

Title (en)

ANTENNA PACKAGE FOR A MILLIMETRE WAVE INTEGRATED CIRCUIT

Title (de)

ANTENNENPAKET FÜR EINE INTEGRIERTE MILLIMETERWELLENSCHALTUNG

Title (fr)

BOÎTIER D'ANTENNE POUR CIRCUIT INTÉGRÉ À ONDES MILLIMÉTRIQUES

Publication

**EP 3414791 B1 20201223 (EN)**

Application

**EP 16747874 A 20160720**

Priority

EP 2016067321 W 20160720

Abstract (en)

[origin: WO2018014951A1] The present invention provides an antenna package 100 and a manufacturing method thereof. The antenna package 100 comprises an antenna 101 with an embedded antenna port 102. The antenna 101 has an antenna port side and an antenna radiation side. A semiconductor chip 103 is provided on the antenna port side of the antenna 101. The chip 103 comprises coupling elements for coupling radio frequency signals from a top side of the chip 103 to the antenna port 102. These coupling elements comprise a matching network including a high-impedance microstrip line 104 and a ground window 105 on the top side of the chip 103, a resonant dielectric cavity 106 within the chip 103, and a metal coupling slot 107 facing the antenna port 102 on a bottom side of the chip 103.

IPC 8 full level

**H01Q 1/22** (2006.01)

CPC (source: EP)

**H01Q 1/2283** (2013.01)

Cited by

US2022247065A1; US11901608B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2018014951 A1 20180125**; EP 3414791 A1 20181219; EP 3414791 B1 20201223

DOCDB simple family (application)

**EP 2016067321 W 20160720**; EP 16747874 A 20160720