505010802 07/19/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5057550

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MONTY HAMMONTREE	06/25/2018
VALENTINA STRACHAN	06/04/2018
TRAVIS LOWDERMILK	07/18/2018
MAXIM LOBANOV	06/04/2018
KELLEY ZHAO	06/18/2018
STEVEN CLARKE	06/19/2018
JESSICA RICH	06/04/2018
JUAN P CARRASCAL-RUIZ	06/04/2018

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:	15994921

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:	404355-US-NP/1777.929US1
NAME OF SUBMITTER:	TYLYN MOORE
SIGNATURE:	/tylyn moore/
DATE SIGNED:	07/19/2018

PATENT REEL: 046397 FRAME: 0110

Total Attachments: 17 source=1777929US1_ASSN#page1.tif source=1777929US1_ASSN#page2.tif source=1777929US1_ASSN#page3.tif source=1777929US1_ASSN#page4.tif source=1777929US1_ASSN#page5.tif source=1777929US1_ASSN#page6.tif source=1777929US1_ASSN#page7.tif source=1777929US1_ASSN#page8.tif source=1777929US1 ASSN#page9.tif source=1777929US1_ASSN#page10.tif source=1777929US1_ASSN#page11.tif source=1777929US1_ASSN#page12.tif source=1777929US1_ASSN#page13.tif source=1777929US1_ASSN#page14.tif source=1777929US1_ASSN#page15.tif source=1777929US1_ASSN#page16.tif source=1777929US1_ASSN#page17.tif

PATENT REEL: 046397 FRAME: 0111

RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 404355-US-NP (1777.929US1)

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please	
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
	Name: Microsoft Technology Licensing, LLC
Monty Hammontree, Valentina Strachan, Travis Lowdermilk, Maxim Lobanov, Kelley Zhao, Steven Clarke, Jessica Rich, Juan P Carrascal-Ruiz	Street Address: One Microsoft Way
Additional name(s) of conveying party(ies) attached?	City: Redmond State: WA Zip: 98052 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: June 25, 2018, June 4, 2018, July 18, 2018, June 4, 2018, June 18, 2018, June 19, 2018, June 4, 2018, June 4, 2018, June 4, 2018	
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, the	ne execution date of the application is:
	••
A. Patent Application No.(s)	B. Patent No.(s)
Serial No. 15/994,921	
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):\$ <u>0.00</u>
Name: <u>Bradley A. Forrest</u>	[]Enclosed ∏Authorized to be charged to deposit account 19-
Address: Schwegman Lundberg & Woessner, P.A.	0743
P.O. Box 2938 Minneapolis, Minnesota 55402	8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743
DO NOT USE T	HIS SPACE
 Statement and signature. To the best of my knowledge and belief, the foregoing information of the original document. 	on is true and correct and any attached copy is a true copy
Bradley A. Forrest/Reg. No. 30,837	7-18-2018
Name of Person Signing	Signature Date
Total n	umber of pages including cover sheet: 17

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

inventor of	subject matter	("INVENTION") dis	e original inventor or an closed and/or claimed <u>//ETER FOR QUERY SESSIC</u>	in a patent
	will be filed. ASSIGNEE'S lega LLC, One Microso LEGAL REPRESER on the following	ASSIGNOR herel I representative, M oft Way, Redmond, NTATIVES), to inseand given Ap Office	by authorizes, and re licrosoft Technology Lic Washington 98052 (ASSI ert here in parentheses plication No. g date, and Office, when I	quests, ensing, IGNEE'S s (filed by) this
Ø		31, 2018 and was he following Office	given Application No " <u>US Patent Office</u> ";	
behalf of itse of acquiring priority, in the derived there	elf and its successo , the entire and e ne INVENTION and efrom, such as co	ors and assigns ("AS exclusive rights, titl the APPLICATION (ntinuing application	shington limited liability SIGNEE"), is entitled to, ar e and interest, including and all other application ns, in whole or in part, in ries ("APPLICATION DERIN	nd is desirous I the right of S and patents n and for the
to insert the	Application No.,		, ASSIGNEE'S LEGAL REPR ffice into the following	
Application	No.	Filing Date	Office	

11072 Hm	6/25/2018
Inventor's Signature	Date
Monty Hammontree	
Printed Name in English	Printed Name in Native Language (if other than English)

L	SSIGNEE'S legal LC, One Microsof	representative, Micro t Way, Redmond, Wa	authorizes, and req osoft Technology Lice shington 98052 (ASSIC	nsing, INEE'S
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Valenda S.	06.04.18
Inventor's Signature	Date
Valentina Strachan	
Printed Name in English	Printed Name in Native Language
	(if other than English)

inventor of	ris Lowdermilk ("ASS subject matter ("I entitled <u>"QUERY AND</u>	NVENTION") disc	losed and/or claim	med in a patent
	will be filed. ASSIGNEE'S legal relation to the following of APPLICATION's Approximation of the following of	epresentative, Mi Way, Redmond, V ATIVES), to inser and given App fice	crosoft Technology Vashington 98052 (t here in parenth dication No.	Licensing, (ASSIGNEE'S neses (filedby) this
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to insert the	NOR hereby authorize Application No., find DERIVATIVES after	ling date, and Of		
Application	No.	Filing Date	Office	

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

Date

Travis Lowdermilk

Printed Name in English

Printed Name in Native Language

(if other than English)

inventor of subject matter ("I	NVENTION") disclosed a	•
ASSIGNEE'S legal r LLC, One Microsoft LEGAL REPRESENTA on the following Of	ASSIGNOR hereby author epresentative, Microsoft Way, Redmond, Washingt ATIVES), to insert here and given Application fice to filing date, ar	rizes, and requests, Technology Licensing, on 98052 (ASSIGNEE'S in parentheses (filed Noby) this
	1, 2018 and was given App following Office " <u>US Pater</u>	
Microsoft Technology Lice behalf of itself and its successors of acquiring, the entire and exc priority, in the INVENTION and the derived therefrom, such as cont United States, its territories, and	and assigns ("ASSIGNEE"), clusive rights, title and in ne APPLICATION (and all o inuing applications, in wh	terest, including the right of ther applications and patents ole or in part, in and for the
ASSIGNOR hereby authorize to insert the Application No., fit APPLICATION DERIVATIVES after	ling date, and Office into	EE'S LEGAL REPRESENTATIVES o the following table for any
Application No.	Filing Date	Office

MS Docket No.: 404355-US-NP

MS Docket No.: 404355-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 sight 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"));

Ma	6/4/2018	
Inventor's Signature	Date	
Maxim Lobanov		
Printed Name in English	Printed Name in Native Language (if other than English)	

of subject ma "QUERY AND	atter ("INVENTION") INFORMATION MET will be filed. ASSIGNEE'S legal in LLC, One Microsof LEGAL REPRESENT	disclosed and/or clain ER FOR QUERY SESSIC ASSIGNOR hereby a representative, Micros t Way, Redmond, Wasi 'ATIVES), to insert h	authorizes, and requests, soft Technology Licensing, hington 98052 (ASSIGNEE'S nere in parentheses (filed	
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MS Docket No.: 404355-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"));

Helley Hom	6/18/18
Inventor's Signature	Date
Kelley Zhao	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Steven Clarke ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "OUERY AND INFORMATION METER FOR QUERY SESSION", 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
	onand given Application Noby
	the following Office) this
	APPLICATION's Application No., filing date, and Office, when known;
52	

 Was filed on May 31, 2018 and was given Application No 15/994,921 by the following Office "US 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;

Application No.	Filing Date	Office

PATENT ASSIGNMENT MS Docket No.: 404355-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"));

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Slaven Clarke	JUNE 19TH 2018	
Inventor's Signature	Date	:8 :8:
Steven Clarke		# #
Printed Name in English	Printed Name in Native La	anguage .
	(If other than English)	

■ 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	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) this APPLICATION's Application No., filing date, and Office, when known; was filed on May 31, 2018 and was given Application No 15/994,921 by the following Office "US Patent Office"; Microsoft Technology Licensing, LLC, a Washington limited liability compabehalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is deformed acquiring, the entire and exclusive rights, title and interest, including the ripriority, in the INVENTION and the APPLICATION (and all other applications and priority, in the INVENTION and the APPLICATION (and all other applications and priority, in the INVENTION and the APPLICATION (and all other applications and priority, in the INVENTION and the APPLICATION (and all other applications and priority).	
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Inventor's Signature	Date 44/8
Jessica Rich	
Printed Name in English	Printed Name in Native Language
	(if other than English)

original joint inventor of subjection entity SESSION", which: Will be filed. ASSIGNEE'S legal of LLC. One Microsoft LEGAL REPRESENT	ct_matter_('INVENTION')	MATION METER FOR QUERY rizes, and requests Technology Licensing on 98052 (ASSIGNEE'S in parentheses (filed
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Microsoft Technology Lic behalf of itself and its successor of acquiring, the entire and ex priority, in the INVENTION and t derived therefrom, such as con United States, its territories, and	s and assigns ("ASSIGNEE"), clusive rights, title and in he APPLICATION (and all o tinuing applications, in wh	terest, including the right of ther applications and patents iole or in part, in and for the
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Application No.	Filing Date	Office

389k_	Jun 4-2018
Inventor's Signature	Date
Juan P Carrascal-Ruiz	
Printed Name in English	Printed Name in Native Language
	(if other than English)