505166975 10/30/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5213743

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RYAN Y. KIM	01/30/2017
TODD R. MANION	01/31/2017
ROBERT N. HEITKAMP	01/30/2017
STEVEN WILSSENS	01/30/2017
PHILIP A. EDRY	01/30/2017

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:	16175176	

CORRESPONDENCE DATA

Fax Number:

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.

Email: usdocket@microsoft.com

Correspondent Name: NEWPORT IP, LLC

Address Line 1:1400 112TH AVE SE, SUITE 100Address Line 4:BELLEVUE, WASHINGTON 98004

ATTORNEY DOCKET NUMBER:	MS1-7040USD1	
NAME OF SUBMITTER:	PAOLA SEVERICH	
SIGNATURE:	/Paola Severich/	
DATE SIGNED:	10/30/2018	

Total Attachments: 10

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> PATENT REEL: 047359 FRAME: 0033

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PATENT REEL: 047359 FRAME: 0034

PATENT ASSIGNMENT	I CIVI	Jocket No.: 401133-03-NF
I, <u>Ryan Y. Kim</u> , ("ASSIC inventor of subject matter (application entitled " <u>GAME STRI</u>	"INVENTION") disclosed	·
ASSIGNEE'S legal LLC., One Mic (ASSIGNEE'S LEC parentheses (filed No. 15/420,840 Patent and Trade	ASSIGNOR hereby auth representative, Microsoft rosoft Way, Redmond, GAL REPRESENTATIVES), d on January 31, 2017 by the following Offimark Office) this APPLICATION, when known;	Technology Licensing, Washington 98052 to insert here in and given Application ce US – United States
No	and was given by the following Office ";	
Microsoft Technology Lice behalf of itself and its successions of acquiring, the entire right of priority, in the INVENTI patents derived therefrom, successfor the United States, its to DERIVATIVES"));	ssors and assigns ("ASSIG re and exclusive rights, ti ON and the APPLICATION h as continuing applicatio	tle and interest, including the (and all other applications and ns, in whole or in part, in and
ASSIGNOR hereby REPRESENTATIVES to insert the following table for any APPLICA	he Application No., filin	
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Page 1 of 2

MS Docket No.: 4	01	15	5-U	S-NP
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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).

12/6	1/30/2017
Inventor's Signature	Date
Ryan Y. Kim	
Printed Name in English	Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

I, <u>Todd R. Manion</u>, ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>GAME STREAMING WITH SPATIAL AUDIO</u>" ("APPLICATION"), which:

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Application
<u> Inited States</u>
olication No.
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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.: 40	0115	55-U	S-NP
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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).

Tollen	1/31/2017
Inventor's Signature	Date
j	
Todd R. Manion	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMEN	. 1	MB Docket No.: 101133 CD 112
inventor of subject m	natter ("INVENTION") discl	original inventor or an original joint osed and/or claimed in a patent <u>AL AUDIO</u> " ("APPLICATION"), which:
ASSIGNEE' LLC., On (ASSIGNEE parenthes No. <u>15/42</u> <u>Patent and</u>	S legal representative, Micne Microsoft Way, Red S'S LEGAL REPRESENTATION S (filed on <u>January 31, 2016)</u> S (by the followin	authorizes, and requests, crosoft Technology Licensing, mond, Washington 98052 IVES), to insert here in and given Application of the original
No	on and was by the following ";	
behalf of itself and it desirous of acquiring, right of priority, in the patents derived therefr	s successors and assigns the entire and exclusive rig INVENTION and the APPLICATION, such as continuing app	hington limited liability company, or ("ASSIGNEE"), is entitled to, and is ghts, title and interest, including the ATION (and all other applications and plications, in whole or in part, in and I foreign countries ("APPLICATION
REPRESENTATIVES to	reby authorizes, and insert the Application No APPLICATION DERIVATIVES	requests, ASSIGNEE'S LEGA o., filing date, and Office into the after they are known;
Application No.	Filing Date	Office

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).

| 30 Jan 2017 | Date | | Robert N. Heitkamp | Printed Name in English | Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT		MB Bocket No.: 101100 GO 14
inventor of subject matter	("INVENTION") disclo	ginal inventor or an original join sed and/or claimed in a paten <u>L AUDIO</u> " ("APPLICATION"), which:
application circuits		
		authorizes, and requests,
LLC., One Mi (ASSIGNEE'S LE	crosoft Way, Redn GAL REPRESENTATIV	osoft Technology Licensing, nond, Washington 98052 /ES), to insert here in 7 and given Application
		Office <u>US - United States</u>
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☐ was filed on	and was g	given Application
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behalf of itself and its succe desirous of acquiring, the en- right of priority, in the INVENT patents derived therefrom, su- for the United States, its DERIVATIVES"));	essors and assigns (tire and exclusive rigition and the APPLICA och as continuing app territories, and all	ington limited liability company, o ("ASSIGNEE"), is entitled to, and interest, including th hts, title and interest, including th TION (and all other applications an lications, in whole or in part, in an foreign countries ("APPLICATION
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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).

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Invento	1 T 'S '	Siana	nure

Date

Steven Wilssens

Printed Name in English

Printed Name in Native Language

(if other than English)

I, <u>Philip A. Edry</u> , ("ASSI inventor of subject matter ("application entitled " <u>GAME STRI</u>	"INVENTION") disclosed	
ASSIGNEE'S legal LLC., One Mic (ASSIGNEE'S LEC parentheses (filed No. 15/420,840 Patent and Trade	ASSIGNOR hereby auth representative, Microsoft rosoft Way, Redmond, SAL REPRESENTATIVES), on January 31, 2017 by the following Offimark Office) this APPLICATION, when known;	Technology Licensing, Washington 98052 to insert here in and given Application ce <u>US – United States</u>
	and was given by the following Office ";	
Microsoft Technology Liebehalf of itself and its succe desirous of acquiring, the entiright of priority, in the INVENTI patents derived therefrom, sucfor the United States, its DERIVATIVES"));	ssors and assigns ("ASSION re and exclusive rights, ti ON and the APPLICATION Th as continuing application	tle and interest, including the (and all other applications and ons, in whole or in part, in and
ASSIGNOR hereby REPRESENTATIVES to insert t following table for any APPLICA	he Application No., filin	
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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).

	1 / 2 2 1 \ 2 1
Inventor's Signature	Date 1/90/2017
Philip A. Edry	
Printed Name in English	Printed Name in Native Language (if other than English)