

(12) International Application Status Report

Received at International Bureau: 07 July 2020 (07.07.2020)

Information valid as of: 21 December 2020 (21.12.2020)

Report generated on: 22 April 2021 (22.04.2021)

(10) Publication number:

WO2021/000842

(43) Publication date:

07 January 2021 (07.01.2021)

(26) Publication language:

Chinese (ZH)

(21) Application Number:

PCT/CN2020/099015

(22) Filing Date:

29 June 2020 (29.06.2020)

(25) Filing language:

Chinese (ZH)

(31) Priority number(s):

201910591306.1 (CN)

(31) Priority date(s):

02 July 2019 (02.07.2019)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

H05K 3/00 (2006.01); G01B 21/32 (2006.01); G01L 1/22 (2006.01)

(71) Applicant(s):

ZTE CORPORATION [CN/CN]; ZTE Plaza Keji Road South, Hi-Tech Industrial Park, Nanshan District Shenzhen, Guangdong 518057 (CN) (*for all designated states*)

(72) Inventor(s):

XIAO, Shouchun; ZTE Plaza Keji Road South, Hi-Tech Industrial Park, Nanshan District Shenzhen, Guangdong 518057 (CN)

(74) Agent(s):

KANGXIN PARTNERS, P.C.; Floor 16, Tower A, Indo Building A48 Zhichun Road, Haidian District Beijing 100098 (CN)

(54) Title (EN): METHOD AND APPARATUS FOR TESTING PRINTED CIRCUIT BOARD (PCB)

(54) Title (FR): PROCÉDÉ ET APPAREIL POUR TESTER UNE CARTE DE CIRCUIT IMPRIMÉ (PCB)

(54) Title (ZH): 印制电路板PCB的测试方法及装置

(57) Abstract:

(EN): A method for processing a printed circuit board (PCB), comprising: determining the position of a region to be tested (22, 41) on a PCB (S102); removing a designated layer (31; 51, 52) at the position, so as to expose a surface of an insulation layer (34, 55) to generate said region (22, 41) (S104); using an auxiliary image identifier (231, 232, 233; 421, 422) arranged around said region (22, 41) to make an adjustment and place a strain gauge on said region (22, 41) for adhesion (S106); and connecting a testing device to the strain gauge and testing said region (S108). Also disclosed is an apparatus for processing a printed circuit board (PCB). The present invention solves the problem of high costs caused by the fact that a PCB will be scrapped after testing in a traditional testing method, and achieves the effect of reducing PCB testing costs.

(FR): L'invention concerne un procédé de traitement d'une carte de circuit imprimé (PCB), consistant à: déterminer la position d'une région à tester (22, 41) sur une carte de circuit imprimé (S102) ; éliminer une couche désignée (31; 51, 52) au niveau de la position, de façon à exposer une surface d'une couche isolante (34, 55) afin de générer ladite région (22, 41) (S104) ; utiliser un identifiant d'image auxiliaire (231, 232, 233; 421, 422) agencé autour de ladite région (22, 41) pour effectuer un ajustement et placer une jauge de contrainte sur ladite région (22, 41) pour l'adhérence (S106) ; et connecter un dispositif de test à la jauge de contrainte et tester ladite région (S108). L'invention concerne également un appareil de traitement d'une carte de circuit imprimé (PCB). La présente invention permet de résoudre le problème de coûts élevés dus au fait qu'une carte de circuit imprimé sera mise au rebut après le test dans un procédé de test classique, et d'obtenir l'effet de réduction des coûts de test de la carte de circuit imprimé.

(ZH): 一种印制电路板PCB的处理方法,包括:确定待测试的区域(22,41)在PCB上的位置(S102);去除该位置的指定层(31;51,52),以裸露绝缘层表面(34,55)生成待测试区域(22,41)(S104);利用待测试区域(22,41)周围设置的辅助图像标识(231,232,233;421,422),调整并将应变片放置在待测试区域(22,41)上进行粘合(S106);将测试设备接入至应变片并对待测试区域(22,41)进行测试(S108)。还公开了印制电路板PCB的处理装置。解决了传统测试方法在测试后PCB会报废带来的高昂成本的问题,达到了降低PCB测试成本的效果。

International search report:

Received at International Bureau: 24 September 2020 (24.09.2020) [CN]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW

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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM