

Title (en)

MICROWAVE TREATING APPARATUS, ESPECIALLY FOR COUPLING DEVICES OF AN ELECTROMAGNETIC WAVE TO AN ABSORBENT MATERIAL

Publication

EP 0122840 B1 19870902 (FR)

Application

EP 84400633 A 19840329

Priority

FR 8305428 A 19830401

Abstract (en)

[origin: EP0122840A1] 1. Treating apparatus for the transfer of electromagnetic energy from a microwave source to a material to be heated, in particular a slow wave type device co-operating with a coupling device between the microwave source and the material to be heated, possibly comprising a means for conveying said material to be heated, consisting of in particular gas fluid or liquid propulsing and sustaining means, wherein said coupling device comprises a principal multi dielectric structure presenting a dielectric permittivity gradient and radiating a damped wave in the presence of said material to be heated, the latter being positioned at a distance from this multi dielectric structure of less than one wavelength, the principal multi dielectric structure co-operating with one or several secondary multi dielectric structures, positioned at a distance from the principal structure of no greater than one wavelength and being excited by this structure in the presence of said material to be heated, said material to be heated having a dielectric permittivity greater than that of the immediately adjacent dielectric.

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IPC 8 full level

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CPC (source: EP)

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Cited by

FR2708481A1; EP0667732A1; US5536921A; FR2818086A1; FR2775552A1; US5481030A; US5591728A; US5608045A; US7026588B2; WO0249397A1; WO9503884A1

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