

Title (en)
METHOD AND DEVICE FOR LOCATING THE ORIGIN OF A DEFECT AFFECTING A STACK OF THIN LAYERS DEPOSITED ON A SUBSTRATE

Title (de)
VERFAHREN UND VORRICHTUNG ZUM LOKALISIEREN DER HERKUNFT EINES FEHLERS BETREFFEND EINEN STAPEL AUS DÜNNEN SCHICHTEN AUF EINEM SUBSTRAT

Title (fr)
PROCÉDÉ ET DISPOSITIF DE LOCALISATION DE L'ORIGINE D'UN DÉFAUT AFFECTANT UN EMPILEMENT DE COUCHES MINCES DÉPOSÉES SUR UN SUBSTRAT

Publication
EP 3475739 A1 20190501 (FR)

Application
EP 17740056 A 20170622

Priority
• FR 1655951 A 20160627
• FR 2017051666 W 20170622

Abstract (en)
[origin: CA3026711A1] This method for locating, in a deposition line comprising a succession of compartments, an origin of a defect affecting a stack of thin layers deposited on a substrate in the compartments, in which each thin layer of a material is deposited in one or more successive compartments of the deposition line and pieces of debris remaining on the surface of a thin layer deposited in a compartment act as masks for the subsequent depositions of thin layers and are the origin of defects, comprises: a step (E10) of obtaining at least one image showing said defect, said at least one image being acquired by at least one optical inspecting system placed at the end of the deposition line; a step (E20) of determining, from said at least one image, a signature of the defect, this signature containing at least one characteristic representative of the defect; and a step (E40) of identifying at least one compartment of the deposition line liable to be the origin of the defect from the signature of the defect and using reference signatures associated with the compartments of the deposition line.

IPC 8 full level
G02B 1/10 (2015.01); **C23C 14/00** (2006.01); **G01N 21/88** (2006.01); **G02B 5/28** (2006.01); **G06T 7/00** (2017.01)

CPC (source: EP KR RU US)
C23C 14/185 (2013.01 - EP KR US); **C23C 14/352** (2013.01 - KR); **C23C 14/54** (2013.01 - EP KR US); **G01N 21/8422** (2013.01 - EP US); **G01N 21/8851** (2013.01 - EP US); **G01N 21/896** (2013.01 - EP US); **G02B 1/10** (2013.01 - EP KR RU US); **G02B 5/28** (2013.01 - RU); **G02B 5/285** (2013.01 - EP KR US); **G06T 7/0004** (2013.01 - EP KR US); **C23C 14/352** (2013.01 - EP US); **G01N 2021/8825** (2013.01 - EP US); **G01N 2021/8845** (2013.01 - KR); **G01N 2021/8854** (2013.01 - EP US); **G06T 2207/10024** (2013.01 - US); **G06T 2207/30148** (2013.01 - EP KR US)

Citation (examination)
US 2012187546 A1 20120726 - AKINMADE-YUSUFF HAKEEM B S [US], et al

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 3053126 A1 20171229; FR 3053126 B1 20190726; BR 112018075797 A2 20190326; CA 3026711 A1 20180104; CN 109564299 A 20190402; CN 109564299 B 20210730; EP 3475739 A1 20190501; JP 2019518963 A 20190704; JP 7110121 B2 20220801; KR 102478575 B1 20221216; KR 20190020755 A 20190304; MX 2018016116 A 20190530; RU 2019105190 A 20200825; RU 2019105190 A3 20200831; RU 2742201 C2 20210203; US 11352691 B2 20220607; US 2019309409 A1 20191010; WO 2018002482 A1 20180104

DOCDB simple family (application)
FR 1655951 A 20160627; BR 112018075797 A 20170622; CA 3026711 A 20170622; CN 201780050232 A 20170622; EP 17740056 A 20170622; FR 2017051666 W 20170622; JP 2018565723 A 20170622; KR 20197001513 A 20170622; MX 2018016116 A 20170622; RU 2019105190 A 20170622; US 201716309184 A 20170622