



09-21-2000



EET

U.S. Department of Commerce  
Patent and Trademark Office

101464660

Our Ref.: 2476-2

Commissioner of Patents and Trademarks  
Box Assignment, Washington, D.C. 20231

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Gregory D. Cooper  
Richard M. Mohring

8-28-00

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

Name: Programmable Lithography, L.L.C.

Internal Address: \_\_\_\_\_

Street Address: 2315 N. Sibley Street

City: Alexandria

State/Country: VA

Zip: 22311

Additional name/s of conveying party/ies attached? ☐

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Assignment ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: August 4, 2000; August 7, 2000

Additional name/s & address/es attached? ☐ Yes ☒ No

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

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

A. Patent Application No(s).

- (1) 09/066,979  
(2) 60/051,121  
(3) 60/058,702

B. Patent No(s).

- (1)  
(2)  
(3)

Additional numbers attached ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert W. Faris

Internal Address: \_\_\_\_\_

Street Address: Nixon & Vanderhye P.C.

1100 North Glebe Road

8<sup>th</sup> Floor

City: Arlington State: VA Zip: 22201

6. Total number of applications & patents involved: 5

7. Total fee (37 CFR 3.41) \$ 200.00

☒ Enclosed

☐ Authorized to be charged to deposit account #14-1140

8. The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our **Account No. 14-1140.**

DO NOT USE THIS SPACE

9. Statements 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.

Leonard C. Mitchard (29,009)

Name of Person Signing  
for Robert W. Faris Reg. No. 31.352

[Signature]  
Signature

August 28, 2000

Date

Total number of pages including **original** cover sheet, attachments, and document: [7]

09/20/2000 NTHA11 00000130 09066979

01 FC:581

200.00 DP

453776

**PATENT**  
**REEL: 011078 FRAME: 0074**

RECORDATION FORM COVER SHEET

**PATENTS ONLY**

Our Ref: 2476-2

Commissioner of Patents and Trademarks  
Box Assignment, Washington, D.C. 20231

1. Name of conveying party(ies):

2. Name:

Street Address:

City:

State:

Zip:

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

A. Patent Application No(s).

(4) 60/058,701

(5) 60/060,254

(6)

(7)

(8)

(9)

B. Patent No(s).

(4)

(5)

(6)

(7)

(8)

(9)

## ASSIGNMENT OF PATENT APPLICATIONS AND INVENTIONS

WHEREAS, Gregory D. Cooper, an individual currently residing at 2315 North Sibley Street, Alexandria, Virginia 22311 ("Cooper"), and Richard M. Mohring, an individual currently residing at 8 Princeton Court, East Brunswick, New Jersey 08816 ("Mohring"; Cooper and Mohring are sometimes herein individually referred to as an "Applicant" and collectively as the "Applicants"), are the owners and inventors of the patent applications listed on Schedule A attached hereto and incorporated herein (the "Patent Applications") and the inventions covered by said Patent Applications (the "Inventions"); and

WHEREAS, the Applicants desire to assign to Programmable Lithography, L.L.C., a Virginia limited liability company (the "Assignee"), and the Assignee desires to accept from the Applicants, in general, (a) the full and exclusive right to said Inventions, and to any and all derivative works, in the United States of America, its territories, dependencies and possessions, and also in all countries foreign to the United States of America, and (b) the entire right, title and interest in and to any and all patents which may be granted therefor in the United States of America, its territories, dependencies and possessions, and also in all countries foreign to the United States of America (including, but not limited to, the entire right, title and interest in and to the Patent Applications, and any and all patents that may be granted as result thereof, in the United States of America, its territories, dependencies and possessions, and also in all countries foreign to the United States of America).

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Applicants and the Assignee, intending to be legally bound, hereby agree as follows:

1. The Applicants hereby assign and transfer to the Assignee, and the Assignee hereby accepts, (a) the full and exclusive right to said Inventions, and to any and all derivative works, in the United States of America, its territories, dependencies and possessions, and also in all countries foreign to the United States of America, and (b) the entire right, title and interest in and to any and all patents which may be granted therefor in the United States of America, its territories, dependencies and possessions, and also in all countries foreign to the United States of America (including, but not limited to, the entire right, title and interest in and to the Patent Applications, any and all other patent applications that may now or hereafter be filed with respect to the Inventions and/or any derivative works, and any and all patents which may be granted as a result thereof, in the United States of America, its territories, dependencies and possessions, and also in all countries foreign to the United States of America), including, without limitation, any and all priority rights, any and all reissues, divisions, continuations, continuations-in-part, and/or extensions of such patents, any and all reexamination patents and/or reissue patents issuing from any of the foregoing, any and all rights of action arising from such patents, any and all claims for damages by reason of infringement of such patents, and any and all rights to sue and collect damages for infringement of such patents, all to be held and enjoyed by the Assignee for its own use and benefit, and for the use and benefit of the Assignee's successors and assigns, as the same would have been held and enjoyed by the Applicants had this Assignment of Patent Applications and Inventions (the "Assignment") not been made.

2. The Applicants hereby authorize and request the United States Commissioner of Patents and Trademarks to issue said United States patents to the Assignee, for the Assignee's sole use and benefit, and for the use and benefit of the Assignee's successors and assigns, to the full end of the term for which such patents may be granted, as fully and entirely as the same would have been held by the Applicants had this Assignment not been made.
3. The Applicants hereby authorize the Assignee, and the Assignee's successors and assigns, to apply for a patent or patents directly in the Assignee's own name upon the Inventions and any and all derivative works wherever the same is permitted by law.
4. The Applicants each hereby covenant and agree, promptly upon the request of the Assignee, to complete, execute, swear to, acknowledge under oath, and deliver such further certificates, assignments, documents and/or instruments, and to promptly do all such other acts and things, as the Assignee may deem necessary, advisable and/or appropriate to carry out and consummate the intent and purposed of this Assignment, all without any further consideration to the Applicants from (but at the cost and expense of) the Assignee.
5. Except to the extent governed by Federal law, this Assignment shall be governed by, and construed and interpreted in accordance with, the laws of the Commonwealth of Virginia, without giving effect to the principles of choice of law. In the event of any ambiguity or question of intent or interpretation arises, this Assignment shall be construed as if drafted jointly by the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Assignment. All terms and words in this Assignment, regardless of the number and gender in which they are used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine or neuter, as the context or sense of this Assignment or any paragraph or clause herein may require, as if such terms and words had been fully and properly written in the appropriate number and gender. Whenever possible, each provision of this Assignment shall be interpreted in such manner to be effective, valid, enforceable and legal under applicable law. However, should any provision of this Assignment for any reason be declared or held invalid, unenforceable or illegal, such invalidity, unenforceability, or illegality shall not affect the validity of any remaining provisions, which remaining provisions shall remain in force and effect as if this Assignment had been executed with the invalid, unenforceable or illegal provision thereof eliminated. Neither this Assignment, nor any provision hereof, may be amended, modified, supplemented, waived, discharged or terminated in whole or in part orally, but only by an instrument in writing signed by the party against which enforcement of said amendment, modification, supplement, waiver, discharge or termination is sought to be enforced. This Assignment may be executed and delivered in multiple counterparts and, in such event, each such counterpart shall constitute an original and all such counterparts shall constitute a single Assignment. This Assignment shall be deemed dated as of the date this Assignment is last signed by the parties hereto.

(signatures on next page)

**APPLICANTS:**

Cooper:

By: [Signature]  
Gregory D. Cooper

Date: August 7, 2000

Mohring:

By: [Signature]  
Richard M. Mohring

Date: 8/4/, 2000

**ACCEPTED:**

**ASSIGNEE:**

Programmable Lithography, L.L.C.,  
a Virginia limited liability company

By: [Signature]  
Gregory D. Cooper, Member

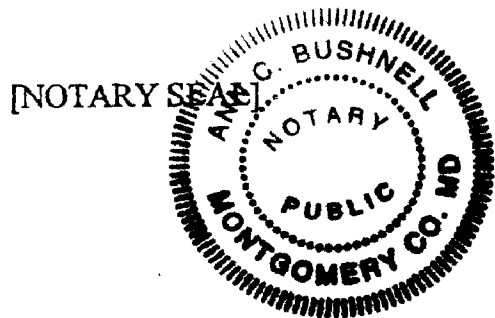
Date: August 7, 2000

By: [Signature]  
Richard M. Mohring, Member

Date: 8/4/, 2000

STATE OF MARYLAND  
COUNTY OF MONTGOMERY

I hereby certify that, on this 7<sup>th</sup> day of August, 2000, before the undersigned subscriber, a Notary Public of the State of Maryland, in and for the County of MONTGOMERY, personally appeared Gregory D. Cooper and he acknowledged that he had executed the foregoing Assignment of Patent Applications and Inventions as an Applicant (as defined therein) as his act and deed for the purposes therein contained.



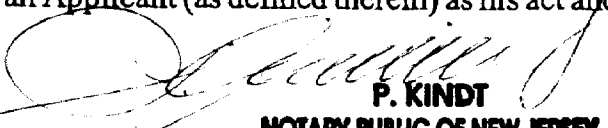
[Signature]  
Name: \_\_\_\_\_  
Notary Public  
My commission expires: 1/1/04

ANN C. BUSHNELL  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires:

STATE OF \_\_\_\_\_ )  
OF \_\_\_\_\_ )

I hereby certify that, on this 04 day of AUG, 2000, before the undersigned subscriber, a Notary Public of NJ, in and for \_\_\_\_\_, personally appeared Richard M. Mohring and he acknowledged that he had executed the foregoing Assignment of Patent Applications and Inventions as an Applicant (as defined therein) as his act and deed for the purposes therein contained.

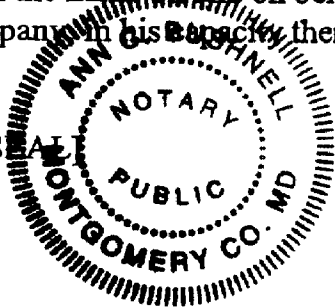
[NOTARY SEAL]


  
**P. KINDT**  
**NOTARY PUBLIC OF NEW JERSEY**  
Name: \_\_\_\_\_  
Commission Expires 1/13/2005  
Notary Public  
My commission expires: \_\_\_\_\_

STATE OF MARYLAND )  
COUNTY OF MONTGOMERY )

I hereby certify that, on this 17th day of August, 2000, before the undersigned subscriber, a Notary Public of the State of Maryland, in and for the County of MONTGOMERY, personally appeared Gregory D. Cooper and he acknowledged that he, being authorized so to do, had executed the foregoing Assignment of Patent Applications and Inventions in the name on and on behalf of Programmable Lithography, L.L.C., a Virginia limited liability company, in his capacity therein stated for the purposes therein contained.

[NOTARY SEAL]



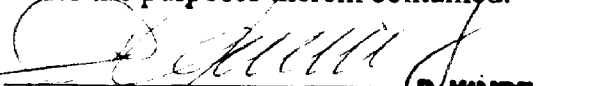
  
Name: \_\_\_\_\_  
Notary Public  
My commission expires: 11/1/04

STATE OF \_\_\_\_\_ )  
OF \_\_\_\_\_ )

**ANN C. BUSHNELL**  
**NOTARY PUBLIC STATE OF MARYLAND**  
My Commission Expires: \_\_\_\_\_

I hereby certify that, on this 04 day of AUG, 2000, before the undersigned subscriber, a Notary Public of NJ, in and for the \_\_\_\_\_, personally appeared Richard M. Mohring and he acknowledged that he, being authorized so to do, had executed the foregoing Assignment of Patent Applications and Inventions in the name on and on behalf of Programmable Lithography, L.L.C., a Virginia limited liability company, in his capacity therein stated for the purposes therein contained.

[NOTARY SEAL]

  
**P. KINDT**  
**NOTARY PUBLIC OF NEW JERSEY**  
Name: \_\_\_\_\_  
Commission Expires 1/13/2005  
Notary Public  
My commission expires: \_\_\_\_\_

**SCHEDULE A  
TO  
ASSIGNMENT OF PATENT APPLICATIONS AND INVENTIONS**

1. Application for a United States Patent filed on April 28, 1998, Application Number 09/066,979.
2. Application for a provisional United States Patent filed on June 27, 1997, Application Number 60/051,121.
3. Application for a provisional United States Patent filed on September 12, 1997, Application Number 60/058,702.
4. Application for a provisional United States Patent filed on September 12, 1997, Application Number 60/058,701.
5. Application for a provisional United States Patent filed on September 29, 1997, Application Number 60/060,254.
6. PCT application filed in the United States Receiving Office with the international filing date June 25, 1998, Application Number PCT/US98/13068, with the title "Transferring A Programmable Pattern by Photon Lithography", published on January 7, 1999, in publication number WO 99/00706, with the following national phase applications:

Canada No. 2,295,635

Europe EPC No. 989334168.0

Korea No. 7012331/1999

Japan No. 11-505665

102823018B.wpd