

(12) International Application Status Report

Received at International Bureau: 04 September 2018 (04.09.2018)

Information valid as of: 03 October 2018 (03.10.2018)

Report generated on: 20 February 2020 (20.02.2020)

(10) Publication number:

WO2019/042682

(43) Publication date:

07 March 2019 (07.03.2019)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/EP2018/070653

(22) Filing Date:

31 July 2018 (31.07.2018)

(25) Filing language:

English (EN)

(31) Priority number(s):

62/550,785 (US)

(31) Priority date(s):

28 August 2017 (28.08.2017)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

G03F 7/20 (2006.01)

(71) Applicant(s):

ASML HOLDING N.V. [NL/NL]; P.O. Box 324 5500 AH Veldhoven (NL) *(for all designated states)*

(72) Inventor(s):

PEREZ-FALCON, Victor, Antonio; 77 Danbury Road Wilton, Connecticut 06897 (US)

CHIEDA, Michael, Andrew; 77 Danbury Road Wilton, Connecticut 06897 (US)

(74) Agent(s):

SLENDERS, Peter; P.O. Box 324 5500 AH Veldhoven (NL)

(54) Title (EN): APPARATUS FOR AND METHOD CLEANING A SUPPORT INSIDE A LITHOGRAPHY APPARATUS

(54) Title (FR): APPAREIL ET PROCÉDÉ DE NETTOYAGE D'UN SUPPORT À L'INTÉRIEUR D'UN APPAREIL LITHOGRAPHIQUE

(57) Abstract:

(EN): Methods and systems are described for cleaning a support such as a clamp of a chuck that holds a patterning device or a wafer in a lithographic apparatus. The method includes loading a electrostatic cleaning substrate into a lithographic apparatus. The electrostatic cleaning substrate includes at least one electrode. The method further includes bringing the electrostatic cleaning substrate near to the clamping surface to be cleaned and connecting the electrode to a voltage source. Particles present on the support are then transferred to the electrostatic cleaning substrate.

(FR): La présente invention porte sur des procédés et des systèmes de nettoyage d'un support tel qu'une pince d'un mandrin qui maintient un dispositif de modélisation ou une plaquette dans un appareil lithographique. Le procédé comprend le chargement d'un substrat de nettoyage électrostatique dans un appareil lithographique. Le substrat de nettoyage électrostatique comprend au moins une électrode. Le procédé consiste en outre à amener le substrat de nettoyage électrostatique à proximité de la surface de serrage devant être nettoyée et à connecter l'électrode à une source de tension. Les particules présentes sur le support sont ensuite transférées au substrat de nettoyage électrostatique.

International search report:

Received at International Bureau: 28 November 2018 (28.11.2018) [EP]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,

KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM