Title (en)

Device for gas excitation by means of a surface-wave plasma and gas treatment installation including such device

Title (de)

Vorrichtung zur Gasanregung durch oberflächenwellen-plasma und diese vorrichtung enthaltende gasanregungsanlage

Title (fr)

Dispositif d'excitation d'un gaz par plasma d'onde de surface et installation de traitement de gaz incorporant un tel dispositif

Publication

EP 0874537 A1 19981028 (FR)

Application

EP 98400974 A 19980421

Priority

FR 9705147 A 19970425

Abstract (en)

The gas excitation system is of the surfaguide(RTM) type and includes a hollow electrically conducting material structure (24) forming a wave guide. This structure is designed to be connected to a microwave generator and is fitted with a passage (38) designed to be traversed by a hollow dielectric tube (40) in which a gas to be excited circulates. The structure has also a wave concentration zone (30) designed to concentrate the microwave radiation produced by the generator towards the tube (40) during operation of the device. The system has in addition a sleeve (42,44) made from a reinforced electromagnetic material which is fixed to the structure (24) and which extends into the extension of the passage (38) so as to surround the hollow tube (40).

Abstract (fr)

Ce dispositif d'excitation d'un gaz, du type surfaguide, comprend une structure creuse (24) formant guide d'ondes, destinée à être raccordée à un générateur de micro-ondes et munie d'un passage (38) traversé par un tube creux (40) diélectrique dans lequel circule le gaz à exciter, et d'une zone (30) de concentration des ondes produites par le générateur vers le tube diélectrique. Il comporte en outre au moins un manchon (42,44) en matériau conducteur de blindage électromagnétique solidaire de ladite structure (24) et s'étendant dans le prolongement dudit passage (38) de manière à entourer ledit tube creux. <IMAGE>

IPC 1-7

H05H 1/46

IPC 8 full level

B01J 19/12 (2006.01); **H05H 1/46** (2006.01)

CPC (source: EP US)

H05H 1/46 (2013.01 - EP US)

Citation (search report)

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DOCDB simple family (application)

EP 98400974 A 19980421; CA 2235648 A 19980423; DE 69820518 T 19980421; FR 9705147 A 19970425; JP 11536998 A 19980424; TW 87105602 A 19980414; US 6665398 A 19980427; ZA 983172 A 19980415