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103315004

RECORDATION FOI PATENT

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

9-27-06

1. Name of conveying party(ies):
Narsingh B. SINGH (9/18/2006), Brian P. WAGNER (9/18/2006), David J. KNUTESON (9/18/2006), Michael E. AUMER (9/18/2006),
Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
Name: Northrop Grumman Corp.
Internal Address: _____
Street Address: _____

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 _____

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)
11/474,398
Additional numbers attached? _____


This document is being filed together with a new application.
B. Patent No.(s)

 Yes No

5. Name and address to whom correspondence concerning document should be mailed:
Name: Michael R. Cammarata
BIRCH, STEWART, KOLASCH & BIRCH,
LLP
Internal Address: Atty. Dkt.: 1215-0573PUS1
Street Address: 8110 Gatehouse Road
Suite 100 East
P.O. Box 747
City: Falls Church
State: VA Zip: 22040-0747
Phone Number: (703) 205-8000
Fax Number: (703) 205-8050
Email Address: mailroom@bskb.com

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:

Signature _____ Date September 27, 2006
Michael R. Cammarata - 39,491
Name of Person Signing _____ Total number of pages including cover sheet, attachments, and documents: 7

09/29/2006 DBYRNE 00000105 11474398
01 FC:8021 40.00 DP

RECORDATION FORM COVER SHEET
(continued)

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):

Andre BERGHMANS (9/18/2006), Darren THOMSON (9/18/2006), and David KAHLER (9/18/2006)

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

1215-0573PUS1 (001006-078)

Serial No. 11/474,398

Page 1 of 5

ASSIGNMENT

WHEREAS, we, Narsingh B. SINGH, Brian P. WAGNER, David J. KNUTESON, Michael E. AUMER, Andre BERGHMANS, Darren THOMSON and David KAHLER, hereinafter referred to as Assignors, have invented certain new and useful improvements in SEMICONDUCTOR HETEROJUNCTION DEVICES BASED ON SiC

described in an application for United States Letters Patent, executed by us on the date as stated below;

WHEREAS, Northrop Grumman Systems Corporation, a Delaware corporation, having its principal place of business at 1840 Century Park East, Los Angeles, CA 90067-2199, hereinafter referred to as Assignee, is desirous of acquiring the entire right, title and interest in, to and under said improvements and said application:

NOW, THEREFORE, in consideration of Assignors' obligations to Northrop Grumman Systems Corporation, and for other good and valuable consideration, the receipt and sufficiency is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assign, Assignors' entire right, title and interest in, to and under said improvements, and said application and all divisions, renewals, continuations, and continuations-in-part thereof, and all United States Letters patent which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, including the full right to claim for any such application the priority benefits of the International Convention for the Protection of Industrial Property and other priority-conferring treaties, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, divisions, continuations, continuations-in-part, renewals and reissues thereof; and Assignors hereby 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 all Letters Patent for said improvements to said Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

Assignors hereby acknowledge that at the time of making the improvements herein identified, Assignors were under an obligation to assign to Assignee, Assignors' entire right, title and interest in, to and under said improvements;

Assignors hereby covenant that Assignors have full right to convey the interest herein assigned, and that Assignors have not executed, and will not execute, any agreement in conflict herewith and that Assignee, Northrop Grumman Systems Corporation, its successors, assigns and other legal representatives shall have the right to hold and enjoy for its and their own use and benefit, to the end of the term or terms for which such Letters Patent shall or may be granted, reissued or extended as fully and completely as the same right or could have been held and enjoyed by Assignors had this Assignment not been made.

Assignors hereby further covenant and agree to communicate to Assignee, its successors, legal representatives and assigns, any and all facts known to Assignors respecting said improvements; to promptly provide Assignors with all documents relating to said improvements, said invention, and said Letters Patent as may be known or accessible to Assignors; to testify as to the same in any interference or litigation or other legal proceedings related thereto; to sign all lawful papers, execute all extensions, continuations, continuations-in-part, divisional and reissue applications; and to make all rightful oaths or declarations and generally do everything possible to aid Assignee, its successors, legal representatives and assigns in obtaining and enforcing all the rights herein conveyed for said improvements in all countries without further compensation, but at the expense of Assignee, its successors, legal representatives and assigns.

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 15th day of September, 2006, and has executed the referenced patent application on the 18th day of September, 2006



Assignor's Signature

STATE OF Maryland
COUNTY OF Anne Arundel) ss

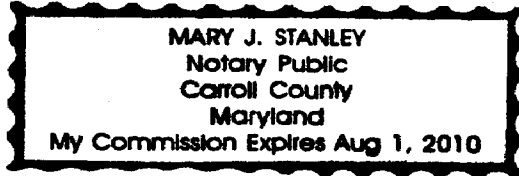
On 18th September 2006 before _____ me,

_____, personally appeared Narsingh B. SINGH, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Mary J. Stanley
Notary's Signature

(Seal)



IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 18th day of September, 2006, and has executed the referenced patent application on the 18th day of September, 2006.

Brian P. Wagner
Assignor's Signature

STATE OF Maryland
COUNTY OF Anne Arundel) ss

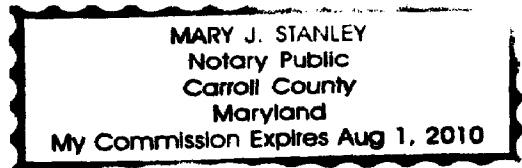
On 18th September 2006 before _____ me,

_____, personally appeared Brian P. WAGNER, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Mary J. Stanley
Notary's Signature

(Seal)



IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 18th day of September, 2006, and has executed the referenced patent application on the 18th day of September, 2006

David J. Knuteson
Assignor's Signature

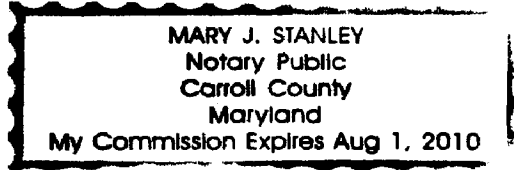
STATE OF Maryland
COUNTY OF Anne Arundel

On 18 September 2006 before _____ me,
_____ personally appeared

David J. KNUTESON, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Mary J. Stanley
Notary's Signature
(Seal)



IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 18 day of September, 2006, and has executed the referenced patent application on the 18 day of September, 2006

Michael Aumer
Assignor's Signature

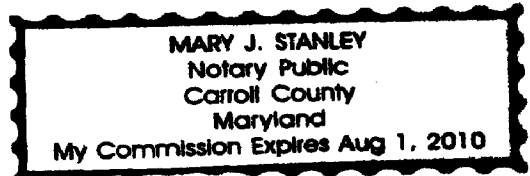
STATE OF ~~Anne~~ Maryland
COUNTY OF Anne Arundel

On 18 September 2006 before _____ me,
_____ personally appeared

Michael AUMER, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Mary J. Stanley
Notary's Signature
(Seal)



IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 18 day of September, 2006, and has executed the referenced patent application on the 18 day of September, 2006

Andre Berghmans

Assignor's Signature

STATE OF Maryland
COUNTY OF Anne Arundel)^{SS}

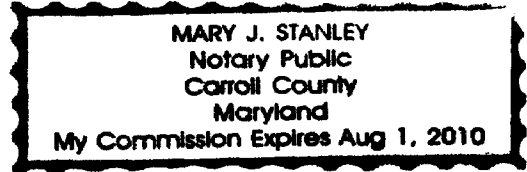
On 18th September 2006 before _____ me,
_____ personally appeared

Andre BERGHMANS, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Mary J. Stanley
Notary's Signature

(Seal)



IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 18th day of September, 2006, and has executed the referenced patent application on the 18th day of September, 2006

Darren Thomson

Assignor's Signature

STATE OF Maryland
COUNTY OF Anne Arundel)^{SS}

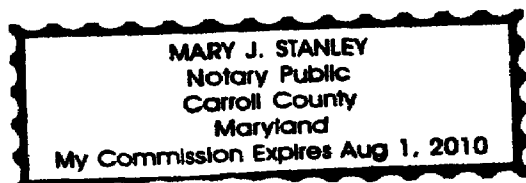
On 18th September 2006 before _____ me,
_____ personally appeared

Darren THOMSON, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Mary J. Stanley
Notary's Signature

(Seal)



IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 18th day of September, 2006, and has executed the referenced patent application on the 18th day of September, 2006.

[Handwritten Signature]

Assignor's Signature

STATE OF Maryland
COUNTY OF Anne Arundel^{SS}

On 18th September 2006 before me,

David KAHLER, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

[Handwritten Signature]
Notary's Signature

(Seal)

