

06-27-2002

TI - 32953

FORM PTO-1595



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U.S. Department of Commerce
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Khurram Muhammad, 05/13/2002
Dirk Leipold, 05/21/2002
Carl M. Panasik, 05/24/2002



Additional name(s) & address(es)
 Attached? ___ Yes X No

06/17/02

2. Name and Address of receiving party(ies):

Name: **Texas Instruments Incorporated**Address: **P. O. Box 655474, M.S. 3999**City: **Dallas**State: **Texas** Zip: **75265**

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

3. Nature of Conveyance:

X Assignment _____ Merger
 _____ Security Agreement _____ Change of Name
 _____ Other

Execution Date: **May 13, 2002, May 21, 2002, and May 24, 2002**

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:

A. Patent Application No.(s)

B. Patent No.(s)

10/132,624Additional numbers attached? ___ Yes X NoAdditional numbers attached? ___ Yes X No

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

Name: **Ronald O. Neerings**

Address: **Texas Instruments Incorporated**
P. O. Box 655474, M.S. 3999
 City: **Dallas**

State: **Texas** Zip: **75265**6. Number of applications and patents involved: **1**7. Amount of fee enclosed or authorized to be charged: **\$40.00**8. Texas Instruments Incorporated, Account Number: **20-0668**

DO NOT USE THIS SPACE

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.

Ronald O. Neerings
 Signature

Ronald O. Neerings, Reg. #34,227
 Name and Registration Number

6/11/02
 Date

Total number of pages including cover sheet, attachments and document: **2**

06/26/2002 LMJELLER 00000245 200668 10132624

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PATENT
REEL: 013020 FRAME: 0307

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 filed on April 25, 2002 and assigned U.S. Serial Number 10/132,624; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 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;

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 therefor, 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 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 hand and seal this day and year;

TITLE OF INVENTION	SPREAD SPECTRUM DEMODULATION USING A SUBSAMPLING COMMUNICATION RECEIVER ARCHITECTURE		
SIGNATURE OF INVENTOR AND NAME	(1) X <i>M. Khurram</i> Khurram Muhammad	(2) X <i>Carl M. Panasik</i> Carl M. Panasik	(3) X <i>Dirk Leipold</i> Dirk Leipold
DATE	X <i>5/13/2002</i>	X <i>24 May 02</i>	X <i>05-21-02</i>
RESIDENCE (City, County, State)	Richardson, Dallas, Texas	Garland, Dallas, Texas	Plano, Collin, Texas

After recording return Assignment to:

Ronald O. Neerings
Texas Instruments Incorporated
P. O. Box 655474, M/S 3999
Dallas, TX 75265