

Title (en)

COMPACT, MULTIBAND AND OPTIONALLY RECONFIGURABLE HIGH-IMPEDANCE SURFACE DEVICE AND ASSOCIATED PROCESS

Title (de)

KOMPAKTE MEHRBAND- UND OPTIONAL REKONFIGURIERBARE HOCHOHMIGE OBERFLÄCHENVORRICHTUNG UND ZUGEHÖRIGES VERFAHREN

Title (fr)

DISPOSITIF DE SURFACE À HAUTE IMPÉDANCE COMPACT, MULTIBANDES ET ÉVENTUELLEMENT RECONFIGURABLE, ET PROCÉDÉ ASSOCIÉ

Publication

EP 3227963 B1 20180905 (FR)

Application

EP 15808741 A 20151126

Priority

- FR 1461962 A 20141205
- FR 2015053220 W 20151126

Abstract (en)

[origin: WO2016087749A1] A high-impedance surface device (1) comprises at least two separate, substantially cylindrical compartments (2r24) filled with a dielectric material, having inside surfaces in an electrically conductive material, and each having, at one end, a single aperture (3), these apertures (3) being oriented on a given side and covered with at least one periodic structure of electrically conductive patterns (4) in order to form electromagnetic resonators, at least two of these resonators having different resonant wavelengths. These compartments (2i-24) are separated from one another by a distance smaller than the shortest resonant wavelength, and the periodic structure has a spatial period shorter than half this shortest resonant wavelength.

IPC 8 full level

H01Q 15/00 (2006.01); **H01P 1/20** (2006.01); **H01Q 1/52** (2006.01); **H01Q 5/00** (2015.01); **H05K 1/02** (2006.01)

CPC (source: EP IL US)

H01Q 1/521 (2013.01 - US); **H01Q 1/523** (2013.01 - EP IL US); **H01Q 5/00** (2013.01 - EP IL US); **H01Q 15/004** (2013.01 - US);
H01Q 15/006 (2013.01 - EP IL US); **H01Q 15/0066** (2013.01 - US); **H01Q 15/0086** (2013.01 - EP IL US)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2016087749 A1 20160609; CA 2967732 A1 20160609; CA 2967732 C 20221213; EP 3227963 A1 20171011; EP 3227963 B1 20180905;
ES 2694280 T3 20181219; FR 3029694 A1 20160610; FR 3029694 B1 20161209; IL 252085 A0 20170731; IL 252085 B 20210531;
US 10305194 B2 20190528; US 2017365931 A1 20171221

DOCDB simple family (application)

FR 2015053220 W 20151126; CA 2967732 A 20151126; EP 15808741 A 20151126; ES 15808741 T 20151126; FR 1461962 A 20141205;
IL 25208517 A 20170503; US 201515532944 A 20151126