506402213 12/14/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6448969

SUBMISSION TYPE:	UBMISSION TYPE: NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ			
Name			Execution Date	
ANCA GENTIANA COMAN		12/11/2020		
JOHN HERSCHEL VULNER		12/11/2020		
JONATHAN CHRISTIAN LUDWIG			12/04/2020	
JUSTIN EVAN SCHNEIDER			12/14/2020	
RAMY SAROUFIM			12/14/2020	
RECEIVING PARTY DA	ТА			
Name:	Micros	oft Technology Licensing, LLC		
Street Address:	One M	crosoft Way		
City:	Redmo	nd		
State/Country:	WASH	NGTON		
Postal Code:	98052			
PROPERTY NUMBERS	Total: 1		7	
Property Type		Number		
Application Number: 17121377				
CORRESPONDENCE D Fax Number:	AIA	(700)005 5150		
	e sent ti	(703)865-5150 • the e-mail address first; if that is un	successful it will be sent	
		l; if that is unsuccessful, it will be set		
•		703-652-3821		
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ATTORNEY DOCKET NUMBER:		2000.0129US1/409157-US-NP		
NAME OF SUBMITTER:		TIMOTHY B. KANG	TIMOTHY B. KANG	
SIGNATURE: /Timothy B. Kang/				
ATE SIGNED: 12/14/2020				

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MS Docket No.: 2000.0129US1/409157-US-NP

I <u>Anca Gentiana COMAN</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application emitted "<u>DETERMINATION OF RESULT DATA FOR SMALL MULTIPLES BASED</u> <u>ON SUBSETS OF A DATA SET</u>" ("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 12/14/2020 and given Application No. 17/121.377 by the US - United States Patent and Trademark Office) this APPLICATION'S Application No., filing date, and Office, when known;

was filed on ______ and was given Application
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 LECAL REPRESENTATIVES to insert the Application No., filling date, and Office into the following table for any APPLICATION DERIVATIVES after they are known

Application No	Filing Date	Office
	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).

Con to

Inventor's Signature

Anca Gerhana Coman

Printed Name in English Anca Centiana COMAN

12/11/2020

Date

Arca Gerticina Couras

Printed Name in Native Language (if other than English)

Page 2 of 2

I John Herschel VULNER ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DETERMINATION OF RESULT DATA FOR SMALL MULTIPLES BASED ON SUBSETS OF A DATA SET" ("APPLICATION"), which:

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Page 1 of 2

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21111 anan Inventor's Signature Date John

Printed Name in English Iohn Herschel VULNER

Printed Name in Native Language (if other than English)

Page 2 of 2

I Jonathan Christian LUDWIG ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DETERMINATION OF RESULT DATA FOR SMALL MULTIPLES BASED ON SUBSETS OF A DATA SET" ("APPLICATION"), which:

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Mliz	12/4/20 Date
Inventor's Signature	
Printed Name in English Jonathan Christian LUDWIG	Printed Name in Native Language (if other than English)
Page	2 of 2

I Justin Evan SCHNEIDER ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DETERMINATION OF RESULT DATA FOR SMALL MULTIPLES BASED ON SUBSETS OF A DATA SET" ("APPLICATION"), which:

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gt Shh	12/14/2020	
Inventor's Signature	Date	
Justin Evan SCHNEIDER		
Printed Name in English	Printed Name in Native Language	
Justin Evan SCHNEIDER	(if other than English)	

I <u>Ramy SAROUFIM</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "EFFICIENT SCROLLABLE SMALL MULTIPLES USING DECLARATIVE <u>VISUAL QUERY LANGUAGE</u>" ("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 ______12/14/2020 _____ and given Application No. ______17/121,377 _____ by the US - United States Patent and Trademark Office) this APPLICATION's Application No., filing date, and Office, when known;

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121 ά. 2020 Inventor's Signature Date mu Sand Printed Name in English Printed Name in Native Language **Ramy SAROUFIM** (if other than English)

Page 2 of 2

PATENT REEL: 054751 FRAME: 0955

RECORDED: 12/14/2020