

Title (en)

MULTILAYER PRINTED CIRCUIT BOARD INCLUDING AN ANTENNA ELEMENT, AND MANUFACTURING METHOD OF A MULTILAYER PRINTED CIRCUIT BOARD ANTENNA ELEMENT

Title (de)

MEHRSCHECHTIGE LEITERPLATTE MIT ANTENNENELEMENT UND HERSTELLUNGSVERFAHREN FÜR EIN MEHRSCHECHTIGES LEITERPLATTENANTENNENELEMENT

Title (fr)

CARTE DE CIRCUIT IMPRIMÉ MULTICOUCHE COMPRENANT UN ÉLÉMENT D'ANTENNE ET PROCÉDÉ DE FABRICATION D'UN ÉLÉMENT D'ANTENNE DE CARTE DE CIRCUIT IMPRIMÉ MULTICOUCHE

Publication

EP 3793023 A1 20210317 (EN)

Application

EP 19196697 A 20190911

Priority

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Abstract (en)

A multilayer PCB (100, 200) comprises a plurality of layers (101, 102, 103, 104; 201, 202, 203), the plurality of layers being stacked in a stacking direction (S) and extending in a planar direction (P) up to an edge (110, 210) of the PCB (100, 200); an antenna element (150, 250) formed along the edge (110, 210); an RF feeding structure (155, 255) electrically connected to the antenna element (150, 250); and a metallic ground structure (160, 260), wherein the antenna element (150, 250) is electrically connected to the ground structure (160, 260), wherein the antenna element (150, 250) is formed as a single resonant structure. A method of manufacturing the antenna element (150, 250) on an edge (110, 210) of the PCB (100, 200).

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 1/38** (2006.01); **H01Q 9/04** (2006.01); **H01Q 9/42** (2006.01)

CPC (source: EP)

H01Q 1/243 (2013.01); **H01Q 1/38** (2013.01); **H01Q 9/0421** (2013.01); **H01Q 9/42** (2013.01)

Citation (applicant)

- WO 2017194096 A1 20171116 - SONY MOBILE COMMUNICATIONS INC [JP], et al
- EP 3051628 A1 20160803 - SAMSUNG ELECTRONICS CO LTD [KR]

Citation (search report)

- [XI] DE 202018103656 U1 20180823 - ASTRA GESELLSCHAFT FUER ASSET MAN MBH & CO KG [DE]
- [Y] CN 103928757 A 20140716 - SHENZHEN C & D ELECTRONICS CO
- [YD] EP 3051628 A1 20160803 - SAMSUNG ELECTRONICS CO LTD [KR]

Cited by

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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

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