

Title (en)

Process and apparatus for electrical charging and separation of hardly removable particle

Title (de)

Verfahren und Vorrichtung zur elektrostatischen Aufladung und Abscheidung schwierig abzuscheidender Partikel

Title (fr)

Procédé et appareil pour le chargement électrique et la séparation de particules difficilement remouvables

Publication

EP 1679123 A1 20060712 (DE)

Application

EP 05000380 A 20050111

Priority

EP 05000380 A 20050111

Abstract (en)

The method involves using only one high voltage source (1) to ionize particles successively in the high voltage zone and removing the particles and producing a significantly higher flow in the ionization region (4) than in the separation region (5) by suitable selection of the negative electrode geometry for the ionization and separation region.. The particles are ionized and separated with negative electrodes (7) connected to only one output for the separation of dust from industrial gases both in the ionization regions of the individual gases as well as in the separation region. An independent claim is also included for a device for implementing the inventive method.

IPC 8 full level

B03C 3/02 (2006.01); **B03C 3/45** (2006.01); **B03C 3/51** (2006.01)

CPC (source: EP KR US)

B03C 3/02 (2013.01 - KR); **B03C 3/025** (2013.01 - EP US); **B03C 3/45** (2013.01 - KR); **B03C 3/455** (2013.01 - EP US); **B03C 3/51** (2013.01 - EP KR US)

Citation (search report)

- [X] US 6004376 A 19991221 - FRANK WERNER J [DE]
- [X] US 4264343 A 19810428 - NATARAJAN SUBBIAH, et al
- [X] US 1343285 A 19200615 - SCHMIDT WALTER A

Cited by

US2021331006A1

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1679123 A1 20060712; CN 101137442 A 20080305; JP 2008526499 A 20080724; KR 101238619 B1 20130228; KR 20070095405 A 20070928; US 2009165648 A1 20090702; US 8002876 B2 20110823; WO 2006074888 A1 20060720; ZA 200706171 B 20080430

DOCDB simple family (application)

EP 05000380 A 20050111; CN 200680007849 A 20060109; EP 2006000106 W 20060109; JP 2007550738 A 20060109; KR 20077018468 A 20060109; US 79496006 A 20060109; ZA 200706171 A 20070725