503257791 04/09/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3304409

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BRIAN E. HORNUNG	03/23/2015
XIANG-ZHENG BO	03/23/2015
AMITAVA CHATTERJEE	01/21/2015
ALWIN J. TSAO	04/02/2015

RECEIVING PARTY DATA

Name:	TEXAS INSTRUMENTS INCORPORATED
Street Address:	12500 TI BOULEVARD, M/S 3999
City:	DALLAS
State/Country:	TEXAS
Postal Code:	75243

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14575552

CORRESPONDENCE DATA

Fax Number: (214)567-2228

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 214-479-1287 Email: uspto@ti.com

TEXAS INSTRUMENTS INCORPORATED **Correspondent Name:**

P O BOX 655474, M/S 3999 Address Line 1: Address Line 4: DALLAS, TEXAS 75265

ATTORNEY DOCKET NUMBER:	TI-71021
NAME OF SUBMITTER:	DONNA F. WILLIAMS
SIGNATURE:	/Donna F. Williams/
DATE SIGNED:	04/09/2015

Total Attachments: 6

source=TI-71021_Assignment_signed#page1.tif source=TI-71021 Assignment signed#page2.tif source=TI-71021_Assignment_signed#page3.tif

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ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented cartain new and useful improvements as below entitled, for which application for United States Letters Patent is made.

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with a place of business at 12500 Ti Boulevard, M/S 3999, Dallas, Texas 75243, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon, as well as to U.S. Provisional Application No(s). 61/921,560, filed December 30, 2013;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and essign unto the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in end to the said application(s) and all patents which may be granted therefor, and all divisions, releases, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Patent and Trademark Office to Issue all patents for said invention, or patents resulting therefrom, to the said TEXAS INSTRUMENTS INCORPORATED, as assignee of my entire right, title and interest.

I also hereby self and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my corresponding rights to the invention disclosed in said application in all other countries of the world, including the right to claim priority, file applications and obtain patents under the terms of the Paris Convention for the Projection of Industrial Property, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all tawful papers, execute all divisional, continuation, release and substitute applications, make all lawful ceths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

I authorize the later insertion of the nonprovisional application number and filing date hereinbelow.

IN WITNESS WHEREOF, I hereunto set hand and seel this day and year.

TITLE	DEEP COLLECTOR VERTICAL	BIPOLAR TRANSISTO	OR WITH ENHANCED GAIN
NONPROVISIONAL APPLICATION NO.	14/575,552	FILING DATE	12/18/2014
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SIGNATURE OF INVENTOR	Din/4	WANT/	
PRINTED NAME OF INVENTOR	Brian E. HORNÓNG	Ô	
DATE	3/23/201	5	
RESIDENCE (CITY AND STATE)	Richardson, TX		

SIGNATURE OF INVENTOR	Jmyhrghe-
PRINTED NAME OF INVENTOR	Xiang-Zhang BC
DATE	3/23/2015
RESIDENCE (CITY AND STATE)	Plano, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Amileva CHATTERJEE
DATE	
RESIDENCE (CITY AND STATE)	Plano, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Alwin J. TSAO
DATE	
RESIDENCE (CITY AND STATE)	

After recording, return Assignment to:

Donna Williams Texas Instruments Incorporated 12500 TI Boulevard, WS 3999 Dallas, TX 75243

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made.

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with a place of business at 12500 Ti Boulevard, M/S 3999, Dallas, Texas 75243, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon, as well as to U.S. Provisional Application No(s). 61/921.580, filed December 30, 2013;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign unto the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in and to the said application(s) and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Patent and Trademark Office to issue all patents for said invention, or patents resulting therefrom, to the said TEXAS INSTRUMENTS INCORPORATED, as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCOPPORATED, its successors and assigns, my corresponding rights to the invention disclosed in said application in all other countries of the world, including the right to claim priority, file applications and obtain patents under the terms of the Paris Convention for the Protection of Industrial Property, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful papers, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

I authorize the later insertion of the nonprovisional application number and filing date hereinbelow.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE	DEEP COLLECTOR VERTICAL BIPOLAR TRANSISTOR WITH ENHANCED GAIN		
NONPROVISIONAL APPLICATION NO.	14/575,582	FILING DATE	12/18/2014
	·		
SIGNATURE OF INVENTOR			
PRINTED NAME OF INVENTOR	Brian E. HORNUNG		
DATE			
RESIDENCE (CITY AND STATE)	Richardson, TX		

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Xiang-Zheng BO
DATE	
RESIDENCE (CITY AND STATE)	Plano, TX
SIGNATURE OF INVENTOR	J
PRINTED NAME OF INVENTOR	Amitava CHATTERJEE
DATE	1/21/2015
RESIDENCE (CITY AND STATE)	Plano, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Alwin J. TSAO
DATE	
RESIDENCE (CITY AND STATE)	

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I authorize the later insertion of the nonprovisional application number and filing date hereinbelow.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE	DEEP COLLECTOR VERTICAL	. BIPOLAR TRANSISTOR	
NONPROVISIONAL APPLICATION NO.	14/575,552	FILING DATE	12/18/2014

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Brian E. HORNUNG
DATE	
RESIDENCE (CITY AND STATE)	Richardson, TX

SIGNATURE OF INVENTOR	1mg/4g2=
PRINTED NAME OF INVENTOR	Xiang-Zheng 60
DATE	3/23/2.15
RESIDENCE (CITY AND STATE)	Plano, TX
unidadini wa majara na majara n	himminimmaanaanaanaanaanaanaanaanaanaanaanaa, sa
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Amitava CHATTERJEE
DATE	
RESIDENCE (CITY AND STATE)	Pleno, TX
SIGNATURE OF INVENTOR	14/10ti, 12/10
PRINTED NAME OF INVENTOR	Alwin J. TSAO
DATE	4/02/15
RESIDENCE (CITY AND STATE)	GARLAND, TX

After recording, return Assignment to:

Donna Williams Texas Instruments Incorporated 12500 TI Boulevard, M/S 3999 Dallas, TX 75243

> PATENT REEL: 035372 FRAME: 0020

RECORDED: 04/09/2015