

Title (en)

WIRELESS COMMUNICATION DEVICE INCLUDING A PLURALITY OF HORN ANTENNAS ON A PRINTED CIRCUIT BOARD (PCB), ASSOCIATED MANUFACTURING METHOD AND USE

Title (de)

DRAHTLOSE KOMMUNIKATIONSVORRICHTUNG, DIE EINE MEHRZAHL VON HORNANTENNEN AUF EINER LEITERPLATTE (PCB) UMFASST, ENTSPRECHENDES HERSTELLUNGS- UND VERWENDUNGSVERFAHREN

Title (fr)

DISPOSITIF DE COMMUNICATION SANS FIL INTEGRANT UNE PLURALITE D'ANTENNES-CORNETS SUR UN CIRCUIT IMPRIME (PCB), PROCEDE DE REALISATION ET UTILISATION ASSOCIES

Publication

EP 3547449 C0 20230607 (FR)

Application

EP 19164351 A 20190321

Priority

FR 1852644 A 20180327

Abstract (en)

[origin: CN110311208A] The invention relates to a wireless communication device integrating a horn antenna on a PCB, a production method and application. The wireless communication device includes: a printed circuit board (PCB) including a dielectric substrate and conductive tracks separated by the dielectric substrate; at least one horn antenna. The horn antenna is a surface mount component (SMC) supported by a PCB substrate and attached to a flange of the PCB substrate. Moreover, the horn antenna is arranged to have a waveguide and a radiation hole on each side of the PCB substrate, and each rib of the horn antenna is in direct contact with or close to the track of the PCB to allow for direct connection or capacitive coupling therebetween.

IPC 8 full level

H01Q 13/02 (2006.01); **H01P 5/107** (2006.01); **H01Q 21/24** (2006.01); **H01Q 21/28** (2006.01)

CPC (source: CN EP KR)

H01P 5/107 (2013.01 - EP); **H01Q 1/22** (2013.01 - CN KR); **H01Q 1/36** (2013.01 - CN); **H01Q 1/38** (2013.01 - KR); **H01Q 13/02** (2013.01 - KR); **H01Q 13/0266** (2013.01 - CN); **H01Q 13/0275** (2013.01 - EP); **H01Q 13/0283** (2013.01 - CN); **H01Q 21/24** (2013.01 - CN EP); **H01Q 21/28** (2013.01 - EP)

Cited by

WO2024193867A1

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

Participating member state (EPC – UP)

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)

EP 3547449 A1 20191002; **EP 3547449 B1 20230607**; **EP 3547449 C0 20230607**; CN 110311208 A 20191008; CN 110311208 B 20210730; ES 2950129 T3 20231005; FR 3079677 A1 20191004; FR 3079677 B1 20211217; KR 102125643 B1 20200622; KR 20190113650 A 20191008

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EP 19164351 A 20190321; CN 201910234925 A 20190327; ES 19164351 T 20190321; FR 1852644 A 20180327; KR 20190035216 A 20190327