## 505582935 07/22/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5629734

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
AMER AREF HASSAN	07/19/2019
RONALD F. JOHNSON	07/19/2019
HOOMAN SHIRANIMEHR	07/19/2019

#### **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:	16518133		

#### **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.

**Email:** usdocket@microsoft.com

Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER P.A.

Address Line 1: P.O. BOX 2938

Address Line 4: MINNEAPOLIS, MINNESOTA 55402-0938

ATTORNEY DOCKET NUMBER:	406924-US-NP/1777.D06US1
NAME OF SUBMITTER:	TYLYN MOORE
SIGNATURE:	/tylyn moore/
DATE SIGNED:	07/22/2019

### **Total Attachments: 7**

source=1777D06US1\_ASSN#page1.tif source=1777D06US1\_ASSN#page2.tif source=1777D06US1\_ASSN#page3.tif source=1777D06US1\_ASSN#page4.tif source=1777D06US1\_ASSN#page5.tif

> PATENT REEL: 049821 FRAME: 0091

505582935

source=1777D06US1\_ASSN#page6.tif source=1777D06US1\_ASSN#page7.tif

> PATENT REEL: 049821 FRAME: 0092

# RECORDATION FORM COVER SHEET PATENTS ONLY

Patent and Trademark Office Atty Ref/Docket No.: 406924-US-NP (1777.D06US1) To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Microsoft Technology Licensing, LLC Amer Aref Hassan, Hooman Shiranimehr, Ronald F. Street Address: One Microsoft Way Johnson Additional name(s) of conveying party(ies) attached? City: Redmond State: WA Zip: <u>98052</u> Country: United States of America [ ]Yes [X]No Additional name(s) & address(es) attached? [ ]Yes [X]No 3. Nature of conveyance: [X] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name [ ] Other Execution Date: July 19, 2019, July 19, 2019, July 19, 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Serial No. 16/518,133 Additional numbers attached? [ ]Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ 0.00 Name: Scott C. Krueger [[Enclosed []Authorized to be charged to deposit account 19-Address: 0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 Please charge any additional fees or credit any over Minneapolis, Minnesota 55402 payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE 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. Scott C. Krueger/Reg. No. 72,633 /Scott C. Krueger/ July 22, 2019 Name of Person Signing Signature Date

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

> PATENT REEL: 049821 FRAME: 0093

Total number of pages including cover sheet: 7

inventor of	subject matter ("	'INVENTION") disclosed a	inventor or an original joint and/or claimed in a patent SOURCED NETWORK DATA",
	ASSIGNEE'S legal LLC, One Microsof LEGAL REPRESENT on 22 July 2019 the following O	ASSIGNOR hereby authorepresentative, Microsoft tway, Redmond, Washing ATIVES), to insert here and given Application ffice United States Paterplication No., filing date, and plication plication No., filing date, and plication No.,	Technology Licensing, ton 98052 (ASSIGNEE'S in parentheses (filed No. <u>16/518,133</u> by nt Office) this
		and was given Application Patent Office ";	ation No by the
behalf of itse of acquiring priority, in t derived ther	elf and its successor i, the entire and ex he INVENTION and t efrom, such as con	s and assigns ("ASSIGNEE") clusive rights, title and in he APPLICATION (and all c tinuing applications, in wh	I limited liability company, on, is entitled to, and is desirous iterest, including the right of other applications and patents nole or in part, in and for the PLICATION DERIVATIVES"));
to insert the	•	iling date, and Office int	EE'S LEGAL REPRESENTATIVES o the following table for any
Application	No.	Filing Date	Office

MS Docket No.: 406924-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).

Ann	H	7/19/2019
Inventor's Signa	iture	Date 🔻 🔻
AMER	HASSA	N
Printed Name ir	ı English	Printed Name in Native Language
		(if other than English)

MS Docket No.: 406924-US-NP

inventor of	subject matter ("	'INVENTION") disclos	ginal inventor or an orig ed and/or claimed in DWD-SOURCED NETWOR	a patent
	ASSIGNEE'S legal LLC, One Microsof LEGAL REPRESENT on 22 July 2019 the following O	representative, Micro t Way, Redmond, Was FATIVES), to Insertand given Applic officeUnited States	authorizes, and requests of the Technology Licensing the Shington 98052 (ASSIGNE) here in parentheses (fination No. 16/518,133  Patent Office the American parentheses the Shington No. 16/518,133	ng, E'S led by his
		and was given A Patent Offic	pplication No by the <u></u> ;	
behalf of its of acquiring priority, in t derived ther	elf and its successor , the entire and ex he INVENTION and t efrom, such as con	s and assigns ("ASSIG clusive rights, title a the APPLICATION (and stinuing applications,	ngton limited liability cor NEE"), is entitled to, and is and interest, including th d all other applications ar in whole or in part, in a s ("APPLICATION DERIVAT	s desirous e right of id patents ad for the
to insert th		filing date, and Offic	SSIGNEE'S LEGAL REPRESE ce into the following tab	
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).

Inventor's Signature

1 KONBED JOHNSON

Printed Name in English

Date

Printed Name in Native Language (if other than English)

I Hoo	man Shir	animehr	("ASSIGNOF	₹") am t	he origi	nal inven	tor or an	origir	nal joint
inventor of	subject	matter	("INVENTIC	)N°) di:	sclosed	and/or	claimed	in a	patent
application	entitled	"ROUTE	PLANNING	USING	CROWE	D-SOURC	ED NETV	<u>VORK</u>	<u>DATA</u> ",
which:									

oxtimes will be filed. ASSIGNOR hereby authorizes, and reque	sts,
ASSIGNEE'S legal representative, Microsoft Technology Licensi	ng,
LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNI	E'S
LEGAL REPRESENTATIVES), to insert here in parentheses (f	iled
on <u>22 July 2019</u> and given Application No. <u>16/518,133</u>	_by
the following Office United States Patent Office	this
APPLICATION's Application No., filing date, and Office, when kno	wn;
$\square$ was filed on and was given Application No by the	
following Office "Patent 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;

	Filing Date Office	
Ī		

PATENT ASSIGNMENT

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).

Inventor's Signature

HOOMAN SHIR ANIMEHR

Printed Name in English

Melve July-19-2019

Printed Name in Native Language

(if other than English)