

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Johann Trenkler</td> <td>11/14/2005</td> </tr> <tr> <td>Hans-Juergen Mann</td> <td>10/20/2005</td> </tr> <tr> <td>Udo Nothelfer</td> <td>11/05/2005</td> </tr> </tbody> </table>		Name	Execution Date	Johann Trenkler	11/14/2005	Hans-Juergen Mann	10/20/2005	Udo Nothelfer	11/05/2005
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<table border="1"> <tr> <td>Name:</td> <td>Carl Zeiss SMT AG</td> </tr> <tr> <td>Street Address:</td> <td>Rudolf-Eber-Strasse 2</td> </tr> <tr> <td>City:</td> <td>73447 Oberkochen</td> </tr> <tr> <td>State/Country:</td> <td>GERMANY</td> </tr> </table>		Name:	Carl Zeiss SMT AG	Street Address:	Rudolf-Eber-Strasse 2	City:	73447 Oberkochen	State/Country:	GERMANY
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PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13939346</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13939346				
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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: (617) 542-5070        Email: apsi@fr.com        Correspondent Name: Marc M. Wefers        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:	36865-0002002								
NAME OF SUBMITTER:	Cheryl A. Forrest								
Signature:	/Cheryl A. Forrest/								
Date:	07/12/2013								

CH \$40.00 13939346

Total Attachments: 4

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Docket No.: FMW-CG-PCT-US (CZ 70 US)

# ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned by the Assignee,

**CARL ZEISS SMT AG**

a corporation organized under the laws of the Germany, domiciled at

**Carl-Zeiss-Strasse 22, 73447 Oberkochen, Germany,**

receipt whereof is hereby acknowledged, the undersigned by these presents hereby sells, assigns, transfers, and sets over unto said assignee the entire right, title and interest in and to the invention or improvement in

**"REFLECTIVE OPTICAL ELEMENT AND EUV LITHOGRAPHY APPLIANCE"**

said invention being fully described and/or claimed in the application for Letters Patent of the United States of America, executed this date(s), as well as any divisional, continuing, reissue, reexamination, or other patent applications, in and for the United States and all foreign countries, the same to be held and enjoyed by said assignee, its successors, assigns or other legal representatives, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

AND SAID ASSIGNEE IS HEREBY AUTHORIZED to make application for and to receive Letters Patent for said invention in any of said countries at its election.

AND BY THIS COVENANT the undersigned will execute or procure any further necessary assurance of title to said invention and Letters Patent; and at any time, upon the request of said assignee, will execute and deliver any and all papers that may be necessary or desirable to perfect the title to said invention or any Letters Patent which may be granted therefor to said Assignee, its successors, assigns or other legal representatives, and, upon the request of said assignee, will execute any divisional, continuing, reissue, reexamination, or other applications for patents for said invention, in any country, and will make all rightful oaths and do all lawful acts requisite for aiding, procuring, or maintaining the same or for aiding therein.

AND THE COMMISSIONER of Patents is hereby authorized and requested to issue any and all Letters Patent to the United States for said invention, to said assignee.

SIGNED as indicated adjacent my signature.

Docket No.: FMW-CA-PCT-US (CZ 68 US)

**PATENT****REEL: 017026 FRAME: 0253****REEL: 030783 FRAME: 0150**

JOHANN TRENKLERDate

Location: \_\_\_\_\_

Witnessed \_\_\_\_\_

Name: \_\_\_\_\_  
(Printed or Typed)DateHANS-JÜRGEN MANNDate

Location: \_\_\_\_\_

Witnessed \_\_\_\_\_

Name: \_\_\_\_\_  
(Printed or Typed)Date  
UDO NOTHELFER8.11.05  
DateLocation: Carl Zeiss AG, Patentabteilung 73446 OberkochenWitnessed Christina GerstungName: Christina Gerstung  
(Printed or Typed)5.11.05  
Date

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Johann Trenkler J. Trinkl Nov 14th 2005  
JOHANN TRENKLER Date

Location: Carl Zeiss AG, Patentabteilung, 73446 Oberkochen

Witnessed Christina Gerstung

Name: Christina Gerstung Nov. 14th, 2005  
(Printed or Typed) Date

H. J. Mann Oct. 20th, 2005  
HANS-JÜRGEN MANN Date

Location: Carl Zeiss AG, Patentabteilung, 73446 Oberkochen

Witnessed Christina Gerstung

Name: Christina Gerstung Oct. 20th, 2005  
(Printed or Typed) Date

UDO NOTHELFER Date

Location: \_\_\_\_\_

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