

Title (en)

Arrangement for coupling microwave energy to a leaky microwave line.

Title (de)

Vorrichtung zur Einbringung von Mikrowellenenergie mit einem offenen Mikrowellenleiter.

Title (fr)

Dispositif pour coupler de l'énergie micro-onde à une ligne micro-onde ouverte.

Publication

EP 0285020 A2 19881005 (DE)

Application

EP 88104822 A 19880325

Priority

DE 3711184 A 19870402

Abstract (en)

[origin: US4847460A] A microwave apparatus injects microwave energy into a receptacle that is at least partially transparent to microwave energy. The receptacle has a window of microwave transparent material. The apparatus includes at least one microwave transmitter and one open microwave guide which is connected to the microwave transmitter and which is situated in the immediate vicinity of the receptacle. The open microwave guide has a plurality of parallel rungs and forming a slow - wave structure of the strapped bar type. The microwave guide is of a symmetrical V-shape, and at the apex of the V it is at a smaller distance from the window than at its feed point. A microwave feeder is disposed at at least both ends of the open microwave guide.

Abstract (de)

Vorrichtung zur Einbringung von Mikrowellenenergie in einen mindestens teilweise für Mikrowellenenergie durchlässigen Behälter. Mindestens ein Mikrowellensender (21, 22) und ein an den Mikrowellensender angeschlossener offener Mikrowellenleiter (1) befinden sich in unmittelbarer Nachbarschaft des Behälters. Um die Längenausdehnung des durch die Mikrowellenenergie erzeugten Plasmas zu vergrößern und die Energieverteilung zu vergleichmäßigen, ist der offene Mikrowellenleiter (1) mindestens an seinen beiden Enden mit einer Mikrowellenzuleitung (17, 18; 24, 25) versehen.

IPC 1-7

H01P 5/12; H05B 6/70

IPC 8 full level

H01P 5/12 (2006.01); H05B 6/70 (2006.01)

CPC (source: EP US)

H01P 5/12 (2013.01 - EP US); H05B 6/70 (2013.01 - EP US); H05B 6/78 (2013.01 - EP US)

Cited by

FR2685821A1; EP0486943A1; US5173640A

Designated contracting state (EPC)

BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0285020 A2 19881005; EP 0285020 A3 19900404; DE 3711184 A1 19881020; US 4847460 A 19890711

DOCDB simple family (application)

EP 88104822 A 19880325; DE 3711184 A 19870402; US 7039987 A 19870707