

Title (en)
METHOD FOR LIMITING EPITAXIAL GROWTH IN A PHOTOELECTRIC DEVICE WITH HETEROJUNCTIONS, AND PHOTOELECTRIC DEVICE

Title (de)
VERFAHREN ZUM BEGRENZEN VON EPITAXIALWACHSTUM IN EINER FOTOELEKTRISCHEN ANORDNUNG MIT HETEROÜBERGÄNGEN
UND FOTOELEKTRISCHE ANORDNUNG

Title (fr)
PROCEDE POUR LIMITER LA CROISSANCE EPITAXIALE DANS UN DISPOSITIF PHOTOELECTRIQUE A HETEROJONCTIONS ET UN TEL
DISPOSITIF PHOTOELECTRIQUE

Publication
EP 2332182 A1 20110615 (FR)

Application
EP 09782410 A 20090831

Priority
• EP 2009061223 W 20090831
• EP 08163425 A 20080901
• EP 09782410 A 20090831

Abstract (en)
[origin: EP2159851A1] The method involves texturing a surface of a crystalline silicon substrate by an anisotropic etching, and forming pyramids on the crystalline silicon substrate, where the pyramids have a base whose dimension is greater than 5 micrometer. The surface of the crystalline silicon substrate is covered by the pyramids. A trough is formed on the crystalline silicon substrate, where the trough has a round base including a curvature radius that is higher than 0.005 micrometer. An independent claim is also included for a photoelectric device comprising an amorphous silicon layer.

IPC 8 full level
H01L 31/0745 (2012.01); **H01L 31/18** (2006.01); **H01L 31/20** (2006.01)

CPC (source: EP US)
H01L 31/02363 (2013.01 - EP US); **H01L 31/0745** (2013.01 - EP US); **H01L 31/0747** (2013.01 - EP US); **H01L 31/1804** (2013.01 - EP US); **H01L 31/202** (2013.01 - EP US); **Y02E 10/50** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

Citation (search report)
See references of WO 2010023318A1

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2159851 A1 20100303; CN 102165606 A 20110824; EP 2332182 A1 20110615; US 2011174371 A1 20110721;
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EP 08163425 A 20080901; CN 200980137903 A 20090831; EP 09782410 A 20090831; EP 2009061223 W 20090831;
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