

Title (en)

Cavity resonator HF-power distributor network

Title (de)

Hohlraumresonator HF-Leistung Verteilnetzwerk

Title (fr)

Réseau de répartition de puissance HF à résonateur d'espace creux

Publication

EP 2211420 A1 20100728 (DE)

Application

EP 10151262 A 20100121

Priority

DE 102009005502 A 20090121

Abstract (en)

The network (10a) has a cavity resonator (12a) that is rectangular, round, oval or spherical in shape. The height of the resonator is in the range of 0.5-2 mm. The resonator is filled with gas such as air. The resonator is filled with dielectric such as PVC or alumina. The resonator has a dielectric substrate and an external wall that is formed by a chain of vias. An input coupler (18a) is arranged between lines on a microwave substrate (14a) and the resonator. The network is operable as a line-distributed network or a line-collecting network in a high frequency range of 20-150 Giga Hertz. An independent claim is also included for an amplifier comprising an accumulative network.

Abstract (de)

Ein Netzwerk zur Verteilung oder Sammlung hochfrequenter elektromagnetischer Strahlung zwischen mindestens einer Einkoppeleinheit (18) und mindestens einer Auskoppeleinheit (20) ist als Hohlraumresonator (12) ausgebildet. Dadurch ergibt sich eine baulich sehr einfache Struktur, die zudem sehr geringe Verluste aufweist.

IPC 8 full level

H01P 5/12 (2006.01); **H01Q 21/00** (2006.01)

CPC (source: EP)

H01P 5/12 (2013.01); **H01Q 21/0043** (2013.01); **H01Q 21/065** (2013.01)

Citation (search report)

- [XYI] US 2008117114 A1 20080522 - HAZIZA DEDI DAVID [US]
- [Y] US 5821836 A 19981013 - KATEHI LINDA P B [US], et al
- [A] US 2007069965 A1 20070329 - SAREHRAZ MOHAMMED [US], et al
- [A] US 2002158722 A1 20021031 - MARUHASHI KENICHI [JP], et al
- [A] US 2006077102 A1 20060413 - MOHAMADI FARROKH [US]
- [A] EP 0476675 A1 19920325 - HUGHES AIRCRAFT CO [US]
- [A] US 5694134 A 19971202 - BARNES FRANK [US]
- [X] MEKKI BELAID ET AL: "Integrated Active Antenna Array Using Unidirectional Dielectric Radiators", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 48, no. 10, 1 October 2000 (2000-10-01), XP011038082, ISSN: 0018-9480

Cited by

EP2343778A1; CN112133618A; US9007268B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2211420 A1 20100728; DE 102009005502 A1 20100722; DE 102009005502 B4 20140703

DOCDB simple family (application)

EP 10151262 A 20100121; DE 102009005502 A 20090121