

Title (en)

PROCESS FOR FABRICATING A SINGLE-CRYSTAL FILM

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER EINKRISTALLSCHICHT

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE COUCHE MONOCRISTALLINE

Publication

EP 2875519 A1 20150527 (FR)

Application

EP 13747450 A 20130715

Priority

- FR 1256898 A 20120717
- FR 2013051688 W 20130715

Abstract (en)

[origin: WO2014013173A1] Process for fabricating a single-crystal thin film n;(1), comprising steps consisting in: a) providing a carrier substrate n;(3); b) placing a seed sample n;(4); c) depositing a thin film n;(1) so as to form an initial interface region n;(7) comprising a proportion of seed sample n;(4) and a proportion of thin film n;(1), the proportion of seed sample n;(4) decreasing from a first peripheral part n;(8) toward a second peripheral part n;(9); e) delivering energy to the initial interface region n;(7) contiguous to the first peripheral part n;(8) so as to liquefy a portion n;(13) of the thin film and form a solid/liquid interface region n;(14); and f) gradually moving the energy delivery away from the seed sample n;(4) so as to solidify the portion n;(13) so as to gradually move the solid/liquid interface region n;(14).

IPC 8 full level

H01L 21/20 (2006.01)

CPC (source: EP US)

C30B 13/005 (2013.01 - US); **C30B 13/24** (2013.01 - US); **H01L 21/02488** (2013.01 - EP US); **H01L 21/02532** (2013.01 - EP US);
H01L 21/02658 (2013.01 - EP US); **H01L 21/02678** (2013.01 - EP US); **H01L 21/02686** (2013.01 - EP US); **H01L 21/02691** (2013.01 - EP US);
Y10T 428/12674 (2015.01 - EP US)

Citation (search report)

See references of WO 2014013173A1

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 2014013173 A1 20140123; EP 2875519 A1 20150527; FR 2993702 A1 20140124; FR 2993702 B1 20150313; US 2015191847 A1 20150709;
US 9777393 B2 20171003

DOCDB simple family (application)

FR 2013051688 W 20130715; EP 13747450 A 20130715; FR 1256898 A 20120717; US 201314415980 A 20130715