

Title (en)

Reflecting surface array and antenna comprising such a reflecting surface

Title (de)

Reflektor und Antenne die einen solchen Reflektor umfasst

Title (fr)

Réseau réflecteur et antenne comportant un tel réseau réflecteur

Publication

EP 2175523 B1 20190612 (FR)

Application

EP 09171108 A 20090923

Priority

FR 0805530 A 20081007

Abstract (en)

[origin: EP2175523A1] The array has individual radiating elements arranged according to periodic pattern, where the elements form reflecting surface (14). The elements are realized in planar technology, and have same geometric shape e.g. hexagon shape, and same peripheral circumferential dimension. Two of the adjacent radiating elements (7, 8) have an internal structure progressively changing from one of the radiating elements to other adjacent radiating element. The radiating elements have metal patch type and radiating aperture type radiating structure.

IPC 8 full level

H01Q 19/10 (2006.01); **H01Q 3/46** (2006.01); **H01Q 15/00** (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP KR US)

H01Q 3/46 (2013.01 - EP US); **H01Q 13/10** (2013.01 - KR); **H01Q 15/002** (2013.01 - EP US); **H01Q 19/10** (2013.01 - KR);
H01Q 19/104 (2013.01 - EP US); **H01Q 21/00** (2013.01 - KR); **H01Q 21/061** (2013.01 - EP US)

Citation (examination)

- WO 2007052112 A1 20070510 - CENTRE NAT RECH SCIENT [FR], et al
- JAY GUO Y ET AL: "PHASE CORRECTING ZONAL REFLECTOR INCORPORATING RINGS", IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 43, no. 4, 1 April 1995 (1995-04-01), pages 350 - 355, XP000496265, ISSN: 0018-926X, DOI: 10.1109/8.376031
- TRAMPUZ C ET AL: "Design, Analysis and Measurements of Reflected Phased Array Microstrip Antennas at Ka-band, using Hollow Phasing", RADAR CONFERENCE, 2006. 3RD EUROPEAN, IEEE, PI, 1 September 2006 (2006-09-01), pages 57 - 60, XP031005982, ISBN: 978-2-9600551-7-7
- HARISH RAJAGOPALAN ET AL: "Reconfigurable reflectarray element characterization", ANTENNAS AND PROPAGATION, 2006. EUCAP 2006. FIRST EUROPEAN CONFERENCE ON, IEEE, PISCATAWAY, NJ, USA, 6 November 2006 (2006-11-06), pages 1 - 6, XP031393344, ISBN: 978-92-9092-937-6

Cited by

EP2267843A1; EP2571098A1; FR2980044A1; EP2436085A4; US2022085515A1; US11646500B2; US9647336B2; WO2010138731A1

Designated contracting state (EPC)

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)

EP 2175523 A1 20100414; EP 2175523 B1 20190612; CA 2681548 A1 20100407; CA 2681548 C 20170321; CN 101714695 A 20100526;
CN 101714695 B 20150610; ES 2738531 T3 20200123; FR 2936906 A1 20100409; FR 2936906 B1 20111125; JP 2010093811 A 20100422;
JP 5589225 B2 20140917; KR 101528938 B1 20150615; KR 20100039264 A 20100415; RU 2009137020 A 20110420;
RU 2520370 C2 20140627; US 2010085272 A1 20100408; US 8319698 B2 20121127

DOCDB simple family (application)

EP 09171108 A 20090923; CA 2681548 A 20091005; CN 200910174515 A 20090928; ES 09171108 T 20090923; FR 0805530 A 20081007;
JP 2009232562 A 20091006; KR 20090094804 A 20091006; RU 2009137020 A 20091006; US 57349909 A 20091005