505571709 07/15/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHRISTOPHER M. WHITE	07/15/2019
DARREN K. EDGE	07/11/2019
JONATHAN K. LARSON	07/09/2019
NATHAN R. EVANS	07/09/2019

RECEIVING PARTY DATA

Name:	MICROSOFT TECHNOLOGY LICENSING, LLC
Street Address:	ONE MICROSOFT WAY
City:	REDMOND
State/Country:	WASHINGTON
Postal Code:	98052

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16511784

CORRESPONDENCE DATA

Fax Number:

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.

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 Email:
 usdocket@microsoft.com

 Correspondent Name:
 MICROSOFT CORPORATION

 Address Line 1:
 ONE MICROSOFT WAY

Address Line 4: REDMOND, WASHINGTON 98052

ATTORNEY DOCKET NUMBER: 406954-US-NP

NAME OF SUBMITTER: KATHERINE WILSON

SIGNATURE: /Katherine Wilson/

DATE SIGNED: 07/15/2019

Total Attachments: 8

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source=406954-US-NP-Assignment-CW-Signed#page1.tif source=406954-US-NP-Assignment-CW-Signed#page2.tif source=406954--US-NP-Assignment-DE-Signed#page1.tif

PATENT REEL: 049755 FRAME: 0018 source=406954--US-NP-Assignment-DE-Signed#page2.tif source=406954-US-NP-Assignment-JL-Signed#page1.tif source=406954-US-NP-Assignment-JL-Signed#page2.tif source=406954-US-NP-Assignment-NE-signed#page1.tif source=406954-US-NP-Assignment-NE-signed#page2.tif

PATENT REEL: 049755 FRAME: 0019

I <u>Christopher M. White</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>MODELING HIGHER-LEVEL METRICS FROM GRAPH DATA DERIVED</u> FROM ALREADY-COLLECTED BUT NOT YET CONNECTED DATA" ("APPLICATION"), which:

X	oxtimes will be filed. ASSIG	NOR hereby	authorizes,	and requests,
	ASSIGNEE'S legal repres	entative, Micr	osoft Techno	ology Licensing,
	LLC., One Microsoft Way	, Redmond, Wa	shington 980)52 (ASSIGNEE'S
	LEGAL REPRESENTATIVE	S), to insert	here in pai	entheses (filed
	ona	nd given Appli	cation No	by
	the following Office) this
	APPLICATION's Applicati	on No., filing d	ate, and Offic	ce, when known;
	was filed on	and was g	jiven Applicat	tion
	No by	the following	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

MS Docket No.: 406954-US-NP

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).

ventor's Signature

Date

Christopher M. White

Printed Name in English

Printed Name in Native Language

(if other than English)

PATENT ASSIGNMENT MS Docket No.: 406954-US-NP

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	SSIGNOR hereby authori: presentative, Microsoft Te	
	Way, Redmond, Washingto	
	TIVES), to insert here in	
	and given Application N	
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	cation No., filing date, and	
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Microsoft Technology Licen		imited liability company, on
behalf of itself and its successors a of acquiring, the entire and exclu priority, in the INVENTION and the derived therefrom, such as contin United States, its territories, and a	nsing, LLC, a Washington li and assigns ("ASSIGNEE"), is usive rights, title and inte e APPLICATION (and all oth nuing applications, in who all foreign countries ("APPL	imited liability company, on s entitled to, and is desirous rest, including the right of ier applications and patents le or in part, in and for the ICATION DERIVATIVES"));
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Page 1 of 2

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).

$\Delta \mathcal{A}$	11 JULY 2019
Inventor's Signature	Date
Darren K. Edge	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 406954-US-NP

I Jonathan K. Larson ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "MODELING HIGHER-LEVEL METRICS FROM GRAPH DATA DERIVED FROM ALREADY-COLLECTED BUT NOT YET CONNECTED DATA" ("APPLICATION"), which:

\boxtimes	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
	APPLICATION's Application No., filing date, and Office, when known
	was filed on and was given Application
	No by the following Office
	в

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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Jonathan K Farson Inventor's Signature	July 9,2019 Date
Jonathan K. Larson	
Printed Name in English	Printed Name in Native Language (if other than English)

MS Docket No.: 406954-US-NP

I <u>Nathan R. Evans</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>MODELING HIGHER-LEVEL METRICS FROM GRAPH DATA DERIVED FROM ALREADY-COLLECTED BUT NOT YET CONNECTED DATA</u>" ("APPLICATION"), which:

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Page 1 of 2

MS Docket No.: 406954-US-NP

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	7/9/19
Inventor's Signature	Date
Nathan R. Evans	
Printed Name in English	Printed Name in Native Language
	(if other than English)