#### 505267353 01/08/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5314125

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
LU YUAN	07/22/2016
SING BING KANG	07/21/2016
CHINTAN A. SHAH	07/21/2016

#### **RECEIVING PARTY DATA**

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

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16316160

#### CORRESPONDENCE DATA

Fax Number: (425)936-7329

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 MICROSOFT CORPORATION **Correspondent Name:** Address Line 1: ONE MICROSOFT WAY

Address Line 4: REDMOND, WASHINGTON 98052

ATTORNEY DOCKET NUMBER:	360529-US-PCT
NAME OF SUBMITTER:	CATHERINE POLANCE
SIGNATURE:	/Catherine Polance/
DATE SIGNED:	01/08/2019

### **Total Attachments: 6**

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**PATENT** REEL: 047930 FRAME: 0361 505267353

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PATENT REEL: 047930 FRAME: 0362

	PATENT ASSIGN	IMENT	MS Docket No.:	360529.01
of subject ma	<u>Yuan</u> ("ASSIGNOR") am tter ("INVENTION") disclos ADAPTIVE SHADOW AND	ed and/or claime	ed in a patent applica	ation entitled
	will be filed. ASSIGN ASSIGNEE'S legal represe LLC., One Microsoft Way, LEGAL REPRESENTATIVES on January 8, 2019 an the following Office APPLICATION's Application	entative, Microso Redmond, Wash I), to insert he d given Applicat U.S. Patent and Tra	oft Technology Lice ington 98052 (ASSICere in parentheses ion No. 16/316,160 idemark Office	nsing, GNEE'S (filed by this
	was filed on by t	he following Off		
Micros	"oft Technology Licensing		ton limited liability	company on
behalf of itsel of acquiring, priority, in the derived there	f and its successors and a the entire and exclusive e INVENTION and the APP from, such as continuing , its territories, and all for	ssigns ("ASSIGNE rights, title and LICATION (and a applications, in	EE"), is entitled to, and interest, including all other applications whole or in part, ir	d is desirous the right of and patents and for the
ASSIGN	NOR hereby authorizes, an	d requests, ASSI	IGNEE'S LEGAL REPRI	ESENTATIVES

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).

La Yuan	7/22/2016
Inventor's Signature	Date
_Lu Yuan	表路 
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 360529.01

	PATENT A	ASSIGNMENT	MS Docket No.:	360529.01
I S	ing Bing Kang ("A	ASSIGNOR") am the origin	nal inventor or an	original joint
		"INVENTION") disclosed		
	·	E ADAPTIVE SHADOW AN		•
	ON"), which:			
	_			
$\boxtimes$	will be filed.	ASSIGNOR hereby auth	norizes, and req	uests,
	ASSIGNEE'S legal	representative, Microsoft	t Technology Lice	nsing,
	LLC., One Microso	ft Way, Redmond, Washin	gton 98052 (ASSIC	SNEE'S
	LEGAL REPRESENT	ATIVES), to insert here	e in parentheses	(filed
	on <u>January 8, 201</u>	9 and given Applicatio	n No. <u>16/316,160</u>	by
	the following O	ffice U.S. Patent and Trade	mark Office	this
	APPLICATION's Ap	plication No., filing date,	and Office, when k	nown;
	was filed on	and was given	Application	
	No	by the following Offic	e	
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Micro	osoft Technology Lic	ensing, LLC, a Washingto	on limited liability	company, on
	<del>-</del> .	s and assigns ("ASSIGNEE"	•	• •
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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				
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ASSIC	GNOR hereby author	izes, and requests, ASSIG	NEE'S LEGAL REPR	ESENTATIVES
to insert th	e Application No., 1	filing date, and Office in	to the following t	able for any
APPLICATION DERIVATIVES after they are known;				

Filing Date

Application No.

Page 1 of 2

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"));

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1660	7/21/16
Inventor's Signature	Date
Sing Bing Kang	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 360529.01

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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

MS Docket No.: 360529.01

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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).

ا کیار (C. A. Stalk) Inventor's Signature	21 <sup>9+</sup> Fuly 2016 Date
Chintan A. Shah Printed Name in English	Printed Name in Native Language
	(if other than English)