Title (en)
METHOD AND DEVICE FOR INSPECTING PRINTED CIRCUIT BOARDS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR INSPEKTION VON GEDRUCKTEN SCHALTUNGEN

Title (fr)
PROCÉDÉ ET DISPOSITIF POUR L'INSPECTION DE CIRCUITS IMPRIMÉS

Publication
EP 2702558 A1 20140305 (DE)

Application
EP 12722678 A 20120424

Priority
- DE 102011018823 A 20110427
- EP 2012001753 W 20120424

Abstract (en)
[origin: WO2012146370A1] The invention relates to an inspection device (10) and an inspection method for a defect analysis of printed circuit boards (PCBs) (14), comprising a translucent/light-conducting substrate (12) and at least one, in particular a plurality of layers (16) stacked one top of another. The device comprises at least one optical detecting means (24), a defect detecting means (30), and a layer printing means (20). The optical detecting means (24) is configured to record a first and/or second optical image B1, B2 of the layer (12) prior to and/or after a printing of a layer (12) of the PCB (14) by the printing means (20), wherein the defect detecting means (30) is configured to determine a difference image ? B from the two images B1, B2 so that the difference image substantially corresponds to the print image of the layer (12), and can be analyzed for print defects. By means of the inspection device, PCBs, which are in particular translucent and have multiple layers, can be optically analyzed for manufacturing defects during the printing process with great precision and high speed and at low cost.

IPC 8 full level
G06T 7/00 (2006.01)

CPC (source: EP)
G06T 7/001 (2013.01); **H05K 3/4638** (2013.01); G06T 2207/30141 (2013.01)

Citation (search report)
See references of WO 2012146370A1

Citation (examination)
US 2006002510 A1 20060105 - KURIYAMA JUN [JP], et al

Cited by
CN109584215A; CN111310402A

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

DOCDB simple family (publication)
DE 102011018823 A1 20121031; EP 2702558 A1 20140305; WO 2012146370 A1 20121101

DOCDB simple family (application)
DE 102011018823 A 20110427; EP 12722678 A 20120424; EP 2012001753 W 20120424