PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7432827

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SCOTT THOMAS SEATON	12/19/2019
RYAN DOUGLAS CARVER	12/24/2019
OSVALDO P. MORALES	12/20/2019
KEITH ALLEN KRUEGER	12/19/2019
LALU VANNANKANDY KUNNATH	12/19/2019
PETER ODONGO WANGIA	12/19/2019
KRIS SEAN REDDING	12/18/2019
ERIC MATTHEW BEAL	10/29/2020
JOSE SEAH DELAPAZ	12/19/2019
STEVE TODD SOLOMON	12/24/2019

RECEIVING PARTY DATA

Name:	MICROSOFT TECHNOLOGY LICENSING, LLC			
Street Address:	Street Address: ONE MICROSOFT WAY			
City:	REDMOND			
State/Country:	WASHINGTON			
Postal Code:	98052			

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17391786

CORRESPONDENCE DATA

Fax Number: (801)532-7543

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.

Phone: 8015321500

Email: mspatent@rgn.com, usdocket@microsoft.com RAY QUINNEY & NEBEKER - MICROSOFT Correspondent Name:

Address Line 1: 36 SOUTH STATE STREET

Address Line 2: **SUITE 1400**

Address Line 4: SALT LAKE CITY, UTAH 84111

ATTORNEY DOCKET NUMBER: 407825-US-NP

PATENT REEL: 060509 FRAME: 0878 507385901

NAME OF SUBMITTER:	JAMES S. BULLOUGH				
SIGNATURE:	/James S. Bullough/				
DATE SIGNED:	07/14/2022				
Total Attachments: 20					
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PATENT REEL: 060509 FRAME: 0879

****	Scott	<u>Tho</u>	nas St	ATON	("ASSI	GNOR")	am	the	origin	ial inv	entor/	or	an	original
joint in	ventor	of s	ubject	matte	· ("IN\	/ENTIOI	۷") d	isclo	sed a	nd/or	claim	ed	in a	ı patent
applicat	tion e	ntitle	d " <u>VA</u> l	<u>RIABLE</u>	RELIA	BILITY	AND	<u> CA</u>	PACIT	<u>Y DA</u>	<u>TA CE</u>	NT	<u>ER</u>	<u>DESIGN</u> "
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ASSIGN	IEE'S lega	il represent	ative,	Micr	osoft	Techno	ology	Licer	nsing,
LLC, O	ne Micros	oft Way, Red	imon	d, Wa	ıshingt	on 980)52 (<i>/</i>	ASSIG	NEE'S
LEGAL	REPRESE	NTATIVES),	to in	nsert	here	in pa	renth	eses	(filed
on		***************************************		and	•	given	ļ	Applie	cation
No.	**************************************	***************************************		by		the		foll	owing
Office	MANAGEMENT	······································	***************************************)	this	APPI	JCAT	'ION's
Applica	ation No.,	filing date,	and (Office	, when	know	n;		

was filed on <u>December 16, 2019</u> and was given Application No. <u>16/716,392</u> by the following Office "<u>US - United States Patent and Trademark Office</u>";

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.
 Filling Date
 Office

 17/391,786
 08-02-2021
 USPTO

LA SLOS LA SIgnature	<u>DEC 19 2019</u> Date
Scott Thomas SEATON	
Printed Name in English	Printed Name in Native Language
	(if other than English)

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joint inventapplication	or of subject mati	er ("INVENTION") discl	e original inventor or an origina osed and/or claimed in a paten NPACITY DATA CENTER DESIGN
	ASSIGNEE'S legal LLC, One Microso LEGAL REPRESEN on No. Office	representative, Micros oft Way, Redmond, Wash OTATIVES), to insert h and by	uthorizes, and requests, oft Technology Licensing, nington 98052 (ASSIGNEE'S ere in parentheses (filed given Application the following this APPLICATION's
R		iling date, and Office, v <u>mber 16, 2019</u> and wa	
630		ne following Office " <u>US -</u>	- United States Patent and
behalf of it desirous of right of prio patents deri	self and its succe acquiring, the enti rity, in the INVENT ved therefrom, suc ited States, its	ssors and assigns ("A ire and exclusive rights ION and the APPLICATIC th as continuing applica	gton limited liability company, or SSIGNEE"), is entitled to, and is title and interest, including the DN (and all other applications and ations, in whole or in part, in and preign countries ("APPLICATION
REPRESENTA	TIVES to insert t		equests, ASSIGNEE'S LEGAL iling date, and Office into the r they are known;
Application I	No.	Filing Date	Office
17	7/391,786	08-02-2021	USPTO
		}	· · · · \$

72) L	12-24-2013
Inventor's Signature	Date
Ryan Douglas CARVER	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>Osvalo</u>	do P. MORALES ("ASSIGNOR") am the original inventor or an original joint
inventor of s	subject matter ("INVENTION") disclosed and/or claimed in a patent
application er	ntitled "VARIABLE RELIABILITY AND CAPACITY DATA CENTER DESIGN"
("APPLICATION	N"), which:
□ v	will be filed. ASSIGNOR hereby authorizes, and requests,
A	ASSIGNEE'S legal representative, Microsoft Technology Licensing,
L	LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S
l	LEGAL REPRESENTATIVES), to insert here in parentheses (filed
C	on and given Application
1	No by the following
(Office
A	Application No., filing date, and Office, when known;
⊠ v	was filed on <u>December 16, 2019</u> and was given Application No.
<u>1</u>	16/716,392 by the following Office " <u>US – United States Patent and</u>
]	<u>Trademark Office</u> ";

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
17/391,786	08-02-2021	USPTO

	12-2019
Inventor's Signature	Date
Osvaldo P. MORALES	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT	N	IS Docket No.: <u>407825-US-NP</u>
I <u>Keith Allen KRUEGER</u> ('inventor of subject matter application entitled " <u>VARIABL</u> " ("APPLICATION"), which:	("INVENTION") disclosed	
ASSIGNEE'S legal LLC, One Microso LEGAL REPRESEN on No. Office	ASSIGNOR hereby auth representative, Microsoft ft Way, Redmond, Washing TATIVES), to insert here and by	Technology Licensing, gton 98052 (ASSIGNEE'S in parentheses (filed given Application the following) this APPLICATION's
	<u>mber 16, 2019</u> and was g ie following Office " <u>US – U</u> ";	
Microsoft Technology Li behalf of itself and its succe desirous of acquiring, the enti right of priority, in the INVENTI patents derived therefrom, suc for the United States, its DERIVATIVES"));	ssors and assigns ("ASSI re and exclusive rights, ti ON and the APPLICATION h as continuing applicatio	tle and interest, including the (and all other applications and ins, in whole or in part, in and
ASSIGNOR hereby REPRESENTATIVES to insert t following table for any APPLICA	he Application No., filin	
Application No. 17/391,786	Filing Date 08-02-2021	Office USPTO

Page 1 of 2

PATENT ASSIGNMENT	M	S Docket No.: <u>407825-US-NP</u>

Inventor's Signature Keith Allen KRUEGER	/ 2 / / 9 / / 9 Date
Printed Name in English	Printed Name in Native Language

PATENT ASSIC	INMENT	N	IS Docket No.: <u>407825-US-NP</u>
original joint inv patent applicati	entor of subject m	atter ("INVENTION")	n the original inventor or an disclosed and/or claimed in a ND CAPACITY DATA CENTER
ASS LLC On No Off Ap	SIGNEE'S legal repr C, One Microsoft Wa GAL REPRESENTATIV ————————————————————————————————————	esentative, Microsoft y, Redmond, Washing /ES), to insert here by date, and Office, whe) this APPLICATION's en known;
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behalf of itself desirous of acqu right of priority, patents derived	and its successors uiring, the entire and in the INVENTION a therefrom, such as	and assigns ("ASSI d exclusive rights, t nd the APPLICATION continuing application	on limited liability company, on GNEE"), is entitled to, and is itle and interest, including the (and all other applications and ons, in whole or in part, in and ign countries ("APPLICATION
REPRESENTATIVE		**************************************	uests, ASSIGNEE'S LEGAL ig date, and Office into the hey are known;
Application No.	3	ig Date	Office
17/39.	1,786	08-02-2021	USPTO

Page 1 of 2

PATENT REEL: 060509 FRAME: 0888

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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).

I <u>Peter Odongo WANGIA</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>VARIABLE RELIABILITY AND CAPACITY DATA CENTER DESIGN</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 and given Application No by the following Office this APPLICATION's Application No., filing date, and Office, when known;
was filed on <u>December 16, 2019</u> and was given Application No. 16/716,392 by the following Office " <u>US – United States Patent and Trademark Office</u> ";
Microsoft Technology Licensing, LLC, a Washington limited liability company, or 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;

following table for any APPLICATION DERIVATIVES after they are known,			
Application No.	Filing Date	Office	
17/391,786	08-02-2021	USPTO	

	·

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).

Warrain Fath	12/19/2019
Inventor's Signature	Date
Peter Odongo WANGIA	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 407825-US-NP

inventor of	subject matter (entitled <u>"VARIABL</u> I	"INVENTION") disclos	riginal inventor or an original joi sed and/or claimed in a pate CAPACITY DATA CENTER DESIG
	ASSIGNEE'S legal LLC, One Microso LEGAL REPRESEN on No. Office	representative, Micro ft Way, Redmond, Was TATIVES), to insertandby	authorizes, and requests, osoft Technology Licensing, shington 98052 (ASSIGNEE'S here in parentheses (filed given Application the following) this APPLICATION's when known;
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behalf of its desirous of right of prior patents deriv for the Un DERIVATIVES	self and its succe acquiring, the enti rity, in the INVENTI ved therefrom, suc ited States, its	ssors and assigns (", re and exclusive righ ON and the APPLICAT h as continuing applic territories, and all	ngton limited liability company, (ASSIGNEE"), is entitled to, and ts, title and interest, including to TON (and all other applications as cations, in whole or in part, in as foreign countries ("APPLICATIO") requests, ASSIGNEE'S LEG.
		he Application No., TION DERIVATIVES aft	filing date, and Office into t ter they are known;
Application I	Na. 7/391,786	Filing Date 08-02-2021	Office USPTO

12 las 142	12/18/2019
Inventor's Signature	Date
Kris Sean REDDING	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>Eric Matthew BEAL</u> ("ASSIGNOR") am the original inventor or an original joint
inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent
application entitled "VARIABLE RELIABILITY AND CAPACITY DATA CENTER DESIGN"
("APPLICATION"), which:
\square 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
Application No., filing date, and Office, when known;
$oxed{\boxtimes}$ was filed on <u>December 16, 2019</u> and was given Application No.
16/716,392 by the following Office "US - United States Patent and
Trademark 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"));

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Application No.	Filing Date	Office	
17/391,786	08-02-2021	USPTO	

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Inventor's Signature Date

Printed Name in English

Printed Name in Native Language

(if other than English)

inventor of subject matter	("INVENTION") disclose	iginal inventor or an original joint d and/or claimed in a patent <u>APACITY DATA CENTER DESIGN</u> '
ASSIGNEE'S lega LLC, One Microso LEGAL REPRESER on No	l representative, Micros oft Way, Redmond, Wasl	uthorizes, and requests, ioft Technology Licensing, nington 98052 (ASSIGNEE'S ere in parentheses (filed given Application the following
		s given Application No. - <u>United States Patent and</u>
behalf of itself and its succ desirous of acquiring, the ent right of priority, in the INVENT patents derived therefrom, su	essors and assigns ("A tire and exclusive rights TON and the APPLICATION ch as continuing applica	gton limited liability company, or SSIGNEE"), is entitled to, and is it it and interest, including the DN (and all other applications and ations, in whole or in part, in and oreign countries ("APPLICATION
•	the Application No., f	requests, ASSIGNEE'S LEGAL filing date, and Office into the er they are known;
Application No. 17/391,786	Filing Date 08-02-2021	Office USPTO

Q. Q.	12/19/2019	
Inventor's Signature	Date	
Jose Seah DELAPAZ		
Printed Name in English	Printed Name in Native Language	
	(if other than English)	

I <u>Steve Todd SOLOMON</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>VARIABLE RELIABILITY AND CAPACITY DATA CENTER DESIGN</u> ' ("APPLICATION"), which:
\square 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
Application No., filing date, and Office, when known;
V filed on December 16, 2010 and niver Application No.
oxtimes was filed on <u>December 16, 2019</u> and was given Application No.
16/716,392 by the following Office "US – United States Patent and
<u>Trademark Office</u> ";

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"));

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Tollowing table for any fur Electricity Belliviting after they are known;			
Application No.	Filing Date	Office	
17/391,786	08-02-2021	USPTO	

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RECORDED: 07/14/2022

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Inventor's Signature

Steve Todd SOLOMON

Printed Name in English

Printed Name in Native Language

Printed Name in Native Language (if other than English)