

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3419483

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
XIAODONG HE	06/24/2015
JIANSU CHEN	06/23/2015
BRENDAN W.L. CLEMENT	06/22/2015
LI DENG	06/27/2015
JIANFENG GAO	06/23/2015
BOCHEN JIN	06/24/2015
PRABHDEEP SINGH	06/25/2015
SANDEEP P. SOLANKI	06/24/2015
LUMING WANG	06/24/2015
HANJUN XIAN	06/24/2015
YILEI ZHANG	06/24/2015
MINGYANG ZHAO	06/23/2015
ZIJIAN ZHENG	06/23/2015

**RECEIVING PARTY DATA**

<b>Name:</b>	Microsoft Technology Licensing, LLC
<b>Street Address:</b>	One Microsoft Way
<b>City:</b>	Redmond
<b>State/Country:</b>	WA
<b>Postal Code:</b>	98052

**PROPERTY NUMBERS Total: 1**

Property Type	Number
<b>Application Number:</b>	14754474

**CORRESPONDENCE DATA**

Fax Number: (509)944-4692

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

Phone: 509-324-9256

Email: alexisc@leehayes.com

Correspondent Name: LEE &amp; HAYES, PLLC

Address Line 1: 601 W. RIVERSIDE AVE, SUITE 1400

**PATENT**

**Address Line 4:** SPOKANE, WASHINGTON 99201

**ATTORNEY DOCKET NUMBER:** MS1-6238US

**NAME OF SUBMITTER:** ALEXIS COLLINS

**SIGNATURE:** /Alexis Collins/

**DATE SIGNED:** 06/30/2015

**Total Attachments: 26**

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I Xiaodong He ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

TRAINING AND OPERATION OF COMPUTATIONAL MODELS

("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative, Microsoft Technology Licensing, LLC., One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on June 29, 2015 and given Application No. 14/754,474 by the following Office US - United States Patent and Trademark Office) this APPLICATION's Application No., filing date, and Office, when known;

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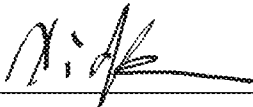
Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

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	6/24/2015
_____ Inventor's Signature	_____ Date
Xiaodong He	何晓冬
_____ Printed Name in English	_____ Printed Name in Native Language (if other than English)

I, Jianshu Chen ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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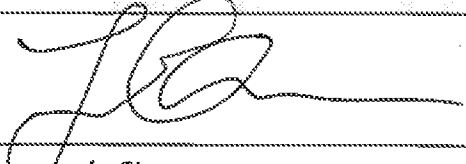
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	06/23/2015
Inventor's Signature	Date
Jianshu Chen	陈建树
Printed Name in English	Printed Name in Native Language (if other than English)

I Brendan W.L. Clement ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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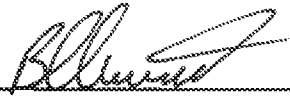
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	2015-06-22
Inventor's Signature	Date
Brendan W.L. Clement	
Printed Name in English	Printed Name in Native Language (if other than English)



I, Li Deng ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

TRAINING AND OPERATION OF COMPUTATIONAL MODELS

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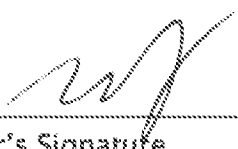
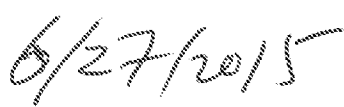
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_____ Inventor's Signature	_____ Date
Li Deng	
_____ Printed Name in English	_____ Printed Name in Native Language (if other than English)

I Jianfeng Gao ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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	6/23/2015
_____ Inventor's Signature	_____ Date
Jianfeng Gao	高剑峰
_____ Printed Name in English	_____ Printed Name in Native Language (if other than English)

I Bochen Jin ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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	<u>06/24/2015</u>
Inventor's Signature	Date
Bochen Jin	
Printed Name in English	Printed Name in Native Language (if other than English)

I Prabhdeep Singh ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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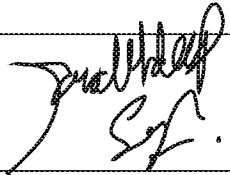

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_____ Inventor's Signature	_____ Date
Prabhdeep Singh	
_____ Printed Name in English	_____ Printed Name in Native Language (if other than English)



I Sandeep P. Solanki ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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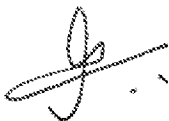
PATENT ASSIGNMENT

MS Docket No.: 357536.01

Attorney Docket No.: MS1- 6238US


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	<u>24<sup>th</sup> June 2015</u>
Inventor's Signature	Date
<u>Sandeep P. Solanki</u>	
Printed Name in English	Printed Name in Native Language (if other than English)

I LuMing Wang ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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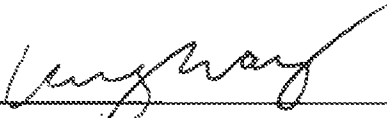
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 _____ Inventor's Signature	<u>06/24/2015</u> _____ Date
<u>LuMing Wang</u> _____ Printed Name in English	_____ Printed Name in Native Language (if other than English)

I Hanjun Xian ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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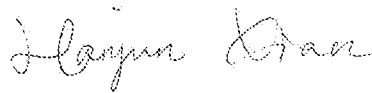
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	06/24/2015
_____ Inventor's Signature	_____ Date
Hanjun Xian	洗汉君
_____ Printed Name in English	_____ Printed Name in Native Language (if other than English)

I Yilei Zhang ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

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was filed on \_\_\_\_\_ and was given Application No \_\_\_\_\_ by the following Office US - United States Patent and Trademark Office:

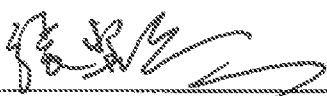
Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")):

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known:

Application No.	Filing Date	Office


For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

	2015-06-24
Inventor's Signature	Date
Yilei Zhang	张科磊
Printed Name in English	Printed Name in Native Language (if other than English)



I Mingyang Zhao ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

TRAINING AND OPERATION OF COMPUTATIONAL MODELS

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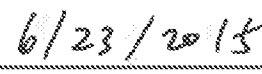
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Inventor's Signature	Date
Mingyang Zhao	赵明阳
Printed Name in English	Printed Name in Native Language (if other than English)

I, Zijian Zheng ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled

TRAINING AND OPERATION OF COMPUTATIONAL MODELS

("APPLICATION"), which:

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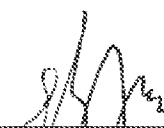
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	6/23/2015
Inventor's Signature	Date
Zijian Zheng	郑子坚
Printed Name in English	Printed Name in Native Language (if other than English)