04-25-2006

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**PATENTS ONLY** 

103225188 TATES IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S)

Berger et al.

**FOR** 

SILICON-BASED BACKWARD DIODES FOR ZERO-BIASED SQUARE LAW DETECTION AND DETECTOR ARRAYS

OF SAME

SERIAL NO.

Unknown

**FILED** 

Herewith

**EXAMINER** 

N/A

**ART UNIT** 

Unknown

CONFIRMATION NO.

Unknown

ATTORNEY DOCKET NO.

: OSUZ 200020

## **ASSIGNMENT RECORDATION FORM COVER SHEET**

U.S. Patent and Trademark Office

MAIL STOP ASSIGNMENT SERVICES DIVISION

P.O. Box 1450

Alexandria, VA 22313-1450

To the Director of the U.S. Patent and Trademark Office:

Please record the attached documents.

1. Name of Conveying Party(ies):

Execution Date(s):

Paul R. Berger

**April 19, 2006** 

Niu Jin

**April 19, 2006** 

2. Name and address of Receiving Party(ies):

The Ohio State University 1960 Kenny Road Columbus, OH 43210-1063

US

04/21/2006 SSITHIB1 00000067 11407120

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PATENT

REEL: 017788 FRAME: 0572

3.	Nature of conveyance:  Assignment Security Agreement Other:  Change of Name Merger
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)
	<u>Unknown</u>
<del>5</del> .	Name and address to whom correspondence concerning document should be mailed:
	Richard J. Minnich, Esq. Fay, Sharpe, Fagan, Minnich & McKee, LLP 1100 Superior Avenue Seventh Floor Cleveland, OH 44114-2579 Phone Number: 216-861-5582 Fax Number: 216-241-1666 Email Address: rminnich@faysharpe.com
6.	Total number of applications and patents involved: 1
7.	Total fee (37 CFR 1.21(h) & 3.41 \$40.00  Payment for the filing of this Assignment is authorized to be charged to a Credit Card. The appropriate form PTO-2038 is enclosed for this purpose. If the Credit Card is unable to be charged, please charge any and all fees or credit any overpayment to Deposit Account No. 06-0308.

9. Total number of pages including cover sheet, attachments, and documents enclosed: 6.  Respectfully submitted, FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP  Apr. 19, 2∞6  Robert M. Sieg, Reg. No. 54,446 1100 Superior Avenue Seventh Floor Cleveland, OH 44114-2579 216-861-5582  CERTIFICATE OF MAILING OR TRANSMISSION  I certify that this Assignment Recordation Form Cover Sheet and accompanying document(s) are being deposited with the United States Postal Service as First Class mail under 37 C.F.R. § 1.8, addressed to (choose one of the following) U.S. Patent and Trademark Office, MAIL STOP ASSIGNMENT SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  transmitted to the U.S. Patent and Trademark Office, Assignment Services Division on the date indicated below to facsimile number 571-273-0140.  ⊠ deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 10 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  Express Mail Label No:  EV 690 753 1 0 0 45  Date  Printed Name  Mary Ann Temesvari	8.	· · · · · · · · · · · · · · · · · · ·	nd belief, the foregoing information is true and a true copy of the original document.
FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP  Apr. 19, 2∞6  Robert M. Sieg, Reg. No. 54,446 1100 Superior Avenue Seventh Floor Cleveland, OH 44114-2579 216-861-5582  CERTIFICATE OF MAILING OR TRANSMISSION  I certify that this Assignment Recordation Form Cover Sheet and accompanying document(s) are being deposited with the United States Postal Service as First Class mail under 37 C.F.R. § 1.8, addressed to (choose one of the following) U.S. Patent and Trademark Office, MAIL STOP ASSIGNMENT SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below. transmitted to the U.S. Patent and Trademark Office, Assignment Services Division on the date indicated below to facsimile number 571-273-0140.  deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  Express Mail Label No.:  Express Mail Label No.:  Express Mail Label No.:  Many Ann Ternunt Rule	9.		ng cover sheet, attachments, and documents
MINNICH & McKEE, LLP  Apr. 19, 2∞6  Robert M. Sieg, Reg. No. 54,446 1100 Superior Avenue Seventh Floor Cleveland, OH 44114-2579 216-861-5582  CERTIFICATE OF MAILING OR TRANSMISSION  I certify that this Assignment Recordation Form Cover Sheet and accompanying document(s) are being deposited with the United States Postal Service as First Class mail under 37 C.F.R. § 1.8, addressed to (choose one of the following) U.S. Patent and Trademark Office, MAIL STOP ASSIGNMENT SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  □ transmitted to the U.S. Patent and Trademark Office, Assignment Services Division on the date indicated below to facsimile number 571-273-0140. deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  Express Mail Label No.:  Express Mail Label No.:  Express Mail Label No.:  Many Ann Tenneut A 22			Respectfully submitted,
Robert M. Sieg, Reg. No. 54,446 1100 Superior Avenue Seventh Floor Cleveland, OH 44114-2579 216-861-5582  CERTIFICATE OF MAILING OR TRANSMISSION  I certify that this Assignment Recordation Form Cover Sheet and accompanying document(s) are being deposited with the United States Postal Service as First Class mail under 37 C.F.R. § 1.8, addressed to (choose one of the following) U.S. Patent and Trademark Office, MAIL STOP ASSIGNMENT SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or the date indicated below.  Express Mail Label No.:  Express Mail Label No.:  Signature  Wann Terneuri 7220			
1100 Superior Avenue Seventh Floor Cleveland, OH 44114-2579 216-861-5582  CERTIFICATE OF MAILING OR TRANSMISSION  I certify that this Assignment Recordation Form Cover Sheet and accompanying document(s) are being deposited with the United States Postal Service as First Class mail under 37 C.F.R. § 1.8, addressed to (choose one of the following) U.S. Patent and Trademark Office, MAIL STOP ASSIGNMENT SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  transmitted to the U.S. Patent and Trademark Office, Assignment Services Division on the date indicated below to facsimile number 571-273-0140.  deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  Express Mail Label No.:  Express Mail Label No.:  Signature  EV 69075310045  Many Ann Terneut Accumulation		Apr. 19, 2006	Robert M. Sug
Seventh Floor Cleveland, OH 44114-2579 216-861-5582  CERTIFICATE OF MAILING OR TRANSMISSION  I certify that this Assignment Recordation Form Cover Sheet and accompanying document(s) are being deposited with the United States Postal Service as First Class mail under 37 C.F.R. § 1.8, addressed to (choose one of the following) U.S. Patent and Trademark Office, MAIL STOP ASSIGNMENT SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below. transmitted to the U.S. Patent and Trademark Office, Assignment Services Division on the date indicated below to facsimile number 571-273-0140. deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  Express Mail Label No.:  Express Mail Label No.:  **EV 690.75310045**  **May Ann Temest Accompany Commissioner Forms Accompany Commissioner For	Date		Robert M. Sieg, Reg. No. 54,446
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Certificate of Mailing or Transmission  I certify that this Assignment Recordation Form Cover Sheet and accompanying document(s) are being  deposited with the United States Postal Service as First Class mail under 37 C.F.R. § 1.8, addressed to (choose one of the following) U.S. Patent and Trademark Office, MAIL STOP ASSIGNMENT SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  transmitted to the U.S. Patent and Trademark Office, Assignment Services Division on the date indicated below to facsimile number 571-273-0140.  deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  Express Mail Label No.:  Express Mail Label No.:  May Can Terneut 72.2.			•
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SERVICES DIVISION, P.O. Box 1450, Alexandria, VA 22313-1450 or Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  transmitted to the U.S. Patent and Trademark Office, Assignment Services Division on the date indicated below to facsimile number 571-273-0140.  deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  Express Mail Label No.:  Express Mail Label No.:  May Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.		deposited with the United States Postal Ser	vice as First Class mail under 37 C.F.R. § 1.8, addressed to
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Express Mail Label No.:  EV 69075310045  May an Temestar  Printed Name  April 19, 2006  Mary Ann Temesvari			
Date  April 19, 2006  Mary Ann Temesvari			May ann Tementare
	4	Jaril 19, 2006	Printed Name Mary Ann Temesvari

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Attorney Docket No.: OSUZ 2 00020

## **ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, the undersigned, Paul R. Berger of 4290 Mountview Road, Columbus, OH 43220; Niu Jin of 509 E. Clark St. #33, Champaign, IL 61820; and, Sung-Yong Chung of 3531 Chowning Ct., Columbus, OH 43220, who have created a certain invention for which a U.S. Patent Application has been

$\boxtimes$	execute	ed concurren	tly herewith
	execute	ed on	
	filed	, 200	and assigned Application Serial No.

and is entitled

## SILICON-BASED BACKWARD DIODES FOR ZERO-BIASED SQUARE LAW DETECTION AND DETECTOR ARRAYS OF SAME

hereby sell, assign and transfer to The Ohio State University, ("Assignee"), having a place of business at 1960 Kenny Road, Columbus, OH 43210-1063, its successors, assigns, nominees or other legal representatives, the full, exclusive, entire worldwide rights, title and interest in, to, and under said invention as described and claimed in said application, including the provisional application from which it claims priority, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, nominees, or other legal representatives, to the end of the term or terms for which said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held and enjoyed by Inventors if this assignment and sale had not been made; all of the entire rights, title and interest in and to said invention and said application, and all original and reissued patents granted for said invention, and all divisions, reissues, continuations-in-part, and continuations of said application, including the subject matter of any and all claims which may be obtained in every patent, and the right, where such right can be legally exercised, in Assignee's own name to apply for and obtain patents in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention and the Patent Cooperation Treaty as fully and entirely as Inventors could have done if the foreign application had been filed in the names of the Inventors, and the entire interest in any Letters Patent which may be granted on any such application in such foreign countries, and Inventors authorize and request the Commissioner of Patents of the United States, and any official of any country or countries foreign to the United States whose duty is to issue patents on applications as aforesaid, to issue the said Letters Patent to Assignee, its successors, assigns, nominees, or other legal representatives, as Assignee and owner of the said entire rights, and Inventors covenant that Inventors have the full right to convey the said entire interest herein assigned and that Inventors have not executed and will not execute any agreement in conflict herewith, and Inventors will communicate to Assignee, its successors, assigns, nominees, or other legal representatives all facts known to

> PATENT REEL: 017788 FRAME: 0575

Inventors respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, execute and deliver all divisional, continuing, and reissue applications, make all rightful oaths or declarations, 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 Assignee, its successors, assigns, nominees, or other legal representatives desire to file a disclaimer relating thereto, Inventors will, upon request, sign and deliver all lawful papers requisite for the filing of such disclaimer; and

Inventors further covenant and agree that Inventors will, at any time upon request, do everything possible to aid Assignee, its successors, assigns, nominees, or other legal representatives, either in the name of Inventors or Assignee, to apply for, obtain, and enforce proper patent protection for said invention in all countries, according to the International Convention and the Patent Cooperation Treaty, and all the laws and treaties in force, all without further consideration but at the expense of Assignee, its successors, assigns, nominees, or other legal representatives.

Signed at	on		, 2005.
	Paul R. Berger	W-	
State of Ohio County of Franklin	) )ss: )	<b>/</b>	
On this 19 day of 19 day of came Paul R. Berger, to me known to be the foregoing instrument, and acknowled			ie personally who executed

Se a TE OF OTHER

WINIFRED SAMPSON Notary Public, State of Ohio My Commission Expires 07-20-09 Notary Public

Signed at Main Street Banka Trust	on <u>April 19                                    </u>	2006.
	Niu Jin	<del></del>
State of Illinois	)	
County of Champaign	)ss: )	
On this 19th day of April came Niu Jin, to me known to be the foregoing instrument, and acknowledged		
"OFFICIAL SEAL" HALIMA M. KRUGH Notary Public, State of Illinois My commission expires 05/16/07	Holima M. Arug Notary Public ( )	R_
Signed at	_ on,	2006.
	Sung-Yong Chung	
State of	)	
County of	)ss: )	
On this day of came Sung-Yong Chung, to me know executed the foregoing instrument, and		
	7	
•	Notary Public	
Seal		

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