

Title (en)

METHOD FOR CONTROLLING THE ORIENTATION OF NANODOMAINS OF A BLOCK COPOLYMER

Title (de)

VERFAHREN ZUR STEUERUNG DER ORIENTIERUNG VON NANODOMÄNEN EINES BLOCKCOPOLYMERS

Title (fr)

PROCEDE DE CONTROLE DE L'ORIENTATION DES NANO-DOMAINES D'UN COPOLYMER A BLOCS

Publication

**EP 3655820 A1 20200527 (FR)**

Application

**EP 18752826 A 20180720**

Priority

- FR 1756928 A 20170721
- FR 2018051857 W 20180720

Abstract (en)

[origin: WO2019016488A1] The invention relates to a method for controlling the orientation of nanodomains of a block copolymer (BPC), the lower interface of which is in contact with the pre-neutralised surface of a substrate, whereby said block copolymer can be nanostructured into nanodomains with a given period (L0), over a minimum thickness (e) that is at least equal to half of the period (L0). The method is characterised in that it consists in depositing the block copolymer (BCP) on the substrate, such that the total thickness (E+e) thereof is at least two times and preferably at least three times greater than the minimum thickness (e), and subsequently depositing an interface material on the block copolymer (BCP) such that it is insulated from the ambient environment.

IPC 8 full level

**G03F 7/00** (2006.01)

CPC (source: EP KR US)

**B05D 1/00** (2013.01 - US); **B05D 1/34** (2013.01 - US); **B05D 3/00** (2013.01 - US); **B05D 3/067** (2013.01 - US);  
**G03F 7/0002** (2013.01 - EP KR US); **G03F 7/004** (2013.01 - KR); **G03F 7/16** (2013.01 - US)

Citation (search report)

See references of WO 2019016488A1

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 2019016488 A1 20190124**; CN 110945426 A 20200331; EP 3655820 A1 20200527; FR 3069339 A1 20190125; FR 3069339 B1 20210514;  
JP 2020527860 A 20200910; KR 20200020846 A 20200226; SG 11202000393V A 20200227; TW 201920321 A 20190601;  
TW I686416 B 20200301; US 2020150535 A1 20200514

DOCDB simple family (application)

**FR 2018051857 W 20180720**; CN 201880048320 A 20180720; EP 18752826 A 20180720; FR 1756928 A 20170721;  
JP 2020501785 A 20180720; KR 20207001695 A 20180720; SG 11202000393V A 20180720; TW 107125123 A 20180720;  
US 201816631093 A 20180720