

Title (en)

Turbine brush unit and vacuum cleaner having the same

Title (de)

Turbinenbürsteneinheit und damit ausgerüsteter Staubsauger

Title (fr)

Unité de brosse de turbine et aspirateur l'utilisant

Publication

**EP 2277425 B1 20130515 (EN)**

Application

**EP 10163958 A 20100526**

Priority

KR 20090063783 A 20090714

Abstract (en)

[origin: EP2277425A1] A turbine brush unit (100a) and a vacuum cleaner having the same are provided. The turbine brush unit (100a) may include a turbine brush case (101), a brush member (102) mounted in the turbine brush case (101), and a turbine fan unit (120, 130) having a plurality of wings (122, 132) and rotating the brush member (102). Each of the plurality of the wings (122, 132) may have a curvature point (C1, C2), a primary collision surface (120a', 130a') with which a primary inlet wind (A1) drawn through the inlet portion (103a) of the turbine fan unit (120, 130) collides and a secondary collision surface (120b', 130b') with which a secondary inlet wind (A2) collides. The primary and secondary inlet winds (A1, A2) apply a force in the rotation direction (D) of the turbine fan unit (120, 130).

IPC 8 full level

**A47L 9/04** (2006.01)

CPC (source: EP KR US)

**A47L 5/30** (2013.01 - KR); **A47L 9/04** (2013.01 - KR); **A47L 9/0416** (2013.01 - EP US); **F04D 29/281** (2013.01 - EP US);  
**F04D 29/30** (2013.01 - EP US); **F04D 29/38** (2013.01 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**EP 2277425 A1 20110126; EP 2277425 B1 20130515;** KR 20110006236 A 20110120; RU 2428095 C1 20110910; US 2011010887 A1 20110120

DOCDB simple family (application)

**EP 10163958 A 20100526;** KR 20090063783 A 20090714; RU 2010122593 A 20100602; US 77066010 A 20100429