Docket No. <u>1018.092US1</u>

08-02-2000 Form PTO -1595 (Modified) U.S. Department of Commerce (Rev. 6-93) Patent and Trademark Office OMB 0651-0011 (exp. 4/94) **PATENT** 101421241 VER SHEET - 1: 16: 42 RE **FATENTS ONLY** · 4554 TO: The Honorable Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies). 1. Name of conveying party(ies): 2. Nature of Conveyance: Joshua Goodman \square Assignment Security Agreement Jianfeng Gao License Change of Name Other Merger Execution Date: 6/21/2000 3. Name and address of receiving party(ies): Microsoft Corporation Name: Address: One Microsoft Way City: Redmond State: WA Country: <u>USA</u> ZIP: 98052 4. Application number(s) or registration number(s): If this document is being filed together with a new application, the execution date of the application is: Patent Application No. Patent No.(s) 09/565,608 5. Name and address of party to whom correspondence concerning document should be mailed: 6. Total number of applications and patents involved: __1_ Michael Dryja Registration No.: 39,662 Address: Law Offices of Michael Dryja 704 228th Ave NE PMB 694 7. Total fee (37 CFR 3.41): \$40.00 City: Redmond State: WA **USA** ZIP: 98053 Country: □ Enclosed Telephone: 425-427-5094 ☑ Authorized to be charged to deposit account 8. Deposit account number: 500463 PATENT TRADEHARK OFFICE DO NOT USE THIS SPACE 08/02/2000 DNGUYEN 00000118 500463 09565608 01 FC:581 40.00 CH 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 origina! document. (o-30-un Michael Dryja Name of Person Signing Signature

> PATENT REEL: 010954 FRAME: 0761

PATENT REEL: 010954 FRAME: 0762

ASSIGNMENT

WHEREAS, we, Joshua Goodman and Jianfeng Gao (hereinafter referred to as ASSIGNORS), are the joint inventors of an invention entitled Cluster and Pruning-Based Language Model Compression as described and claimed in the specification forming part of an application for United States letters patent filed on 5/4/2000, and assigned Serial No. 09/565,608;

WHEREAS, Microsoft Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at One Microsoft Way, Redmond, WA 98052, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

IN WITNESS WHEREOF, We have hereunto signed our names on the day and year set forth below.

1

John Dorth	6/21/10	
Invertor's Signature	DATE	
Joshua Goodman		
nventor's Printed Name		
STATE OF)) SS		
COUNTY OF)		
	before me personally came the above named <u>Joshua Goodman</u> who is personally known to be the same individual who executed the foregoing assignment, and who acknowledged to me to be the same individual who executed the foregoing assignment.	by
ne/she executed the same of his/her own free will for th	e use and purposes therein set forth.	
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JEL ESION EL	My Commission Expires: 10-9-0	
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PUBLIC >	Page 1 of ?	
10-9-01	(Please ces	
IN FOFWASHITE	additional committee	
Maries	Page 1 of 2 (Please see additional signature on reverse side) PATENT	

Jawlong acm	JUN. 14, 2000
Inventor's Signature	DATE
Jianfeng Gao Inventor's Printed Name	
On this day of, or proved to me on the basis of satisfactory evidence to be the she/she executed the same of his/her own free will for the use and p	_, before me personally came the above named <u>Jianfeng Gao</u> who is personally known by me ame individual who executed the foregoing assignment, and who acknowledged to me that purposes therein set forth.
MING ZHOU	M. Zhon
WITNESS NAME	WITNESS SIGNATURE

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RECORDED: 07/05/2000