

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
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RECEIVING PARTY DATA															
<table border="1"> <tr> <td>Name:</td> <td>Carl Zeiss SMT GmbH</td> </tr> <tr> <td>Street Address:</td> <td>Rudolf-Eber-Strasse 2</td> </tr> <tr> <td>City:</td> <td>Oberkochen</td> </tr> <tr> <td>State/Country:</td> <td>GERMANY</td> </tr> <tr> <td>Postal Code:</td> <td>73447</td> </tr> </table>		Name:	Carl Zeiss SMT GmbH	Street Address:	Rudolf-Eber-Strasse 2	City:	Oberkochen	State/Country:	GERMANY	Postal Code:	73447				
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CORRESPONDENCE DATA															
<p>Fax Number: 8777697945  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 212-765-5070        Email: apsi@fr.com        Correspondent Name: Chris C. Bowley        Address Line 1: FISH &amp; RICHARDSON P.C.        Address Line 2: P.O.BOX 1022        Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022</p>															
ATTORNEY DOCKET NUMBER:	23375-0007001														

NAME OF SUBMITTER:	Alissa Tizzano
Signature:	/Alissa/
Date:	06/05/2013
<b>Total Attachments: 4</b> source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif	

ASSIGNMENT

For valuable consideration, we, OLAF ROGALSKY of Katzenbachstrasse 5, 73447 Oberkochen, Germany, SONJA SCHNEIDER of Jenaer Strasse 14, 73447 Oberkochen, Germany, BORIS BITTNER of Rheingoldstrasse 6, 91154 Roth, Germany, JENS KUGLER of Walkstrasse 64, 73431 Aalen, Germany, BERNHARD GELLRICH of Hermelinstrasse 39/4, 73434 Aalen, Germany, and ROLF FREIMANN of Weisse Steige 20, 73431 Aalen, Germany, hereby assign to: Carl Zeiss SMT GmbH, 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 IMAGING OPTICAL SYSTEM FOR MICROLITHOGRAPHY, filed 3/8/2013, and assigned U.S. Serial Number 13/790,443, 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: May 29-2015

Olaf Rogalsky  
OLAF ROGALSKY

Witnessed by:

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

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

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

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

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

\_\_\_\_\_  
SONJA SCHNEIDER

Witnessed by:

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

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

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

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

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

\_\_\_\_\_  
BORIS BITTNER

Witnessed by:

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

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

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

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

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

\_\_\_\_\_  
JENS KUGLER

Witnessed by:

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

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

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

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

Date: \_\_\_\_\_  
OLAF ROGALSKY

Witnessed by:

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

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

Date: April 18, 2013 Sonja Schneider  
SONJA SCHNEIDER

Witnessed by:

Name: Christina Gorkun Date: April 18, 2013

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

Date: April 4, 2013 Boris Bittner  
BORIS BITTNER

Witnessed by:

Name: Christina Gorkun Date: April 4, 2013

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

Date: April 26, 2013 Jens Kugler  
JENS KUGLER

Witnessed by:

Name: Christina Gorkun Date: April 26, 2013

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

Date: April 17, 2013

Bernhard Gellrich  
BERNHARD GELLRICH

Witnessed by:

Name: Christina Goss

Date: April 17, 2013

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

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

Date: April 8<sup>th</sup> 2013

Rolf Freimann  
ROLF FREIMANN

Witnessed by:

Name: Edith R.

Date: April 8, 2013

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

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

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