

Title (en)
L-BAND ANTENNA FOR MOBILE SATELLITE BROADCASTING

Publication
EP 0195356 A3 19871021 (DE)

Application
EP 86103264 A 19860311

Priority
DE 3508929 A 19850313

Abstract (en)
[origin: EP0195356A2] A slotted tube antenna is arranged vertically with respect to a highly conductive reflective plane to produce a conical, substantially circular-polarised polar diagram for a mobile L-band satellite radio; in this case, the cylindrical antenna tube, which is arranged vertically with respect to the reflective plane and has a specific length, is excited as a vertically polarised linear emitter, while at the same time, but separately therefrom, a longitudinal slot of predetermined length designed in the cylindrical antenna tube is excited as a horizontally polarised dipole at a specific height above the reflective plane. By suitable dimensioning of the antenna tube and of the slot designed therein, and by suitable arrangement of the antennal centre of gravity above the highly conductive reflective plane, an overall circular-polarised emitter is produced having an optimum radiation characteristic for mobile satellite radio, with a circular polar diagram in the azimuth plane and a beam in the elevation plane with maximum radiation of the main lobe at an elevation angle of approximately 30 DEG , which is satisfactory, for example, for the conditions in Europe.
<IMAGE>

IPC 1-7
H01Q 9/30; **H01Q 13/12**; **H01Q 21/24**

IPC 8 full level
H01Q 9/30 (2006.01); **H01Q 13/12** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP)
H01Q 9/30 (2013.01); **H01Q 13/12** (2013.01); **H01Q 21/24** (2013.01)

Citation (search report)
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• [A] US 2727232 A 19551213 - PRYGA STANLEY A
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