

Title (en)

FEED STRUCTURE FOR ELECTROMAGNETIC WAVEGUIDES

Title (de)

EINSPEISESTRUKTUR FÜR ELEKTROMAGNETISCHE HOHLLEITER

Title (fr)

STRUCTURE D'ALIMENTATION POUR GUIDES D'ONDES ELECTROMAGNETIQUES

Publication

**EP 1221181 A4 20030319 (EN)**

Application

**EP 00960224 A 20000904**

Priority

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Abstract (en)

[origin: WO0118901A1] The present invention relates to feed structures for electromagnetic waveguides, cavities, antennas and other structures. A "feed structure" is an arrangement for electrical conductors used to transfer RF energy between any transmission lines and a waveguide. There are problems associated with designing and manufacturing conventional feeds. The present invention overcomes these problems by directly coupling an integrated circuit incorporating an RF circuit element to a waveguide, cavity, antenna or other structure. Coupling is achieved by an aperture formed in a ground plane of the integrated circuit and connected to a transmission line linked to the RF circuit element.

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IPC 8 full level

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CPC (source: EP)

**H01P 5/107** (2013.01)

Citation (search report)

- [A] US 5202648 A 19930413 - MCCANDLESS JAY H [US]
- [A] US 4211987 A 19800708 - PAN JING-JONG [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 448 (E - 0983) 26 September 1990 (1990-09-26)
- [A] WEINREB S ET AL: "HIGH-GAIN 150-215-GHZ MMIC AMPLIFIER WITH INTEGRAL WAVEGUIDE TRANSITIONS", IEEE MICROWAVE AND GUIDED WAVE LETTERS, IEEE INC, NEW YORK, US, vol. 9, no. 7, July 1999 (1999-07-01), pages 282 - 284, XP000834807, ISSN: 1051-8207
- See references of WO 0118901A1

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