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TI-34731	RECOI	02359315	Patent and Trademark Office
To the Honorable Commissioner of	Patents and Trademarks. Please	record the attached original document	s or copy thereof.
1. Name of conveying party(ies):		2. Name and Address of receiving p	oarty(ies):
1) Tao Luo 2) Young-Chai Ko	(01/20/2003)	Name: TEXAS INSTRUMENTS	SINCORPORATED P
	(01/20/2003)	Address: P.O. Box 655474, MS 39	99
		City: Dallas	353°
		State: TX Zip: 75265	/01 10/
		Additional name(s) & address(es) at	tached?Yes_X_No
3. Nature of Conveyance:		, , , , , ,	
·	Merger		
Security Agreement	Change of Name		
Other			
Execution Date: January 20, 2003			
4. Application number(s) or patent r	number(s).		
X This document is being filed tog	ether with a new application.		
Execution date of the application: <i>J</i> Title: <i>Method And Apparatus Of S</i> Docket No: <i>TI-34731</i>		rd Fading Channel	
A. Patent Application No.(s)		B. Patent No.(s)	53489
Additional numbers attached?	YesXNo	Additional numbers attached?	
5. Name and address of party to wh document should be mailed:	om correspondence concerning	6. Number of applications and patent	s involved:(1)
Name: Ron Neerings			
Texas Instruments Incorporated			
Address: P.O. Box 655474, MS 399	9		
City: Dallas			
State: TX Zip: 75265			
		7. Amount of fee enclosed or author	ized to be charged: \$40
		8. Deposit Account No: 20-0668 of	Texas Instruments Incorporated
	DO NOT US	E THIS SPACE	
9. Statement and signature.  To the best of my knowledge and beliadocument.	ef, the foregoing information is true a	nd correct and any attached copy is a true o	copy of the original
January 29, 2003 Date		Dwight N. John	bo, Reg. No. 36,410
· <del>-</del>		V	<b>-</b>

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PATENT REEL: 013722 FRAME: 0598

ATTORNEY DOCKET NO.
TI-34731

ASSIGNMENT

Page 1 of 1

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 a place of business at 7839 Churchill Way, MS 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;

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 therefore, 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;

RECORDED: 01/29/2003

TITLE OF INVENTION	Method And Apparatus Of Signal Estimation Over Generalized Fading Channel		
SIGNATURE OF INVENTOR AND NAME	THO LUO	Young-Chai Ko	
DATE	Jan 20, 2003	Jan 20, 2003	
RESIDENCE (City, County, State)	7675 Palmilla Drive #6304 San Diego, CA 92122	10677 Tipperary Way San Diego, CA 92131	
DATE APPLICATION EXECUTED	Jan 20, 2003	Jan 20,2003	

PATENT REEL: 013722 FRAME: 0599