PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6503421

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NIKUNJ RAGHUVANSHI	10/06/2019
KEITH WILLIAM GODIN	09/06/2019
JOHN MICHAEL SNYDER	09/20/2019
CHAKRAVARTY REDDY ALLA CHAITANYA	09/21/2019

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:	17152375		

CORRESPONDENCE DATA

Fax Number: (509)381-3110

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.

Phone: 4254212115

Email: chriochs@microsoft.com MICROSOFT CORPORATION **Correspondent Name:** Address Line 1: ONE MICROSOFT WAY

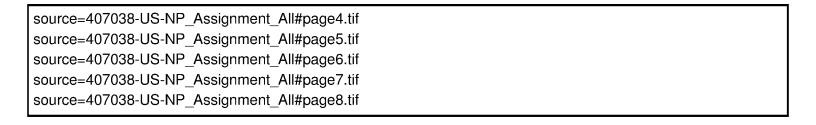
Address Line 4: **REDMOND, WASHINGTON 98052**

ATTORNEY DOCKET NUMBER:	407038-US-CNT
NAME OF SUBMITTER:	ALEX LEA
SIGNATURE:	/alex lea/
DATE SIGNED:	01/19/2021

Total Attachments: 8

source=407038-US-NP_Assignment_All#page1.tif source=407038-US-NP Assignment All#page2.tif source=407038-US-NP_Assignment_All#page3.tif

> **PATENT REEL: 054956 FRAME: 0410** 506456650



PATENT REEL: 054956 FRAME: 0411

MS Docket No.: 407038-US-NP

I <u>Nikunj RAGHUVANSHI</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>Bidirectional Propagation of Sound</u> " ("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) this APPLICATION's Application No., filing date, and Office, when known;
was filed on <u>August 22, 2019</u> and was given Application No $16/548,645$ by the following Office " <u>USPTO</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

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).

nili	10/6/2010
Inventor's Signature	
Nikunj RAGHUVANSHI	
Printed Name in English	Printed Name in Native Language (if other than English)

MS Docket No.: 407038-US-NP

MS Docket No.: 407038-US-NP

I <u>Keith Willian</u>	<u>ı GODIN</u>	("ASSIGNOR")	am the or	iginal inven	tor or an	original joint
inventor of subject	matter	("INVENTION	l") disclos	ed and/or	claimed	in a patent
application entitled "	<u>Bidirecti</u>	<u>onal Propagat</u>	ion of Soul	<u>ıd</u> " ("APPLIC	ATION"), v	vhich:

will be filed. ASSIG	NOR hereby	authorizes,	and requests,
ASSIGNEE'S legal repres	entative, Mic	rosoft Techno	logy Licensing,
LLC., One Microsoft Way,	, Redmond, W	ashington 980	152 (ASSIGNEE'S
LEGAL REPRESENTATIVE	S), to insen	: here in par	entheses (filed
ona	nd given Appl	ication No	by
the following Office) this
APPLICATION's Application	on No., filing	date, and Offic	e, when known;

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

was filed on August 22, 2019 and was given Application No.

16/548,645 by the following Office "USPTO";

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;

United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

Application No.	Filing Date	Office
	§	

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).

Inventor's Signature

Date

Keith William GODIN

Printed Name in English

Printed Name in Native Language

(if other than English)

MS Docket No.: 407038-US-NP

l <u>John</u>	<u>Michael</u>	SNYDER ("A	SSIGNOR") ai	m the origi	nal inven	tor or ar	ı origin	al joint
inventor of	subject	matter ("I	NVENTION")	disclosed	and/or	claimed	in a	patent
application e	ntitled " <u>l</u>	<u> Bidirectional</u>	Propagation	of Sound"	("APPLIC	ATION"),	which:	

soft Way, Redmond, Washi	ngton 98052 (ASSIGNEE'S
ENTATIVES), to insert he	re in parentheses (filed
and given Applicati	on Noby
Office) this
Application No., filing date	, and Office, when known;
	ASSIGNOR hereby au al representative, Microscosoft Way, Redmond, WashienTATIVES), to insert he and given Applicati OfficeApplication No., filing date

was filed on <u>August 22, 2019</u> and was given Application No <u>16/548,645</u> by the following Office "<u>USPTO</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	

MS Docket No.: 407038-US-NP

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).

Inventor's Signature

John Michael SNYDER

Printed Name in English

Printed Name in Native Language
(if other than English)

MS Docket No.: 407038-US-NP

I <u>Chakravarty Reddy ALLA</u> an original joint inventor of subj patent application entitled " <u>Bidir</u>	ect matter ("INVENTION")	·
ASSIGNEE'S legal r LLC., One Microsof LEGAL REPRESENT on the following Of	ASSIGNOR hereby authorepresentative, Microsoft of Way, Redmond, Washing ATIVES), to insert here and given Application of the fice blication No., filing date, and given in the collication was a series of the collication was applicated by the collication was applied by the collica	Technology Licensing, ton 98052 (ASSIGNEE'S in parentheses (filed Noby) this
-	t 22, 2019 and was given following Office " <u>USPTO</u> ";	
Microsoft Technology Lice behalf of itself and its successors of acquiring, the entire and exc priority, in the INVENTION and the derived therefrom, such as cont United States, its territories, and	s and assigns ("ASSIGNEE") clusive rights, title and in he APPLICATION (and all o cinuing applications, in wh	terest, including the right of ther applications and patents role or in part, in and for the
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

MS Docket No.: 407038-US-NP

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).

Cut pur	2019/09/21
Inventor's Signature	Date
Chakravarty Reddy ALLA CHAITANYA	
Printed Name in English	Printed Name in Native Language (if other than English)

RECORDED: 01/19/2021