505487661 05/22/2019

# **PATENT ASSIGNMENT COVER SHEET**

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5534465

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
PATRICIUS ALOYSIUS JACOBUS TINNEMANS	10/22/2018
EDO MARIA HULSEBOS	10/15/2018
HENRICUS JOHANNES LAMBERTUS MEGENS	10/16/2018
AHMET KORAY ERDAMAR	10/11/2018
LOEK JOHANNES PETRUS VERHEES	10/11/2018
WILLEM SEINE CHRISTIAN ROELOFS	11/12/2018
WENDY JOHANNA MARTINA VAN DE VEN	10/11/2018
HADI YAGUBIZADE	10/16/2018
HAKKI ERGÜN CEKLI	10/11/2018
RALPH BRINKHOF	10/11/2018
TRAN THANH THUY VU	10/11/2018
MAIKEL ROBERT GOOSEN	10/11/2018
MAAIKE VAN'T WESTEINDE	10/23/2018
WEITIAN KOU	10/18/2018
MANOUK RIJPSTRA	10/16/2018
MATTHIJS COX	10/11/2018
FRANCISCUS GODEFRIDUS CASPER BIJNEN	10/11/2018
SUDHARSHANAN RAGHUNATHAN	10/16/2018
BORIS MENCHTCHIKOV	10/16/2018

## **RECEIVING PARTY DATA**

Name:	ASML NETHERLANDS B.V.	
Street Address:	PO BOX 324	
City:	VELDHOVEN	
State/Country:	NETHERLANDS	
Postal Code:	5500 AH	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	16132520	

PATENT REEL: 049249 FRAME: 0543

#### **CORRESPONDENCE DATA**

**Fax Number:** (703)770-7901

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 703-770-7900

**Email:** cathy.fitzgerald@pillsburylaw.com

Correspondent Name: PILLSBURY WINTHROP SHAW PITTMAN LLP

Address Line 1: P.O. BOX 10500

Address Line 4: MCLEAN, VIRGINIA 22102

ATTORNEY DOCKET NUMBER:	081468-0461715
NAME OF SUBMITTER:	CATHY M. FITZGERALD
SIGNATURE:	/Cathy M. FitzGerald/
DATE SIGNED:	05/22/2019

#### **Total Attachments: 13**

source=081468-0461715-Executed Assignment#page1.tif source=081468-0461715-Executed Assignment#page2.tif source=081468-0461715-Executed Assignment#page3.tif source=081468-0461715-Executed Assignment#page4.tif source=081468-0461715-Executed Assignment#page5.tif source=081468-0461715-Executed Assignment#page6.tif source=081468-0461715-Executed Assignment#page7.tif source=081468-0461715-Executed Assignment#page8.tif source=081468-0461715-Executed Assignment#page9.tif source=081468-0461715-Executed Assignment#page10.tif source=081468-0461715-Executed Assignment#page11.tif source=081468-0461715-Executed Assignment#page12.tif source=081468-0461715-Executed Assignment#page12.tif source=081468-0461715-Executed Assignment#page13.tif

PATENT REEL: 049249 FRAME: 0544

For Administrative Purposes			
Assignee's internal reference.	2017P00211-US	7/////	
Counterpart or related patent application of, or	Country filing date & application number	Initials of administrator and date	
for, the assigned subject matter below			
are consequently and the consequence of the consequ			

#### **ASSIGNMENT**

In consideration of good and valuable consideration received by the ASSIGNOR(s), namely

in consideration of good said vasioning consideration received by the virginity				
NAME(S) OF	(1)	Patricius, Aloysius, Jacobus TINNEMANS	(2)	Edo, Maria HULSEBOS
ASSIGNOR(S)	(3)	Henricus, Johannes, Lambertus MEGENS	(4)	Ahmet, Koray ERDAMAR
	(5)	Loek, Johannes, Petrus VERHEES	(6)	Willem, Seine, Christian ROELOFS
	(7)	Wendy, Johanna, Martina VAN DE VEN	(8)	Hadi YAGUBIZADE
	(9)	Hakki, Ergün, CEKLI	(10)	Ralph, BRINKHOF
	(11)	Tran, Thanh, Thuy, VU	(12)	Maikel, Robert, GOOSEN
	(13)	Maaike, VAN T WESTEINDE	(14)	Weitian, KOU
	(15)	Manouk, RIJPSTRA	(16)	Matthijs, COX
	(17)	Franciscus, Godefridus, Casper,		
		BUNEN	L	

the receipt and sufficiency of which are acknowledged by the ASSIGNOR(s), the ASSIGNOR(s) hereby sell(s), assign(s) and transfer(s) unto:

NAME OF ASSIGNEE and ADDRESS

ASML Netherlands B.V.	1
P.O. Box 324	****
5500 AH Veldhoven	
The Netherlands	

and its or their successors, assigns and legal representatives (together and individually hereinafter "ASSIGNEE") and, to the extent already assigned or transferred to ASSIGNEE by operation of law or by a general obligation between the ASSIGNOR(s) and ASSIGNEE, the ASSIGNOR(s) hereby confirm(s) and formalize(s) the assignment and transfer to ASSIGNEE of the entire and exclusive right, title and Interest for all countries, regions, territories, and other jurisdictions throughout the world, in, to and under the invention(s), improvements thereof, and all patent applications, provisional and non-provisional, (including without limitation all patent applications claiming priority and/or benefit, including without limitation all divisional, continuation, continuation-in-part, substitute, renewal and reissue applications), patents (including without limitation all divisional, continuation, continuation other intellectual property protection (including without limitation all utility models, designs and inventor certificates, and applications, extensions, renewals and reissues for the same) therefor, together with, though not in any way of limitation, all rights of priority under the international Convention for the Protection of Industrial Property and all other laws and international agreements, the right to apply for patents in ASSIGNEE's name(s), and all rights to bring suit, collect damages and settle suits for past, present or future infringements thereof, known as

TITLE	E OF	THE
INVE	NTIC	MC

LITHOGRAPI	HIC METHOD		
for which a patent	application was executed and	for filed for:	
USA	17.Sep.2018	US	16/132,520
Country	Date	Country abbreviation	Application number

AND the ASSIGNOR(s) hereby authorize(s) and request(s) any government agency, office or official whose duty includes issuing patents or other evidence or forms of intellectual property protection on or for the aforesaid invention(s) and application(s) (including, without limitation, all applications filed in or for China, Europe, Japan, Korea, the Netherlands, United Kingdom, Germany, France, Italy, Talwan, Singapore and the United States), to issue the same to ASSIGNEE, as the assignee(s) of all rights, title, interests thereto and/or as the applicant(s) therefor;

AND the ASSIGNOR(s) agree(s) that the attorney of record in the aforesaid application(s) shall hereinafter act on behalf of ASSIGNEE:

AND the ASSIGNOR(s) acknowledge(s) that the aforesaid invention(s) was/were made in the framework of a specific relationship to ASSIGNEE and that in this relationship the ASSIGNOR(s) is/are bound to use specific knowledge to create inventions similar to the aforesaid invention(s);

AND the ASSIGNOR(s) acknowledge(s) that the ASSIGNOR(s)'s salary or other remuneration includes fair and reasonable compensation for the assignment hereunder of the subject matter herein assigned;

AND the ASSIGNOR(s) agree(s), without further remuneration, to communicate to ASSIGNOE any facts known to the ASSIGNOR(s) respecting the aforesaid invention(s), and all related patent applications, patents, and other intellectual property protection mentioned above, and to testify in any legal proceeding, sign any lawful papers, execute any applications, make any rightful oaths or declarations, and generally provide all assistance, cooperation and information reasonably necessary for ASSIGNEE to perfect title in, prepare, complete, prosecute, obtain, maintain, preserve, enforce and/or defend the aforesaid invention(s) and all related patent applications, patents and other intellectual property protection mentioned above, and grant(s) ASSIGNEE a perpetual and irrevocable power of attorney to execute and sign in the name(s) and on behalf of the ASSIGNOR(s) any documents of any nature in pursuit of the aforesaid;

AND the ASSIGNOR(s) agree(s) not to contest or aid in contesting the validity, enforceability or ownership of the aforesaid invention(s) and all related patent applications, patents, and other intellectual property protection mentioned above;

AND the ASSIGNOR(s) represent(s) and warrant(s) to have the full right to convey the subject matter herein assigned, to have obtained the consent, if applicable, of all joint owners and all inventors to the subject matter assigned herein, to have not made and will not make any agreement or license in conflict herewith, and to have not encumbered and will not encumber by any grant, license or right the subject matter herein assigned;

AND the ASSIGNOR(s) has/have not disclosed and will not disclose the aforesald invention(s) to any third party, except with the prior written consent of ASSIGNEE, prior to the date of earliest publication of the aforesald application(s);

AND the ASSIGNOR(s) hereby authorize(s) any attorneys or other representatives of ASSIGNEE to insert hereon any further identification necessary or desirable for recordation of this document, including without limitation any applicable patent or patent application number;

AND, to the extent there is a conflict between the agreement herein and any previous agreement between ASSIGNEE and any or all of the ASSIGNOR(s), the ASSIGNOR(s) agree(s) that the agreement herein controls and supersedes any such conflicting previous agreement;

AND, where permitted by law, the ASSIGNOR(s) agree(s) that the agreement herein supersedes, modifies and/or supplements the law to the extent the agreement herein provides ASSIGNEE greater rights and protections than available under the law;

AND the ASSIGNOR(s) and ASSIGNEE irrevocably waive their rights to rescind the agreement herein, including, without limitation, on the basis of article 6: 258, 265, or 270 of the Dutch Civil Code;

AND the ASSIGNOR(s) agree(s) that the agreement herein shall be exclusively construed under and governed by the laws of the Netherlands with the exclusion of conflicts of law rules;

AND the ASSIGNOR(s) agree(s) that any dispute arising from or in relation to the agreement herein shall be submitted to the exclusive jurisdiction and venue of the competent court in 's-Hertogenbosch, the Netherlands, unless ASSIGNEE in its sole discretion prefer(s) to submit such dispute to an arbitration, whereby the arbitral tribunal shall be composed of one arbitrator, the place of arbitration shall be within the Netherlands, and the arbitral procedure shall be conducted in the English language;

AND the ASSIGNOR(s) and ASSIGNEE agree that if any provision of the agreement herein is deemed to be unenforceable, void, illegal or invalid, it shall be modified so as to make it valid and enforceable, and as so modified the agreement herein shall remain in full force and effect.

	ASSIGNOR(S)	DATE SIGNED
1):	Rimaneus	12-00-7018
Name:	Patricius, Aloysius, Jacobus TINNEMANS	Date
2):		
Name:	Edo, Maria HULSEBOS	Date
3):		
Name:	Henricus, Johannes, Lambertus MEGENS	Date

NL

AND the ASSIGNOR(s) hereby authorize(s) and request(s) any government agency, office or official whose duty includes issuing patents or other evidence or forms of intellectual property protection on or for the aforesaid invention(s) and application(s) (including, without limitation, all applications filed in or for China, Europe, Japan, Korea, the Netherlands, United Kingdom, Germany, France, Italy, Talwan, Singapore and the United States), to issue the same to ASSIGNEE, as the assignee(s) of all rights, title, interests thereto and/or as the applicant(s) therefor,

AND the ASSIGNOR(s) agree(s) that the attorney of record in the aforesaid application(s) shall hereinafter act on behalf of ASSIGNEE:

AND the ASSIGNOR(s) acknowledge(s) that the aforesaid invention(s) was/were made in the framework of a specific relationship to ASSIGNEE and that in this relationship the ASSIGNOR(s) is/are bound to use specific knowledge to create inventions similar to the aforesaid invention(s);

AND the ASSIGNOR(s) acknowledge(s) that the ASSIGNOR(s)'s salary or other remuneration includes fair and reasonable compensation for the assignment hereunder of the subject matter herein assigned;

AND the ASSIGNOR(s) agree(s), without further remuneration, to communicate to ASSIGNEE any facts known to the ASSIGNOR(s) respecting the aforesaid invention(s), and all related patent applications, patents, and other inteflectual property protection mentioned above, and to testify in any legal proceeding, sign any lawful papers, execute any applications, make any rightful oaths or declarations, and generally provide all assistance, cooperation and information reasonably necessary for ASSIGNEE to perfect title in, prepare, complete, prosecute, obtain, maintain, preserve, enforce and/or defend the aforesaid invention(s) and all related patent applications, patents and other intellectual properly protection mentioned above, and grant(s) ASSIGNEE a perpetual and irrevocable power of attorney to execute and sign in the name(s) and on behalf of the ASSIGNOR(s) any documents of any nature in pursuit of the aforesaid;

AND the ASSIGNOR(s) agree(s) not to contest or aid in contesting the validity, enforceability or ownership of the aforesaid invention(s) and all related patent applications, patents, and other intellectual properly protection mentioned above;

AND the ASSIGNOR(s) represent(s) and warrant(s) to have the full right to convey the subject matter herein assigned, to have obtained the consent, if applicable, of all joint owners and all inventors to the subject matter assigned herein, to have not made and will not make any agreement or license in conflict herewith, and to have not encumbered and will not encumber by any grant, license or right the subject matter herein assigned;

AND the ASSIGNOR(s) has/have not disclosed and will not disclose the aforesaid invention(s) to any third party, except with the prior written consent of ASSIGNEE, prior to the date of earliest publication of the aforesaid application(s);

AND the ASSIGNOR(s) hereby authorize(s) any attorneys or other representatives of ASSIGNEE to insert hereon any further identification necessary or desirable for recordation of this document, including without limitation any applicable patent or patent application number;

AND, to the extent there is a conflict between the agreement herein and any previous agreement between ASSIGNEE and any or all of the ASSIGNOR(s), the ASSIGNOR(s) agree(s) that the agreement herein controls and supersedes any such conflicting previous agreement.

AND, where permitted by law, the ASSIGNOR(s) agree(s) that the agreement herein supersedes, modifies and/or supplements the law to the extent the agreement herein provides ASSIGNEE greater rights and protections than available under the law;

AND the ASSIGNOR(s) and ASSIGNEE irrevocably waive their rights to rescind the agreement herein, including, without limitation,

on the basis of article 6: 258, 265, or 270 of the Dutch Civil Code;

AND the ASSiGNOR(s) agree(s) that the agreement herein shall be exclusively construed under and governed by the laws of the Netherlands with the exclusion of conflicts of law rules;

AND the ASSIGNOR(s) agree(s) that any dispute arising from or in relation to the agreement herein shall be submitted to the exclusive jurisdiction and venue of the competent court in 's-Hertogenbosch, the Netherlands, untess ASSIGNEE in its sole discretion prefer(s) to submit such dispute to an arbitration, whereby the arbitral tribunal shall be composed of one arbitrator, the place of arbitration shall be within the Netherlands, and the arbitral procedure shall be conducted in the English language;

AND the ASSIGNOR(s) and ASSIGNEE agree that if any provision of the agreement herein is deemed to be unenforceable, yold, tllegal or invalid, it shall be modified so as to make it valid and enforceable, and as so modified the agreement herein shall remain in full force and effect.

	ASSIGNOR(S)	DATE SIGNED
1):		
Name:	Patricius, Aloysius, Jacobus TINNEMANS	Date
2):	Substantia	15-10-2018
Name:	Edo, Maria HULSEBOS	Dale
3):		
Name:	Henricus, Johannes, Lambertus MEGENS	Date

NL.

AND the ASSIGNOR(s) hereby authorize(s) and request(s) any government agency, office or official whose duty includes issuing patents or other evidence or forms of intellectual property protection on or for the aforesaid invention(s) and application(s) (including, without limitation, all applications filed in or for China, Europe, Japan. Korea, the Netherlands, United Kingdom, Germany, France, Italy, Taiwan, Singapore and the United States), to issue the same to ASSIGNEE, as the assignee(s) of all rights, title, interests thereto and/or as the applicant(s) therefor;

AND the ASSIGNOR(s) agree(s) that the attorney of record in the aforesaid application(s) shall hereinafter act on behalf of ASSIGNEE;

AND the ASSIGNOR(s) acknowledge(s) that the aforesaid invention(s) was/were made in the framework of a specific relationship to ASSIGNEE and that in this relationship the ASSIGNOR(s) is/are bound to use specific knowledge to create inventions similar to the aforesaid invention(s);

AND the ASSIGNOR(s) acknowledge(s) that the ASSIGNOR(s)'s salary or other remuneration includes fair and reasonable compensation for the assignment hereunder of the subject matter herein assigned;

AND the ASSIGNOR(s) agree(s), without further remuneration, to communicate to ASSIGNEE any facts known to the ASSIGNOR(s) respecting the aforesaid invention(s), and all related patent applications, patents, and other intellectual property protection mentioned above, and to testify in any legal proceeding, sign any lawful papers, execute any applications, make any rightful oaths or declarations, and generally provide all assistance, cooperation and information reasonably necessary for ASSIGNEE to perfect title in, prepare, complete, prosecute, obtain, maintain, preserve, enforce and/or defend the aforesaid invention(s) and all related patent applications, patents and other intellectual property protection mentioned above, and grant(s) ASSIGNEE a perpetual and irrevocable power of attorney to execute and sign in the name(s) and on behalf of the ASSIGNOR(s) any documents of any nature in pursuit of the aforesaid;

AND the ASSIGNOR(s) agree(s) not to contest or aid in contesting the validity, enforceability or ownership of the aforesald invention(s) and all related patent applications, patents, and other intellectual property protection mentioned above;

AND the ASSIGNOR(s) represent(s) and warrant(s) to have the full right to convey the subject matter herein assigned, to have obtained the consent, if applicable, of all joint owners and all inventors to the subject matter assigned herein, to have not made and will not make any agreement or license in conflict herewith, and to have not encumbered and will not encumber by any grant, license or right the subject matter herein assigned,

AND the ASSIGNOR(s) has/have not disclosed and will not disclose the aforesaid invention(s) to any third party, except with the prior written consent of ASSIGNEE, prior to the date of earliest publication of the aforesaid application(s);

AND the ASSIGNOR(s) hereby authorize(s) any attorneys or other representatives of ASSIGNEE to insert hereon any further identification necessary or desirable for recordation of this document, including without limitation any applicable patent or patent application number;

AND, to the extent there is a conflict between the agreement herein and any previous agreement between ASSIGNEE and any or all of the ASSIGNOR(s), the ASSIGNOR(s) agree(s) that the agreement herein controls and supersedes any such conflicting previous agreement;

AND, where permitted by law, the ASSIGNOR(s) agree(s) that the agreement herein supersedes, modifies and/or supplements the law to the extent the agreement herein provides ASSIGNEE greater rights and protections than available under the law;

AND the ASSIGNOR(s) and ASSIGNEE irrevocably waive their rights to rescind the agreement herein, including, without limitation, on the basis of article 6: 258, 265, or 270 of the Dutch Civil Code;

AND the ASSIGNOR(s) agree(s) that the agreement herein shall be exclusively construed under and governed by the laws of the Netherlands with the exclusion of conflicts of law rules;

AND the ASSIGNOR(s) agree(s) that any dispute arising from or in relation to the agreement herein shall be submitted to the exclusive jurisdiction and venue of the competent court in 's-Hertogenbosch, the Netherlands, unless ASSIGNEE in its sole discretion prefer(s) to submit such dispute to an arbitration, whereby the arbitral tribunal shall be composed of one arbitrator, the place of arbitration shall be within the Netherlands, and the arbitral procedure shall be conducted in the English language;

AND the ASSIGNOR(s) and ASSIGNEE agree that if any provision of the agreement herein is deemed to be unenforceable, void, illegal or invalid, it shall be modified so as to make it valid and enforceable, and as so modified the agreement herein shall remain in full force and effect.

and a survey of the survey of	ASSIGNOR(S)	DATE SIGNED	
1):		100 a a a a a a a a a a a a a a a a a a	
Name:	Patricius, Aloysius, Jacobus TINNEMANS	Date	
2):		and the second s	
Name:	Edo, Maria HULSEBOS	Date	
3):		16-10-18	
Narfie:	Henricus, Johannes, Lambertus MEGENS	Date	
	₩ NL	2017 <i>F</i> -	00211-

PATENT REEL: 049249 FRAME: 0548

pusitatavivimamamimamilisti	Moder	okitatatusatatakui etteet maatissäinen miiseen taavaan een vastiken (10-ka en eiken maanen miinky).
4):	Whate.	Oct. 11,2018
Name:	Ahmet, Koray ERDAMAR	Date
5):		001.11,2018
Name:	Loek, Johannes, Petrus VERHEES	Date
6):	aparto	15-11-5018
Name:	Willem, Seine, Christian ROELOFS	Date
7):	Wudle	8105,11,2018
Name:	Wendy, Johanna, Martina VAN DE VEN	Date /
8):	4aqubis oda	oct. 16, 2018
Name:	Hadi YAGUBIZADE	Date
9):		
Name:	Hakki, Ergün, CEKLI	Date
10):		
Name:	Ralph, BRINKHOF	Date
11):	AA	oot. 11, 2018
Name:	Tran, Thanh, Thuy, VU	Date
12):		
Name:	Maikel, Robert, GOOSEN	Date
13):		
Name:	Maaike, VAN T WESTEINDE	Date
14):	Refere	DOL. 18.2018
Name:	Weltlan, KOU	Date
15):		
Name:	Manouk, RIJPSTRA	Date

4):		
Name:	Ahmet, Koray ERDAMAR	Dale
5):		
Name:	Loek, Johannes, Petrus VERHEES	Dale
6):		
Name:	Willem, Seine, Christian ROELOFS	Date
7):		
Name:	Wendy, Johanna, Martina VAN DE VEN	Dale
8):		
Name:	Hadi YAGUBIZADE	Date
9):	HEGAN	11-00+-2018
Name:	Hakki, Ergün, CEKLI	Date
10):		
Name:	Ralph, BRINKHOF	Date
11):		
Name:	Tran, Thanh, Thuy, VU	Date
12):		
Name:	Maikel, Robert, GOOSEN	Dale
13):		
Name:	Maaike, VAN T WESTEINDE	
14):		
Name:	Weitian, KOU	Date
15):		
Name:	Manouk, RIJPSTRA	Date

NL.

4);		
Name:	Ahmet, Koray ERDAMAR	Date
5):		
Name:	Loek, Johannes, Petrus VERHEES	Date
6):		
Name:	Willem, Seine, Christian ROELOFS	Date
7):		and the second s
Name:	Wendy, Johanna, Martina VAN DE VEN	Dale
8):		rasevernamenti ili ilika katalaini ili vasita katalaini ili ja
Name:	Hadi YAGUBIZADE	Date
9):		
Name:	Hakki, Ergün, CEKLI	Date
10):	ammer-	11-10-603
Name:	Ralph, BRINKHOF	Date
11):		
Name:	Tran, Thanh, Thuy, VU	Dale
12):		!
Name:	Maikel, Robert, GOOSEN	Date
13):		
Name:	Maaike, VAN T WESTEINDE	Date
14):		
Name:	Weitian, KOU	Date
15):		
Name:	Manouk, RIJPSTRA	Date
""" """ "" "" "" "" " " " " " " " " "		till til om en mende samte med men men sagsen med samte sem en men men men seg sig seg seg seg seg seg men en

NL

Almena	A h A B P	Photo s
Name	Ahmet, Koray ERDAMAR	Date
5):		
Name	Loek, Johannes, Petrus VERHEES	Date
6):		
Name:	Willem, Seine, Christian ROELOFS	Date
7):		
Name:	Wendy, Johanna, Martina VAN DE VEN	Date
8):		
Name:	Hadi YAGUBIZADE	Date
9):		
Name:	Hakki, Ergün, CEKLI	Date
10):		
Name:	Ralph, BRINKHOF	Date
11):		
Name:	Tran, Thanh, Thuy, VU	Date
12):	Mathe	Oct. 11 2018
Name:	Majkel-Robert, GOOSEN	Date
13):	•	
Name:	Maaike, VAN T WESTEINDE	Date
14):		
Name:	Weitian, KOU	onimista orazione di sociale di s
15):		
Name:	Manouk, RIJPSTRA	Date

NL

Vame:	Ahmet, Koray ERDAMAR	Date
e	Hake a supposition of the substitute of the contract of the co	yypene <mark>st filiana</mark> o'r bannennau o'r bann o'r brannennau ar bannadd beill filian beil (bl. 42) or ar bann bei
5):	Franklinning guidelig gesterning mengenga pe Gegennerskanning an sanski ben immoven e nesimmendili fisioniskanni	MS COMPANIATION - PROPERTY OF THE PROPERTY OF
lame:	Loek, Johannes, Petrus VERHEES	Dale
S):		
Vame:	Willem, Seine, Christian ROELOFS	Dale
<b>'</b> ):		
lame:	Wendy, Johanna, Martina VAN DE VEN	DALE
3):		
Name:	Hadi YAGUBIZADE	Date
9):	and a shall see the shall see	
Name:	Hakki, Ergün, CEKLI	Date
10):	yng gyfraeth new oenn ag thaus Efferinin o cynn gymru gyfraetha fei lledau de rei af 24 fei y 10 coc ann eghetti gaeth gwell y 10 coc ann eghetti gwell y	Olivi daskih oojoo hisolada Qorumaan maaaa maaaa ahaa ka saabaa ka saabaa ka saabaa ka saabaa ka saabaa ka saa
Name:	Ralph, BRINKHOF	Dale
11):	All Land Co. Will as desired on gave resolution	
Name;	Tran, Thanh, Thuy, VU	Date
12):		
Name:	Maikel, Robert, GOOSEN	Date
13):	Additionable	. 01 5
Name:	Maaike, VAN T WESTEINDE	<u>22 odl 2018.</u> Date
14):		
Name:	Weltian, KOU	Dale
15):	www.da.com.com.com.com.com.com.com.com.com.com	manggussis y <mark>Milli</mark> tor summanga wasar 11 a a milita ka pinga pangan kan kananan na ka
Name:	Manouk, RIJPSTRA	Date

NL.

4):		Y POPP ( Mary Property of the American Conference of the American Conferenc
Name:	Ahmet, Koray ERDAMAR	. Date
5):		
Name:	Loek, Johannes, Petrus VERHEES	Date
6):		
Name:	Willem, Seine, Christian ROELOFS	Date
7):		
Name:	Wendy, Johanna, Martina VAN DE VEN	Date
8);		- The Control of the
Name:	Hadi YAGUBIZADE	Date
9):	,	
Name:	Hakki, Ergün, CEKLI	Date
10):		
Name:	Ralph, BRINKHOF	Date
11):		
Name:	Tran, Thanh, Thuy, VU	Date
12):		
Name:	Malkel, Robert, GOOSEN	Date
13):		
Name:	Maaike, VAN T WESTEINDE	Date
14):		
Name:	Weitian, KOU	Date
15):	Multer	16-10-2018
Name:	Manouk, MJPSTRA	Date
	The state of the s	

NL

16):	And the second s	11-10-2018
Name:	Matthijs, COX	Date
17);	42	11-10-2018
Name:	Franciscus, Godefridus, Casper, BIJNEN	Date

Company: ASML Netherlands B,V. Date
Signor Antonius J.M. van Hoef
Name: Senior Vice President and Chief iP
Counsel

pirkaminintanintahintahintanintanintinintaninta	ĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ	типостинентомного выштипостичения выпостину рассия в при выправления в при выпости в при в при в при в при в п			
For Administrative Purposes					
Assignee's internal reference:	2017P00211-US				
Counterpart or related patent application of, or	Country, filing date & application number:	Initials of administrator and data.			
for, the assigned subject matter below:					
		i			

#### **ASSIGNMENT**

In consideration of good and valuable consideration received by the ASSIGNOR(s), namely:

ADDRES AF	(4)	O St	1833	Pa
NAME OF	177	Sudharshanan RAGHUNATHAN	(2)	Boris MENCHTCHIKOV
ASSIGNOR(S)	arowhii		mongraum odpravions	
the receipt and suffi	iciency of	which are acknowledged by the ASSIGNOR(s), the AS	SIGNO	R(s) hereby sell(s), assign(s) and transfer(s) unto:
		ASML Netherlands B.V.		
NAME OF		P.O. Box 324		
<b>ASSIGNEE</b> and		5500 AH Veldhoven		
ADDRESS		The Netherlands		The state of the s

and its or their successors, assigns and legal representatives (together and individually hereinafter "ASSIGNEE") and to the extent already assigned or transferred to ASSIGNEE by operation of law or by a general obligation between the ASSIGNOR(s) and ASSIGNEE, the ASSIGNOR(s) hereby confirm(s) and formalize(s) the assignment and transfer to ASSIGNEE of, the entire and exclusive right, title and interest for all countries, regions, territories, and other jurisdictions throughout the world, in, to and under the invention(s), improvements thereof, and all patent applications, provisional and non-provisional, (including without limitation all patent applications claiming priority and/or benefit, including without limitation all divisional, continuation, continuation-in-part, substitute, renewal and reissue applications), patents (including without limitation extensions, reissues and renewals thereof), and other intellectual property protection (including without limitation all utility models, designs and inventor certificates, and applications, extensions, renewals and reissues for the same) therefore, together with, though not in any way of limitation, all rights of priority under the International Convention for the Protection of Industrial Property and all other laws and international agreements, the right to apply for patents in ASSIGNEE's name(s), and all rights to bring suit, collect damages and settle suits for past, present or future infringements thereof, known as

TITLE OF THE INVENTION	LITHOGRAPHIC METHOD				
	☐ Which is filed herewith, or				
	☑ For which a patent application was executed and/or filed for:				
	USA 17.Sep.2018 US 16/132,520				
	Country	Date	Country abbreviation	Application number	

AND the ASSIGNOR(s) hereby authorize(s) and request(s) any government agency, office or official whose duty includes issuing patents or other evidence or forms of intellectual property protection on or for the aforesaid invention(s) and application(s) (including, without limitation, all applications filed in or for China, Europe, Japan, Korea, the Netherlands, United Kingdom, Germany, France, Italy, Taiwan, Singapore and the United States), to issue the same to ASSIGNEE, as the assignee(s) of all rights, title, interests thereto and/or as the applicant(s) therefore;

AND the ASSIGNOR(s) agree(s) that the attorney of record in the aforesald application(s) shall hereinafter act on behalf of

AND the ASSIGNOR(s) acknowledge(s) that the aforesaid invention(s) was/were made in the framework of a specific relationship to ASSIGNEE and that in this relationship the ASSIGNOR(s) is/are bound to use specific knowledge to create inventions similar to the aforesaid invention(s):

AND the ASSIGNOR(s) acknowledge(s) that the ASSIGNOR(s)'s salary or other remuneration includes fair and reasonable compensation for the assignment hereunder of the subject matter herein assigned;

AND the ASSIGNOR(s) agree(s), without further remuneration, to communicate to ASSIGNEE any facts known to the ASSIGNOR(s) respecting the aforesaid invention(s), and all related patent applications, patents, and other intellectual property protection mentioned above, and to testify in any legal proceeding, sign any lawful papers, execute any applications, make any rightful oaths or declarations, and generally provide all assistance, cooperation and information reasonably necessary for ASSIGNEE to perfect title in, prepare, complete, prosecute, obtain, maintain, preserve, enforce and/or defend the aforesaid invention(s) and all related patent applications, patents and other intellectual property protection mentioned above, and grant(s) ASSIGNEE a perpetual and irrevocable power of attorney to execute and sign in the name(s) and on behalf of the ASSIGNOR(s) any documents of any nature in pursuit of the aforesaid;

AND the ASSIGNOR(s) agree(s) not to contest or aid in contesting the validity, enforceability or ownership of the aforesaid invention(s) and all related patent applications, patents, and other intellectual property protection mentioned above;

AND the ASSIGNOR(s) represent(s) and warrant(s) to have the full right to convey the subject matter herein assigned, to have

PATENT<sup>0211-US</sup>

obtained the consent, if applicable, of all joint owners and all inventors to the subject matter assigned herein, to have not made and will not make any agreement or license in conflict herewith, and to have not encumbered and will not encumber by any grant, license or right the subject matter herein assigned;

AND the ASSIGNOR(s) has/have not disclosed and will not disclose the aforesaid invention(s) to any third party, except with the prior written consent of ASSIGNEE, prior to the date of earliest publication of the aforesaid application(s);

AND the ASSIGNOR(s) hereby authorize(s) any attorneys or other representatives of ASSIGNEE to insert hereon any further identification necessary or desirable for recordation of this document, including without limitation any applicable patent or patent application number;

AND, to the extent there is a conflict between the agreement herein and any previous agreement between ASSIGNEE and any or all of the ASSIGNOR(s), the ASSIGNOR(s) agree(s) that the agreement herein controls and supersedes any such conflicting previous agreement;

AND, where permitted by law, the ASSIGNOR(s) agree(s) that the agreement herein supersedes, modifies and/or supplements the law to the extent the agreement herein provides ASSIGNEE greater rights and protections than available under the law.

AND the ASSIGNOR(s) and ASSIGNEE irrevocably waive their rights to rescind the agreement herein, including, without limitation, on the basis of article 6: 258, 265, or 270 of the Dutch Civil Code;

AND the ASSIGNOR(s) agree(s) that the agreement herein shall be exclusively construed under and governed by United States federal law and the laws of Delaware with the exclusion of conflicts of law rules;

AND the ASSIGNOR(s) agree(s) that any dispute arising from or in relation to the agreement herein shall be submitted to the exclusive jurisdiction and venue of a court of competent jurisdiction in the states of Connecticut, Arizona or California in the United States of America, unless ASSIGNEE in its sole discretion prefer(s) to submit such dispute to an arbitration, whereby the arbitral tribunal shall be composed of one arbitrator, the place of arbitration shall be states of Connecticut, Arizona or California, and the arbitral procedure shall be conducted in the English language;

AND the ASSIGNOR(s) and ASSIGNEE agree that if any provision of the agreement herein is deemed to be unenforceable, void, illegal or invalid, it shall be modified so as to make it valid and enforceable, and as so modified the agreement herein shall remain in full force and effect.

	ASSIGNOR(S)	DATE SIGNED
1):	Relation	10/16/2018
Name:	Sudharshanan RAGHUNATHAN	Date
2):	(h)	10/16/2012
Name:	Boris MENGHTCHIKOV	Date

		ASSIGNEE ALIGAL	DATE SIGNED
		10/4	11 JAN 18 19
	Company:	ASML Netherlands B.V.	Date
A Charles of the Contract	Signor	Antonius J.M. van Hoef	
***************************************	Name:	Senior Vice President and Chief IP	
**********		Counsel	

PATEM7F00211-US