

Title (en)

Antenna for circular polarisation with a conductive base

Title (de)

Antenne für zirkulare Polarisation mit einer leitenden Grundfläche

Title (fr)

Antenne destinée à la polarisation circulaire et dotée d'une surface de base conductrice

Publication

**EP 2256864 B1 20170809 (DE)**

Application

**EP 10005480 A 20100527**

Priority

DE 102009023514 A 20090530

Abstract (en)

[origin: EP2256864A1] The antenna has a slot radiators provided with a longitudinal extension unit along a sectional line between a symmetric level and an electrical conducting base surface (2) with a slot radiator-connection location (7). The slot radiators and an electrical dipole radiator are connected with a dipole-feeder line (6) via a distributor network (13) with an antenna-connection point (12) according to the quantity and phase in a manner such that circular polarization is enabled in a distant field at a frequency, on which the slot and dipole radiators are coordinated with each other.

IPC 8 full level

**H01Q 9/28** (2006.01); **H01Q 13/10** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP US)

**H01Q 9/28** (2013.01 - EP US); **H01Q 13/10** (2013.01 - EP US); **H01Q 21/24** (2013.01 - EP US)

Citation (examination)

- R. COX ET AL: "Circularly polarized phased array antenna element", IRE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol. 18, no. 6, 1 November 1970 (1970-11-01), USA, pages 804 - 807, XP055254617, ISSN: 0096-1973, DOI: 10.1109/TAP.1970.1139801
- PANTSIOS F A: "NEW ELEMENTS THAT PROVIDE PATTERN VERSATILITY IN COAX AND WAVESTAR ANTENNAS", IEEE TRANSACTIONS ON BROADCASTING, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 36, no. 3, 1 September 1990 (1990-09-01), pages 219 - 225, XP000161664, ISSN: 0018-9316, DOI: 10.1109/11.59848
- AZADEGAN R ET AL: "A novel approach for miniaturization of slot antennas", IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 51, no. 3, 1 March 2003 (2003-03-01), pages 421 - 429, XP011096793, ISSN: 0018-926X, DOI: 10.1109/TAP.2003.809853
- FILIPOVIC D S ET AL: "A thin broadband cavity-backed slot spiral antenna for automotive applications", IEEE ANTENNAS AND PROPAGATION SOCIETY INTERNATIONAL SYMPOSIUM. 2001 DIGEST. APS. BOSTON, MA, JULY 8 - 13, 2001; [IEEE ANTENNAS AND PROPAGATION SOCIETY INTERNATIONAL SYMPOSIUM], NEW YORK, NY : IEEE, US, 8 July 2001 (2001-07-08), pages 414 - 417vol.1, XP032405022, ISBN: 978-0-7803-7070-8, DOI: 10.1109/APS.2001.958879

Cited by

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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 SE SI SK SM TR

DOCDB simple family (publication)

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DOCDB simple family (application)

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