

Title (en)

# ELECTROSTATIC DUST SEPARATOR

Publication

**EP 0252371 B1 19900221 (DE)**

Application

**EP 87109099 A 19870624**

Priority

DE 3622699 A 19860705

Abstract (en)

[origin: EP0252371A1] 1. A dedusting electrostatic precipitator for a horizontal flow of gas, wherein a tubular inlet port (7), which flares in three conical sections (a, b, c) from the cross-section of the gas supply line to the at least ten times larger cross-section of the cylindrical housing (1), vertical platelike collecting electrodes (2) are equally spaced apart in a cylindrical pressure-resisting housing (1) and extend parallel to the main axis of the housing (1) and substantially throughout the available height over the length of the corresponding chord of the circle, corona electrodes (3) tensioned in frames (15) are provided between the collecting electrodes (2) and scraping means (6) are provided, which are pivotally movable about the axis of the housing throughout the lower portion of the housing wall, which portion is provided with dust discharge openings (4), characterized in that the respective smaller diameters d of the conical sections (a, b, c) of the tubular inlet and pipe (7) are related to the diameter D of the housing (1) as  $0.24 D \leq d_3 \leq 0.36 D$  (preferably  $0.3 D$ )  $0.36 D \leq d_2 \leq 0.48 D$  (preferably  $0.42 D$ )  $0.90 D \leq d_1 \leq 0.95 D$  (preferably  $0.925 D$ ) and that the intermediate conical section b has three gas-distributing plates (8a to 8c).

IPC 1-7

**B03C 3/01; B03C 3/72; B03C 3/82; B03C 3/88**

IPC 8 full level

**B03C 3/36** (2006.01); **B03C 3/01** (2006.01); **B03C 3/011** (2006.01); **B03C 3/72** (2006.01); **B03C 3/82** (2006.01); **B03C 3/88** (2006.01)

CPC (source: EP KR)

**B03C 3/00** (2013.01 - KR); **B03C 3/011** (2013.01 - EP); **B03C 3/72** (2013.01 - EP); **B03C 3/82** (2013.01 - EP); **B03C 3/88** (2013.01 - EP)

Cited by

WO2011003610A1; WO2011003614A1; DE102010021233A1; CN106622664A; EP3156132A1; AT409347B; KR100735174B1; US7022166B2; WO0194023A1; DE102009060254A1

Designated contracting state (EPC)

AT DE FR IT LU

DOCDB simple family (publication)

**EP 0252371 A1 19880113; EP 0252371 B1 19900221**; AT E50436 T1 19900315; AU 590095 B2 19891026; AU 7509587 A 19880107; BR 8703402 A 19880322; CN 1014497 B 19911030; CN 87104610 A 19880323; DD 260874 A5 19881012; DE 3622699 A1 19880114; DE 3761721 D1 19900329; IN 165150 B 19890819; JP H0221864 B2 19900516; JP S6323759 A 19880201; KR 880001332 A 19880422; KR 950002794 B1 19950327; PL 152427 B1 19901231; PL 266621 A1 19880721; RU 1809782 C 19930415

DOCDB simple family (application)

**EP 87109099 A 19870624**; AT 87109099 T 19870624; AU 7509587 A 19870703; BR 8703402 A 19870703; CN 87104610 A 19870704; DD 30459787 A 19870703; DE 3622699 A 19860705; DE 3761721 T 19870624; IN 513CA1987 A 19870702; JP 16765287 A 19870704; KR 870007189 A 19870704; PL 26662187 A 19870703; SU 4202953 A 19870703