

Title (en)

METHOD FOR PRODUCING DEFINED POLYCRYSTALLINE SILICON AREAS IN AN AMORPHOUS SILICON LAYER

Title (de)

VERFAHREN ZUR HERSTELLUNG DEFINIERTER POLYKRISTALLINER SILIZIUM-BEREICHE IN EINER AMORPHEN SILIZIUMSCHICHT

Title (fr)

PROCEDE DE FABRICATION DE ZONES DE SILICIUM POLYCRISTALLIN DEFINIES DANS UNE COUCHE DE SILICIUM AMORPHE

Publication

**EP 1258032 A1 20021120 (DE)**

Application

**EP 01916884 A 20010126**

Priority

- DE 0100314 W 20010126
- DE 10005564 A 20000209

Abstract (en)

[origin: WO0159818A1] The invention relates to a method for producing defined polycrystalline silicon areas, especially for creating conductive areas, comprising the following steps: (a) a substrate (10) is provided with an insulating layer (12) and a layer made of doped amorphous silicon (14); b) said structure is exposed to electromagnetic radiation (20) with the aid of a laser source (18) in order to produce the electrically conductive areas (26); c) a shadow mask (22) is placed in between the substrate provided with the doped amorphous silicon layer (14) and the laser source (18) in order to define the contours of the electrically conductive areas (26).

IPC 1-7

**H01L 21/20**; G01L 9/00; H01L 21/02; H01L 29/84

IPC 8 full level

**G01L 9/00** (2006.01); **H01L 21/20** (2006.01); **H01L 29/84** (2006.01)

CPC (source: EP US)

**G01L 9/0042** (2013.01 - EP US); **H01L 21/02678** (2013.01 - US); **H01L 21/02686** (2013.01 - US); **H01L 21/02425** (2013.01 - EP US); **H01L 21/02488** (2013.01 - EP US); **H01L 21/02532** (2013.01 - EP US)

Citation (search report)

See references of WO 0159818A1

Designated contracting state (EPC)

DE FR GB GR IT

DOCDB simple family (publication)

**WO 0159818 A1 20010816**; DE 10005564 A1 20010816; EP 1258032 A1 20021120; JP 2003523079 A 20030729; US 2004026358 A1 20040212; US 7012026 B2 20060314

DOCDB simple family (application)

**DE 0100314 W 20010126**; DE 10005564 A 20000209; EP 01916884 A 20010126; JP 2001559045 A 20010126; US 20359602 A 20021202