

Title (en)

DUAL STAGE CYCLONIC DUST COLLECTOR

Title (de)

ZWEISTUFIGER ZYKLON-STAUBSAMMLER

Title (fr)

COLLECTEUR DE POUSSIÈRES CYCLONIQUE À DOUBLE ÉTAGE

Publication

**EP 2231303 A4 20140611 (EN)**

Application

**EP 08857514 A 20081208**

Priority

- US 2008085926 W 20081208
- US 99293507 P 20071206

Abstract (en)

[origin: WO2009073888A1] A surface cleaning suction type appliance comprises a housing, an airstream suction source, a cyclone main body, and a dirt cup. The housing includes a main suction opening. The airstream suction source is mounted to the housing and includes a suction airstream inlet and a suction airstream outlet. The suction source selectively establishes and maintains a flow of air from the main suction opening, via the airstream inlet, to the airstream outlet. The cyclone main body is supported by the housing and is in communication with the main suction opening. The cyclone main body has a uniform outer circumference and includes a first stage separator, and a plurality of downstream second stage separators. The lengths of the second stage cyclonic separators are different for any number of adjacent pairs of separators from one pair up to all adjacent pairs of separators. The dirt cup is connected to the cyclone main body. The dirt cup includes a first particle collector and a second particle collector. The first particle collector communicates with the first stage separator for collecting dust particles from the first stage separator. The separate second particle collector communicates with the plurality of second stage separators for collecting dust particles from the second stage separators.

IPC 8 full level

**A47L 9/16** (2006.01); **B01D 50/00** (2006.01)

CPC (source: EP)

**A47L 9/1608** (2013.01); **A47L 9/1633** (2013.01); **A47L 9/1641** (2013.01); **A47L 9/165** (2013.01); **A47L 9/1666** (2013.01); **A47L 9/1683** (2013.01); **B01D 45/12** (2013.01); **B04C 5/13** (2013.01); **B04C 5/185** (2013.01); **B04C 5/26** (2013.01); **B04C 5/28** (2013.01)

Citation (search report)

- [XI] EP 1779761 A2 20070502 - SAMSUNG KWANGJU ELECTRONICS CO [KR]
- [XYI] GB 2424606 A 20061004 - SAMSUNG KWANGJU ELECTRONICS CO [KR]
- [Y] US 2006123590 A1 20060615 - FESTER JOSEPH A [US], et al
- [A] EP 1837079 A1 20070926 - HOOVER LTD [GB]
- [A] WO 2007041947 A1 20070419 - TEK ELECTRICAL SUZHOU CO LTD [CN], et al & EP 1961356 A1 20080827 - TEK ELECTRICAL SUZHOU CO LTD [CN]
- See references of WO 2009073888A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

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DOCDB simple family (application)

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