

Title (en)

DISCHARGE ELECTRODE OF ELECTROSTATIC PRECIPITATOR FOR TREATING DIESEL ENGINE EXHAUST GAS

Title (de)

ENTLADUNGSELEKTRODE EINES ELEKTROSTATISCHEN ABSCHIEDERS ZUR BEHANDLUNG VON DIESELMOTORABGAS

Title (fr)

ÉLECTRODE DE DÉCHARGE DE DÉPOUSSIÉREUR ÉLECTROSTATIQUE POUR LE TRAITEMENT DE GAZ D'ÉCHAPPEMENT DE MOTEUR DIESEL

Publication

**EP 3308863 A4 20190213 (EN)**

Application

**EP 16807359 A 20160601**

Priority

- JP 2015117042 A 20150609
- JP 2016066293 W 20160601

Abstract (en)

[origin: EP3308863A1] Provided is a discharge electrode capable of appropriately setting the arrangement of electrode needles with respect to a main electrode at a desired density even if the outer diameter of a collecting pipe of a tubular collecting part of an electrostatic precipitator for treating diesel engine exhaust gas is increased, reducing the weight and maintaining the shape of the electrode needles, and also being effective also for measures against high temperatures. The discharge electrode of the diesel engine exhaust gas treatment apparatus having a tubular collecting part with a predetermined length composed of the discharge electrode for charging particulate matter contained in the exhaust gas and a precipitation electrode for collecting the particulate matter charged, the discharge electrode being composed of a main electrode disposed in the tubular collecting part in a pipe axial direction and electrodes disposed on the main electrode to radially protrude, tubular collecting modules short in an axial direction with varied diameters arranged at a plurality of stages in the tubular collecting part is configured by radially arranging short discharge electrode needles or low-height saw-blade-shaped discharge electrode plates on the outer periphery of a cylindrical discharge electrode support barrel attached to the outer periphery of the main electrode.

IPC 8 full level

**B03C 3/02** (2006.01); **B03C 3/06** (2006.01); **B03C 3/40** (2006.01); **B03C 3/41** (2006.01); **B03C 3/49** (2006.01); **F01N 3/01** (2006.01)

CPC (source: EP KR)

**B03C 3/025** (2013.01 - EP); **B03C 3/06** (2013.01 - EP); **B03C 3/41** (2013.01 - EP KR); **B03C 3/49** (2013.01 - EP KR); **F01N 3/01** (2013.01 - EP KR); **B03C 2201/10** (2013.01 - EP); **B03C 2201/30** (2013.01 - EP)

Citation (search report)

- [I] CN 104437908 A 20150325 - UNIV DALIAN MARITIME
- [A] WO 2004041412 A1 20040521 - EERO ERMA [SE]
- [A] WO 2008000003 A1 20080103 - FLECK CARL M [AT]
- See references of WO 2016199652A1

Cited by

CN110420757A; WO2021046620A1; WO2021250382A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3308863 A1 20180418**; **EP 3308863 A4 20190213**; CN 107708869 A 20180216; CN 107708869 B 20201222; JP 2017000952 A 20170105; JP 6646952 B2 20200214; KR 101972718 B1 20190823; KR 20180015739 A 20180213; WO 2016199652 A1 20161215

DOCDB simple family (application)

**EP 16807359 A 20160601**; CN 201680031236 A 20160601; JP 2015117042 A 20150609; JP 2016066293 W 20160601; KR 20187000409 A 20160601