

Title (en)

METHOD AND DEVICE FOR PLASMA TREATMENT OF MOVING METAL SUBSTRATES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR PLASMA-BEHANDLUNG METALLISCHER SUBSTRATE IM DURCHLAUF

Title (fr)

PROCEDE ET DISPOSITIF POUR TRAITER DES SUBSTRATS METALLIQUES AU DEFILE PAR PLASMA

Publication

**EP 1307607 A1 20030507 (FR)**

Application

**EP 01962488 A 20010806**

Priority

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Abstract (en)

[origin: EP1178134A1] Metallic substrate (1) is subjected to an electrical discharge (10), i.e. plasma, and a magnetic field between the substrate (1) and a counter-electrode (9). A confining magnetic induction field is created around the substrate so that electrical discharge is uniformly confined around the whole substrate by confinement of electrons liberated in the electrical discharge. Process for the treatment, especially cleaning and/or heating, of a metallic substrate (1) involves moving the metallic substrate (1) continuously in a vacuum chamber (3) having a treatment zone in which a electrical discharge (10), i.e. a plasma, and a magnetic field are produced in a gas maintained at below atmospheric pressure between the substrate (1), which acts as an electrode, and a counter-electrode (9). A confining magnetic induction field is produced around the whole substrate (1) such that the electrical discharge (10) is uniformly confined around the whole substrate in the treatment zone by confinement of electrons liberated in the electrical discharge. An Independent claim is given for a device used for implementation of the process.

IPC 1-7

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