



US008749322B2

(12) **United States Patent**
Wu et al.

(10) **Patent No.:** **US 8,749,322 B2**

(45) **Date of Patent:** **Jun. 10, 2014**

(54) **MULTILAYER CIRCUIT BOARD
STRUCTURE AND CIRCUITRY THEREOF**

(75) Inventors: **Tzong-Lin Wu**, Taipei (TW); **Chuen-De Wang**, Taipei (TW)

(73) Assignee: **National Taiwan University**, Taipei (TW)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 409 days.

(21) Appl. No.: **13/224,501**

(22) Filed: **Sep. 2, 2011**

(65) **Prior Publication Data**
US 2013/0057362 A1 Mar. 7, 2013

(51) **Int. Cl.**
H01P 3/08 (2006.01)

(52) **U.S. Cl.**
USPC **333/204; 333/219; 333/185**

(58) **Field of Classification Search**
USPC **333/185, 204, 202, 205, 219**
See application file for complete search history.

(56) **References Cited**

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Primary Examiner — Robert Pascal

Assistant Examiner — Kimberly Glenn

(74) *Attorney, Agent, or Firm* — Rosenberg, Klein & Lee

(57) **ABSTRACT**

An exemplary embodiment of the present disclosure illustrates a multilayer circuit board structure, for suppressing the undesired electromagnetic wave propagation within a specific frequency band. The multilayer circuit board structure includes a plurality of crystals and a plurality of conducting channels, wherein a crystal includes a first through fourth conducting planes, at least a first conducting connector, and at least a second conducting connector, wherein the first through the fourth conducting planes are substantially parallel to each other. The first conducting plane is electrically connected to the third conducting plane through the first conducting connector. The fourth conducting plane is electrically connected to the second conducting plane through the second conducting connector. The first and the third conducting planes are configured to be electrically separated from the second and the fourth conducting planes. Furthermore, the conducting channels are for electrically connecting between crystals in the multilayer circuit board structure.

17 Claims, 21 Drawing Sheets

