506366495 11/20/2020 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6413251

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYA	NCE:	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ		
		Name	Execution Date
HAOYU DONG			07/05/2018
SHI HAN			07/05/2018
ZHOUYU FU			07/06/2018
DONGMEI ZHANG			07/05/2018
RECEIVING PARTY DA			
Name:	MICRO	SOFT TECHNOLOGY LICENSI	NG, LLC
Street Address:	ONE M	CROSOFT WAY	
City:	REDMC	ND	
State/Country:	WASHI	NGTON	
Postal Code:	98052		
Property Type		Number	
Application Number:		17057097	
Application Number: CORRESPONDENCE D Fax Number:	ΑΤΑ	17057097	
Application Number: CORRESPONDENCE D Fax Number: Correspondence will b	OATA be sent to	17057097 the e-mail address first; if tha	t is unsuccessful, it will be sent be sent via US Mail.
Application Number: CORRESPONDENCE D Fax Number: Correspondence will b)ATA be sent to provided	17057097	
Application Number: CORRESPONDENCE E Fax Number: Correspondence will b using a fax number, if	DATA be sent to provided	17057097 the e-mail address first; if tha ; if that is unsuccessful, it will	be sent via US Mail.
Application Number: CORRESPONDENCE E Fax Number: Correspondence will b using a fax number, if Email: Correspondent Name: Address Line 1:	DATA be sent to provided	the e-mail address first; if tha ; if that is unsuccessful, it will usdocket@microsoft.com SCHWEGMAN LUNDBERG & W PO BOX 2938	<i>be sent via US Mail.</i> OESSNER P.A.
Application Number: CORRESPONDENCE E Fax Number: Correspondence will b using a fax number, if Email: Correspondent Name:	DATA be sent to provided	<i>the e-mail address first; if tha</i> <i>; if that is unsuccessful, it will</i> usdocket@microsoft.com SCHWEGMAN LUNDBERG & W	<i>be sent via US Mail.</i> OESSNER P.A.
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Application Number: CORRESPONDENCE E Fax Number: Correspondence will b using a fax number, if Email: Correspondent Name: Address Line 1: Address Line 4:	DATA be sent to provided	<i>the e-mail address first; if tha</i> <i>; if that is unsuccessful, it will</i> usdocket@microsoft.com SCHWEGMAN LUNDBERG & W PO BOX 2938 MINNEAPOLIS, MINNESOTA 55	<i>be sent via US Mail.</i> OESSNER P.A. 5402
Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER:	DATA be sent to provided	<i>the e-mail address first; if tha</i> <i>; if that is unsuccessful, it will</i> usdocket@microsoft.com SCHWEGMAN LUNDBERG & W PO BOX 2938 MINNEAPOLIS, MINNESOTA 55 404674-US-PCT/1777.A42	<i>be sent via US Mail.</i> OESSNER P.A. 5402
Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUMBER AME OF SUBMITTER: SIGNATURE:	DATA be sent to provided	the e-mail address first; if tha ; if that is unsuccessful, it will usdocket@microsoft.com SCHWEGMAN LUNDBERG & W PO BOX 2938 MINNEAPOLIS, MINNESOTA 55 404674-US-PCT/1777.A42 TYLYN MOORE	<i>be sent via US Mail.</i> OESSNER P.A. 5402
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Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Email: Correspondent Name: Address Line 1: Address Line 1: Address Line 4: ATTORNEY DOCKET NUME NAME OF SUBMITTER: SIGNATURE: DATE SIGNED: Total Attachments: 9 source=1777A42US1_AS source=1777A42US1_AS	DATA De sent to provided UMBER:	the e-mail address first; if tha ; if that is unsuccessful, it will usdocket@microsoft.com SCHWEGMAN LUNDBERG & W PO BOX 2938 MINNEAPOLIS, MINNESOTA 55 404674-US-PCT/1777.A42 TYLYN MOORE /tylyn moore/ 11/20/2020	<i>be sent via US Mail.</i> OESSNER P.A. 5402
Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER: SIGNATURE: DATE SIGNED: Total Attachments: 9 source=1777A42US1_AS	DATA De sent to provided UMBER: SSN#page SSN#page SSN#page	the e-mail address first; if tha ; if that is unsuccessful, it will usdocket@microsoft.com SCHWEGMAN LUNDBERG & W PO BOX 2938 MINNEAPOLIS, MINNESOTA 55 404674-US-PCT/1777.A42 TYLYN MOORE /tylyn moore/ 11/20/2020 1.tif 2.tif 3.tif	<i>be sent via US Mail.</i> OESSNER P.A. 5402

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Atty Ref/Docket No.: 404674-US-PCT (1777.A42US1)

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 Haoyu Dong, Shi Han, Zhouyu Fu, Dongmei Zhang Street Address: One Microsoft Way Additional name(s) of conveying party(ies) attached? City: <u>Redmond</u> State: <u>WA</u> Zip Country: <u>United States of America</u> Zip: 98052 []Yes [X]No 3. Nature of conveyance: Additional name(s) & address(es) attached? []Yes [X]No [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other Execution Date: July 5, 2018, July 5, 2018, July 6, 2018, July 5, 2018 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: B. Patent No.(s) A. Patent Application No.(s) Serial No. 17/057,097 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: Andrew R. Peret []Enclosed [Authorized to be charged to deposit account Address: 19-0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 8. 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 9. 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. Iandrew Peret 1 Signature 11/20/2020 Andrew R. Peret/Reg. No. 41,246 Name of Person Signing Date Total number of pages including cover sheet: 9

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 and Trademark Office

I <u>Haoyu Dong</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "TABLE DETECTION IN SPREADSHEET_____" ("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 _______) this APPLICATION's
 Application No., filing date, and Office, when known;
- was filed on June 29, 2018 and was given Application No
 201810698750.9by the following Office "State Intellectual Property Office of the People's Republic of China (RO/CN)

Microsoft Technology Licensing, LEC, 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	
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AND DIST. A. P. JUL		

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).

董陆字 Harryy 17ang	218.7.5
Inventor's Signature	Date
Haoyu Dong	董浩宇
Printed Name in English	Printed Name in Native Language (if other than English)

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 "TABLE DETECTION IN SPREADSHEET_____" ("APPLICATION"), which:

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Shi Ham	7/5/2018
Inventor's Signature	Date
Shi Han	韩石
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>Zhouvu Fu</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>TABLE DETECTION IN SPREADSHEET</u>" ("APPLICATION"), which:

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Application No.	Filing Date	Office

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Printed Name in English	Printed Name in Native Language (if other than English)
Zhouyu Fu	
nventor's Signature	Date
Showyn Fu	07/06/2018

I Dongmel Zhang("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "TABLE DETECTION IN SPREADSHEET " ("APPLICATION"), which:

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Page 1 of 2

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July 5, 2018 Inventor's Signature Date 张冬梅 Dongmei Zhang Printed Name in English Printed Name in Native Language (if other than English)