

12-29-2006



U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

103354980

Attorney Docket No.
20-045/001526-804

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)

- (1) **Hau H. Ho**
- (2) **Ethan A. Stein**
- (3) **Michael Fashano**
- (4) **Peter J. Hadinger**
- (5) **Gary Lehto**

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

2. Name and address of receiving party(ies)

Name: **Northrop Grumman Corporation**
Street Address: **1840 Century Park East**
Los Angeles, California
90067

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

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

Execution Date(s) **(1),(3),(5): December 1, 2006**
(2),(4): December 18, 2006

- ☒ Assignment ☐ Merger
- ☐ Security Agreement ☐ Change of Name
- ☐ Joint Research Agreement
- ☐ Government Interest Assignment
- ☐ Executive Order 9424, Confirmatory License
- ☐ Other _____

4. Application or patent number(s):

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

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

Name: **Kerry S. Culpepper**

POSZ LAW GROUP, PLC

Internal Address: _____

Street Address: **12040 South Lakes Drive, Suite 101**

City: **Reston**

State: **Virginia** Zip: **20191**

Phone Number: **(703) 707-9110**

Fax Number: **(703) 707-9112**

Email Address: _____

6. Total number of applications and patents involved: _____

7. Total fee (37 CFR 1.21(h) & 3.41) \$ **40**

- ☐ Authorized to be charged by credit card
- ☒ Authorized any additional fee to be charged/credited 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 **50-1147**

Authorized User Name _____

9. Signature: *Kerry S. Culpepper*

Signature

December 21, 2006

Date

Kerry S. Culpepper (REG. NO. 45,672)

Name of Person Signing

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

7

ASSIGNMENT

WHEREAS, WE, Hau H. Ho, Ethan A. Stein, Michael Fashano, Peter J. Hadinger, hereinafter referred to as
and Gary Lehto Assignor

have invented certain new and useful improvements in SATELLITE COMMUNICATION SYSTEM
described in an application for United States Letters Patent, executed by us on the date as stated below;

WHEREAS, Northrop Grumman Corporation, a Delaware corporation, having its principal place of business at 1840 Century Park East, Los Angeles, California 90067, 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 Assignor's obligations to Northrop Grumman Corporation, and for other good and valuable consideration, the receipt and sufficiency is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, Assignor's 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 Assignor hereby authorizes and requests 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;

Assignor hereby acknowledges that at the time of making the improvements herein identified, Assignor was under an obligation to assign to Assignee, Assignor's entire right, title and interest in, to and under said improvements;

Assignor hereby covenants that Assignor has full right to convey the interest herein assigned, and that Assignor has not executed, and will not execute, any agreement in conflict herewith and that Assignee, Northrop Grumman 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 Assignor had this Assignment not been made.

Assignor hereby further covenants and agrees to communicate to Assignee, its successors, legal representatives and assigns, any and all facts known to Assignor respecting said improvements; to promptly provide Assignor with all documents relating to said improvements, said invention, and said Letters Patent as may be known or accessible to Assignor; 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 1ST day of December, 2006, and has executed the referenced patent application on the 1ST day of December, 2006.

Hau H. Ho
Hau H. Ho

STATE OF CALIFORNIA)
) ss
COUNTY OF LOS ANGELES)

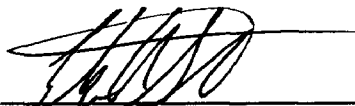
On December 1, 2006 before me, Lorna L. Schott, Notary Public, personally appeared Hau H. Ho, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same 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
Lorna L. Schott
Notary's Signature

(Seal)



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




Ethan A. Stein

STATE OF VIRGINIA)
) ss
COUNTY OF) FAIRFAX

On 18 DECEMBER 2006 before me, William W. Hawes, personally appeared Ethan A. Stein, 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



Notary's Signature

Embossed Hereon Is My
Commonwealth of Virginia Notary Public Seal
My Commission Expires December 31, 2007
WILLIAM W. HAWES

(Seal)

• POSZ LAW GROUP, PLC.
20-043 / 001526-804

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 1st day of April, 2006, and has executed the referenced patent application on the 1st day of April, 2006.

Michael Fashano

STATE OF CALIFORNIA)
) ss
COUNTY OF LOS ANGELES)

On 12-04-2016 before me, Lorna L. Schott, Notary Public, personally appeared Michael Fashano, 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

Notary's Signature



(Seal)

PATENT
REEL: 018735 FRAME: 0051

POSZ LAW GROUP, PLC.
20-043 / 001526-804

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




Peter J. Hadinger

STATE OF VIRGINIA)
) ss
COUNTY OF) FAIRFAX

On 18 DECEMBER 2006 before me, WILLIAM W. HAWES personally appeared Peter J. Hadinger, 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



Notary's Signature

Embossed Hereon Is My
Commonwealth of Virginia Notary Public Seal
My Commission Expires December 31, 2007
WILLIAM W. HAWES

(Seal)

Gary Lehto

STATE OF CALIFORNIA)
) ss
COUNTY OF LOS ANGELES)

On December 1, 2006 before me, Lorna L. Schott, Notary Public, personally appeared Gary Lehto, 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

Barbara L. Schott
Notary's Signature

