

Title (en)

Travelling-wave tube with a coupling arrangement between its delay line and external microwave circuits.

Title (de)

Wanderfeldröhre mit einer Kupplungsvorrichtung zwischen ihrer Verzögerungsleitung und den äusseren Mikrowellenschaltungen.

Title (fr)

Tube à onde progressive comportant un dispositif de couplage entre sa ligne à retard et des circuits hyperfréquences externes.

Publication

EP 0341107 A1 19891108 (FR)

Application

EP 89401031 A 19890414

Priority

FR 8805139 A 19880419

Abstract (en)

It includes a cylindrical sleeve (2) containing a delay line (1) and an arrangement for coupling between the delay line (1) and an external circuit (40) for extracting or injecting microwave energy. <??>This external circuit includes a transmission line (4) possessing an internal conductive core (5). <??>A conductive part (36) is placed at one end of the delay line (1). It possesses a coupling finger (35) projecting towards the inside of the sleeve (2) and brazed to the end (12) of the delay line (1). The conductive part (36) is brazed to the sleeve (2). <??>Coupling between the delay line (1) and the external circuit occurs between the part (36) and the internal conductive core (5) of the transmission line (4). This coupling is contactless, a narrow gap (37) being allowed between the outside surface of the part (36) situated on the coupling finger (35) side and the internal conductive core (5). <??>Applications to broadband travelling-wave power tubes. <IMAGE>

IPC 1-7

H01J 23/42; H01J 23/50

IPC 8 full level

H01J 23/40 (2006.01); **H01J 23/50** (2006.01)

CPC (source: EP US)

H01J 23/50 (2013.01 - EP US)

Citation (search report)

- [Y] DE 973327 C 19600121 - STANDARD ELEKTRIK LORENZ AG
- [Y] US 2636948 A 19530428 - PIERCE JOHN R
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- [AP] EP 0274950 A1 19880720 - THOMSON CSF [FR]

Designated contracting state (EPC)

DE FR GB IT

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