

## Title (en)

ELECTRIC EXHAUST GAS TREATING METHOD AND ELECTRIC EXHAUST GAS TREATING DEVICE

## Title (de)

ELEKTRISCHES ABGASBEARBEITUNGSVERFAHREN UND ELEKTRISCHE ABGASBEARBEITUNGSVORRICHTUNG

## Title (fr)

PROCÉDÉ ET DISPOSITIF DE TRAITEMENT ÉLECTRIQUE DE GAZ D'ÉCHAPPEMENT

## Publication

**EP 2489843 A4 20141105 (EN)**

## Application

**EP 10823455 A 20101014**

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- JP 2010068089 W 20101014

## Abstract (en)

[origin: EP2489843A1] Problems in conventional exhaust gas treatment techniques for a diesel engine that use corona discharge are solved, and a method and equipment of electrical treatment for diesel engine exhaust gas are provided which can remove with high efficiency PM, particularly, SOF in exhaust gas of a diesel engine using a low-quality fuel equivalent or inferior to heavy fuel oil, and which can provide long-term stable performance. In an electrical exhaust gas treatment method for a large-displacement diesel engine that removes, by an electrical means, particulate matter mainly including insoluble organic fractions and soluble organic fractions contained in exhaust gas of a diesel engine that uses a low-quality fuel equivalent or inferior to heavy fuel oil, the particulate matter is removed by the electrical means after the temperature of the whole exhaust gas containing the particulate matter is lowered by 100 °C or more, preferably, 130 °C or more, to a temperature that is represented by a ratio R of exhaust gas temperature/fuel boiling point temperature of 0.85, or less by a gas cooling means.

## IPC 8 full level

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## CPC (source: EP KR)

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## Citation (search report)

- [YD] JP 2008019849 A 20080131 - FURUKATA MUNEKATSU
- [XYI] ARIANA I MADE ET AL: "REMOVAL OF MARINE DIESEL PARTICULATE MATTER BY ELECTROSTATIC PRECIPITATOR", INTERNATIONAL CONFERENCE ON ELECTROSTATIC PRECIPITATION ICESP X- AUSTRALIA 2006, 26 June 2006 (2006-06-26), pages Paper 4A2, XP055143132, Retrieved from the Internet <URL:http://www.isesp.org/ICESP X PAPERS/PDFS/Paper 4A2.pdf> [retrieved on 20140929]
- [A] ZHIDE XU ET AL: "Development Diesel Particulate Filter for Marine Diesel Engine -Characteristics of PM Collection in Electrostatic-Cyclone DPF", TRANSLATED FROM JOURNAL OF THE JIME VOL 44 NO. 2 PAGES 124-129, March 2009 (2009-03-01), XP055142824, Retrieved from the Internet <URL:http://www.mesj.or.jp/publication/award\_paper/ap\_papers/pdf/2009AP6.pdf> [retrieved on 20140925]
- See references of WO 2011046187A1

## Cited by

EP3872311A4; EP2998529A4; EP3871752A4; EP3871753A4

## Designated contracting state (EPC)

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