

Title (en)

PROCESS FOR MANUFACTURING A TWO-DIMENSIONAL FILM OF HEXAGONAL CRYSTALLINE STRUCTURE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES ZWEIDIMENSIONALEN FILMS AUS HEXAGONALER KRISTALLINER STRUKTUR

Title (fr)

PROCEDE DE FABRICATION D'UN FILM BIDIMENSIONNEL DE STRUCTURE CRISTALLINE HEXAGONALE

Publication

EP 3577257 A1 20191211 (FR)

Application

EP 18705964 A 20180131

Priority

- FR 1750868 A 20170202
- FR 2018050217 W 20180131

Abstract (en)

[origin: WO2018142061A1] The invention relates to a process for manufacturing a two-dimensional film of a group IV material having a hexagonal crystalline structure, in particular graphene, comprising: - the formation of a growth substrate (100), comprising the transfer of a single-crystal metal film (1) suitable for the growth of said two-dimensional film on a support substrate (2), and - the epitaxial growth of the two-dimensional film (3) on the metal film of said substrate (100).

IPC 8 full level

C30B 23/02 (2006.01); **C30B 23/04** (2006.01); **C30B 25/18** (2006.01); **C30B 29/02** (2006.01); **C30B 33/06** (2006.01); **H01L 21/683** (2006.01)

CPC (source: EP KR US)

C30B 23/025 (2013.01 - EP KR); **C30B 25/186** (2013.01 - EP KR US); **C30B 29/02** (2013.01 - EP KR US); **C30B 29/66** (2013.01 - US); **C30B 33/06** (2013.01 - EP KR); **H01L 21/02002** (2013.01 - EP); **H01L 21/185** (2013.01 - EP); **H01L 21/6835** (2013.01 - KR)

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)

FR 3062398 A1 20180803; **FR 3062398 B1 20210730**; CN 110234800 A 20190913; CN 110234800 B 20210330; EP 3577257 A1 20191211; JP 2020506150 A 20200227; JP 7341059 B2 20230908; KR 102523183 B1 20230418; KR 20190110613 A 20190930; SG 11201906821P A 20190827; US 11913134 B2 20240227; US 2019390366 A1 20191226; US 2023416940 A1 20231228; WO 2018142061 A1 20180809

DOCDB simple family (application)

FR 1750868 A 20170202; CN 201880009436 A 20180131; EP 18705964 A 20180131; FR 2018050217 W 20180131; JP 2019541704 A 20180131; KR 20197025738 A 20180131; SG 11201906821P A 20180131; US 201816481767 A 20180131; US 202318461226 A 20230905