

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)**

Kumaran Vijayasankar  
Ramanuja Vedantham  
Anand G. Dabak  
Badri N. Varadarajan

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

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) 4/26/2012 & 4/27/2012

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

**2. Name and address of receiving party(ies)**

Name: Texas Instruments Inc.

Internal Address: \_\_\_\_\_

Street Address: 7839 Churchill Way, M/S 3999

City: Dallas

State: Texas

Country: US Zip: 75265

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

**4. Application or patent number(s):**

A. Patent Application No.(s)

13/457,612

☒ This document is being filed together with a new application.  
B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Steven Shaw

Internal Address: Texas Instruments

Street Address: P.O. Box 655474, MS 3999

City: Dallas

State: Texas Zip: 75265

Phone Number: 972-917-5137

Fax Number: 972-917-4418

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 Michael J. Fogarty, III

**9. Signature:**

Michael J. Fogarty, III  
Signature  
Name of Person Signing

5/5/2012  
Date

Total number of pages including cover sheet, attachments, and documents: 6

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 13457612

FORM PTO-1595

Application S/N: 13/457,612

CONTINUATION SHEET

1. (cont.) Additional names of conveying parties:

Il Han Kim

Xiaolin Lu

3. (cont.) Execution Dates:

Assignment

4/27/2012

Application No. 13/457,612

Attorney Docket No. TI-70814

**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 7839 Churchill Way, M/S 3999, Dallas, Texas 75251, 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. **61/482,298**, filed **05/04/2011**;

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 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 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 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.

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	Hybrid Communication Networks		
NONPROVISIONAL APPLICATION NO.	13/457,612	FILING DATE	April 27, 2012

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Kumaran Vijayasankar
DATE	04/27/2012
RESIDENCE (CITY AND STATE)	Dallas, TX

Assignment From Inventor (US 9/1/09)

Application No. 13/457,612

Attorney Docket No. TI-70814

SIGNATURE OF INVENTOR	<i>Ramanuja</i>
PRINTED NAME OF INVENTOR	Ramanuja Vedantham
DATE	04/27/2012
RESIDENCE (CITY AND STATE)	Allen, TX

SIGNATURE OF INVENTOR	<i>Anand G. Dabak</i>
PRINTED NAME OF INVENTOR	Anand G. Dabak
DATE	04/27/2012
RESIDENCE (CITY AND STATE)	Plano, TX

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Badri N. Varadarajan
DATE	
RESIDENCE (CITY AND STATE)	Mountain View, CA


Assignment From Inventor (US 9/1/09)

Application No. 13/457,612

Attorney Docket No. TI-70814

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Ramanuja Vedantham
DATE	
RESIDENCE (CITY AND STATE)	Allen, TX


SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Anand G. Dabak
DATE	
RESIDENCE (CITY AND STATE)	Plano, TX

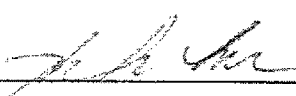
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Badri N. Varadarajan
DATE	6/26/2012
RESIDENCE (CITY AND STATE)	Mountain View, CA

Assignment From Inventor (US 9/1/09)

Application No. 13/457,612

Attorney Docket No. TI-70814

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Il Han Kim
DATE	4-27-2012
RESIDENCE (CITY AND STATE)	Dallas, TX

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Xiaolin Lu
DATE	 04/27/2012
RESIDENCE (CITY AND STATE)	Plano, TX

After recording, return Assignment to:

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

Assignment From Inventor (US 9/1/09)