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Fornt PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)	T U.S DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
To the Honorable Commissic 1034	42151 shed original documents or copy thereof.	
Name of conveying party(ies):	2. Name and address of receiving party(ies):	
	Name: Texas Instruments Incorporated	
Nir Tal, Yossi Tsfati, Robert B. Staszewski,	Street Address:	
Gregory Lerner	PO Box 655474	
Additional name(s) of conveying party(ies) attached? Yes X No	Mail Station 3999	
3. Nature of conveyance:	City: Dallas State: TX Zip: 75265-5474	
	Country:	
Execution Date: August 23, 2007; August 23, 2007; August 23, 2007; August 23, 2007	Additional name(s) and address(es) attached?  Yes  No	
4. Application number(s) or patent number(s):		
If this document is being filed together with a ne application is: August 23, 2007	ew application, the execution date of the	
A. Patent Application No(s).	B. Patent No(s).	
Additional numb	ers attached? ☐ Yes ☒ No	
Name and address of party to whom correspondence concerning document should	6. Total number of applications and patents involved: 1	
be mailed:	7. Total fee (37 CFR 3.41) \$ 40.00	
Ronald O. Neerings	☐ Enclosed	
Texas Instruments Incorporated PO Box 655474	☑ Authorized to be charged to deposit account	
Mail Station 3999 Dallas TX 75265-5474	8. Deposit account number:	
	20-0668 (Atty Docket No. 12411.0099; TI-65258)	
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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 the original document.		
Howard Zaretsky (Reg. No. 38,669)  Name of Person Signing  Signature  August 23, 2007  Date		
Total number of pages including of	over sheet, attachments and documents: 7	

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**PATENT** 

**REEL: 019793 FRAME: 0344** 

## ASSIGNMENT

WHEREAS, WE,

Inventor Name	Address	Nationality
Nir Tal	13 Vardia St., Haifa 34657, Israel	Israel
Yossi Tsfati	9 Haharuv St., Rishon Letzion 75537, Israel	Israel
Robert B. Staszewski	413 West Murifield Rd, Garland TX 75044,	United States
Gregory Lerner	2 Harav Pinto St., Petach Tikva 49294, Israel	Israel

hereinafter called 'Assignors', have made certain inventions in

LOCAL OSCILLATOR CIRCUIT WITH NON-HARMONIC RATIO BETWEEN OSCILLATOR AND RF FREQUENCIES USING XOR OPERATION

described in an application for Letters Patent filed herewith by us, and

WHEREAS,

Texas Instruments Incorporated PO Box 655474 Mail Station 3999 Dallas TX 75265-5474

a Delaware corporation, hereinafter called 'Assignee', is desirous of securing an undivided One Hundred Percent (100%) of the entire right, title and interest in and to the said inventions, applications and Letters Patent, when granted, and in and to any divisions, continuations, continuations-in-part, improvements, reissues or extensions that may be granted on any of them;

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by the said Assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the Assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said Assignee, its successors and assigns, an undivided One Hundred Percent (100%) of the entire right, title and interest throughout the world in and to the said inventions, applications, Letters Patent, when granted, and in and to any divisions, continuations, continuations-in-part, improvements, reissues or extensions that may be made or granted on any of them;

TO HAVE AND TO HOLD the same to the full end of the term or terms for which said Letters Patent may be granted, as fully and completely as the same might be held by us had this sale and assignment not been made.

For the consideration aforesaid, we hereby covenant and agree to and with the said Assignee, its successors and assigns what whenever its counsel or representative, or the counsel or

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PATENT REEL: 019793 FRAME: 0345 representative of its successors or assigns, shall advise of, or any other proceeding or action in connection with said application or inventions, including interference proceedings, is lawful and desirable, or that a reissue or continuation, continuation-in-part or extension of said Letters Patent is lawful and desirable, we will sign all lawful papers and drawings, execute all divisional, continuation, reissue and substitute applications, take all rightful oaths and affidavits, testify in any legal proceedings, and do all acts necessary or required to be done for the reissue of continuation, continuation-in-part or extension of same, and will do all acts necessary or required to secure to the said Assignee, its successors and assigns, the title to and full benefit of all rights hereby assigned, without charge to said Assignee or its successors or assigns, but at its or their expense.

AND the Commissioner of Patents and Trademarks is requested to issue the said Letters Patent, when granted, in accordance with this sale and assignment.

For the consideration aforesaid, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto the said Assignee, its successors and assigns, or the nominees of any of them, an undivided One Hundred Percent (100%) of the entire right, title and interest in and to any and all Letters Patent for said inventions which may be granted in countries foreign to the United States, and in and to any applications for Letters Patent which may be filed for said inventions in countries foreign to the United States, and in and to the inventions described in said applications; and we hereby authorize and empower said Assignee and its successors, assigns or nominees, to apply for Letters Patent or other form of protection on said inventions in its own name or in the name of its successors, assigns or nominees, in any or all countries where it may desire to file such applications, and where said applications may be filed by other than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, execute all rightful affidavits, and do all acts necessary or required to be done for the procurement and maintenance of Letters Patent or other form of protection for said inventions in countries foreign to the United States, and for further investing or confirming the right and title thereto in the Assignee, its successor, assigns or nominees, but at its or their expense.

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Robert B. Staszev	vski	<del></del>
Witnessed By: _		Date:
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J.		
Gregory Lerner	<i>j</i> .	<del></del>
Witnessed By:	(01/10 1/2)	Date: _8/23/2007
Witnessed By: _	OH-60 0/6)	Date: _8/23/2007

## ASSIGNMENT

## WHEREAS, WE,

Inventor Name	Address	<b>Nationality</b>
Nir Tal	13 Vardia St., Haifa 34657, Israel	Israel
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NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by the said Assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the Assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said Assignee, its successors and assigns, an undivided One Hundred Percent (100%) of the entire right, title and interest throughout the world in and to the said inventions, applications, Letters Patent, when granted, and in and to any divisions, continuations, continuations-in-part, improvements, reissues or extensions that may be made or granted on any of them;

TO HAVE AND TO HOLD the same to the full end of the term or terms for which said Letters Patent may be granted, as fully and completely as the same might be held by us had this sale and assignment not been made.

For the consideration aforesaid, we hereby covenant and agree to and with the said Assignee, its successors and assigns what whenever its counsel or representative, or the counsel or

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PATENT REEL: 019793 FRAME: 0348 representative of its successors or assigns, shall advise of, or any other proceeding or action in connection with said application or inventions, including interference proceedings, is lawful and desirable, or that a reissue or continuation, continuation-in-part or extension of said Letters Patent is lawful and desirable, we will sign all lawful papers and drawings, execute all divisional, continuation, reissue and substitute applications, take all rightful oaths and affidavits, testify in any legal proceedings, and do all acts necessary or required to be done for the reissue of continuation, continuation-in-part or extension of same, and will do all acts necessary or required to secure to the said Assignee, its successors and assigns, the title to and full benefit of all rights hereby assigned, without charge to said Assignee or its successors or assigns, but at its or their expense.

AND the Commissioner of Patents and Trademarks is requested to issue the said Letters Patent, when granted, in accordance with this sale and assignment.

For the consideration aforesaid, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto the said Assignee, its successors and assigns, or the nominees of any of them, an undivided One Hundred Percent (100%) of the entire right, title and interest in and to any and all Letters Patent for said inventions which may be granted in countries foreign to the United States, and in and to any applications for Letters Patent which may be filed for said inventions in countries foreign to the United States, and in and to the inventions described in said applications; and we hereby authorize and empower said Assignee and its successors, assigns or nominees, to apply for Letters Patent or other form of protection on said inventions in its own name or in the name of its successors, assigns or nominees, in any or all countries where it may desire to file such applications, and where said applications may be filed by other than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, execute all rightful affidavits, and do all acts necessary or required to be done for the procurement and maintenance of Letters Patent or other form of protection for said inventions in countries foreign to the United States, and for further investing or confirming the right and title thereto in the Assignee, its successor, assigns or nominees, but at its or their expense.

Nir Tal		
Witnessed By:	Date:	
Witnessed By:	Date:	·
Yossi Tsfati		
Witnessed By:	Date:	_
Witnessed By:	Date:	

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Robert B. Staszewski	-/- A.	•	
Witnessed By:	Acros all	Date;	8/13/04
Witnessed By:	Brukosters)	Date:	\$1:0/07
Gregory Lerner			
Witnessed By:		Date:	
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**RECORDED: 08/23/2007** 

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date: 08-29-2007

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