

Title (en)

METHOD AND DEVICE FOR TESTING PRINTED CIRCUIT BOARDS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM TESTEN VON LEITERPLATTEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE TEST DE CARTES DE CIRCUITS IMPRIMÉS

Publication

EP 4182710 A1 20230524 (DE)

Application

EP 21731736 A 20210607

Priority

- US 202063053005 P 20200717
- EP 2021065090 W 20210607

Abstract (en)

[origin: US2022018874A1] A method for testing printed circuit boards (20) in a test apparatus having a carrying apparatus for the printed circuit board (20) and having test modules for measuring physical variables of components (EB) and contact points (29) on the printed circuit board (20), in which the width of the printed circuit board (20) defines an X direction, its length defines a Y direction and its thickness defines a Z direction inside the test apparatus, reference points, the X, Y and Z positions of which relative to the carrying apparatus are known, are present on the printed circuit board (20) or outside the latter, the X and Y positions of the components (EB) and contact points (29) relative to the reference points are known, the measurement of the physical variables depends on an actual Z position of the printed circuit board at the X and Y positions of the component (EB) or contact point (29) to be measured, and the actual Z position of the printed circuit board at the X and Y positions of the component (EB) or contact point (29) to be measured is determined by means of an interpolation method starting from the X, Y and Z positions of selected reference points.

IPC 8 full level

G01R 31/28 (2006.01); **G01R 1/067** (2006.01); **G01R 1/073** (2006.01)

CPC (source: EP US)

G01B 11/005 (2013.01 - US); **G01B 11/0608** (2013.01 - US); **G01R 1/06705** (2013.01 - EP US); **G01R 1/073** (2013.01 - US);
G01R 1/07392 (2013.01 - EP); **G01R 31/2806** (2013.01 - EP); **G01R 31/2808** (2013.01 - US)

Citation (search report)

See references of WO 2022012815A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

US 11255877 B2 20220222; US 2022018874 A1 20220120; CA 3093760 A1 20220117; EP 4182710 A1 20230524;
WO 2022012815 A1 20220120

DOCDB simple family (application)

US 202017012887 A 20200904; CA 3093760 A 20200921; EP 2021065090 W 20210607; EP 21731736 A 20210607