

Title (en)  
High-frequency switching device

Title (de)  
Hochfrequenz-Schaltvorrichtung

Title (fr)  
Dispositif de commutation haute fréquence

Publication  
**EP 1445820 A1 20040811 (DE)**

Application  
**EP 03026448 A 20031120**

Priority  
DE 10305302 A 20030210

Abstract (en)

The arrangement has a connecting line structure with an HF input for the HF signal, a low frequency input for a switching voltage and an HF output and at least two diode paths connected to the connecting line structure and each with a diode and line structure element. The line structure elements of the diode paths are spatially separated so that isolation between the line structure elements off the diode paths is greater than a defined threshold. The arrangement (100) has a connecting line structure (110) with an HF input (HF-E) for the HF signal, a low frequency input (NF-E) for a switching voltage and an HF output and at least two diode paths (120-1, 120-2) connected to the connecting line structure and each with a diode (120-1-2,120-2-2) and line structure element (120-1-1, 120-2-1). The line structure elements of the diode paths are spatially separated so that isolation between the line structure elements off the diode paths is greater than a defined threshold.

Abstract (de)

Die Erfindung betrifft eine Hochfrequenz-Schaltvorrichtung (100, 100') zum Schalten von HF-Signalen umfassend eine Verbindungsleitungsstruktur (110, 110') mit einem HF-Eingang (HF-E), einem HF-Ausgang (HF-A) und einem Niederfrequenzeingang (NF-E) zum Anlegen einer Schaltspannung und mit mindestens zwei Diodenpfaden (120-1, 120-2), welche jeweils eine Diode und ein Leitungsstrukturelement aufweisen. Um die Isolation zwischen den Leitungsstrukturelementen (120-1-1, 120-2-1) der Diodenpfade größer als einen vorgebbaren Isolationswert einzustellen, wird vorgeschlagen, die Leitungsstrukturelemente (120-1-1, 120-2-1) jeweils räumlich getrennt voneinander anzurorden. <IMAGE>

IPC 1-7  
**H01P 1/15**

IPC 8 full level  
**H01P 1/15** (2006.01)

CPC (source: EP)  
**H01P 1/15** (2013.01)

Citation (search report)

- [Y] GB 2121239 A 19831214 - STANDARD TELEPHONES CABLES LTD
- [Y] US 3402340 A 19680917 - TRYGVE RINGEREIDE
- [X] EP 0446050 A2 19910911 - SONY CORP [JP]
- [A] US 5283539 A 19940201 - SADHIR VIRENDER K [US], et al
- [XY] MANSOUR R R ET AL: "Analysis of microstrip T-junction and its application to the design of transfer switches", MICROWAVE SYMPOSIUM DIGEST, 1992., IEEE MTT-S INTERNATIONAL ALBUQUERQUE, NM, USA 1-5 JUNE 1992, NEW YORK, NY, USA,IEEE, US, 1 June 1992 (1992-06-01), pages 889 - 892, XP010063048, ISBN: 0-7803-0611-2
- [X] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 04 31 August 2000 (2000-08-31)
- [A] TEETER D ET AL: "Ka-band GaAs HBT PIN diode switches and phase shifters", MICROWAVE SYMPOSIUM DIGEST, 1994., IEEE MTT-S INTERNATIONAL SAN DIEGO, CA, USA 23-27 MAY 1994, NEW YORK, NY, USA,IEEE, 23 May 1994 (1994-05-23), pages 451 - 454, XP010586625, ISBN: 0-7803-1778-5

Cited by  
RU167594U1; EP2717473A4; RU2627541C1; RU2659302C1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1445820 A1 20040811; EP 1445820 B1 20080326**; AT E390722 T1 20080415; DE 10305302 A1 20040819; DE 50309461 D1 20080508

DOCDB simple family (application)  
**EP 03026448 A 20031120**; AT 03026448 T 20031120; DE 10305302 A 20030210; DE 50309461 T 20031120