Title (en)

DÉVICE FOR EMITTING A PLASMA JET FROM THE ATMOSPHERIC AIR AT AMBIENT TEMPERATURE AND PRESSURE, AND USE OF SAID DEVICE

Title (de)

VORRICHTUNG ZUR AUSGABE EINES PLASMASTRAHLS AUS ATMOSPHÄRENLUFT BEI UMGEBUNGSTEMPERATUR UND DRUCK, UND VERWENDUNG DER VORRICHTUNG

Title (fr

DÍSPOSITIF D'ÉMISSION D'UN JET DE PLASMA À PARTIR DE L'AIR ATMOSPHÉRIQUE À TEMPÉRATURE ET PRESSION AMBIANTES ET UTILISATION D'UN TEL DISPOSITIF

Publication

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Application

EP 10745308 A 20100623

Priority

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- FR 0903156 A 20090629

Abstract (en)

[origin: WO2011001070A1] The invention relates to a device for emitting a plasma jet (10) at ambient pressure and temperature, including an electric-field generator capable of generating discharges between an anode assembly and a cathode assembly, wherein: The cathode assembly is shaped so as to define an inter-cathode dielectric space that extends inside the cathode assembly and is opposite at least one cathode surface of said cathode assembly, and has at least one cathode opening (5) extending outside the inter-cathode space, said cathode opening (5) being defined by at least one active edge (7) of the cathode surface, said active edge(s) (7) extending in a cathode opening plane (8), the anode assembly including at least one pointed portion that is oriented toward the outside of the inter-cathode space and is laterally and deeply placed relative to the cathode opening (5) of the cathode assembly. Said device is characterized in that the pointed portion is placed so as to extend up to the cathode opening plane (8), and so as to be capable of causing an emission of the plasma jet (10) that is spontaneously sprayed in a predetermined direction toward the outside of the inter-cathode space.

IPC 8 full level

H05H 1/24 (2006.01)

CPC (source: EP US)

H05H 1/471 (2021.05 - EP US); H05H 2245/32 (2021.05 - EP US)

Citation (search report)

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