

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3848844

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SHI HAN	03/30/2016
YINGNONG DANG	03/28/2016
DONGMEI ZHANG	03/25/2016
SONG GE	03/30/2016
RECEIVING PARTY DATA	
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Street Address:	ONE MICROSOFT WAY
City:	REDMOND
State/Country:	WASHINGTON
Postal Code:	98052
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15139960
CORRESPONDENCE DATA	
Fax Number:	(509)323-8979
<i>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.</i>	
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Email:	saybra@leehayes.com
Correspondent Name:	LEE & HAYES, PLLC
Address Line 1:	601 W. RIVERSIDE AVENUE
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Address Line 4:	SPOKANE, WASHINGTON 99201
ATTORNEY DOCKET NUMBER:	MS1-5130USC1
NAME OF SUBMITTER:	SAYBRA MORRIS
SIGNATURE:	/Saybra Morris/
DATE SIGNED:	04/27/2016
Total Attachments: 8	
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PATENT ASSIGNMENT

MS Docket No.: _____

Attorney Docket No.: MS1- 5130USC1

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

Frequent Pattern Mining

("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 _____ and given Application No. _____ by the following Office US - United States Patent and Trademark Office) this APPLICATION's Application No., filing date, and Office, when known;

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

PATENT ASSIGNMENT

MS Docket No.: _____

Attorney Docket No.: MS1-5130USC1

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).

<u>Shi Han</u>	<u>3/30/2016</u>
Inventor's Signature	Date
Shi Han	SHI
Printed Name in English	Printed Name in Native Language (if other than English)

I Yingnong Dang (“ASSIGNOR”) am the original inventor or an original joint inventor of subject matter (“INVENTION”) disclosed and/or claimed in a patent application entitled

Frequent Pattern Mining

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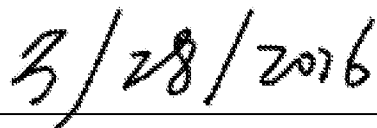
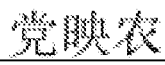
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 _____ Inventor's Signature	 _____ Date
Yingnong Dang _____ Printed Name in English	 _____ Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

MS Docket No.: 331841.02

Attorney Docket No.: MS1- 5130USC1

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

Frequent Pattern Mining

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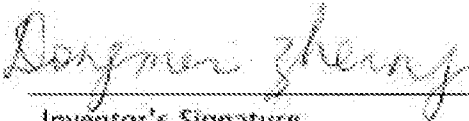
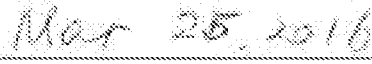
PATENT ASSIGNMENT

MS Docket No.: _____

Attorney Docket No.: MS1- 5130JSC1

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

PATENT ASSIGNMENT

MS Docket No.: _____

Attorney Docket No.: MS1- 5130USC1

I, Song Ge ("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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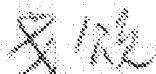
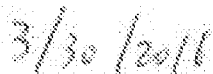
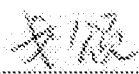
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Inventor's Signature	Date
Song Ge	
Printed Name in English	Printed Name in Native Language (if other than English)