



10-18-2005



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FORM PTO-1595

(Rev. 10/02)

REC

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Docket No.: 055071-0419

To the Honorable Commissioner for Patents and Trademarks: Please record the attached original documents or copy thereto:

1. Name of Conveying Party(ies):

Xuelong SHI, Robert J. SOCHA, Thomas LAIDIG and Douglas
VAN DEN BROEKE

2. Name and address of receiving party(ies):

Name: ASML MASKTOOLS B.V.

Address: P.O. Box 324
Veldhoven, AH 5500 The NetherlandsAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☒ Other *Resubmission of Assignment (second and last
inventors names incomplete)*

Execution Date: March 3; March 7; March 7 and March 7, 2005
(respectively)Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If the document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s).

10/981,750, filed November 5, 2004

B. Patent No(s).

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence
concerning document should be mailed:

Name: MCDERMOTT WILL & EMERY LLP

Internal Address:

Street Address: 600 13th Street, N.W.

City: Washington State: D. C. Zip: 20005-3096

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41)

\$40.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

500417

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy
of the original document.*

Michael E. Fogarty, Registration No. 36,139

October 13, 2005

Name and Registration No. of Person Signing

Signature

Date

Total number of pages including cover sheet: 6

OMB No. 0651-0027 (exp. 6/30/2005)

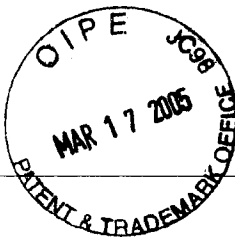
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PATENT
REEL: 017084 FRAME: 0114

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03-22-2005



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FORM PTO-1595
(Rev. 10/02)

RI

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Docket No.: 55071-419

To the Honorable Commissioner for Patents and Trademarks: Please record the attached original documents or copy thereto:

1. Name of Conveying Party(ies):

Xuelong SHI, Robert SOCHA, Thomas LAIDIG and Doug VAN
DEN BROEKE

2. Name and address of receiving party(ies):

Name: ASML MASKTOOLS B.V.

Address: P.O. Box 324
Veldhoven, AH 5500 The NetherlandsAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: March 3; March 7; March 7 and March 7, 2005
(respectively)Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If the document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s).

10/981,750, filed November 5, 2004

B. Patent No(s).

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence
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- ☐ Enclosed
☒ Authorized to be charged to deposit account

8. Deposit account number:

500417

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy
of the original document.*

Michael E. Fogarty, Registration No. 36,139

March 17, 2005

Name and Registration No. of Person Signing

Signature

Date

Total number of pages including cover sheet: 3

OMB No. 0651-0027 (exp. 6/30/2005)

03/21/2005 6TON11 00000092 500417 10981750

01 FC:8021 40.00 DA

PATENT
REEL: 017084 FRAME: 0115

ASSIGNMENT

WHEREAS, Xuelong SHI, Robert J. SOCHA, Thomas LAIDIG and Douglas VAN DEN BROEKE, hereinafter called the "Assignors," have jointly invented a new and useful invention entitled EIGEN DECOMPOSITION BASED OPC MODEL, for which they have:

- (a) filed an application for United States Letters Patent on November 5, 2004 as (Serial No. 10/981,750); or
- (b) executed an application for United States Letters Patent on _____; and

WHEREAS, ASML MASKTOOLS B.V., a corporation organized and existing under the laws of the The Netherlands, having a place of business at P.O. Box 324, 5500 AH Veldhoven, The Netherlands, hereinafter called the "Assignee," is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under any Letters Patent which may be obtained to said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for and in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient considerations, the receipt of which by said Assignors from the said Assignee is hereby acknowledged, the said Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, the entire, right, title and interest for the United States in and to the invention and application hereinabove identified, and any Letters Patent of the United States that may issue for said invention, together with the entire right, title and interest in and to said invention and applications for Letters Patent and Letters Patent therefor, in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; to have and to hold for the sole and exclusive use and benefit of the said Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said inventions may issue.

And the said Assignors do hereby covenant and agree, for themselves and their legal representatives, that they will assist the said Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the said Assignee may elect to make covering the invention herein identified, as hereinabove set forth; in vesting in the said Assignee like exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patent herein contemplated; and that they will execute and deliver to the said Assignee any and all additional papers which may be requested by the said Assignee to fully carry out the terms of this Assignment.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue Letters Patent to the said Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the said Assignors have hereunto set their hand.

Date

March 3rd. 2005

Inventor: Xuelong SHI

Xuelong Shi

Date

March 7, 2005

Inventor: Robert J. SOCHA

Robert Socha

Date

Mar 7, 2005

Inventor: Thomas LAIDIG

Thomas Laidig

Date

7-Mar-05

Inventor: Douglas VAN DEN BROEKE

Douglas Van Den Broeke