

Title (en)

Slot coupled micromachined waveguide antenna

Title (de)

Schlitzgekoppelte mikrogefertigte Hohlleiterantenne

Title (fr)

Antenne à guide d'onde micro-usiné à couplage à fente

Publication

**EP 1063723 A1 20001227 (EN)**

Application

**EP 99870129 A 19990622**

Priority

EP 99870129 A 19990622

Abstract (en)

The present invention relates to a device for emitting and/or receiving a signal in the millimetre wave range, characterised in that said device comprises a first metallic layer, a first insulating layer interposed between said first metallic layer and a substrate, said substrate comprising a cavity extending to said insulating layer, and having a second metallic layer at least covering the walls of said cavity and covering part of said insulating layer, said first metallic layer having a slot facing said cavity. <IMAGE>

IPC 1-7

**H01Q 21/00**; **H01Q 13/06**; **H01Q 13/18**

IPC 8 full level

**H01Q 13/06** (2006.01); **H01Q 13/18** (2006.01); **H01Q 21/00** (2006.01)

CPC (source: EP)

**H01Q 13/06** (2013.01); **H01Q 13/18** (2013.01); **H01Q 21/0087** (2013.01)

Citation (search report)

- [XA] US 5724049 A 19980303 - PARK PYONG K [US], et al
- [X] WO 9627913 A1 19960912 - VALTION TEKNILLINEN [FI], et al
- [E] EP 0939451 A1 19990901 - KYOCERA CORP [JP]
- [A] US 5414394 A 19950509 - GAMAND PATRICE [FR], et al
- [A] DE 4208058 A1 19930916 - DEUTSCHE AEROSPACE [DE]
- [A] WO 9847198 A2 19981022 - UNIV VIRGINIA [US], et al
- [X] VANDENBERG N L ET AL: "A BANDWIDTH ENHANCEMENT TECHNIQUE FOR MICROSTRIP FED SLOT ARRAYS", PROCEEDINGS OF THE ANTENNAS AND PROPAGATION SOCIETY ANNUAL MEETING,US,NEW YORK, IEEE, vol. -, pages 1824-1827, XP000239314, ISBN: 0-7803-0144-7
- [A] LUBECKE V M ET AL: "MICROMACHINING FOR TERAHERTZ APPLICATIONS", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES,US,IEEE INC. NEW YORK, vol. 46, no. 11, PART 02, pages 1821-1831, XP000785371, ISSN: 0018-9480

Cited by

CN110783685A; CN109478710A; EP3398230A4; WO2017117362A2; US11721887B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 1063723 A1 20001227**

DOCDB simple family (application)

**EP 99870129 A 19990622**