

Title (en)

An antenna element, an interconnect, a method and an antenna array

Title (de)

ANTENNENELEMENT, VERBINDUNG, VERFAHREN UND ANTENNENARRAY

Title (fr)

ÉLÉMENT D'ANTENNE, INTERCONNEXION, PROCÉDÉ ET RÉSEAU D'ANTENNES

Publication

**EP 3059803 A1 20160824 (EN)**

Application

**EP 15305252 A 20150219**

Priority

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Abstract (en)

An antenna element comprising a first conductive radiating surface mounted at a predefined distance from a surface plane of a ground plate, a second conductive radiating surface mounted at substantially the same predefined distance from the surface plane of the ground plate as the first conductive element, the second conductive radiating surface separated from the first conductive radiating surface by a gap of a predefined width, and at least one conductive interconnect coupling the two conductive radiating surfaces and configured to introduce substantially no additional phase shift at the fundamental resonant frequency of the overall antenna element comprising the conductive radiating surfaces and the gap in a signal traveling from one conductive radiating surface to the other conductive radiating surface via the conductive interconnect, and a phase shift of substantially 180° at the first harmonic frequency of the overall antenna element comprising the conductive radiating surfaces and the gap for a signal traveling from one conductive radiating surface to the other conductive radiating surface.

IPC 8 full level

**H01Q 9/04** (2006.01); **H01Q 5/321** (2015.01); **H01Q 5/378** (2015.01); **H01Q 19/00** (2006.01)

CPC (source: EP)

**H01Q 5/321** (2015.01); **H01Q 5/378** (2015.01); **H01Q 9/0407** (2013.01); **H01Q 19/005** (2013.01); **H01Q 1/38** (2013.01)

Citation (search report)

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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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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