PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5990152

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIANCHAO WU	10/13/2017
ANDER MARTINEZ	10/13/2017
HANG TONG	10/13/2017

RECEIVING PARTY DATA

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State/Country:	WASHINGTON
Postal Code:	98052

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16642819

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ATTORNEY DOCKET NUMBER:	403013-US-PCT/1777.B87US1
NAME OF SUBMITTER:	TYLYN MOORE
SIGNATURE:	/tylyn moore/
DATE SIGNED:	03/02/2020

Total Attachments: 7

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> PATENT REEL: 051973 FRAME: 0650

RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 403013-US-PCT (1777.B87US1) Patent and Trademark Office 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 Xianchao Wu, Ander Martinez, Hang Tong Street Address: One Microsoft Wav Additional name(s) of conveying party(ies) attached? City: Redmond State: WA Zip: <u>98052</u> []Yes [X]No Country: United States of America 3. Nature of conveyance: Additional name(s) & address(es) attached? []Yes [X]No [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other Execution Date: October 13, 2017, October 13, 2017, October 13, 2017 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: A. Patent Application No.(s) B. Patent No.(s) Serial No. 16/642,819 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 19-Address: 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 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. Andrew R. Peret/Reg. No. 41,246 Name of Person Signing Total number of pages including cover sheet: 7

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 REEL: 051973 FRAME: 0651

PATENT ASSIGNMENT MS Docket No.: 403013-WO-PCT

	("INVENTION") disclosed	inventor or an original joint and/or claimed in a patent ON " ("APPLICATION"), which:
LLC, One Microso LEGAL REPRESEN on No Office	ASSIGNOR hereby authorepresentative, 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
No <u>PCT/CN2017</u>	ber 13, 2017 and was give /106152 by the follow rty Office of the People's F	ing Office " <u>State</u>
Microsoft Technology Linbehalf of itself and its succe desirous of acquiring, the entiright of priority, in the INVENTI patents derived therefrom, sucfor the United States, its 1 DERIVATIVES"));	ssors and assigns ("ASSI re and exclusive rights, ti ON and the APPLICATION h as continuing application	tle and interest, including the (and all other applications and ns, in whole or in part, in and
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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).

200	13 Oct 2017
Inventor's Signature	Date
Xianchao WU	吴先超
Printed Name in English	Printed Name in Native Language (if other than English)
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# PATENT ASSIGNMENT MS Docket No.: 403013-WO-PCT

l <u>An</u>	<u>der MARTINEZ</u> ("A	SSIGNOR") am the origina	al inventor or an original joint
inventor of	subject matter (	"INVENTION") disclosed	and/or claimed in a patent
application e	ntitled " <u>PROVIDI</u>	ng a response in a sessi	ON_" ("APPLICATION"), which:
	will be filed. 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	norizes, and requests, Technology Licensing, gton 98052 (ASSIGNEE'S in parentheses (filed given Application the following ) this APPLICATION's
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Micros behalf of its desirous of a right of prior patents deriv	No <u>PCT/CN2017</u> Intellectual Proper (RO/CN) "; soft Technology Lingelf and its succe acquiring, the entimity, in the INVENTITY and therefrom, successions.	ssors and assigns ("ASSI re and exclusive rights, to ON and the APPLICATION h as continuing application	ing Office " <u>State</u>
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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).

A	October 13, 2017
nventor's Signature	Date
Ander MARTINEZ	Martínez Sánchez, Ander
Printed Name in English	Printed Name in Native Language
	(if other than English)

## PATENT ASSIGNMENT MS Docket No.: 403013-WO-PCT

of subject matter ("INVENTIO entitled" PROVIDING A RESPO	N") disclosed and/or cla	,
LLC, One Microso LEGAL REPRESEN on No. Office	representative, Microsoft ft Way, Redmond, Washin TATIVES), to insert here and by	Technology Licensing, gton 98052 (ASSIGNEE'S in parentheses (filed given Application the following ) this APPLICATION's
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Microsoft Technology Linbehalf of itself and its succe desirous of acquiring, the entiright of priority, in the INVENTI patents derived therefrom, sucfor the United States, its IDERIVATIVES"));	ssors and assigns ("ASSI re and exclusive rights, ti ON and the APPLICATION h as continuing application	tle and interest, including the (and all other applications and ms, in whole or in part, in and
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Application No.	Filing Date	Office
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PATENT ASSIGNMENT	MS Docket No.: <u>403013-WO-PC1</u>

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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HONG GONG	October 13, 2017
nventor's Signature	Date
lang Tong	佟航
Printed Name in English	Printed Name in Native Language
	(if other than English)

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