FORM PTO-1595 U.S. Department of Commerce **Patent and Trademark Office** 102789856 TI-37332 To the Assistant Commissioner for Patents. Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and Address of receiving party(ies): Alexis P. Bernard 5/7/04 Name: TEXAS INSTRUMENTS INCORPORATED Yifan Gong 5/3/04 Address: P.O. Box 655474, MS 3999 Dallas State: TX 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 in order of listed parties: 5/7/04; 5/3/04 4. Application number(s) or patent number(s). This document is being filed together with a new application. Execution date of the application in order of listed parties: 5/7/04; 5/3/04 Title: Middle-End Solution to Robust Speech Recognition Docket No: TI-37332 A. Patent Application No.(s) B. Patent No.(s) S.N. 10/823,059 X,XXX,XXX Additional numbers attached? Additional numbers attached? _ 5. Name and address of party to whom correspondence concerning 6. Number of applications and patents involved: _ document should be mailed: Name: Robert L. Troike Texas Instruments Incorporated Address: P.O. Box 655474, MS 3999 City: Dallas State: TX Zip: 75265 7. Amount of fee enclosed or authorized to be charged: \$40 8. Deposit Account No: 20-0668 (Attach duplicate copy if paying by deposit account) 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.

Total Number of Pages Including Cover Sheet, Attachments and Document: 3

07/12/2004 LHUELLER 00000133 200668 10823059

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PATENT REEL: 015545 FRAME: 0638

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 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 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	Middle-End Solution to Robust Speech Recognition		
SIGNATURE OF INVENTOR AND NAME	Alexis P. Bernard	Yifan Gong	N/A
DATE OF SIGNATURE	x 5/7/04		
RESIDENCE (City, State)	Dallas, Texas	Plano, Texas	
DATE APPLICATION EXECUTED			

After recording Assignment, please return to:

Robert L. Troike
Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265

PATENT REEL: 015545 FRAME: 0639

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

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IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE OF INVENTION	Middle-End Solution to Robust Speech Recognition		
SIGNATURE OF INVENTOR AND NAME	Alexis P. Bernard	x Garage N/A	
DATE OF SIGNATURE		× 3 man rook	
RESIDENCE (City, State)	Dallas, Texas	Plano, Texas	
DATE APPLICATION EXECUTED			

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Texas Instruments Incorporated
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Dallas, TX 75265

PATENT
RECORDED: 07/06/2004 REEL: 015545 FRAME: 0640