

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4277825

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Heiko Feldmann	01/07/2008
Daniel Kraehmer	01/09/2008
Jean-Claude Perrin	01/02/2008
Julian Kaller	01/07/2008
Aurelian Dodoc	12/21/2007
Vladimir Kamenov	01/10/2008
Olaf Conradi	01/07/2008
Toralf Gruner	01/09/2008
Thomas Okon	01/14/2008
Alexander Epple	01/10/2008
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CARL ZEISS SMT AG
<b>Street Address:</b>	RUDOLF-EBER-STRASSE 2
<b>City:</b>	OBERKOCHEN
<b>State/Country:</b>	GERMANY
<b>Postal Code:</b>	73447
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15414005
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(877)769-7945
<i>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.</i>	
<b>Phone:</b>	(650) 839-5070
<b>Email:</b>	apsi@fr.com
<b>Correspondent Name:</b>	KA-LO YEH
<b>Address Line 1:</b>	FISH & RICHARDSON P.C.
<b>Address Line 2:</b>	P.O.BOX 1022
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55440-1022
<b>ATTORNEY DOCKET NUMBER:</b>	23523-0003004

PATENT

<b>NAME OF SUBMITTER:</b>	ALISSA TIZZANO
<b>SIGNATURE:</b>	/Alissa/
<b>DATE SIGNED:</b>	02/16/2017
<b>Total Attachments: 10</b> source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif source=Assignment#page7.tif source=Assignment#page8.tif source=Assignment#page9.tif source=Assignment#page10.tif	

ASSIGNMENT

For valuable consideration, we, HEIKO FELDMANN of Dorfmuehle 4, 73432 Aalen, Germany, DANIEL KRAEHMER of Birnenweg 2, 73457 Essingen, Germany, JEAN-CLAUDE PERRIN of Le Buit-Mellecey, FR-71640 Givry, France, JULIAN KALLER of Steinheimer Weg 10, 89551 Koenigsbronn, Germany, AURELIAN DODOC of Schillerstrasse 15, 89522 Heidenheim, Germany, VLADIMIR KAMENOV of Staufenstrasse 3, 73457 Essingen, Germany, OLAF CONRADI of Weidenstrasse 32, 73463 Westhausen/Westerhofen, Germany, TORALF GRUNER of Opalstrasse 22, 73433 Aalen-Hofen, Germany, THOMAS OKON of Egerlandstr. 45, 73431 Aalen, Germany, ALEXANDER EPPLER of Langertstrasse 38, 73431 Aalen, Germany, hereby assign to: Carl Zeiss SMT AG, a corporation of Germany having a place of business at:

Rudolf-Eber-Strasse 2  
73447 Oberkochen  
Germany; and

its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled MICROLITHOGRAPHY PROJECTION OBJECTIVE, filed 11/30/2007, and assigned U.S. Serial Number 11/916,162, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further

applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Date: 7 - Jan - 2008

Heiko Feldmann  
HEIKO FELDMANN

Witnessed by:

Name: Sabine Lunge

Date: Jan 7<sup>th</sup>, 2008

Name: David Jestic

Date: Jan 7<sup>th</sup>, 2008

Date: 09 January 2008

Daniel Kraehmer  
DANIEL KRAEHMER

Witnessed by:

Name: Sabine Lunge

Date: Jan 9<sup>th</sup>, 2008

Name: David Jestic

Date: Jan 9<sup>th</sup>, 2008

Date: \_\_\_\_\_

\_\_\_\_\_  
JEAN-CLAUDE PERRIN

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: 07-Jan 2008

Olaf Conrad  
OLAF CONRADI

Witnessed by:

Name: Sabine Lunge

Date: Jan 7<sup>th</sup>, 2008

Name: Louis Festic

Date: Jan 7<sup>th</sup>, 2008

Date: January 9<sup>th</sup>, 2008

Toralf Gruner  
TORALF GRUNER

Witnessed by:

Name: Sabine Lunge

Date: January 9<sup>th</sup>, 2008

Name: Louis Festic

Date: Jan. 9<sup>th</sup>, 2008

Date: January 14<sup>th</sup>, 2008

Thomas Okon  
THOMAS OKON

Witnessed by:

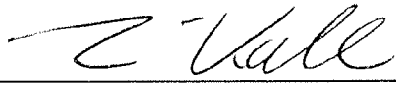
Name: Louis Festic

Date: Jan 14<sup>th</sup>, 2008

Name: Christina Gorking

Date: Jan 14<sup>th</sup>, 2008

Date: Jan 7<sup>th</sup>, 2008

  
JULIAN KALLER

Witnessed by:

Name: Sabine Lunge

Date: Jan 7<sup>th</sup>, 2008

Name: Louise Jestic

Date: Jan 7<sup>th</sup>, 2008

Date: 21 Dec 2007

  
AURELIAN DODOC

Witnessed by:

Name: Sabine Lunge

Date: Dec 21<sup>st</sup>, 2007

Name: Louise Jestic

Date: Dec 21<sup>st</sup>, 2007

Date: 10-JAN-2008

  
VLADIMIR KAMENOV

Witnessed by:

Name: Louise Jestic

Date: Jan 10<sup>th</sup>, 2008

Name: Christina Gostner

Date: Jan 10<sup>th</sup>, 2008

Date: 10-JAN-2008

Alexander Epple  
ALEXANDER EPPLE

Witnessed by:

Name: Sabine Jung

Date: Jan 10<sup>th</sup>, 2008

Name: Lewis Fette

Date: Jan 10<sup>th</sup>, 2008

. 21797181.doc

ASSIGNMENT

For valuable consideration, we, HEIKO FELDMANN of Dorfmuehle 4, 73432 Aalen, Germany, DANIEL KRAEHMER of Birmenweg 2, 73457 Essingen, Germany, JEAN-CLAUDE PERRIN of Le Buit-Mellecey, FR-71640 Givry, France, JULIAN KALLER of Steinheimer Weg 10, 89551 Koenigsbronn, Germany, AURELIAN DODOC of Schillerstrasse 15, 89522 Heidenheim, Germany, VLADIMIR KAMENOV of Staufenstrasse 3, 73457 Essingen, Germany, OLAF CONRADI of Weidenstrasse 32, 73463 Westhausen/Westerhofen, Germany, TORALF GRUNER of Opalstrasse 22, 73433 Aalen-Hofen, Germany, THOMAS OKON of Egerlandstr. 45, 73431 Aalen, Germany, ALEXANDER EPPLER of Langertstrasse 38, 73431 Aalen, Germany, hereby assign to: Carl Zeiss SMT AG, a corporation of Germany having a place of business at:

Rudolf-Eber-Strasse 2  
73447 Oberkochen  
Germany; and

its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled MICROLITHOGRAPHY PROJECTION OBJECTIVE, filed 11/30/2007, and assigned U.S. Serial Number 11/916,162, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further



applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Date: \_\_\_\_\_

\_\_\_\_\_  
HEIKO FELDMANN

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
DANIEL KRAEHMER

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: 02-January 2008  
Jan. 02, 2008

\_\_\_\_\_  
*Jean-Claude Perrin*  
JEAN-CLAUDE PERRIN

Witnessed by:

Name: *Walter J. Fitch*

Date: *Jan. 2<sup>nd</sup>, 2008*

Name: *Christina Gorman*

Date: *Jan. 2<sup>nd</sup>, 2008*

Date: \_\_\_\_\_

\_\_\_\_\_  
OLAF CONRADI

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
TORALF GRUNER

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
THOMAS OKON

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
JULIAN KALLER

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
AURELIAN DODOC

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
VLADIMIR KAMENOV

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
ALEXANDER EPPLE

Witnessed by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

. 21797181.doc