

Title (en)

Microwave plasma torch, device comprising such a torch and production procedure for powder operating them.

Title (de)

Mikrowellenplasmabrenner, einen solchen Brenner aufweisende Anlage und sie verwendendes Puderproduktionsverfahren.

Title (fr)

Torche à plasma micro-onde, dispositif comportant une telle torche et procédé pour la fabrication de poudre les mettant en oeuvre.

Publication

EP 0296921 A1 19881228 (FR)

Application

EP 88401405 A 19880609

Priority

FR 8708096 A 19870610

Abstract (en)

Microwave plasma torch characterised in that it comprises at least one gas-intake duct (1, 2); a resonator cavity (3) forming, around the said duct, a sleeve open on the exit side of the said duct and comprising a lateral opening (4); a coaxial transition structure perpendicular to the sleeve comprising on the one hand an outer tube (5) connected to the lateral opening (4) of the sleeve and on the other hand an inner member (6) one of whose ends (20) is in contact with the said duct and whose other end is in contact with the outer surface of a waveguide (8) and carries a transition piece (7) disposed inside the waveguide (8); the said waveguide (8) for supplying microwave energy with rectangular cross-section and perpendicular to the coaxial structure (5, 6) being provided with an opening (27) wherein is connected the outer tube (5) of the said structure; means of supplying cladding gas in the waveguide (8) and/or the coaxial structure (5, 6) and/or the sleeve; possibly tuning means; and possibly means of igniting the plasma. <??>It also relates to a device and a method for manufacturing powder. <IMAGE>

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H05H 1/30

IPC 8 full level

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CPC (source: EP US)

H05H 1/30 (2013.01 - EP US); **H05H 1/46** (2013.01 - EP US)

Citation (search report)

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- [A] DE 3134501 A1 19830811 - CEBANKOV NIKOLAJ IVANOVIC [SU], et al
- [A] ELEKTRONISCHE RUNDSCHAU, vol. 13, no. 11, novembre 1959, pages 404-406; W. SCHMIDT: "Der Mikrowellen-Plasmabrenner"

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DOCDB simple family (application)

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