

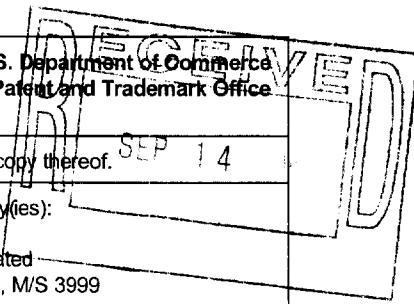
09-21-1998

FORM PTO-1595



100870156

ET

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):

Xiaoshu Qian &amp; Yinong Ding

Additional name(s) attached? \_\_\_ Yes \_\_\_X\_\_\_ No

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

Name: Texas Instruments Incorporated  
Internal Address: P. O. Box 655474, M/S 3999  
Street Address: 7839 Churchill Way

City: Dallas

State: Texas

Zip: 75265

Additional name(s) &amp; address(es) attached? \_\_\_ Yes \_\_\_X\_\_\_ No

3. Nature of Conveyance:

\_\_\_X\_\_\_ Assignment      \_\_\_ Merger  
 \_\_\_ Security Agreement      \_\_\_ Change of Name  
 \_\_\_ Other \_\_\_\_\_

Execution Date: **January 13 & 15, 1998**4. Application number(s) or patent number(s). **08/989,701, Filed December 12, 1997 - Document ID No. 100735128**

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)

Additional numbers attached? \_\_\_ Yes \_\_\_X\_\_\_ No

Additional numbers attached? \_\_\_ Yes \_\_\_X\_\_\_ No

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

Name: Warren L. Franz  
Internal Address: P. O. Box 655474, M/S 3999  
Street Address: 7839 Churchill Way

City: Dallas

State: Texas

Zip: 75265

6. Number of applications and patents involved: 17. Amount of fee enclosed or authorized to be charged: **\$40.00**8. Deposit account number (Attach two copies of this form if paying by deposit account): **20-0668**

09/17/1998 TTOM11 00000097 200668 08989701  
 01 FC:581 40.00 CH

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.

Signature

Name of Person Signing: Warren L. Franz, Reg. No. 28,716Date: 9/18/98Total number of pages including cover sheet, attachments, and document: **3**

**PATENT**  
**REEL: 9458 FRAME: 0766**

**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 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 Assistant 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	FREQUENCY AND PHASE INTERPOLATION IN SINUSOIDAL MODEL-BASED MUSIC AND SPEECH SYNTHESIS		
SIGNATURE OF INVENTOR AND NAME	(1) <i>Xiaoshu Qian</i> Xiaoshu Qian	(2) Yinong Ding	(3)
DATE	<i>x Jan 13 1998</i>		
RESIDENCE (City, State)	Cupertino, California	Plano, Texas	
DATE APPLICATION EXECUTED	<i>x Dec 12, 1997</i>		

After recordation, please return Assignment to:

Warren L. Franz  
Texas Instruments Incorporated  
P.O. Box 655474, MS 3999  
Dallas, TX 75265

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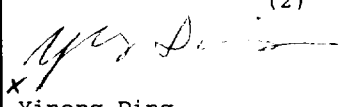
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NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said 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 Assistant 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.

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SIGNATURE OF INVENTOR AND NAME	(1) Xiaoshu Qian	(2) X  Yinong Ding	(3)
DATE		X 4/13/98	
RESIDENCE (City, State)	Cupertino, California	Plano, Texas	
DATE APPLICATION EXECUTED		X 4/13/98	

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