11-09-2005



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1. Name of conveying party(ies): Raymond E. BARNETT Ganesh Kumar BALACHANDRAN  2. Name: Texas Instruments Incorporated Internal Address: P. O. Box 655474, M/S 3999 Street Address: 7839 Churchill Way  City: Dallas State: Texas  Zip: 75265  Additional name(s) attached?Yes _X_ No  Additional name(s) & address(es) attached?Yes  Execution Date: October 31, 2005  Additional number(s) or patent number(s). If this document is being filed together with a new application, the execution date of the application is October 31, 2005  Additional numbers attached?Yes _X_ No  Additional numbers attached?Yes _X.  A			U.S. Department of Commerce  Patent and Trademark Office	
Raymond E. BARNETT Ganesh Kumar BALACHANDRAN  Name: Texas Instruments Incorporated Internal Address: P. O. Box 655474, M/S 3999 Street Address: 7839 Churchill Way  City: Dallas State: Texas Zip: 75265  Additional name(s) attached?Yes _XNo  Additional name(s) & address(es) attached?Yes XAssignment Merger Security Agreement Change of Name Other Execution Date: October 31, 2005  4. Application number(s) or patent number(s). If this document is being filed together with a new application, the execution date of the application is October 31, 2005  A. Patent Application No.(s)  Additional numbers attached?Yes _XNo  Street Address: P. O. Box 855474, M/S 3999 Street Address: P. O. Box 855474, M/S 3999 Street Address: 7839 Churchill Way  City: Dallas  State: Texas Zip: 75265  7. Amount of fee enclosed or authorized to be charged  8. Deposit account number (Attach two copies of this f paying by deposit account): 20-0668	To the Honorable Commissioner of Patents	and Trademarks. Please record the attach	ned original documents or copy thereof.	
Additional name(s) attached?Yes _XNo	Raymond E. BARNETT	Name: To Internal A Street Add	exas Instruments Incorporated ddress: P. O. Box 655474, M/S 3999 dress: 7839 Churchill Way	113243 U.S. PTO
Nature of Conveyance:  _X_Assignment		J	,	113
		_ No Additional na	me(s) & address(es) attached?Yes _X_No	
If this document is being filed together with a new application, the execution date of the application is October 31, 2005  A. Patent Application No.(s)  Additional numbers attached?Yes _XNo  Additional numbers attached?Yes _X  5. Name and address of party to whom correspondence concerning document should be mailed:  Name: William B. Kempler Internal Address: P. O. Box 655474, M/S 3999  Street Address: 7839 Churchill Way  City: Dallas  State: Texas  Zip: 75265  7. Amount of fee enclosed or authorized to be charged  8. Deposit account number (Attach two copies of this f paying by deposit account): 20-0668	Security Agreement C	nange of Name		
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paying by deposit account): 20-0668	State. Texas Zip. 132	***	fee enclosed or authorized to be charged: \$40.00	
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9. Statement and signature.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of document.  Name of Person Signing: William B. Kemper, Reg. No. 28,22  Date:	To the best of my knowledge and belief, document.			ıal
Total number of pages including cover sheet, attachments, and document: 3  05 ECROPER 20000278 200668 11265261			ents, and document: 3	

11/08/2

01 FC:8021

**PATENT REEL: 017185 FRAME: 0920** 

## ASSIGNMENT

WHEREAS, we, the undersigned inventor(s) (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, the said application having been executed on the date set forth below; and

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 our 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, we hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, our 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 we 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 our entire right, title and interest.

We also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, our 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 International Convention for the Protection of Industrial Property, and of the European Patent Convention, 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.

We hereby further agree that we will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, assigns, and legal representatives, any facts known to our 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, we hereunto set hand and seal this day and year;

TITLE OF INVENTION	RANDOM NUMBER GENERATOR USING JITTER SAMPLED RF CARRIER
SIGNATURE OF INVENTOR AND NAME	Raymond E. BARNETT
DATE	Oct. 31 2005
RESIDENCE (CITY AND STATE)	Dallas, Texas
DATE APPLICATION EXECUTED	

TITLE OF INVENTION	RANDOM NUMBER GENERATOR USING  JITTER SAMPLED RF CARRIER
SIGNATURE OF	XM-KED
INVENTOR	CHONSON LINE
AND NAME	Ganesh Kumar Balachandfan
DATE	Oct. 31, 2005
RESIDENCE	)
(CITY AND	Irving, Texas
STATE)	
DATE	
APPLICATION	
EXECUTED	

WHEREAS, we, the undersigned inventor(s) (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, the said application having been executed on the date set forth below; and

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 our 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, we hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, our 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 we 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 our entire right, title and interest.

We also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, our 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 International Convention for the Protection of Industrial Property, and of the European Patent Convention, 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.

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SIGNATURE OF INVENTOR AND NAME	Ganesh Kumar Balachandran
DATE	Oct. 31, 2005
RESIDENCE (CITY AND STATE)	Irving, Texas
DATE APPLICATION EXECUTED	

PATENT REEL: 017185 FRAME: 0924