

Title (en)

FABRICATING UNIQUE CHIPS USING A CHARGED PARTICLE MULTI-BEAMLET LITHOGRAPHY SYSTEM

Title (de)

HERSTELLUNG VON EINZIGARTIGEN CHIPS MIT EINEM LITHOGRAFIESYSTEM MIT MEHREREN LADUNGSTRÄGERTEILSTRAHLEN

Title (fr)

FABRICATION DE PUCES UNIQUES À L'AIDE D'UN SYSTÈME DE LITHOGRAPHIE À PETITS FAISCEAUX MULTIPLES DE PARTICULES CHARGÉES

Publication

EP 3559752 A4 20200819 (EN)

Application

EP 17884025 A 20171222

Priority

- US 201615389593 A 20161223
- US 201762458082 P 20170213
- JP 2017047416 W 20171222

Abstract (en)

[origin: WO2018117275A1] Method of manufacturing electronic devices using a maskless lithographic exposure system using a maskless pattern writer. The method comprises generating beamlet control data for controlling the maskless pattern writer to expose a wafer for creation of the electronic devices, wherein the beamlet control data is generated based on a feature data set defining features selectable for individualizing the electronic devices, wherein exposure of the wafer according to the beamlet control data results in exposing a pattern having a different selection of the features from the feature data set for different subsets of the electronic devices.

IPC 8 full level

G03F 7/20 (2006.01); **H01J 37/302** (2006.01); **H01J 37/317** (2006.01); **H01L 21/82** (2006.01)

CPC (source: EP KR)

G03F 7/2059 (2013.01 - EP KR); **G03F 7/70291** (2013.01 - EP KR); **G03F 7/70508** (2013.01 - EP KR); **H01J 37/3026** (2013.01 - EP KR); **H01J 37/3177** (2013.01 - EP KR); **H01J 2237/31762** (2013.01 - EP KR)

Citation (search report)

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- [Y] US 2003141462 A1 20030731 - HARTLEY JOHN G [US]
- [A] US 2002160311 A1 20021031 - MURAKI MASATO [JP], et al
- [Y] JP S58116732 A 19830712 - FUJITSU LTD
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- See also references of WO 2018117275A1

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

DOCDB simple family (publication)

WO 2018117275 A1 20180628; CN 110268330 A 20190920; CN 110268330 B 20220128; CN 114355733 A 20220415; CN 114355733 B 20240315; EP 3559752 A1 20191030; EP 3559752 A4 20200819; KR 102359084 B1 20220207; KR 20190098222 A 20190821

DOCDB simple family (application)

JP 2017047416 W 20171222; CN 201780086059 A 20171222; CN 202210036020 A 20171222; EP 17884025 A 20171222; KR 20197021442 A 20171222