

Title (en)  
DEVICE FOR COLLECTING DUST PARTICLES OR RESIDUAL MATERIAL IN AN AIRFLOW

Title (de)  
VORRICHTUNG ZUM AUFFANGEN VON STAUBTEILCHEN ODER RESTMATERIAL IN EINEM LUFTSTROM

Title (fr)  
DISPOSITIF PERMETTANT DE COLLECTER DES PARTICULES DE POUSSIERE OU DES MATIERES RESIDUELLES CONTENUES DANS UN ECOULEMENT D'AIR

Publication  
**EP 1835996 A1 20070926 (EN)**

Application  
**EP 05813570 A 20051207**

Priority  
• SE 2005001848 W 20051207  
• SE 0402992 A 20041208

Abstract (en)  
[origin: WO2006062472A1] The invention relates to a device for collecting particles in an airflow, comprising a casing (2) with a vacuum chamber (4) arranged at the top of the casing, which vacuum chamber has a connection (10) to a vacuum source and is connected to a cyclone device (6) for separating and transporting the particles from the airflow to a collection drum (8) arranged at the bottom of the casing. Said cyclone device (6) has an inlet (11) for the particle-containing airflow and an outlet (18) leading to the collection drum (8) . A bag (22) can be attached to said outlet (18) in the collection drum (8) which has a casing (30) , which can be closed off (32) in such a way that it provides a seal against the atmosphere around such an attached bag (22) . Said vacuum chamber (4) is connected to the collection drum (8) via a duct (36) , whereby a first pressure is created in a space between the casing (30) of the collection drum and the outside of the bag, and there is a second relatively higher pressure on the inside of the bag so that a pressure difference is created, by means of which the bag (22) is pressed into contact with the walls (24) and bottom (26) of the collection drum.

IPC 8 full level  
**B04C 5/185** (2006.01); **B01D 45/16** (2006.01); **B04C 9/00** (2006.01); **B24B 55/06** (2006.01)

IPC 8 main group level  
**B01D** (2006.01)

CPC (source: EP SE US)  
**B01D 45/16** (2013.01 - EP US); **B04C 5/185** (2013.01 - EP SE US); **B04C 9/00** (2013.01 - EP SE US); **B24B 55/06** (2013.01 - EP SE US);  
**B04C 2009/002** (2013.01 - EP US)

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

DOCDB simple family (publication)  
**WO 2006062472 A1 20060615**; EP 1835996 A1 20070926; SE 0402992 D0 20041208; SE 0402992 L 20060609; SE 529547 C2 20070911;  
US 2009119870 A1 20090514

DOCDB simple family (application)  
**SE 2005001848 W 20051207**; EP 05813570 A 20051207; SE 0402992 A 20041208; US 79226205 A 20051207