

Title (en)  
CLEANING APPARATUS FOR A PREFERABLY PLANAR SURFACE

Title (de)  
REINIGUNGSVORRICHTUNG FÜR EINE VORZUGSWEISE EBENE FLÄCHE

Title (fr)  
DISPOSITIF DE NETTOYAGE POUR UNE SURFACE DE PRÉFÉRENCE PLANE

Publication  
**EP 2046180 A1 20090415 (DE)**

Application  
**EP 07787431 A 20070712**

Priority

- EP 2007057160 W 20070712
- DE 102006033669 A 20060720

Abstract (en)  
[origin: WO2008009614A1] The cleaning apparatus (1) is provided for a preferably planar surface (2), in particular a window pane (3), and has a wiping device (4) and a plunger (5) which keeps the wiping device (4) in contact with the surface and also, by means of an open side, bears against the surface (2) in a manner sealing it around the edge. Furthermore it is provided with a suction device (6, 7, 8, 9) for generating a negative pressure in the plunger (5). The plunger (5) is provided with driving rollers (18), which are actuated by motor, for moving the plunger (5) together with the wiping device (4), and the suction device (6, 7, 8, 9) has at least two fans (3, 6) which are each provided with their own outlet opening (10, 11).

IPC 8 full level  
**A47L 1/02** (2006.01); **A47L 11/38** (2006.01); **B62D 57/024** (2006.01)

CPC (source: EP US)  
**A47L 1/02** (2013.01 - EP US); **A47L 11/38** (2013.01 - EP US); **A47L 11/4036** (2013.01 - EP US); **A47L 11/4066** (2013.01 - EP US); **E04G 23/002** (2013.01 - EP US); **A47L 2201/00** (2013.01 - EP US)

Citation (search report)  
See references of WO 2008009614A1

Cited by  
CN106808353A; CN106491053A

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**WO 2008009614 A1 20080124**; AT E472284 T1 20100715; DE 102006033669 A1 20080124; DE 502007004272 D1 20100812; EP 2046180 A1 20090415; EP 2046180 B1 20100630; US 2010005606 A1 20100114; US 7950097 B2 20110531

DOCDB simple family (application)  
**EP 2007057160 W 20070712**; AT 07787431 T 20070712; DE 102006033669 A 20060720; DE 502007004272 T 20070712; EP 07787431 A 20070712; US 37449707 A 20070712