

Title (en)
Suction cleaner with filling level measurement

Title (de)
Schmutzsauger mit Füllstandsmessung

Title (fr)
Sapirateur avec détection de niveau

Publication
EP 1468636 A3 20080402 (DE)

Application
EP 04006648 A 20040319

Priority
DE 10317111 A 20030414

Abstract (en)
[origin: EP1468636A2] The vacuum cleaner has a pressure difference sensor (11) and a connected level measurement tube (10) that extends into the interior of the dirt container (1) to close to the floor. At least the lower region of the level measurement tube is enclosed by a protective tube (18) that carries circulated air. The lower opening of the protective tube extends axially beyond the end opening of the level measurement tube.

IPC 8 full level
A47L 7/00 (2006.01); **A47L 9/19** (2006.01); **A47L 9/28** (2006.01)

CPC (source: EP)
A47L 7/0028 (2013.01); **A47L 9/19** (2013.01); **A47L 9/2821** (2013.01)

Citation (search report)
• [A] US 3286444 A 19661122 - GEORGE BOSWINKLE, et al
• [A] US 6237186 B1 20010529 - GRIFFITHS ROBERT S [US]
• [A] DE 3436064 A1 19860403 - KAERCHER GMBH & CO ALFRED [DE]
• [A] US 5267370 A 19931207 - WOERWAG PETER [CH]
• [A] DE 3205831 A1 19830825 - SCHMIEGEL KARL HEINZ

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL LT LV MK

DOCDB simple family (publication)
EP 1468636 A2 20041020; EP 1468636 A3 20080402; EP 1468636 B1 20081224; AT E418285 T1 20090115; DE 10317111 A1 20041111;
DE 10317111 B4 20070913; DE 502004008719 D1 20090205

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