

Title (en)
METHOD FOR PRODUCING INFRARED DETECTORS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON INFRAROTDETEKTOREN

Title (fr)
PROCÉDÉ DE RÉALISATION DE DÉTECTEURS INFRAROUGES

Publication
EP 2847796 A1 20150318 (FR)

Application
EP 13721698 A 20130506

Priority
• FR 1201324 A 20120509
• EP 2013059421 W 20130506

Abstract (en)
[origin: WO2013167553A1] The invention relates to a method for producing at least one photosensitive infrared detector by assembling a first electronic component (100, 230) comprising a plurality of photodiodes (110) sensitive to infrared radiation and a second electronic component (400) comprising at least one electronic circuit for reading the plurality of photodiodes, the method being characterised in that it comprises: the production, on each of the first (100, 230) and second (400) components, of a connection surface (192, 492) formed at least partially by a layer (210, 405) containing silicon oxide (SiO₂); and a step of adhering the first component (100, 230) and the second component (400) by means of the connection surfaces (192, 492) thereof, enabling the direct adhesion the two components (100, 230, 400). This method enables the simplification of the hybridisation of heterogeneous components for the production of an infrared detector. The invention also relates to an infrared detector and to an assembly for producing such a detector.

IPC 8 full level
H01L 27/146 (2006.01)

CPC (source: EP US)
H01L 24/03 (2013.01 - EP US); **H01L 24/19** (2013.01 - EP US); **H01L 24/80** (2013.01 - EP US); **H01L 27/1465** (2013.01 - EP US); **H01L 27/14687** (2013.01 - EP US); **H01L 27/1469** (2013.01 - EP US); **H01L 27/14692** (2013.01 - EP US); **H01L 24/05** (2013.01 - EP US); **H01L 24/08** (2013.01 - EP US); **H01L 27/14632** (2013.01 - EP US); **H01L 27/14636** (2013.01 - EP US); **H01L 2224/03845** (2013.01 - EP US); **H01L 2224/04105** (2013.01 - EP US); **H01L 2224/05571** (2013.01 - EP US); **H01L 2224/05647** (2013.01 - EP US); **H01L 2224/08145** (2013.01 - EP); **H01L 2224/08147** (2013.01 - US); **H01L 2224/19** (2013.01 - EP US); **H01L 2224/221** (2013.01 - EP US); **H01L 2224/80201** (2013.01 - EP US); **H01L 2224/80357** (2013.01 - EP US); **H01L 2224/80895** (2013.01 - EP US); **H01L 2224/80896** (2013.01 - EP US); **H01L 2224/80948** (2013.01 - EP US); **H01L 2224/96** (2013.01 - EP US); **H01L 2924/00014** (2013.01 - EP US); **H01L 2924/12036** (2013.01 - EP US); **H01L 2924/12043** (2013.01 - EP US); **H01L 2924/351** (2013.01 - EP US)

Citation (search report)
See references of WO 2013167553A1

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

DOCDB simple family (publication)
WO 2013167553 A1 20131114; EP 2847796 A1 20150318; FR 2990565 A1 20131115; FR 2990565 B1 20161028; US 2015102447 A1 20150416; US 9318527 B2 20160419

DOCDB simple family (application)
EP 2013059421 W 20130506; EP 13721698 A 20130506; FR 1201324 A 20120509; US 201314399824 A 20130506