Title (en)

DEVICE FOR TRANSFERRING SIGNALS FROM A METAL HOUSING

Title (de

VORRICHTUNG ZUR ÜBERTRAGUNG VON SIGNALEN AUS EINEM METALL-GEHÄUSE

Title (fr)

DISPOSITIF POUR LE TRANSFERT DE SIGNAUX DEPUIS UN BOÎTIER MÉTALLIQUE

Publication

EP 3231035 A1 20171018 (DE)

Application

EP 15791280 A 20151103

Priority

- DE 102014118391 A 20141211
- EP 2015075542 W 20151103

Abstract (en

[origin: WO2016091481A1] The invention relates to a device for transferring signals from at least one housing opening (2) of a housing (3), which is metallic at least in part, by means of electromagnetic waves (4) of at least one specific wavelength, comprising a transmitting/receiving unit (5) arranged in the housing (3) for generating and receiving the electromagnetic waves (4), at least one primary antenna (6) arranged in the housing (3) for decoupling the generated electromagnetic waves (4) of the transmitting/receiving unit (5) and for coupling and transferring received electromagnetic waves (4) to the transmitting/receiving unit (5), a first secondary antenna (7) for receiving the electromagnetic waves decoupled from the primary antenna (6), wherein the first secondary antenna is arranged within the housing (3) on the housing opening (2), a second secondary antenna (8) for receiving the electromagnetic waves (4) transferred from outside the housing (3), wherein the second secondary antenna (8) is arranged outside the housing (3) on the housing opening (2), wherein a reflection point (9) is arranged between the first and second secondary antennas (7, 8), such that an impedance jump occurs between the first and second secondary antennas (7, 8).

IPC 8 full level

H01Q 1/22 (2006.01)

CPC (source: CN EP US)

H01Q 1/2233 (2013.01 - US); H01Q 1/225 (2013.01 - CN EP US); H01Q 1/40 (2013.01 - EP); H01Q 1/521 (2013.01 - US); H01Q 9/36 (2013.01 - EP); H01Q 1/1214 (2013.01 - US)

Citation (search report)

See references of WO 2016091481A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016091481 A1 20160616; CN 107004941 A 20170801; CN 107004941 B 20191122; DE 102014118391 A1 20160616; EP 3231035 A1 20171018; EP 3231035 B1 20210811; US 10236555 B2 20190319; US 2018034129 A1 20180201

DOCDB simple family (application)

EP 2015075542 W 20151103; CN 201580066804 A 20151103; DE 102014118391 A 20141211; EP 15791280 A 20151103; US 201515534724 A 20151103