

Title (en)  
IONIZATION STAGE AND COLLECTOR FOR AN EXHAUST GAS PURIFICATION SYSTEM

Title (de)  
IONISIERUNGSSTUFE UND KOLLEKTOR EINER ABGASREINIGUNGSANLAGE

Title (fr)  
ÉTAGE D'IONISATION ET COLLECTEUR POUR INSTALLATION D'ÉPURATION DE GAZ D'ÉCHAPPEMENT

Publication  
**EP 2091653 B1 20100324 (DE)**

Application  
**EP 07846577 A 20071114**

Priority  
• EP 2007009823 W 20071114  
• DE 102006055543 A 20061124

Abstract (en)  
[origin: DE102006055543B3] A first upstream conical casing, having a convex cross section, rests over its entire basal area, against the high voltage electrode. A second conical downstream casing with convex cross section, is placed against the high voltage electrode. A downstream conductive covering seals-off the shell electrode; this has a structure permitting gas flow. Downstream of the ionization stage (2), a collector (3) follows directly. This consists of filling bodies piled up on the nozzle plate over the open cross section only, to form filter elements. They are packed to permit gas flow. Around the edge of the nozzle plate a casing supports the filter elements. They are packed in a tower-like or conical configuration. The covering of a casing electrode is hat-shaped. It is a covering projecting over the open cross section of the gas purification plant. In the lowest regions of the nozzle plate, outlet holes are provided for particle laden fluid which collects on the downstream side of the plate. The nozzle plate is conical, the cone height being less than that of the casing electrode. The height of the second conical casing is less than or equal to the second smallest gap width between the star-shaped high voltage electrode and the associated casing electrode. In the collector, downstream of the filter elements (16) a waste gas purification plant is located, for scrubbing the gas flow. The gas flow axis and the fluid-spraying axis include an angle in the range 0[deg] - 180[deg]. The packing bodies are balls, rings or conical rings. They are made from sintered material, plastic or metal.

IPC 8 full level  
**B03C 3/41** (2006.01)

CPC (source: EP)  
**B03C 3/06** (2013.01); **B03C 3/16** (2013.01); **B03C 3/41** (2013.01); **B03C 2201/06** (2013.01)

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 MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 102006055543 B3 20080124**; AT E461749 T1 20100415; DE 502007003248 D1 20100506; EP 2091653 A1 20090826;  
EP 2091653 B1 20100324; WO 2008061653 A1 20080529

DOCDB simple family (application)  
**DE 102006055543 A 20061124**; AT 07846577 T 20071114; DE 502007003248 T 20071114; EP 07846577 A 20071114;  
EP 2007009823 W 20071114