PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the fourth assignor's last name previously recorded on Reel 026400 Frame 0217. Assignor(s) hereby confirms the correct last name is Von Buenau.

CONVEYING PARTY DATA

Name	Execution Date
David Shafer	05/10/2005
Wilhelm Ulrich	04/29/2005
Aurelian Dodoc	05/02/2005
Rudolf M. Von Buenau	05/10/2005
Hans-Juergen Mann	05/10/2005
Alexander Epple	04/29/2005

RECEIVING PARTY DATA

Name:	Carl Zeiss SMT AG
Street Address:	Rudolf-Eber-Strasse 2
City:	Oberkochen
State/Country:	GERMANY
Postal Code:	73447

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13153544

CORRESPONDENCE DATA

 Fax Number:
 8777697945

 Phone:
 212-765-5070

 Email:
 apsi@fr.com

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

via US Mail.

Correspondent Name: Chris C. Bowley

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

PATENT

REEL: 028619 FRAME: 0591

0.00 13153544

ATTORNEY DOCKET NUMBER:	36919-0005010
NAME OF SUBMITTER:	Alissa Tizzano
Total Attachments: 6 source=corrective_assignment#page1.tif source=corrective_assignment#page2.tif source=corrective_assignment#page3.tif source=corrective_assignment#page4.tif source=corrective_assignment#page5.tif source=corrective_assignment#page6.tif	

USPTO 6/7/2011 12:20:02 PM PAGE 4/005 Fax Server

TO: CHRIS C. BOWLEY COMPANY: FISH & RICHARDSON P.C.

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1 06/07/2011 501556547

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
David Shafer	05/10/2005
Wilhelm Ulrich	04/29/2005
Aurelian Dodoc	05/02/2005
Rudolf M. Buekan Von Buenau	05/10/2005
Hans-Juergen Mann	05/10/2005
Alexander Epple	04/29/2005

RECEIVING PARTY DATA

Name:	Carl Zeiss SMT AG
Street Address:	Rudolf-Eber-Strasse 2
City:	Oberkochen
State/Country:	GERMANY
Postal Code:	73447

PROPERTY NUMBERS Total: 1

	Number
Application Number:	13153544

CORRESPONDENCE DATA

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Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 212-765-5070

Email: alp@fr.com

Correspondent Name: Chris C. Bowley

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER: 18233-0005010

USPTO 6/7/2011 12:20:02 PM PAGE 5/005 Fax Server

TO: CHRIS C. BOWLEY COMPANY: FISH & RICHARDSON P.C.

NAME OF SUBMITTER:	Alissa Tizzano
Total Attachments: 2 source=assignment#page1.tif source=assignment#page2.tif	

Assignment

Whereas, I/We, David SHAFER, Wilhelm ULRICH, Aurelian DODOC, Rudolf VON BUENAU, Hans-Juergen MANN and Alexander EPPLE of Fairfield, Connecticut; Aalen, GERMANY; Oberkochen, GERMANY; Jenz, GERMANY; Oberkochen, GERMANY; and Aalen, GERMANY, respectively, hereinafter called assignor(s), have invented certain improvements in

CATADIOPTRIC PROJECTION OBJECTIVE

and executed an application for Letters Patent of the United States of America therefor, and

Whereas, CARL ZEISS SMT AG, of Carl-Zeiss-Strasse 22, 73447 Oberkochen, FEDERAL REPUBLIC OF GERMANY (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor,

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee.

VWe hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 11/035,103, filed January 14, 2005) the application number and filing date

(Appu of said	application when known.
Date:	James Amares 10 may 200
Dates	29 - Apr - 7005 W. W.
Oate:	Auxlier Boolee 02. Huy 2005
Date:	9/RUdolf VON BUENAU
Date:	10- Hay - 2005 UT
Date:	29-APR-2005 Anolud 213

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

Docker No. Q79423 For Non-U.S. Clients

Assignment

Whereas, I'We, David SHAFER, Wilhelm ULRICH, Aurelian DODOC, Rudolf VON BUENAU, Hans-Juergen MANN and Alexander EPPLE of Fairfield, Connecticut; Aalen, GERMANY; Oberkochen, GERMANY; Jena, GERMANY; Oberkochen, GERMANY; and Aalen, GERMANY, respectively, hereinafter called assignor(s), have invented carrain improvements in

CATADIOPTRIC PROJECTION OBJECTIVE

and executed an application for Letters Patent of the United States of America therefor, and

Whereas, CARL ZEISS SMT AG, of Carl-Zeiss-Sirasse 22, 73447 Oberkochen, FEDERAL REPUBLIC OF GERMANY (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent gramed upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignce in connection with the United States application when called upon to do so by the assignee.

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Date:		quadr
6 Date:	19 - Apr - 2005 Williams	IGDO*A
	s/Wilhelm ULRICH	
Date:		Agree.
Date:	to Mary 2005 Rudel Hvin Burrow	
	S/Rudolf VON BUENA/	
Date:		***************************************
	s/Hans-Juergen MANN	
Date:	29- APR-2005 Agenounder E.S.	F
	VAlexander EPPLE	

(Legalization not required for recording but is prima facile evidence of execution under 35 U.S.C. \$261)

PATENT REEL: 028619 FRAME: 0596

RECORDED: 07/23/2012