

Title (en)

METHOD AND DEVICE FOR GENERATING A NON-ISOTHERMAL PLASMA JET

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG EINES NICHTISOTHERMISCHEN PLASMASTRAHLS

Title (fr)

PROCEDE ET DISPOSITIF POUR LA GENERATION D'UN JET DE PLASMA NON- ISOTHERMIQUE

Publication

**EP 2567599 B1 20160309 (FR)**

Application

**EP 11724269 A 20110504**

Priority

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Abstract (en)

[origin: WO2011138525A1] The invention relates to a method for generating an axisymmetric non-isothermal plasma jet by means of a high-voltage electrical discharge of a single-phase or three-phase direct or alternating current into a gas flow, wherein said discharge is initiated by a discharge plasma, propelled by an electromagnetic force and by the drag force exerted by the gas flow and localized at the ends of the electrodes, characterized in that the gas flow propelling the plasma of the discharge is stabilized and laminarized at all points of the resulting plasma jet, and to a device for using the method comprising, in particular, a gas propellant dispenser consisting of elements for the laminarization of the flow in a honeycomb system or an abruptly expanding system, wherein a system of magnetic fields forms the plasma cords and conduits for the introduction of the propulsion and rotation gas components of the propulsion gas flow.

IPC 8 full level

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