 200810168366 A 20040226