

Title (en)

Device for disrupting a propagation of electromagnetic waves and method for manufacturing same

Title (de)

Vorrichtung zum Verhindern einer Ausbreitung von elektromagnetischen Wellen und ihr Herstellungsprozess

Title (fr)

Dispositif de perturbation d'une propagation d'ondes électromagnétiques et son procédé de fabrication

Publication

EP 2808946 B1 20180509 (FR)

Application

EP 14169886 A 20140526

Priority

FR 1354998 A 20130531

Abstract (en)

[origin: US2014354502A1] An electromagnetic wave propagation disruption device with a metamaterial structure including: a plurality of conductive elements arranged on a top face of a substrate; a plurality of interconnection networks electrically interconnecting at least some of these conductive elements, wherein these networks are not electrically connected to each other. At least two of these networks are dimensioned differently to each other, thus involving that distances between interconnected conductive elements are different from one network to another, to generate phase shifts, between the conductive elements interconnected thereby, different from one network to the other. A ground plane with holes is arranged on a bottom face of the substrate and metallic vias are formed in the substrate, each of them including an upper end in contact with a conductive elements and a lower end arranged facing one of the holes of the ground plane, with no electrical contact with the ground plane.

IPC 8 full level

H01Q 15/00 (2006.01); **H01Q 1/52** (2006.01)

CPC (source: EP US)

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Citation (examination)

US 2010252319 A1 20101007 - CHO WON WOO [KR], et al

Cited by

CN111600129A; CN114497932A; EP3605734A1; FR3084779A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2808946 A1 20141203; **EP 2808946 B1 20180509**; FR 3006505 A1 20141205; FR 3006505 B1 20170210; US 2014354502 A1 20141204; US 9419335 B2 20160816

DOCDB simple family (application)

EP 14169886 A 20140526; FR 1354998 A 20130531; US 201414291322 A 20140530