

Title (en)  
ELECTROSTATIC FILTRATION DEVICE FOR GAS CLEANING

Publication  
**EP 0049454 B1 19840808 (DE)**

Application  
**EP 81107704 A 19810928**

Priority  
DE 3037115 A 19801001

Abstract (en)  
[origin: EP0049454A2] 1. Electrostatic filter device for the purification of gases, with - a microporous filter medium which is installed in a filter housing in the gas flow path between the gas inlet and the gas outlet, has at least a small electrical conductivity and which is connected on the gas outflow side to a source pole of a direct-current high-voltage source and is installed into the filter housing in such a way that the gas stream is deflected, - an ionisation device, which is connected to the other source pole of the direct-current high-voltage source, for at least partially ionising the gas before entry into the filter medium, and with - an fan which conveys the gas through the filter housing, characterised in that the distance (l) between the ionisation device (8) and the entry surface of the gas into the filter medium (7) decreases progressively, as viewed from the gas inlet (A) to the gas outlet (B).

IPC 1-7  
**B03C 3/14**; **B03C 3/36**

IPC 8 full level  
**B03C 3/14** (2006.01); **B03C 3/155** (2006.01); **B03C 3/36** (2006.01); **B01D 46/12** (2006.01)

CPC (source: EP)  
**B03C 3/155** (2013.01); **B03C 3/36** (2013.01)

Cited by  
DE4216313A1; DE3707938A1; US6361589B1; DE102016202293B3; US4941962A; GB2177625A; DE202005004151U1; WO2004026482A1; WO2004042204A1; WO2006048183A1; WO9907474A1; WO9402719A1; EP3220725B1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0049454 A2 19820414**; **EP 0049454 A3 19820609**; **EP 0049454 B1 19840808**; AT E8848 T1 19840815; DE 3165420 D1 19840913; ES 504616 A0 19820816; ES 8206217 A1 19820816

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**EP 81107704 A 19810928**; AT 81107704 T 19810928; DE 3165420 T 19810928; ES 504616 A 19810807