

Title (en)

PHASED ANTENNA ARRAY WITH PERFORATED AND AUGMENTED ANTENNA ELEMENTS

Title (de)

PHASENGESTEUERTE GRUPPENANTENNE MIT PERFORIERTEN UND ERWEITERTEN ANTENNENELEMENTEN

Title (fr)

RÉSEAU D'ANTENNES À COMMANDE DE PHASE AVEC ÉLÉMENTS D'ANTENNE PERFORÉS ET AUGMENTÉS

Publication

EP 4210171 A1 20230712 (EN)

Application

EP 23150513 A 20230105

Priority

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Abstract (en)

Systems, devices, and methods related to antenna elements with perforations and augmentations are provided. An example patch antenna structure includes a first conductive patch on a first layer of the structure, where the first conductive patch includes one or more perforations at a periphery of a first side of the first conductive patch, and one or more extended conductive portions at a second side of the first conductive patch, the second side opposite the first side; a ground plane on a ground layer of the structure, the ground layer spaced apart from the first layer; and a first signal feed to couple a signal to the first conductive patch. In an example, an individual extended conductive portion of the one or more extended conductive portions may compensate a radiation pattern associated with a corresponding one of the one or more perforations.

IPC 8 full level

H01Q 9/04 (2006.01); **H01Q 1/52** (2006.01); **H01Q 3/26** (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP)

H01Q 1/526 (2013.01); **H01Q 9/0407** (2013.01); **H01Q 3/26** (2013.01); **H01Q 21/06** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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