

Form PTO-1595 (Rev. 03-09)  
OMB No. 0651-0027 (exp. 03/31/2009)

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

### RECORDATION FORM COVER SHEET PATENTS ONLY

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)**  
 Brian K. Kirkpatrick  
 Rajesh Tiwari

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

**2. Name and address of receiving party(ies)**  
 Name: Texas Instruments Incorporated  
 Internal Address: \_\_\_\_\_  
 Street Address: 12500 TI Boulevard, M/S 3999  
 City: Dallas  
 State: Texas  
 Country: us Zip 75243

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

**3. Nature of conveyance/Execution Date(s):**  
 Execution Date(s) September 30, 2011

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)  
13/251,498

B. Patent No.(s)

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**  
 Name: Texas Instruments Incorporated  
 Internal Address: \_\_\_\_\_  
 Street Address: 12500 TI Boulevard, M/S 3999  
 City: Dallas  
 State: Texas Zip 75243  
 Phone Number: \_\_\_\_\_  
 Fax Number: \_\_\_\_\_  
 Email Address: \_\_\_\_\_

**6. Total number of applications and patents involved:** 1

**7. Total fee (37 CFR 1.21(h) & 3.41)** \$ 40.00

Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment information**

Deposit Account Number 20-0668  
 Authorized User Name Yingsheng (Sam) Tung

**9. Signature:** /Neil R. Jetter/ October 3, 2011  
 Signature Date

Neil R. Jetter  
 Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 3

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

CH \$40.00 200668 13251498

Attorney Docket No.  
TI-70654

Serial No.

**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.

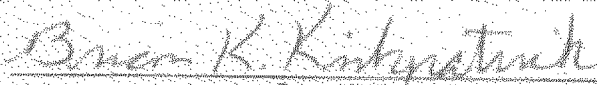
WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with a place of business at 12500 TI Boulevard, M/S 3999, Dallas, Texas 75243, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefore, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED, as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to 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 patent rights.

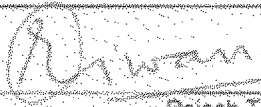
I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, 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.

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

TITLE OF INVENTION	DIE HAVING COEFFICIENT OF THERMAL EXPANSION GRADED LAYER
SIGNATURE OF INVENTOR AND NAME	 Brian K. Kirkpatrick
DATE	9/30/2011
RESIDENCE (CITY AND STATE)	Allen, TX

TI-70654

Page 2

TITLE OF INVENTION	DIE HAVING COEFFICIENT OF THERMAL EXPANSION GRADED LAYER
SIGNATURE OF INVENTOR AND NAME	 Rajesh Tiwari
DATE	September 30, 2011
RESIDENCE (CITY AND STATE)	Plano, TX

After recording, return Assignment to:

Texas Instruments Incorporated  
PO Box 655474, M/S 3999  
Dallas, TX 75265