

Title (en)  
CONTROLLABLE MULTIFUNCTIONAL FREQUENCY SELECTIVE SURFACE

Title (de)  
STEUERBARE MULTIFUNKTIONELLE FREQUENZSELEKTIVE OBERFLÄCHE

Title (fr)  
SURFACE SÉLECTIVE EN FRÉQUENCE COMMANDABLE ET MULTIFONCTIONNELLE

Publication  
**EP 3485534 B1 20210721 (FR)**

Application  
**EP 17737819 A 20170712**

Priority  
• FR 1601100 A 20160713  
• EP 2017067600 W 20170712

Abstract (en)  
[origin: WO2018011294A1] This device comprises a substrate, a network of elementary conductive patterns (8) printed on a surface of said substrate, and a network of coupling components (12, 12a, 12b), each connecting two adjacent elementary conductive patterns (8) and having a modifiable capacitance. The device comprises a control assembly for selectively controlling the value of the capacitances of groups (20a, 20b) of coupling components (12, 12a, 12b) according to a first band-stop mode, in which the capacitance of the assembly of groups (20a, 20b) is fixed at a given value, and a second band-pass mode, in which the capacitance of the coupling components (12, 12a, 12b) of a first assembly of groups (20a) is fixed at a first value, and the capacitance of the coupling components (12, 12a, 12b) of a second assembly (20b) of groups, complementary to the first assembly, is fixed at a second value.

IPC 8 full level  
**H01Q 15/00** (2006.01)

CPC (source: EP)  
**H01Q 15/002** (2013.01)

Citation (examination)  
• US 2011210903 A1 20110901 - SARABANDI KAMAL [US], et al  
• GB 689089 A 19530318 - VICKERS ELECTRICAL CO LTD  
• BAYATPUR F ET AL: "A Tunable Metamaterial Frequency-Selective Surface With Variable Modes of Operation", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, PLENUM, USA, vol. 57, no. 6, 1 June 2009 (2009-06-01), pages 1433 - 1438, XP011257280, ISSN: 0018-9480  
• BAYATPUR F ET AL: "Single-Layer High-Order Miniaturized-Element Frequency-Selective Surfaces", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, PLENUM, USA, vol. 56, no. 4, 1 April 2008 (2008-04-01), pages 774 - 781, XP011206148, ISSN: 0018-9480

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 2018011294 A1 20180118**; EP 3485534 A1 20190522; EP 3485534 B1 20210721; ES 2884355 T3 20211210; FR 3054044 A1 20180119; FR 3054044 B1 20190830

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**EP 2017067600 W 20170712**; EP 17737819 A 20170712; ES 17737819 T 20170712; FR 1601100 A 20160713