505635874 08/22/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5682680

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AMER AREF HASSAN	07/22/2019
RICHARD JAMES COLE	07/31/2019
WHITNEY J GIAIMO	08/05/2019

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:	16526496

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

ATTORNEY DOCKET NUMBER:	406921-US-NP D03US1
NAME OF SUBMITTER:	JESSE CANTRELL
SIGNATURE:	/ Jesse Cantrell /
DATE SIGNED:	08/22/2019

Total Attachments: 7

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> PATENT REEL: 050139 FRAME: 0832

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> PATENT REEL: 050139 FRAME: 0833

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Atty Ref/Docket No.: 406921-US-NP (1777.D03US1)

Patent and Trademark Office

Joshua E. Garfield/Reg. No. 58,416 Name of Person Signing	/Joshua E. Garfield/ August 22, 2019 Signature Date			
9. Statement and signature. To the best of my knowledge and belief, the foregoing info of the original document.	ormation is true and correct and any attached copy is a true copy			
DO NOT U	SE THIS SPACE			
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			
Address: Schwegman Lundberg & Woessner, P.A.	[]Enclosed []Authorized to be charged to deposit account 19- 0743			
Name: Joshua E. Garfield	,			
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>			
Traditional numbers accepted: []105 [24]100	6. Total number of applications and patents involved: 1			
Additional numbers attached? []Yes [X]No				
Serial No. 16/526,496	2. 2.2000 (0)			
A. Patent Application No.(s)	B. Patent No.(s)			
If this document is being filed together with a new applicat	tion, the execution date of the application is:			
4. Application number(s) or patent number(s):				
Execution Date: <u>July 22, 2019, July 31, 2019, August 5, 2019</u>				
[X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other				
3. Nature of conveyance:	reductional nume(s) & address(es) attached. [11 es [24]140			
[]Yes [X]No	Additional name(s) & address(es) attached? []Yes [X]No			
Additional name(s) of conveying party(ies) attached?	City: <u>Redmond</u> State: <u>WA</u> Zip: <u>98052</u> Country: <u>United States of America</u>			
Amer Aref Hassan, Richard James Cole, Whitney J Giaimo	Street Address: One Microsoft Way			
1. Name of conveying party(ies):	Name: Microsoft Technology Licensing, LLC			
	2. Name and address of receiving party(ies):			

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: 050139 FRAME: 0834

I Amer Aref Hassan ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DYNAMICALLY SELECTING A CHANNEL MODEL FOR OPTICAL COMMUNICATIONS", which:

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	ASSIG	NEE'	S legal	repre	sentat	ive, M	licros	oft '	Techn	ology	Licer	ısing,
	LLC, (One I	Microso	oft Way	, Redr	nond,	Wasł	ningt	on 98	052 (4	ASSIG	NEE'S
	LEGAI	L RE	PRESEN	ITATIV	ES), t	o inse	ert h	ere	in pa	renth	eses	(filed
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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"));

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).

Am Hans	7/22/2019
Inventor's Signature	Date
Amer Aref Hassan	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Richard James Cole ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DYNAMICALLY SELECTING A CHANNEL MODEL FOR OPTICAL COMMUNICATIONS", 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 30 July 2019 and given Application No. 16/526,496 by the following Office United States Patent Office APPLICATION's Application No., filing date, and Office, when known;
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

APPLICATION DERIVATIVES after they are known; Application No. Filing Date Office

to insert the Application No., filing date, and Office into the following table for any

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).

	7/3//2018
Inventor's Signature	Date
Richard James Cole	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Whitney J Giaimo ("ASSIC	GNOR") am the original i	nventor or an original joint
inventor of subject matter ("IN	IVENTION") disclosed ar	nd/or claimed in a patent
application entitled "DYNAMICAL	LLY SELECTING A CHAP	NNEL MODEL FOR OPTICAL
COMMUNICATIONS", which:		
\square will be filed. As	SSIGNOR hereby autho	rizes, and requests,
ASSIGNEE'S legal re	presentative, Microsoft	Fechnology Licensing,
LLC, One Microsoft V	Way, Redmond, Washingt	on 98052 (ASSIGNEE'S
LEGAL REPRESENTA	TIVES), to insert here	in parentheses (filed
on	and given Application	No by
the following Offi) this
APPLICATION's Appli	ication No., filing date, an	
\bowtie was filed on July 30.	2019 and was given App	lication No
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Microsoft Technology Licen	nsing, LLC, a Washington	limited liability company, on
behalf of itself and its successors a		
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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	8/5/2019 Date
Whitney J Giaimo	
Printed Name in English	Printed Name in Native Language
	(if other than English)