

Title (en)

Modularized planar antenna structure

Title (de)

Modularisierte planare Antennenstruktur

Title (fr)

Structure d'antenne planaire modularisée

Publication

**EP 1976054 A1 20081001 (EN)**

Application

**EP 07006176 A 20070326**

Priority

EP 07006176 A 20070326

Abstract (en)

A modularized planar antenna structure electrically connected to a main circuit board (5) of an electronic device, the modularized planar antenna structure comprising: - an antenna unit (1) comprising a base (11), a radiation metal plate (12) on an upper face of the base (11), a ground metal plate (13) on bottom face of the base, the radiation metal plate (12) electrically connected to a signal feeder (15) passing through the base (11) and the ground metal plate (13); - a circuit board (3) electrically connected to end of the signal feeder (15); - a connection unit (2) connected to the antenna unit (1) and the circuit board (3) such that the ground metal plate (13) is perpendicular to the circuit board (3); and - a cover (4) assembled to the circuit board (3) to protect electronic components on the circuit board (3) from electromagnetic interference or the like. When the modularized planar antenna structure is assembled to the main circuit board (5) of the electronic device, the circuit board (3) can be directly assembled to the main circuit board (5) by soldering or by means of screws and the antenna unit points toward zenith direction to receive satellite signal.

IPC 8 full level

**H01Q 1/24** (2006.01); **H01Q 9/04** (2006.01); **H01Q 23/00** (2006.01)

CPC (source: EP)

**H01Q 1/243** (2013.01); **H01Q 9/0407** (2013.01); **H01Q 23/00** (2013.01)

Citation (search report)

- [X] EP 0469779 A2 19920205 - SONY CORP [JP]
- [X] EP 1189304 A2 20020320 - SONY CORP [JP]
- [X] EP 1445827 A1 20040811 - FUJITSU LTD [JP]
- [X] US 2005007281 A1 20050113 - FURUYA MASAHIRO [JP]
- [A] EP 1079463 A2 20010228 - RANGESTAR INTERNAT CORP [US]

Cited by

CN109755756A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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