

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ALEXANDER CHARLES CULLUM	02/07/2017
BARRY JOHN PTAK	02/08/2017
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<b>Postal Code:</b>	98052
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15428829
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<b>ATTORNEY DOCKET NUMBER:</b>	400400-US-NP/MFCP.264918
<b>NAME OF SUBMITTER:</b>	JASON O. HOWARD
<b>SIGNATURE:</b>	/JASON O. HOWARD/
<b>DATE SIGNED:</b>	03/29/2017
<b>Total Attachments: 4</b>	
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source=MFCP_264918_Executed_Assignments - NP#page4.tif	

## PATENT ASSIGNMENT

I, Alexander Charles Cullum ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "POSITIONING OBJECTs IN THREE-DIMENSIONAL GRAPHICAL SPACE" ("APPLICATION"), which:

☐ will be filed. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, of Shook, Hardy & Bacon L.L.P., 2555 Grand Blvd., Kansas City, Missouri 64108, who are associated with Customer Number 45809 (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 October 25, 2016 and was given Application No 62/412,812 by the following Office "United States Patent & 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
15/428,829	02-09-2017	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).

	7th February 2017
_____ Inventor's Signature	_____ Date
<u>Alexander Charles Cullum</u>	_____
Printed Name in English	Printed Name in Native Language (if other than English)

## PATENT ASSIGNMENT

I, Barry John Ptak ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "POSITIONING OBJECTS IN THREE-DIMENSIONAL GRAPHICAL SPACE" ("APPLICATION"), which:

☐ will be filed. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, of Shook, Hardy & Bacon L.L.P., 2555 Grand Blvd., Kansas City, Missouri 64108, who are associated with Customer Number 45809 (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;

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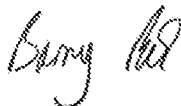
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ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

	08 February 2017
_____ Inventor's Signature	_____ Date
_____ Barry John Ptak	_____ Printed Name in Native Language (if other than English)
_____ Printed Name in English	