

Title (en)
AUXILIARY ELECTRODES FOR ENHANCED ELECTROSTATIC DISCHARGE

Title (de)
HILFSELEKTRODEN FÜR VERSTÄRKT ELEKTROSTATISCHE ENTLADUNG

Title (fr)
ELECTRODES AUXILIAIRES POUR DÉCHARGE ÉLECTROSTATIQUE OPTIMISÉE

Publication
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Application
EP 08861959 A 20081217

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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.

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