

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

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