

Title (en)
Antenna module

Title (de)
Antennenmodul

Title (fr)
Module d'antenne

Publication
EP 1619752 B1 20140402 (DE)

Application
EP 05015079 A 20050712

Priority
DE 102004035064 A 20040720

Abstract (en)
[origin: EP1619752A1] An antenna module for GHz-frequencies has a lower patch antenna (10) with a lower substrate (11) made of a dielectric material, a lower lambda/2-structure form of the lower substrate (11), and a lower metallization (13) formed on the bottom face of the lower substrate (11). An upper lambda/2-structure is formed on the upper face of the upper substrate (21) for satellite GHz-range reception, and a lower antenna tap (14) from the lower lambda/2 antenna structure is provided through the lower substrate (11).

IPC 8 full level
H01Q 1/32 (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/40** (2015.01); **H01Q 9/04** (2006.01); **H01Q 21/28** (2006.01)

CPC (source: EP US)
H01Q 1/3275 (2013.01 - EP US); **H01Q 5/40** (2015.01 - EP US); **H01Q 9/0407** (2013.01 - EP US); **H01Q 9/0414** (2013.01 - EP US);
H01Q 21/28 (2013.01 - EP US)

Citation (examination)

- US 6087990 A 20000711 - THILL KEVIN M [US], et al
- EP 0521384 A1 19930107 - BALL CORP [US]
- JAMES J R; HALL P S: "Handbook of microstrip antennas, PASSAGE", 1 January 1989 (1989-01-01), PETER PEREGRINUS LTD, LONDON, GB, pages 318 - 319, XP002266113

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WO2009133523A1; CN103403961A; KR101540223B1; EP1936736A1; US7587183B2; US9553365B2; US7928909B2; US7936306B2; WO2009065806A1; WO2012123125A1; US7277056B1; US7528780B2; US7405700B2; US9093750B2; US9270019B2; WO2010031459A1; US8111196B2; US7489280B2

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 1619752 A1 20060125; EP 1619752 B1 20140402; DE 102004035064 A1 20060216; US 2006220970 A1 20061005; US 2006273969 A1 20061207; US 2007210967 A1 20070913; US 7295167 B2 20071113; US 7489280 B2 20090210

DOCDB simple family (application)
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