Form <b>PTO-1595</b> (Rev. 09/04)	TI-38909/1962-2: U.S. DEPARTMENT OF COMM		
OMB No. 0651-0027 (exp. 6/30/2005)  RECOR	uited States Patent and Trademark		
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2. Anand G. DABAK	Name: Texas Instruments Incorporated		
	Internal Address: MS 3999	8 P P P P P P P P P P P P P P P P P P P	
August 8, 2005	l <del></del>	18009 U. 11/199	
Execution Date(s)	Street Address: P.O. Box 655474		
Additional name(s) of conveying party(ies) attached? Yes V No.  3. Nature of conveyance:		£,	
Assignment Merger	City: Dallas		
Security Agreement Change of Name			
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Executive Order 9424, Confirmatory License	Country: US Zip: 75265		
Other	Additional name(s) & address(es) attached? Yes Vo		
4. Application or patent number(s):	document is being filed together with a new applicat		
A. Patent Application No.(s)	B. Patent No.(s)		
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	<i>D. 1 atcin No.(3)</i>		
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A/5/2005 6T0H11 00000112 200668 11199629  1 FC:8021 40.00 DA Additional numbers at 5. Name and address to whom correspondence	tached? Yes No  6. Total number of applications and patents involved:		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:  7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40		
5. Name and address to whom correspondence concerning document should be mailed:  Name: Ronald Neerings	tached? Yes No  6. Total number of applications and patents involved:  7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40  Authorized to be charged by credit card		
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A/S/2005 STOWN 00000112 200668 11199629  Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed:  Name:Ronald Neerings  Internal Address: Texas Instruments Incorporated MS 3999  Street Address: P.O. Box 655474  City: Dallas  State:Texas Zip:75265  Phone Number: (972) 917-5299  Fax Number: (972) 917-4418  Email Address: r-neerings@ti.com	6. Total number of applications and patents involved:  7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40  Authorized to be charged by credit card  Authorized to be charged to deposit account  Enclosed  None required (government interest not affecting)  8. Payment Information  a. Credit Card Last 4 Numbers  Expiration Date  b. Deposit Account Number 20-0668	title)	
A Additional numbers at  5. Name and address to whom correspondence concerning document should be mailed:  Name: Ronald Neerings  Internal Address: Texas Instruments Incorporated  MS 3999  Street Address: P.O. Box 655474  City: Dallas  State: Texas Zip: 75265  Phone Number: (972) 917-5299  Fax Number: (972) 917-4418  Email Address: r-neerings@ti.com  9. Signature:	August 9, 2005	title)	
A/S/2005 STOWN 00000112 200668 11199629  Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed:  Name:Ronald Neerings  Internal Address: Texas Instruments Incorporated MS 3999  Street Address: P.O. Box 655474  City: Dallas  State:Texas Zip:75265  Phone Number: (972) 917-5299  Fax Number: (972) 917-4418  Email Address: r-neerings@ti.com	6. Total number of applications and patents involved:  7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40  Authorized to be charged by credit card  Authorized to be charged to deposit account  Enclosed  None required (government interest not affecting)  8. Payment Information  a. Credit Card Last 4 Numbers  Expiration Date  b. Deposit Account Number 20-0668  Authorized User Name Ronald Neerings		

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

PATENT REEL: 016880 FRAME: 0764

P.05/05

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## 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, 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 its principal office at P.O. Box 655474, MS 3999, Dallas, Texas 75265, 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 and to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Ass't Commissioner for Patents 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 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.

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 my hand and seal this day and year;

TITLE OF INVENTION	WIRELESS PRECODING METHODS		
SIGNATURE OF INVENTOR AND NAME	Anand G. Dabak	Eko N. Onggosanuai	(3)
DATE	08/08/2005	03/08/2605	
RESIDENCE (City, County, State)	8625 Kendall Dr. Collin, Plano TX, 75025	1430 McClure Dr. Collin, Allen TX 75013	
DATE APPLICATION EXECUTED	08/08/2005	08/08/2005	

After recordation, please return Assignment to:

RECORDED: 08/09/2005

Ron Neerings Texas Instruments Incorporated P.O. Box 655474, MS 3999 Dallas, TX 75265

156589.01/1962.25200

TOTAL P.05

**PATENT** REEL: 016880 FRAME: 0765