

Title (en)  
DUST COLLECTING DEVICE USING MULTI-CYCLONE DUST FILTRATION

Title (de)  
STAUBSAMMLUNGSVORRICHTUNG MIT VERWENDUNG VON MULTI-ZYKLON-STAUFILTERUNG

Title (fr)  
DISPOSITIF DE COLLECTE DE POUSSIÈRE À L'AIDE DE LA FILTRATION DE POUSSIÈRE À CYCLONES MULTIPLES

Publication  
**EP 3560403 A1 20191030 (EN)**

Application  
**EP 18169524 A 20180426**

Priority  
EP 18169524 A 20180426

Abstract (en)  
A dust collecting device (100) using multi-cyclone dust filtration includes a dust collecting chamber (11), a cyclone chamber (12) and an airflow guiding component (13). The dust collecting chamber (11) is communicated with the cyclone chamber (12). The cyclone chamber (12) is provided with an intake port (121) provided for a gas to be filtered (300) to enter, an annular side wall (122) being connected to the intake port (121) and guiding the gas to be filtered (300) to form a first cyclone (301), an engaging port (123) being communicated with the dust collecting chamber (11) and allowing the first cyclone (301) to enter the dust collecting chamber (11), and an exhaust port (124). The airflow guiding component (13) is provided within the cyclone chamber (12). The airflow guiding component (13) is provided with a return flow tube (131) receiving the returned gas to be filtered (300) and forming a second cyclone (302), an airflow guiding bonnet (132) separately located with respect to the return flow tube (131), and a dust filtration channel (133) formed between the airflow guiding bonnet (132) and the return flow tube (131). The second cyclone (302) is allowed to flow toward the exhaust port (124), and enable dust (502) contained therein to enter the cyclone chamber (12) again, as passing by the dust filtration channel (133).

IPC 8 full level  
**A47L 9/16** (2006.01)

CPC (source: EP)  
**A47L 9/1633** (2013.01); **A47L 9/1683** (2013.01)

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