

Title (en)

Horn array antenna for dual linear polarization

Title (de)

Horngruppenantenne mit zwei linearen Polarisationen

Title (fr)

Réseau d'antennes en cornet à deux polarisations linéaires

Publication

EP 2287969 A1 20110223 (EN)

Application

EP 10188071 A 20070202

Priority

- EP 07002351 A 20070202
- KR 2006005368 W 20061208

Abstract (en)

A horn array antenna (1) for dual linear polarization receiving a first polarization wave and a second polarization wave comprises a plurality of horns (10) to which a mixed wave of the first polarization wave and the second polarization wave enters; a plurality of polarization filtering units (20) provided in each of the horns to separate the incident mixed wave into the first and second polarization waves; a first polarization guide (30) which guides the first polarization waves separated at the polarization filtering units; and a second polarization guide (50) which guides the second polarization waves separated at the polarization filtering units. An upper portion of each polarization filtering unit is formed as a quadrilateral space and each polarization filtering unit has four walls including a first, second, third and fourth walls. A stepped portion (25) is extended from a lower portion of the first wall to an interior of the polarization filtering unit, whereby a lower portion of the polarization filtering unit is formed as a quadrilateral space with a narrower width than that of the upper portion. An extended portion is formed on an upper portion of the stepped portion and a first polarization inlet is formed on the second wall opposite to the first wall to provide the first polarization wave to the first polarization guide.

IPC 8 full level

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Citation (search report)

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