

Title (en)

METHOD AND CONTROL UNIT FOR ADJUSTING THE OPERATING VOLTAGE AND FOR CONTROLLING THE WEAR OF A DEVICE FOR THE ELECTROSTATIC SEPARATION OF PARTICLES IN GASEOUS STREAMS

Title (de)

VERFAHREN UND STEUERUNGSEINHEIT ZUR REGELUNG DER BETRIEBSSPANNUNG UND ZUR VERSCHLEISSKONTROLLE AN EINER VORRICHTUNG FÜR DIE ELEKTROSTATISCHE PARTIKELABSCHEIDUNG IN GASSTRÖMEN

Title (fr)

PROCEDE ET UNITE DE COMMANDE POUR REGULER UNE TENSION DE SERVICE ET POUR CONTROLER L'USURE D'UN DISPOSITIF POUR LA SEPARATION ELECTROSTATIQUE DES PARTICULES DANS DES FLUX GAZEUX

Publication

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Application

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Abstract (en)

[origin: WO2006000114A1] The invention relates to a method based on the measurement of the alternating current component of the operating voltage of the corona electrode (4), said component being caused by the excitation of the corona electrode to produce mechanical vibrations. The amplitude and frequency of the alternating current component then give information about the amplitude of the mechanical vibration and the approach of the electrode towards the inner wall of the flue gas conduit (1). The frequency permits the determination of a possible clogging of the corona electrode or the wear of material of said electrode. The two measured variables are thus suitable for use as guide variables for the control of the filter operation and the display of the condition of the electrode. The optimal operating voltage of the corona electrode can be maintained under changing conditions in the flue gas conduit, in order to guarantee the best possible purification of the waste gas. If the corona electrode or the flue gas conduit is clogged, an automatic cleaning process can be initiated. If the electrode is worn or defective, a fault signal can be generated.

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