

Title (en)

ANTENNA SYSTEM FOR CIRCULAR POLARISED SATELLITE RADIO SIGNALS ON A VEHICLE

Title (de)

ANTENNENANORDNUNG FÜR ZIRKULAR POLARISIERTE SATELLITENFUNKSIGNALE AUF EINEM FAHRZEUG

Title (fr)

DISPOSITIF D'ANTENNE POUR SIGNAUX SATELLITES POLARISÉS CIRCULAIREMENT SUR UN VÉHICULE

Publication

**EP 3474374 B1 20210526 (DE)**

Application

**EP 18201246 A 20181018**

Priority

DE 102017009758 A 20171019

Abstract (en)

[origin: JP2019092151A] To provide an antenna structure for receiving a circularly polarized satellite radio signal having a free space wavelength  $\lambda$  and a frequency  $f$ , which includes at least one circularly polarized satellite receiving antenna located above a conductive base plane. SOLUTION: A circularly polarized satellite receiving antenna 2 is provided with a waveguide 4 whose outer shape is inscribed in a circle K with a relative antenna radius  $ra/\lambda < 0.15$  around a phase center PZ. The waveguide includes a horizontal electrical conductor having two conductor ends, which are guided over the waveguide length  $L_d$  at a waveguide height above a conductive base surface 3, angled at the two conductor ends, and respectively extend from the two conductor ends as vertical conductors towards the conductive base surface to be electrically conductively connected to the conductive base surface. SELECTED DRAWING: Figure 1a

IPC 8 full level

**H01Q 1/32** (2006.01); **H01Q 19/28** (2006.01); **H01Q 9/04** (2006.01)

CPC (source: EP US)

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