

Title (en)  
Lower housing of a vaccum cleaner

Title (de)  
Gehäuseunterteil eines Handstaubsaugers

Title (fr)  
Boitier inférieur d'un aspirateur

Publication  
**EP 1639931 A3 20071226 (DE)**

Application  
**EP 05018242 A 20050823**

Priority  
DE 102004046382 A 20040924

Abstract (en)  
[origin: EP1639931A2] The suction hose (10) connector (8,9) has a spigots connecting to the suction head (1) and hose which connects to the filter chamber (6) which has a flange connection (5) to the power unit chamber (3) comprising an electric motor and fan unit (12).

IPC 8 full level  
**A47L 5/28** (2006.01)

CPC (source: EP US)  
**A47L 5/28** (2013.01 - EP US)

Citation (search report)

- [X] US 4517705 A 19850521 - HUG NIKOLAUS [CH]
- [A] GB 2354935 A 20010411 - SAMSUNG KWANGJU ELECTRONICS CO [KR]
- [A] US 5553347 A 19960910 - INOUE TAKAYUKI [JP], et al
- [A] WO 2004062457 A2 20040729 - ROYAL APPLIANCE MFG [US], et al

Designated contracting state (EPC)  
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 state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1639931 A2 20060329; EP 1639931 A3 20071226; EP 1639931 B1 20100414**; AT E463999 T1 20100415; DE 102004046382 A1 20060406; DE 102004046382 B4 20071213; DE 502005009399 D1 20100527; US 2006067843 A1 20060330; US 7481630 B2 20090127

DOCDB simple family (application)  
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