FORM PTO-	1595	
(Rev. 6-93)	RECORDATION	FORM COVER SHEET
OMB No 0651-0	001 (exp. 4/94)	PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 1016-031

OMB No. 0651-001 (exp. 4/94)	to: Places record the attached original documents or copy thereof.		
To the Honorable Commissioner of Patents and Trademar	ks: Please record the attached original documents or copy thereof.		
 Name of conveying party(ies): 	Name and address of receiving party(ies):		
a. VERMA, Purakh Raj	CHARTERED SEMICONDUCTOR MANUFACTURING LTD.		
b. CHU, Shao-fu Sanford	60 Woodlands Industrial Park D		
	Street 2		
c. CHAN, Lap	Singapore 738406		
d. Ll, Jian Xun			
e. ZHENG, Jia Zhen			
Additional name(s) of conveying party(ies) attached? □Yes ☑No	Additional name(s) & address(es) attached? ☐Yes ☑No		
3. Nature of Conveyance:			
	Merger		
☐ Security Agreement ☐	Other		
	003, Sept. 2, 2003, Feb. 9, 2003, Sept. 30, 2003		
Application number(s) or patent number(s));		
If this document is being filed together with	a new application, execution date of the application is:		
A. Patent Application No(s).	B. Patent No(s).		
Serial No.: 10/683,713 Date Filed: 10/09/6	03		
	numbers attached? NO		
Name and address of party to whom correspondence concerning document sho be mailed:			
Miklo Ishimaru	7. Total Fee (37 CFR 3.41): <u>\$40.00</u>		
The Law Offices of Mikio Ishimaru	☐ Enclosed		
1110 Sunnyvale-Şaratoga Rd.	Authorization to be charged to deposit		
Suite A1 Sunnyvale, CA 94087	account		
Sumiyyale, Ox 5450	8. Deposit Account Number: 50-0374		
	(Attach duplicate copy of this page if paying by deposit account)		
DO NO	T USE THIS SPACE		
9. Statement and signature.			
T- the heat of my knowledge and belief	the foregoing information is true and correct and any		
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.			
Mikio Ishimaru Mikio Ishimaru January 19, 2004			
Name of Person Signing	Signature Date		
Total number of pages including	g cover sheet, attachments, and document: 6		
	t detach this portion		
Mail document to be recorded	d with required cover sheet information to:		

Mail Stop Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450

Alexandria, VA 22313-1450

PATENT

ASSIGNMENT

WHEREAS, the undersigned (hereinafter termed Assignor(s) has/have invented certain new and useful improvements in

HETEROJUNCTION BIPOLAR TRANSISTOR USING REVERSE EMITTER WINDOW

for which a United States patent application has been executed on or before the date of this assignment.

WHEREAS, CHARTERED SEMICONDUCTOR MANUFACTURING LTD., a Corporation of the Republic of Singapore, having a place of business at 60 Woodlands Industrial Park D. Street 2, Singapore 738406, (hereinafter termed Assignce), is desirous of acquiring the entire right, title and interest in and to said application and said invention and improvements thereon, and in and to Letters Patents thereon when granted in the United States and foreign countries.

NOW, THEREFORE, for good and valuable consideration received by said Assignor(s) from said Assignee, the receipt of which is hereby acknowledged by said Assignor(s):

- Said Assignor(s) does hereby sell, assign, transfer and convey unto said Assignee, the entire right, title and interest in and to said application and said invention and in and to any and all improvements on said invention and in and to any and all improvements on said invention heretofore or hereafter made or acquired by said Assignor(s); and in and to any and all Letters Patent on said invention and/or said improvements that may be granted in the United States or any foreign country, including each and every Letters Patent granted on any application which is a division, continuation, substitution, renewal, or continuation-in-part of any said application, and in and to each and every reissue or extension of said Letters Patent.
- Said Assignor(s) hereby covenants and agrees to cooperate with said Assignee where said Assignee may enjoy to the fullest extent the right, title and interest herein conveyed. Such cooperation shall include (a) prompt execution of all papers (prepared at the expense of Assignee) which are deemed necessary or desirable by Assignee to perfect in it the right, title and interest herein conveyed, (b) prompt execution of all petitions, oaths, specifications or other papers (prepared at the expense of Assignee) which are deemed necessary or desirable by assignee for prosecuting said application, for filing and prosecuting divisional, continuation, substitution, renewal, continuation-in-part, or additional applications in the United States and/or foreign countries covering said invention and/or said improvements, for filing and prosecuting applications for reissuance of letters patent included herein, or for interference proceedings involving said invention and/or said improvements and (c) prompt assistance and cooperation in the prosecution of interference proceedings involving said invention and/or said improvements and in the adjudication of said Letters Patent, particularly by the disclosure of facts and the production of evidence relating to said invention and/or said improvements, provided the expenses which may be incurred by said Assignor(s) in lending such assistance and cooperation shall be paid by the Assignee.
 - The terms, covenants and conditions of this assignment shall inure to the benefit of said Assignee, its successors, assigns and/or other legal representatives and shall be binding upon said Assignor(s), his/her heirs, legal representatives and assigns.

4. Said Assignor(s) hereby warrants and represents that he/she has not entered into any assignment, contract or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignor has executed and delivered this instrument on the date set forth below.

date set form before.	
(2 ~ · ·	02/09/03
Purakh Raj Verma	Date
Witness Signature K SHESH MANI PANDEY	Witness Signature Zhou Yansku
Print Witness Name	Print Witness Name
Date 69 03	Date

IN WITNESS WHEREOF, the said Assignor has executed and delivered this instrument on the date set forth below.

date set forth below.	50p4 03
Shao-fu Sanford Chu	Date
Ch	P. R. Verma (300)
Witness Signature	Witness Signature
Cher Kat Was Johnny	Print Witness Name
Print Witness Name	First witness realize
	Date 4 va va

IN WITNESS WHEREOF, the said Assignor has executed and delivered this instrument on the date set forth below.

Jap Chan	Dup 2, 2003
Lap Chan	Date WS
Witness Signature	Witness Signature
Purakh Raj Verma	NGA YIANG ANN
Print Witness Name	Print Witness Name
Date	3rd Sept 2003. Date

IN WITNESS WHEREOF, the said Assignor has executed and delivered this instrument on the date set forth below.

20 7000	02/0/6203
Jian Xun Li	Date
Witness Signature	Witness Signature
SHESH MANI PANOEY_	P.R. Verma
Print Witness Name	Print Witness Name
02/05/183	<u>52\0°1(63</u>
Date	Date

IN WITNESS WHEREOF, the said Assignor has executed and delivered this instrument on the date set forth below.

Zhen Jia Zheng	Date
Witness Signature	Witness Signature
Print Witness Name	Print Witness Name
Date	Date

ne date set forth below.	recuted and delivered this instrument on
Ing- Chan	Dep 2, 2003
Lap Chan	Date
	100
Witness Signature	Witness Signature
Pujakh Raj Verma	NGA YIANG AUN
Print Witness Name	Print Witness Name
3-rd Sept 2003	3rd Sept 2003.
Date	Date
IN WITNESS WHEREOF, the said Assignor has	executed and delivered this instrument of
the date set forth below.	0/
217000	02/01/2003
Jian Xun Li	Date /
E Pro	(Syr)
Witness Signature	Witness Signature
SHESH MANI PANOEY	P.R.Verma
Print Witness Name	Print Witness Name
02/01/03	02/09/03
Date	Date
IN WITNESS WHEREOF, the said Assignor has	s executed and delivered this instrument
IN WITNESS WHEREOF, the said Assignor has the date set forth below.	_
IN WITNESS WHEREOF, the said Assignor has the date set forth below.	executed and delivered this instrument
the date set forth below.	_
the date set forth below.	-200). 9. 3°.
Zhen Jia Zheng	-200). 9. 3°.
the date set forth below.	7007. 9. 3°.

The Law Offices of Mikio Ishimaru

Intellectual Property Law Patents - Licensing - Strategy - & Related Matters 1110 Sunnyvale-Saratoga Road, Suite A1 Sunnyvale, CA 94087 Telephone: (408) 738-0592 Fax: (408) 738-0881

Fax

То:	Patent and Trademark Assignment Office	From:	Mikio Ishimaru
Fax:	703-306-5995	Pages:	8
Phone:	703-308-9723	Date:	January 19, 2004
Re:	U.S. Patent Application Serial No. 10/683,713	CC:	
⊠ Req	uest for Recordation of Assignme	nt	☐ Information ☐ Other
	IM	PORTANT	
you are not	t the intended recipient, you are acreby nonnect ation is strictly prohibited. If you have receive the original message to us at the address above	d this facsime via the U.S.	
	For confirmation or		
Deer Ac	eignment Division:		

Dear Assignment Division:

Attached are a Certificate of Transmission, Recordation Cover Sheet, and Assignment, for U.S. Patent Application Serial No. 10/683,713 (attorney docket no. 1016-031).

Respectfully submitted,

White Ishiman

Mikio Ishimaru Reg. No. 27,449

PTO/\$B/97 (08-03) Approved for use through 7/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Into Zo

on <u>January 19, 2004</u> Date

Justin Zahrt

Typed or printed name of person signing Certificate

Each paper must have its own certificate of transmission, or this certificate must Note: identify each submitted paper.

With reference to serial number 10/683,713, the following are being submitted:

Fax Cover Sheet Certificate of Transmission Recordation Form Cover Sheet Assignment

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case, any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

FORM PTO-1595 RECORDATION FORM COVER SHEET (Rev. 6-93) OMB No. 0651-001 (exp. 4/94) PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 1016-031

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or cope 2. Name and address of receiving party 2. Name and address of receiving party 3. VERMA, Purakh Raj 3. CHARTERED SEMICONDUCTOR 3. CHU, Shao-fu Sanford 4. CHAN, Lap 4. CHAN, Lap 5. CHAN, Lap 5. Singapore 738406 5. CHAN, Lap 6. ZHENG, Jia Zhen 6. ZHENG, Jia Zhen 6. ZHENG, Jia Zhen 6. ZHENG 6. Conveying party(ies) 6. Additional name(s) & address(es) attached?			
b. CHU, Shao-fu Sanford c. CHAN, Lap d. LI, Jian Xun e. ZHENG, Jia Zhen Additional name(s) of conveying party(ies) MANUFACTURING LTD. 60 Woodlands Industrial Park D Street 2 Singapore 738406 Additional name(s) & address(es) attach			
b. CHU, Shao-fu Sanford c. CHAN, Lap d. LI, Jian Xun e. ZHENG, Jia Zhen Additional name(s) of conveying party(ies) MANUFACTURING LTD. 60 Woodlands Industrial Park D Street 2 Singapore 738406 Additional name(s) & address(es) attach			
c. CHAN, Lap Street 2 Singapore 738406 d. LI, Jian Xun e. ZHENG, Jia Zhen Additional name(s) of conveying party(ies) Additional name(s) & address(es) attach			
d. Li, Jian Xun e. ZHENG, Jia Zhen Additional name(s) & address(es) attach			
e. ZHENG, Jia Zhen Additional name(s) & address(es) attach			
Additional name(s) of conveying party(ies) Additional name(s) & address(es) attach			
Additional flattice (2) The State of the Sta			
44144411441 1 1 4 4 4 4 4 4 4 4 4 4 4 4	ed?		
3. Nature of Conveyance:			
Security Agreement Other			
Execution Date(s): Feb. 9, 2003, Sept. 4, 2003, Sept. 2, 2003, Feb. 9, 2003, Sept. 30, 200	03		
4. Application number(s) or patent number(s):			
If this document is being filed together with a new application, execution date of the applic	ation is:		
A, Patent Application No(s). B. Patent No(s).			
Serial No.: 10/683,713 Date Filed: 10/09/03			
Additional numbers attached? NO			
 5. Name and address of party to whom correspondence concerning document should be mailed: 6. Total number of applications and painvolved: 1 	atents		
7 Total Eco (37 CER 3.41): \$401	<u>00</u>		
Miklo Ishimaru The Law Offices of Mikio Ishimaru Enclosed			
1110 Sunnyvale-Saratoga Rd. Authorization to be charged to	deposit		
Suite A1 account	•		
Sunnyvale, CA 94087			
8. Deposit Account Number: 50-0374			
(Attach duplicate copy of this page if paying by depos	lt account)		
DO NOT USE THIS SPACE			
9. Statement and signature.			
To the best of my knowledge and belief, the foregoing information is true and correct at attached copy is a true copy of the original document.	nd any		
Mikio lehimaru Mikia Johnna January 19, 20	004		
Name of Person Signing Signature Date			
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RECORDED: 01/19/2004