PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SURIYA NARAYANAN	07/10/2015
NITINKUMAR SHAH	07/08/2015
ZHONGHUA CHU	07/08/2015
ED V. BUDRYS	07/09/2015
TOMASZ KAMINSKI	07/07/2015
LIANG YU	07/10/2015

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:	15913041

CORRESPONDENCE DATA

Fax Number:

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ATTORNEY DOCKET NUMBER:	356813-US-CNT
NAME OF SUBMITTER:	DAWN C. RUD
SIGNATURE:	/Dawn C. Rud/
DATE SIGNED:	06/28/2018

Total Attachments: 12

PATENT REEL: 046227 FRAME: 0921

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PATENT REEL: 046227 FRAME: 0922

MS Docket No.: <u>356813.02</u>

I Suriya Narayanan ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "REPRESENTATION OF CUSTOMIZABLE TYPES IN A DEVELOPMENT ENVIRONMENT" ("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 <u>US - United States Patent</u>
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 "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"));

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;

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PATENT	ASSIGNMENT	MS Docket No.:	356813.02
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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).

Inventor's Signature

Date

Suriya Narayanan

Printed Name in English

Printed Name in English

Date

Gran Brown in

Printed Name in Native Language
(if other than English)

MS Docket No.: 356813.02 I Nitinkumar Shah ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "REPRESENTATION OF CUSTOMIZABLE TYPES IN A DEVELOPMENT ENVIRONMENT" ("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 <u>US - United States Patent</u> 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 "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")); 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

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Inventor's Signature	Jul-8-2015 Date
Nitinkumar Shah	
Printed Name in English	Printed Name in Native Language (if other than English)

I Zhonghua Chu ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "REPRESENTATION OF CUSTOMIZABLE TYPES IN A DEVELOPMENT ENVIRONMENT" ("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 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 "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")); 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. Office Filing Date

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"));

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Inventor's Signature Date

Zhonghua Chu

Printed Name in English Printed Name in Native Language (if other than English)

I Ed V. Budrys ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "REPRESENTATION OF CUSTOMIZABLE TYPES IN A DEVELOPMENT ENVIRONMENT" ("APPLICATION"), which:

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Ed V. Buoliys Inventor's Signature	7-9-2015 Date
Ed V. Budrys Printed Name in English	Printed Name in Native Language (if other than English)

Tomasz Kaminski ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "REPRESENTATION OF CUSTOMIZABLE TYPES IN A DEVELOPMENT ENVIRONMENT" ("APPLICATION"), which:

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7/7/15 Inventor's Signature Date Tomasz Kaminski Printed Name in English Printed Name in Native Language (if other than English)

MS Docket No.: 356813.02

I Liang Yu ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "REPRESENTATION OF CUSTOMIZABLE TYPES IN A DEVELOPMENT ENVIRONMENT" ("APPLICATION"), which:

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low	7/10/2015
Inventor's Signature	Date
Liang Yu	y A
Printed Name in English	Printed Name in Native Language
	(if other than English)