	04-20-2001 ————				
FORM PTO-1595	U.S. Departmen Patent and Tra	t of Commerce ademark Office			
DOCKET MUTIBEL. 11-317-40					
To the Ass't Commissioner for Patents. Ple	101677253 thereof.				
Name of conveying party(ies):	Name and Address of receiving party(ies):	7 P.			
James B. Cho	Name: Texas Instruments Inc.	1046 U.S. 09/801534			
Additional names(s) attached?Yesx!	Address: P.O. Box 655474, M/S 3999	, ° ° / 80			
, red iid iid iid iid iid iid iid iid iid i	City: Dallas, Texas 75265	90			
- 40	Country United States of America	<u> </u>			
3/08	Country: United States of America	W. M.			
	Additional name(s) & address(es) attached?Yes	_X_N0			
3. Nature of Conveyance:					
X_AssignmentMerger					
Security Agreement Change of Nan					
Other	. /				
Execution Date March 7, 2001	09801534				
Application number(s) or patent number(s).	0/8013 -/				
X This document is being filed together with a new a	application.				
Execution date of the application: March 7, 2001					
Title: USING PHASE INTERPOLATOR INFO	ORMATION TO DETECT A LOSS OF LOCK CONDITION RECEIVED DATA STREAM	N DURING			
A. Patent Application No.(s)	B. Patent No.(s)				
S.N. Additional number attached? YesX	Mo Additional numbers attached?Yes	XNc			
Name and address of party to whom correspondence document should be mailed:					
W. James Brady III Texas Instruments Incorporated P.O. Box 655474, M/S 3999 Dallas, TX 75265 972-917-4371					
	7. Amount of fee enclosed or authorized to be charge	d: \$40			
	8. Deposit Account No: 20-0668				
with the	DO NOT USE THIS SPACE				
Statement and signature.					
	g information is true and correct and any attached copy is a true copy of Scott B. Stahl, Reg. No. 33,795	f the onginal			
Total Number of Pages Including Cover Sheet, Attachments and Document: _2					
2502636					

PATENT REEL: 011685 FRAME: 0870

Docket No.: TI-31746

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 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 er force 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	USING PHASE INTERPOLATOR INFORMATION TO DETECT A LOSS OF LOCK CONDITION DURING RECOVERY OF A CLOCK SIGNAL FROM A RECEIVED DATA STREAM		
SIGNATURE OF INVENTOR AND NAME	James B. Cho	(2)	(3)
DATE	×3-07-01		
RESIDENCE	<u>'</u>		
(City, County, State)	Plano, Collin, Texas		
DATE			
APPLICATION EXECUTED	×3-07-01		

After recording return Assignment to:

RECORDED: 03/08/2001

W. James Brady, III Texas Instruments Incorporated P. O. Box 655474, M/S 3999

Dallas, TX 75265

1: JWDOCS 2589005v1

PATENT REEL: 011685 FRAME: 0871