

Title (en)

Transmission line resonator with dielectric substrate having an etched structure on the ground plane

Title (de)

Planarer Leitungsresonator mit einer speziell geformten Aussparung in der Massefläche

Title (fr)

Résonateur planard à ligne de transmission et portion de masse gravée

Publication

EP 1170817 A1 20020109 (EN)

Application

EP 00125431 A 20001120

Priority

KR 20000038068 A 20000704

Abstract (en)

A resonator having a defected ground structure (DGS) coupling an electronic element at the position of a gap in a DGS cell formed on a ground plane of a dielectric substrate is provided, to thereby control the Q factor and the resonant frequency of the resonator smoothly. The resonator includes a dielectric substrate formed of a dielectric material, a ground plane having an etched portion including a gap forming an electric field density portion on either inner side, with a conductive film coated on one surface of the dielectric substrate, a transmission line coated at the gap position on the surface opposing the ground plane on the dielectric substrate, to thereby transmit a signal, and an electronic element whose either end is connected with either end of the ground plane. <IMAGE>

IPC 1-7

H01P 1/203; **H01P 7/08**; **H01P 1/15**

IPC 8 full level

H01P 7/10 (2006.01); **H01P 1/15** (2006.01); **H01P 1/203** (2006.01); **H01P 7/08** (2006.01)

CPC (source: EP KR)

H01P 1/15 (2013.01 - EP); **H01P 1/2005** (2013.01 - EP); **H01P 1/2039** (2013.01 - EP); **H01P 7/082** (2013.01 - EP); **H01P 7/10** (2013.01 - KR)

Citation (search report)

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Designated contracting state (EPC)

DE FI FR GB SE

DOCDB simple family (publication)

EP 1170817 A1 20020109; KR 100349571 B1 20020824; KR 20020004314 A 20020116

DOCDB simple family (application)

EP 00125431 A 20001120; KR 20000038068 A 20000704