

Title (en)

METHOD FOR APPLYING ELECTRIC CONTACTS TO SEMI-CONDUCTOR SUBSTRATES, SEMI-CONDUCTOR SUBSTRATE AND USE OF SAID METHOD

Title (de)

VERFAHREN ZUM AUFBRINGEN VON ELEKTRISCHEN KONTAKTEN AUF HALBLEITENDE SUBSTRATE, HALBLEITENDES SUBSTRAT UND VERWENDUNG DES VERFAHRENS

Title (fr)

PROCÉDÉ D'APPLICATION DE CONTACTS ÉLECTRIQUES SUR DES SUBSTRATS SEMICONDUCTEURS, SUBSTRAT SEMICONDUCTEUR ET UTILISATION DU PROCÉDÉ

Publication

**EP 2062299 A1 20090527 (DE)**

Application

**EP 07726161 A 20070626**

Priority

- EP 2007005658 W 20070626
- DE 102006040352 A 20060829

Abstract (en)

[origin: DE102006040352B3] The method involves applying a layer of metallic powder (4) on a semiconductor substrate e.g. solar cell, and guiding a laser beam over the substrate for local sintering and/or fusing the metallic powder in an inert atmosphere or in vacuum. The non sintered and/or fused metallic powder is removed. The metallic powder includes nickel, tungsten, chromium, molybdenum, magnesium, silver, cobalt, cadmium, titanium, palladium and/or their mixtures. An independent claim is also included for a semiconducting substrate with an electrical contact.

IPC 8 full level

**H01L 23/482** (2006.01); **H01L 31/0224** (2006.01); **H01L 31/18** (2006.01)

CPC (source: EP KR US)

**H01L 21/76838** (2013.01 - EP US); **H01L 23/482** (2013.01 - KR); **H01L 24/03** (2013.01 - EP US); **H01L 31/0224** (2013.01 - KR);  
**H01L 31/022425** (2013.01 - EP US); **H01L 31/18** (2013.01 - EP KR US); **H01L 2224/0401** (2013.01 - EP US);  
**H01L 2924/01005** (2013.01 - EP US); **H01L 2924/01006** (2013.01 - EP US); **H01L 2924/01012** (2013.01 - EP US);  
**H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01014** (2013.01 - EP US); **H01L 2924/01019** (2013.01 - EP US);  
**H01L 2924/01022** (2013.01 - EP US); **H01L 2924/01024** (2013.01 - EP US); **H01L 2924/01027** (2013.01 - EP US);  
**H01L 2924/01029** (2013.01 - EP US); **H01L 2924/01033** (2013.01 - EP US); **H01L 2924/01042** (2013.01 - EP US);  
**H01L 2924/01046** (2013.01 - EP US); **H01L 2924/01047** (2013.01 - EP US); **H01L 2924/0106** (2013.01 - EP US);  
**H01L 2924/01068** (2013.01 - EP US); **H01L 2924/01074** (2013.01 - EP US); **H01L 2924/01082** (2013.01 - EP US);  
**H01L 2924/014** (2013.01 - EP US); **H01L 2924/3025** (2013.01 - EP US); **Y02E 10/50** (2013.01 - EP US)

Citation (search report)

See references of WO 2008025392A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**DE 102006040352 B3 20071018**; EP 2062299 A1 20090527; JP 2010502021 A 20100121; KR 20090060296 A 20090611;  
US 2010069278 A1 20100318; US 2010267194 A1 20101021; WO 2008025392 A1 20080306

DOCDB simple family (application)

**DE 102006040352 A 20060829**; EP 07726161 A 20070626; EP 2007005658 W 20070626; JP 2009525933 A 20070626;  
KR 20097005351 A 20090316; US 30882507 A 20070627; US 43963907 A 20070626