### 503147691 01/22/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3194303

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
DAVID CHIYUAN CHU	01/15/2015
EDUARDO ALBERTO CUERVO LAFFAYE	01/15/2015
JOHANNES PETER KOPF	01/21/2015
ALASTAIR WOLMAN	01/07/2015
YURY DEGTYAREV	01/14/2015
KYUNGMIN LEE	01/08/2015
SERGEY GRIZAN	01/09/2015

### **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:	14603213

### **CORRESPONDENCE DATA**

**Fax Number:** (425)936-7329

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER:	355792.01
NAME OF SUBMITTER:	VLADIMIR A. KOZYREV
SIGNATURE:	/Vladimir A. Kozyrev/
DATE SIGNED:	01/22/2015

503147691 PATENT REEL: 034794 FRAME: 0193

# Total Attachments: 14 source=355792.01 Executed Assignments#page1.tif source=355792.01 Executed Assignments#page2.tif source=355792.01 Executed Assignments#page3.tif source=355792.01 Executed Assignments#page4.tif source=355792.01 Executed Assignments#page5.tif source=355792.01 Executed Assignments#page6.tif source=355792.01 Executed Assignments#page7.tif source=355792.01 Executed Assignments#page8.tif source=355792.01 Executed Assignments#page9.tif source=355792.01 Executed Assignments#page10.tif source=355792.01 Executed Assignments#page10.tif source=355792.01 Executed Assignments#page11.tif source=355792.01 Executed Assignments#page12.tif source=355792.01 Executed Assignments#page12.tif source=355792.01 Executed Assignments#page13.tif source=355792.01 Executed Assignments#page13.tif

PATENT REEL: 034794 FRAME: 0194

inventor of	subject matter ("	INVENTION") disclosed a	inventor or an original joint nd/or claimed in a patent <u>OF SCENES</u> " ("APPLICATION"),
	ASSIGNEE'S legal in LLC., One Microsoft LEGAL REPRESENT on January 22, 20 the following Office	ASSIGNOR hereby authorepresentative, Microsoft of Way, Redmond, Washington (ATIVES), to insert here and given Application to lication No., filing date, ar	Technology Licensing, con 98052 (ASSIGNEE'S in parentheses (filed No. <u>14/603,213</u> by ) this
	No	and was given A by the following Office ";	pplication
behalf of its of acquiring priority, in t derived the United State	elf and its successors g, the entire and except the INVENTION and the refrom, such as contest, and	s and assigns ("ASSIGNEE"), clusive rights, title and in he APPLICATION (and all o cinuing applications, in wh all foreign countries ("APF	limited liability company, on is entitled to, and is desirous terest, including the right of ther applications and patents ole or in part, in and for the PLICATION DERIVATIVES"));
	•	•	EE'S LEGAL REPRESENTATIVES the following table for any
	N DERIVATIVES after		
Application	n No.	Filing Date	Office

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"));

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).

,	***************************************
10-2-	Jan 15, 2015
Inventor's Signature	Date
David Chiyuan Chu	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 355792.01

PATENT A	SSIGNMENT	MS Docket No.: <u>355792.01</u>
I Eduardo Alberto Cuervo original joint inventor of subject patent application entitled "("APPLICATION"), which:	ct matter ("INVENTION") di	
ASSIGNEE'S legal in LLC., One Microsof LEGAL REPRESENT on January 22, 20 the following Office	ASSIGNOR hereby authorepresentative, Microsoft to Way, Redmond, Washingth ATIVES), to insert here and given Application to blication No., filing date, ar	Technology Licensing, con 98052 (ASSIGNEE'S in parentheses (filed No. <u>14/603,213</u> by ) this
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behalf of itself and its successors of acquiring, the entire and expriority, 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 o inuing applications, in wh all foreign countries ("APF	terest, including the right of ther applications and patents ole or in part, in and for the PLICATION DERIVATIVES"));
ASSIGNOR hereby authori to insert the Application No., f APPLICATION DERIVATIVES after	iling date, and Office into	EE'S LEGAL REPRESENTATIVES  the following table for any
Application No.	Filing Date	Office

Page 1 of 2

MS Docket No.: 355792.01

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")):

parameter	
Liero L. Falanto A.	Jan 15 2015
Inventor's Signature	Date
Eduardo Alberto Cuervo Laffaye	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT MS Docket No.: 355792.01 I Johannes Peter Kopf ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "PREDICTIVE SERVER-SIDE RENDERING OF SCENES" ("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 January 22, 2015 and given Application No. 14/603,213 by the following Office ) this

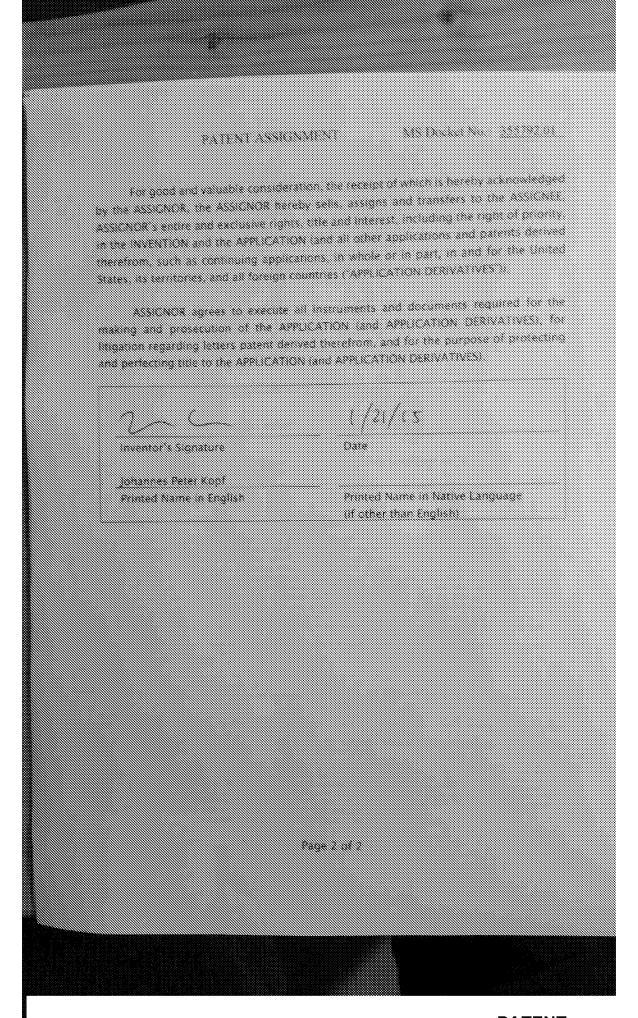
APPLICATION's Application No., filing date, and Office, when known;

was filed on	and was given Application	
No	by the following Office	
u	".	

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 REEL: 034794 FRAME: 0200

inventor of	subject matter ("	"INVENTION") disclosed a	inventor or an original joint ind/or claimed in a patent <u>OF SCENES</u> " ("APPLICATION"),
	ASSIGNEE'S legal LLC., One Microsof LEGAL REPRESENT on January 22, 20 the following Office	ASSIGNOR hereby authorepresentative, Microsoft ft Way, Redmond, Washing ATIVES), to insert here 15 and given Application e	Technology Licensing, ton 98052 (ASSIGNEE'S in parentheses (filed No. 14/603,213 by this
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behalf of itse of acquiring, priority, in th derived there United States ASSIGI	If and its successor the entire and ex- le INVENTION and t efrom, such as conf i, its territories, and	s and assigns ("ASSIGNEE"), clusive rights, title and in he APPLICATION (and all otinuing applications, in what is all foreign countries ("API zes, and requests, ASSIGN	I limited liability company, on is entitled to, and is desirous terest, including the right of ther applications and patents tole or in part, in and for the PLICATION DERIVATIVES"));  EE'S LEGAL REPRESENTATIVES the following table for any
APPLICATION	DERIVATIVES after	they are known;	
Application	NO	Filing Date	Office
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Page 1 of 2

MS Docket No.: <u>355792.01</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"));

alastais Wohnen	1/7/2015
Inventor's Signature	Date
Alastair Wolman	
Printed Name in English	Printed Name in Native Language
	(if other than English)

inventor of	subject matter ("I	NVENTION") disclosed a	nventor or an original join <sup>.</sup> nd/or claimed in a paten <sup>.</sup> <u>OF SCENES</u> " ("APPLICATION")
	ASSIGNEE'S legal r LLC., One Microsoft LEGAL REPRESENT, on January 22, 20 <sup>o</sup> the following Office	ASSIGNOR hereby authorepresentative, Microsoft of Way, Redmond, Washington ATIVES), to insert here and given Application be according to the Marketten No., filing date, and marketten to the marketten No., filing date, and filing date	Technology Licensing, con 98052 (ASSIGNEE'S in parentheses (filed No. <u>14/603,213</u> by ) this
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behalf of itsel of acquiring, priority, in th derived there United States	f and its successors the entire and exc e INVENTION and the from, such as cont , its territories, and	s and assigns ("ASSIGNEE"), clusive rights, title and in ne APPLICATION (and all o inuing applications, in wh all foreign countries ("API zes, and requests, ASSIGN	limited liability company, or is entitled to, and is desirous terest, including the right of ther applications and patents ole or in part, in and for the PLICATION DERIVATIVES"));
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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"));

10 uz	01/14/2015
Inventor's Signature	Date
Yury Degtyarev	Юрий Дегтярев
Printed Name in English	Printed Name in Native Language
	(if other than English)

l <u>Kyuı</u>	<u>ngmin Lee</u> ("ASSIC	NOR") am the original i	inv <b>entor or an</b> original joint
inventor of	subject matter ('	'INVENTION") disclosed a	and/or claimed in a patent
application e which:	ntitled " <u>PREDICTIV</u> !	SERVER-SIDE RENDERING	OF SCENES" ("APPLICATION"),
	ASSIGNEE'S legal LLC., One Mici (ASSIGNEE'S LEG parentheses (filed No. 14/603)	ASSIGNOR hereby authorepresentative, Microsoft rosoft Way, Redmond, AL REPRESENTATIVES), January 22, 2015 3,213 by ling date, and Office, when	Technology Licensing, Washington 98052 to insert here in and given Application the following ) this APPLICATION's
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behalf of its desirous of a right of prior patents deriv	self and its succes acquiring, the entil rity, in the INVENTII ved therefrom, suc ited States, its t	ssors and assigns ("ASSIO re and exclusive rights, ti ON and the APPLICATION ( h as continuing applicatio	n limited liability company, or GNEE"), is entitled to, and is tle and interest, including the (and all other applications and ns, in whole or in part, in and ign countries ("APPLICATION
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Application I	NO.	Filing Date	Office
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Page 1 of 2

MS Docket No.: <u>355792.01</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"));

DATENIT AGGICAN CAPAR

Inventor's Signature	01/08/2015 Date
Kyungmin Lee	이경민
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>Sergey Grizan</u> ("ASSIGNO of subject matter ("INVENTION") " <u>PREDICTIVE SERVER-SIDE REND</u>	disclosed and/or cla	nimed in a patent ap	oplication entitled
LLC., One Microsof LEGAL REPRESENT on January 22, 20 the following Offic	ASSIGNOR hereby representative, Microft Way, Redmond, Wardert Magnet 15 and given Application No., filing of	rosoft Technology ashington 98052 (A here in parentho ication No. <u>14/603</u> ,	Licensing, ASSIGNEE'S eses (filed ,213 by) this
No	and was of the following";		
Microsoft Technology Lice behalf of itself and its successors of acquiring, the entire and expriority, in the INVENTION and to derived therefrom, such as confunited States, its territories, and	s and assigns ("ASSI clusive rights, title the APPLICATION (ar tinuing applications	GNEE"), is entitled to and interest, inclu nd all other applicat , in whole or in pa	o, and is desirous ding the right of tions and patents art, in and for the
ASSIGNOR hereby authori to insert the Application No., f APPLICATION DERIVATIVES after	iling date, and Offi		
Application No.	Filing Date	Office	

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MS Docket No.: 355792.01

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Anno	1/9/15
Invento/s Signature	Date
Sergey Crizan	
Printed Name in English	Printed Name in Native Language (if other than English)

Page 2 of 2

PATENT REEL: 034794 FRAME: 0208

**RECORDED: 01/22/2015**