504241178 02/23/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4287855

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
EMILY TRAN	02/22/2017
L. TUCKER HATFIELD	02/21/2017
DANIEL PARISH	02/21/2017

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:	15440208

CORRESPONDENCE DATA

Fax Number: (720)293-9822

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: 425-707-9382

Email: usdocket@microsoft.com

Correspondent Name: MICROSOFT CORPORATION

Address Line 1: ONE MICROSOFT WAY

Address Line 4: REDMOND, WASHINGTON 98052

ATTORNEY DOCKET NUMBER:	401122-US-NP
NAME OF SUBMITTER:	STEPHEN S. ROCHE
SIGNATURE:	/Stephen S. Roche/
DATE SIGNED:	02/23/2017

Total Attachments: 6

source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif

> PATENT REEL: 041356 FRAME: 0172

504241178

source=Assignment#page5.tif
source=Assignment#page6.tif

PATENT REEL: 041356 FRAME: 0173 I <u>Emily Tran</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>DIRECTIONAL STAMPING</u>" ("APPLICATION"), which:

\times	will	be	filed.	ASSIGNOR	hereby	autho	rizes,	and	requ	uests,
	ASSI	GNE	E'S legal	representat	ive, Micr	osoft ⁻	Techno	logy	Licer	ısing,
	LLC.	, One	e Microso	oft Way, Red	mond, Wa	ashingt	on 980)52 (A	SSIG	NEE'S
	LEGA	AL R	EPRESEN	TATIVES), t	o insert	here	in par	enthe	ses	(filed
	on _			and giv	ven Appli	cation	No			by
	the f	ollov	ving Offi	ce <u>US – Unite</u>	ed States	<u>Patent</u>	and Tr	<u>adema</u>	ark C)ffice)
	this	APPL	LICATION	l's Applicati	on No., 1	filing d	late, ar	nd Off	ice,	when
	knov	vn;								
	was	filed	on	6	and was g	given A	pplicat	ion		
	No_			by the f	ollowing	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

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	2 2 1 1 Date
Emily Tran Printed Name in English	Printed Name in Native Language

MS Docket No.:401122-US-NP

I <u>L. Tucker Hatfield</u> ("ASS inventor of subject matter (" application entitled " <u>DIRECTION</u>	INVENTION") disclosed a	•
ASSIGNEE'S legal in LLC., One Microsof LEGAL REPRESENT on the following Office	ASSIGNOR hereby authorepresentative, Microsoft Way, Redmond, Washing ATIVES), to insert here and given Application with Europe US – United States Patents Application No., filing or	Technology Licensing, ton 98052 (ASSIGNEE'S in parentheses (filed No by and Trademark Office)
\square was filed on	and was given A	Application
No	by the following Office	
ιι		
Microsoft Technology Lice behalf of itself and its successors of acquiring, the entire and ex- priority, in the INVENTION and t derived therefrom, such as cont United States, its territories, and	s and assigns ("ASSIGNEE") clusive rights, title and in he APPLICATION (and all c tinuing applications, in wh	terest, including the right of other applications and patents nole or in part, in and for the
ASSIGNOR hereby authori	zes, and requests, ASSIGN	EE'S LEGAL REPRESENTATIVES
to insert the Application No., f	iling date, and Office into	o the following table for any
APPLICATION DERIVATIVES after		T
Application No.	Filing Date	Office

Page 1 of 2

PATENT ASSIGNMENT

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	— <u>2-21-17</u> Date
L. Tucker Hatfield	
Printed Name in English	Printed Name in Native Language (if other than English)

I <u>Daniel Parish</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>DIRECTIONAL STAMPING</u>" ("APPLICATION"), which:

\times	will	be	filed.	ASSIGNOR	hereby	autho	rizes,	and	requ	uests,
	ASSI	GNE	E'S legal	representat	ive, Micr	osoft ⁻	Techno	logy	Licer	ısing,
	LLC.	, One	e Microso	oft Way, Red	mond, Wa	ashingt	on 980)52 (A	SSIG	NEE'S
	LEGA	AL R	EPRESEN	TATIVES), t	o insert	here	in par	enthe	ses	(filed
	on _			and giv	ven Appli	cation	No			by
	the f	ollov	ving Offi	ce <u>US – Unite</u>	ed States	<u>Patent</u>	and Tr	<u>adema</u>	ark C)ffice)
	this	APPL	LICATION	l's Applicati	on No., 1	filing d	late, ar	nd Off	ice,	when
	knov	vn;								
	was	filed	on	6	and was g	given A	pplicat	ion		
	No_			by the f	ollowing	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

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	2/21/20 <u>Date</u>
Daniel Parish	
Printed Name in English	Printed Name in Native Language
	(if other than English)