Title (en)

AUXILIARY ELECTRODES FOR ENHANCED ELECTROSTATIC DISCHARGE

Title (de)

HILFSELEKTRODEN FÜR VERSTÄRKTE ELEKTROSTATISCHE ENTLADUNG

Title (fr)

ELECTRODES AUXILIAIRES POUR DÉCHARGE ÉLECTROSTATIQUE OPTIMISÉE

Publication

EP 2229686 A1 20100922 (EN)

Application

EP 08861959 A 20081217

Priority

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- US 1469407 P 20071218

Abstract (en)

[origin: US2009155090A1] In general, the present invention relates to methods and apparatuses that achieve high gas flow rates through the use of an electrostatic pump. According to some aspects, the present invention relates to additional, auxiliary electrodes that generate increased ion current at lower voltages, which leads to greater pumping power than a corona wind discharge. According to further aspects, the invention provides for a directional emission of the ions. This eliminates the back flow of ions and improves the electro-fluid power conversion efficiency and pumping performance. According to yet further aspects, the invention enables the electrodes to be fabricated directly on a dielectric substrate, making the system mechanically rugged and easily fabricated.

IPC 8 full level

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