



09-15-2005



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RECORDATION FORM COVER
PATENTS ONLY

103082057

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

Rowland C. CLARKE (09/07/2005), Erica C. ELVEY (08/24/2005), S. S. KRISHNASWAMY (09/02/2005), and

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s): in parentheses after inventor name

☒ Assignment ☐ Merger ☐ Change of Name

☐ Security Agreement ☐ Joint Research Agreement

☐ Government Interest Assignment

☐ Executive Order 9424, Confirmatory License

☐ Other

2. Name and address of receiving party(ies)

Name: Northrop Grumman Corp.

Internal Address:

Street Address:

Electronics Sensors Systems Div.
Law Department
P.O. Box 17319 MS A440

City: Baltimore

State: Maryland

Country: United States of America Zip: 21203-7319

Additional name(s) & address(es) attached: ☐ Yes ☒ No

4. Application or patent number(s):

A. Patent Application No.(s)

11/154,641

☐ This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

Name: William L. Gates
BIRCH, STEWART, KOLASCH & BIRCH, LLP

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6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☐ Authorized to be charged by credit card
☐ Authorized to be charged to deposit account
☒ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers
Expiration Date

b. Deposit Account Number
Authorized User Name

9. Signature:

William L. Gates

Signature

September 12, 2005

Date

William L. Gates - 20,848

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

6

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**RECORDATION FORM COVER SHEET
(continued)****Additional Conveying Party(ies)/Execution Date(s) (1. Continued):**

Jeffery D. HARTMAN (09/01/2005)

Additional Assignees (2. Continued):

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Country: _____ Zip: _____

Additional Applications and/or Patents (4. Continued):Additional Patent Application Numbers
4A. Continued:Additional Patent Numbers
4B. Continued:

Additional numbers attached?

☐

Yes

☐

No

COPY

ASSIGNMENT JOINT

In accordance with existing Employee Intellectual Property Agreement(s) and/or other undertaking(s) entered into for good and valuable consideration, receipt of which is hereby acknowledged, we, Rowland C. CLARKE of Sykesville, MD 21784, Erica C. ELVEY of Owings Mills, MD 21117, Silai V. KRISHNASWAMY of Monroeville, PA 15146, and Jeffrey D. HARTMAN of Severn, MD 21144, hereby sell and assign to **NORTHROP GRUMMAN CORPORATION**, a Corporation organized and existing under the laws of Delaware, U.S.A., having its principal place of business at 1840 Century Park East, Los Angeles, California 90067-2199, U.S.A., its successors, assigns, nominees, or other legal representatives, the entire right, title and interest in and to the invention in **A METHOD OF THINNING A SEMICONDUCTOR STRUCTURE**, invented by us and the application for United States patent therefor, executed on the same day as the assignment is executed and all original and reissued patents granted therefor, and all divisions and continuations thereof, including the subjects-matter of any and all claims which may be obtained in every such patent, and the right to apply for and obtain patents and Utility Model Registrations in countries foreign to the United States, and in and to any Letters Patent or Utility Model Registration which may be granted thereon in such foreign countries, and authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue the said Letters Patent or Utility Model Registration to the said **NORTHROP GRUMMAN CORPORATION** its successors, assigns, nominees or other legal representatives, as assignee of the entire interest, and covenant that we have full right to convey the entire interest herein assigned and that we have not executed and will not execute any agreement in conflict herewith, and agree that we will communicate to said Corporation, its successors, assigns, nominees or other legal representatives, all facts known to us respecting said invention, whenever requested, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and do all lawful acts requisite for the application for such divisional, continuing or reissue applications, or the procuring thereof, and that if and when said **NORTHROP GRUMMAN CORPORATION** its successors, assigns, nominees or other legal representatives desire to file a disclaimer relating thereto, we will, upon request, sign all lawful papers requisite for the filing of such disclaimer, and we further covenant and agree that we will, at any time upon request, do everything legally possible to aid said Corporation, its successors, assigns, nominees or other legal representatives, either in its or their own name, to apply for, obtain and enforce proper patent and/or Utility Model protection for said invention in all countries, all without further consideration but at the expense of said **NORTHROP GRUMMAN CORPORATION** its successors, assigns, nominees or other legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 7 day
of September, 2005.



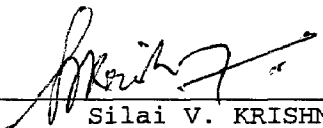
Rowland C. CLARKE

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 24 day
of August, 2005.



Erica C. ELVEY

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 2nd day
of September, 2005.



Silai V. KRISHNASWAMY

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 1st day
of September, 2005.



Jeffrey D. HARTMAN