

Title (en)

Method and device for adjusting the electrical power supply of a magnetron, and installation for treatment of thermoplastic containers applying same

Title (de)

Verfahren und Vorrichtung zur Regulierung der Stromversorgung eines Magnetrons und Anlage zur Behandlung von thermoplastischen Behältern, bei dem diese zum Einsatz kommen

Title (fr)

Procédé et dispositif de régulation d'alimentation électrique d'un magnétron et installation de traitement de récipients thermoplastiques qui en fait application

Publication

EP 1916877 B1 20100120 (FR)

Application

EP 07118496 A 20071015

Priority

FR 0609379 A 20061025

Abstract (en)

[origin: EP1916877A1] Controlling the power supply of a magnetron comprises determining and memorizing a magnetron efficiency value, measuring the anodic current, measuring the applied voltage, calculating the difference between the target microwave power and the product of the anodic current, the applied voltage and the magnetron efficiency value, and modifying the microwave power as a function of the target power, the calculated difference and a predetermined control rule. Independent claims are also included for: (1) device for controlling the power supply of a magnetron, comprising devices for performing the above operations; (2) installation for depositing a coating on a thermoplastic receptacle with the aid of a low-pressure plasma generated by excitation of a precursor gas with UHF radiation in a cylindrical vacuum cavity containing the receptacle, comprising a UHF generator and a UHF waveguide for connecting the generator to a window in the side wall of the cavity, where the UHF generator is a magnetron controlled as above.

IPC 8 full level

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Cited by

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