O PE 40		
Form PTO-1595 (Few 08/05)	0006	U.S. DEPARTMENT OF COMMERCE
	-2006	United States Patent and Trademark Office
		Attorney docket: 20-046/
To the Director of the U.S. Patent and Leavenue Ville Pleas	50862 e record the attached do	001581-804 ocuments or the new address(es) below.
1. Name of conveying party(ies)		ess of receiving party(ies)
<ul> <li>(1) Linh DANG (6) Jane LEE</li> <li>(2) Wayne YOSHIDA (7) Weidong LIU</li> <li>(3) Xiaobing MEI (8) Michael BARSKY</li> <li>(4) Jennifer WANG (9) Richard LAI</li> <li>(5) Po-Hsin LIU</li> <li>Additional name(s) of conveying party(ies) attached? Yes X No</li> <li>3. Nature of conveyance/Execution Date(s):</li> <li>Execution Date(s) (1), (2), (4) &amp; (9): 12/1/06;</li> <li>(2), (3) &amp; (5) &amp; (8): 11/28/06; (6): 11/21/06; (7) 11/17/06</li> <li>X Assignment Merger</li> <li>Security Agreement Change of Name</li> <li>Joint Research Agreement</li> <li>Government Interest Assignment</li> <li>Executive Order 9424, Confirmatory License</li> </ul>	E/ City: <u>LOS ANGELE</u> State: <u>CALIFORNI/</u> Country: <u>US</u>	ATION <u>B40 CENTURY PARK</u> <u>AST</u> <u>S</u> <u>A</u> Zip: <u>90067</u>
Other	Additional name(s) & a	address(es) attached? Yes X No
<b>4.</b> Application or patent number(s):       Thi         A. Patent Application No.(s)       11/598,817	B. Patent No.(s)	
Additional numbers at		X No
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of involved: <u>1</u>	f applications and patents
Name: POSZ LAW GROUP, PLCStreet Address: 12040 SOUTH LAKES DRIVE, SUITE 101City: RESTONState: VIRGINIAZip: 20191Phone Number: (703) 707-9110Fax Number: (703) 707-9112Email Address: DPOSZ@POSZLAW.COM	Authorized Authorized Authorized X Enclosed None requi 8. Payment Inform a. Credit Card Las	st 4 Numbers piration Date
	b. Deposit Account I	
· ·	Authorized User Na	me DAVID G. POSZ
9. Signature:		DECEMBER 14, 2006
DAVID G. POSZ (REG. NO. 37, 701) Name of Person Signing		ber of pages including cover achments, and documents: 11

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

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## ASSIGNMENT

## WHEREAS, WE, Linh Dang, Wayne Yoshida, Xiaobing Mei, Jennifer Wang, Po-, hereinafter referred to as <u>Hsin Liu, Jane Lee, Weidong Liu, Michael Barsky, and Richard Lai</u> have invented certain new and useful improvements in HIGH ELECTRON MOBILITY TRANSISTOR SEMICONDUCTOR DEVICE AND FABRICATION METHOD

THEREOF

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 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, is upatents 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 December December	WHEREOF, the _, 20 <u>0 k</u> a and _,20 <u>6 (-</u> ,	e undersigned I I has executed	has executed and d the referenced	delivered this ins patent applicatio	trument this _ n on the	$\int ST$	day of day of
A la Dan	4						

(VWV) Linh Dang

STATE OF CALIFORNIA

) ss )

On  $\underline{December/2-00}$  before me, Lorna L. Schott, Notary Public, personally appeared Linh Dang, personally known to me - or - proved to me on the basis of satisfactory evidence to be the person(s) whose name(e) is/are subscribed to this instrument and acknowledge to me that  $\frac{1}{100}$ /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

LORNA L. SCHOTT Comm. # 1449123 Ø NOTARY PUBLIC - CALIFORNIA Los Angeles County My Comm. Expires Nov. 3, 2007

(Seal)

PATENT REEL: 018709 FRAME: 0481

· ~ / -

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this  $\frac{2877}{2877}$  day of NUVENDER, 2005, and has executed the referenced patent application on the day of day of

Wayne Wayne Yoshida

) ss

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

On <u>November 75</u>, before me, <u>Lorna L. Schott</u>, <u>Notary Public</u>, personally appeared <u>Wayne Yoshida</u>, personally <u>known to me - of</u> - proved to me on the basis of satisfactory evidence to be the person(e) whose name(e) 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(e) acted, executed the instrument.

WITNESS my hand and official sea

Notary's Signature

(Seal)

LORNA L. SCHOTT Comm. # 1449123 NOTARY PUBLIC - CALIFORNIA Ø Los Angeles County My Comm. Expires Nov. 3, 2007 Ť

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 28 th day of 2006, and has executed the referenced patent application on the 28 th day of ovember 20 06 Vovember

) ss

Xiaobing Mei

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

Kvemberbefore me, Lorna L. Schott, Notary Public, personally appeared <u>Xiaobing Mei</u> On , p<del>ersonall</del>y 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)

LORNA L. SCHOTT Comm. # 1449123 NOTARY PUBLIC - CALIFORNIA Los Angeles County My Comm. Expires Nov. 3, 2007

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this  $\frac{1}{2}$ day of day of <u>, 2006</u>.

) ss

nifer Wang

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

On <u>December 1</u> Before me, <u>Lorna L. Schott, Notary Public</u>, personally appeared <u>Jennifer Wang</u>, personally known to me or the basis of satisfactory evidence to be the person(e) whose name(e) 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 pay hand and official sea

Netary's Signature

LORNA L. SCHOTT Comm. # 1449123 0 NOTARY PUBLIC - CALIFORNIA Los Angeles County My Comm. Expires Nov. 3, 2007

(Seal)

IN WITNESS WHEREOF, the Normber, 2006, and Normber, 2006.	undersigned has executed and delivered this instrument t has executed the referenced patent application on th	his $\frac{28}{28}$ day of day of
Po-Hsin Liu		

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

On the merity before me, Lorna L. Schott, Notary Public, personally appeared <u>Po-Hsin Liu</u>, 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.

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WITNESS my hand and official seal

Notary's Signature

(Seal)

LORNA L. SCHOTT Comm. # 1449123 NOTARY PUBLIC - CALIFORNIA Los Angeles County My Comm. Expires Nov. 3, 2007

) ss

)

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this  $\frac{21^{51}}{21^{51}}$  day of <u>Appropriate</u>, 20<u>06</u>, and has executed the referenced patent application on the  $\frac{21^{51}}{21^{51}}$  day of <u>Approximate</u>, 20<u>06</u>.

Ø

) ss

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STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

on Wember 21 per befor

On We make before me, Lorna L. Schott, Notary Public, personally appeared Jane Lee , personallyknown 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 may hand and official sea

Notary's Signature

(Seal)

LORNA L. SCHOTT Comm. # 1449123 NOTARY PUBLIC - CALIFORNIA Los Angeles County My Comm. Expires Nov. 3, 2007 Ø

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 17th day of 1000 and has executed the referenced patent application on the 17th day of 1000 bergin 2006.

Weidong Liu

STATE OF CALIFORNIA

) ss )

On <u>Weinber 17</u> 200 before me, <u>Lorna L. Schott</u>, <u>Notary Public</u>, personally appeared <u>Weidong Liu</u>, <del>personally known to me or</del> 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/<del>shc/they</del> executed the same in his/her/their authorized capacity(iee), 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(e) acted, executed the instrument.

WITNESS may hand and official seal totary's Signature

LORNA L. SCHOTT (Seal) Comm. #1449123 NOTARY PUBLIC - CALIFORNIA N Los Angeles County Comm. Expires Nov. 3, 2007

		day day	
-{	Michael Barsky		

STATE OF CALIFORNIA

POSZ LAW GROUP, PLC.

COUNTY OF LOS ANGELES

On Window & We before me, Lorna L. Schott, Notary Public, personally appeared <u>Michael Barsky</u>, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/aresubscribed 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

LORNA L. SCHOTT Comm. # 1449123 NOTARY PUBLIC - CALIFORNIA Los Angeles County My Comm. Expires Nov. 3. 2007

) ss

(Seal)

IN WITNESS December December	WHEREOF, the	e und	ersigned h	as e	xecuted and	delivere	ed this instru	ıment	this _/	ist	_ day	of
December	_, 20 <u>0</u> 6, and	i has	executed	the	referenced	patent	application	on tl	he	ST	day	of
December	, 20 <u>06</u> .					•			•		-	

**Bichard Lai** 

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

On <u>Reember 1</u>, 200 before me, <u>Lorna L. Schott</u>, <u>Notary Public</u>, personally appeared <u>Richard Lai</u>, personally <u>known to me - or</u> proved to me on the basis of satisfactory evidence to be the person(e) whose name(e) 1s/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ice), 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

tåry's Signature



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(Seal)