506727193 06/22/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6774009

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XINJIAN XUE	06/15/2021
BIN PAN	06/15/2021
NAVEEN DUDDI HARIBABU	06/18/2021
PRASHANT SINGH AHLUWALIA	06/19/2021
RYAN WANG GAO	06/15/2021
JONG-CHIN LIN	06/15/2021
LEA VEGA ROMERO	06/15/2021
BALAJI RAMASUBRAMANIAM	06/16/2021
ADEEL JAMIL SIDDIQUI	06/16/2021
ONUR TUNA	06/15/2021

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:	17352531

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: MICROSOFT TECHNOLOGY LICENSING, LLC

Address Line 1: ONE MICROSOFT WAY

Address Line 4: REDMOND, WASHINGTON 98052

ATTORNEY DOCKET NUMBER:	409877-US-NP
NAME OF SUBMITTER:	MICHAEL J. MEDLEY

PATENT 506727193 REEL: 056615 FRAME: 0563

SIGNATURE: /Michael J. Medley/ **DATE SIGNED:** 06/22/2021 **Total Attachments: 20** source=409877-US-NP-Assignment#page1.tif source=409877-US-NP-Assignment#page2.tif source=409877-US-NP-Assignment#page3.tif source=409877-US-NP-Assignment#page4.tif source=409877-US-NP-Assignment#page5.tif source=409877-US-NP-Assignment#page6.tif source=409877-US-NP-Assignment#page7.tif source=409877-US-NP-Assignment#page8.tif source=409877-US-NP-Assignment#page9.tif source=409877-US-NP-Assignment#page10.tif source=409877-US-NP-Assignment#page11.tif source=409877-US-NP-Assignment#page12.tif source=409877-US-NP-Assignment#page13.tif source=409877-US-NP-Assignment#page14.tif source=409877-US-NP-Assignment#page15.tif source=409877-US-NP-Assignment#page16.tif source=409877-US-NP-Assignment#page17.tif source=409877-US-NP-Assignment#page18.tif

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PATENT REEL: 056615 FRAME: 0564

I, <u>Xinjian XUE,</u> ("ASSIGNOI	R") am the original invento	r or an original joint inventor											
of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled													
"COMPUTER-IMPLEMENTED EXPOSOMIC CLASSIFIER" ("APPLICATION"), which:													
oxtimes will be filed.	ASSIGNOR hereby autho	rizes, and requests,											
ASSIGNEE'S legal ı	ASSIGNEE'S legal representative, Microsoft Technology Licensing,												
LLC., One Microsof	LLC., One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S												
LEGAL REPRESENT	ATIVES), to insert here	in parentheses (filed											
on <u>June 21, 2021</u>	and given Applica tion	No. <u>17/352,531</u> by											
the following Office	e <u>US – United States Patent</u>	and Trademark Office)											
this APPLICATION'	s Application No., filing d	ate, and Office, when											
known;													
☐ was filed on	and was given A	pplication											
	by the following Office												
и	".												
Microsoft Technology Lice	ensing, LLC, a Washington	limited liability company, on											
behalf of itself and its successors	s and assigns ("ASSIGNEE"),	is entitled to, and is desirous											
of acquiring, the entire and exc	clusive rights, title and in	terest, including the right of											
priority, in the INVENTION and t	he APPLICATION (and all o	ther applications and patents											
derived therefrom, such as cont	inuing applications, in wh	ole or in part, in and for the											
United States, its territories, and	all foreign countries ("APF	PLICATION DERIVATIVES"));											
ASSIGNOR hereby authori	zes, and requests, ASSIGN	EE'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											

Application No.	Filing Date	Office

Xinjian XUE	6/15/2021
Inventor's Signature	Date
Xinjian XUE	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I, <u>Bin PAN</u> , ("ASSIGNOR") a	am the original inventor o	r an original joint inventor of
subject matter ("INVENTION") di	sclosed and/or claimed in	a patent application entitled
"COMPUTER-IMPLEMENTED EXPO	<u> SOMIC CLASSIFIER</u> " ("APPL	ICATION"), which:
ASSIGNEE'S legal r LLC., One Microsof LEGAL REPRESENT on June 21, 2021 the following Office	ASSIGNOR hereby authorepresentative, Microsoft to Way, Redmond, Washingth ATIVES), to insert here and given Application to US – United States Patents Application No., filing of	Technology Licensing, ton 98052 (ASSIGNEE'S in parentheses (filed No. 17/352,531 by and Trademark Office)
	and was given A by the following Office ";	application
behalf of itself and its successors of acquiring, the entire and exception priority, in the INVENTION and the derived therefrom, such as contunited 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 ("API	terest, including the right of ther applications and patents role or in part, in and for the
to insert the Application No., fi	•	
APPLICATION DERIVATIVES after		of the following table for any
Application No.	Filing Date	Office
Appreciation No.	Timing Dute	Office

Bin Pan	6/15/2021
Inventor's Signature	Date
Bin PAN	
Printed Name in English	Printed Name in Native Language
	(if other than English)

- I. Naveen Duddi HARIBABIJ. ("ASSICNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent COMPUTER IMPLIMENTED EXPOSOMIC CLASSIFIER CAPPLICATION'), which
 - 🗵 will be filed ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative. Microsoft Tochnology Licensing. LLC., One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on June 21, 2021 and given Application No. 17/352,531 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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Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of leself 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"))

ASSICNOR 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 to	Filing Date	Office
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Page I of a

0.	
Inventor's Signature	06/18/2021 Date
Naveen Duddi HARIBABU	
Printed Name in English	Printed Name in Native Language (if other than English)

("APPLICATION"), which:	application	entitled	matter ("INVENTION") d "COMPUTER-IMPLEMENTEMENT COMPUTER-IMPLEMENT C		CLASSIFIER
ASSIGNEE'S legal regresentative, Microsoft Technology Licensing, LLC., One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on June 21, 2021 and given Application No. 17/352,531 by the following Office US – United States Patent and Trademark Office) this APPLICATION's Application No., filling date, and Office, when known; was filed on and was given Application No by the following Office	("APPLICATIO)N"), which:			
Microsoft Technology Licensing, LLC, a Washington limited liability company, o behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirou of acquiring, the entire and exclusive rights, title and interest, including the right or priority, in the INVENTION and the APPLICATION (and all other applications and patent 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 REPRESENTATIVE to insert the Application No., filing date, and Office into the following table for an APPLICATION DERIVATIVES after they are known; Application No. Filing Date Office		ASSIGNEE'S LLC., One Mi LEGAL REPR on June 21, 2 the following this APPLICA	legal representative, Microsoft Way, Redmond, \ ESENTATIVES), to inserence and given App Office US – United State	crosoft Technology Lic Nashington 98052 (ASS It here in parenthese Ulication No. 17/352,531 Is Patent and Trademar	censing, JGNEE'S Is (filed by k Office)
Microsoft Technology Licensing, LLC, a Washington limited liability company, o behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirou of acquiring, the entire and exclusive rights, title and interest, including the right or priority, in the INVENTION and the APPLICATION (and all other applications and patent 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 REPRESENTATIVE to insert the Application No., filling date, and Office into the following table for an APPLICATION DERIVATIVES after they are known; Application No. Filling Date Office		was filed on	and was	aiven Application	
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behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirou 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 patent 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 REPRESENTATIVE to insert the Application No., filing date, and Office into the following table for an APPLICATION DERIVATIVES after they are known; Application No. Filing Date Office		#	***		
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PATENT

REEL: 056615 FRAME: 0571

	06/19/2021
Inventor's Signature	Date
Prashant Singh AHLUWALIA	
Printed Name in English	Printed Name in Native Language (If other than English)

I, <u>Rya</u>	<u>ın Wang GAO,</u> ("ASS	SIGNOR") am the original	inventor or an original joint
inventor of	subject matter ("	INVENTION") disclosed a	nd/or claimed in a patent
application	entitled " <u>COI</u>	MPUTER-IMPLEMENTED	EXPOSOMIC CLASSIFIER"
("APPLICATIO	ON"), which:		
\boxtimes	will be filed.	ASSIGNOR hereby autho	orizes, and requests,
		representative, Microsoft	•
	_	t Way, Redmond, Washing	5,
		ATIVES), to insert here	
		and given Application	
		e <u>US – United States Patent</u>	
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Application		Filing Date	Office
Application		Timing Ducc	o mee

のようなとして、Signature	6/15/2021 Date
Ryan Wang GAO	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I, <u>Jon</u>	<u>g-Cnin Lin</u> , (ASSIC	JNOR") am the original i	nventor or an original joint
inventor of	subject matter ("l	INVENTION") disclosed a	nd/or claimed in a patent
application	entitled " <u>CON</u>	MPUTER-IMPLEMENTED	EXPOSOMIC CLASSIFIER"
("APPLICATIO	ON"), which:		
\boxtimes	will be filed.	ASSIGNOR hereby autho	orizes, and requests,
		representative, Microsoft	
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	•	ATIVES), to insert here	•
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Jong-Chin Lin Inventor's Signature	6/15/2021 Date
Jong-Chin LIN	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I, <u>Lea</u>	VEGA ROMERO, ("A	SSIGNOR") am the origina	l inventor or an original join
inventor of	subject matter ("	INVENTION") disclosed a	nd/or claimed in a paten
application	entitled " <u>COI</u>	MPUTER-IMPLEMENTED	EXPOSOMIC CLASSIFIER
("APPLICATIO	ON"), which:		
\boxtimes	will be filed.	ASSIGNOR hereby autho	orizes, and requests,
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	•	t Way, Redmond, Washing	<i>5,</i>
		ATIVES), to insert here	
		and given Application	
		e <u>US – United States Patent</u>	
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Application	No.	Filing Date	Office

4	6/15/2021
Inventor's Signature	Date
Lea VEGA ROMERO	
	Drintad Nama in Nativa Language
Printed Name in English	Printed Name in Native Language
	(if other than English)

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	or of subject matte entitled " <u>CO</u>	IAM, ("ASSIGNOR") am the our control of the our control of the output of	l and/or claimed	l in a patent
	ASSIGNEE'S legal LLC., One Microsol LEGAL REPRESENT on June 21, 2021 the following Offic	ASSIGNOR hereby authorepresentative, Microsoft ft Way, Redmond, Washing (ATIVES), to insert here and given Application e US – United States Patent s Application No., filing o	Technology Lice ton 98052 (ASSIC in parentheses No. 17/352,531 and Trademark (nsing, JNEE'S (filed by Office)
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Application	No.	Filing Date	Office	

RENT P	6/16/2021
Inventor's Signature	Date
Balaji RAMASUBRAMANIAM	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.:409877-US-NP

I, <u>Ade</u>	<u>el Jamil SIDDIQUI,</u> (".	ASSIGNOR") am the origina	al inventor or an original joint
inventor of	subject matter ("	INVENTION") disclosed a	nd/or claimed in a patent
application	entitled " <u>COI</u>	MPUTER-IMPLEMENTED	EXPOSOMIC CLASSIFIER"
("APPLICATIO)N"), which:		
\boxtimes	will be filed.	ASSIGNOR hereby autho	orizes, and requests,
		representative, Microsoft	
	LLC., One Microsof	t Way, Redmond, Washing	ton 98052 (ASSIGNEE'S
	LEGAL REPRESENT	ATIVES), to insert here	in parentheses (filed
	on June 21, 2021	and given Application	No. <u>17/352,531</u> by
	the following Office	e <u>US – United States Patent</u>	and Trademark Office)
	this APPLICATION'	s Application No., filing o	late, and Office, when
	known;		
	was filed on	and was given A	application
		by the following Office	•
	"	"· ————————————————————————————————————	
Micros	soft Technology Lice	ensing, LLC, a Washington	limited liability company, on
behalf of itse	elf and its successors	s and assigns ("ASSIGNEE")	, is entitled to, and is desirous
of acquiring	, the entire and exc	clusive rights, title and in	terest, including the right of
priority, in th	ne INVENTION and t	he APPLICATION (and all o	ther applications and patents
derived there	efrom, such as cont	tinuing applications, in wh	nole or in part, in and for the
			PLICATION DERIVATIVES"));
ASSIG	NOR hereby authori	zes, and requests, ASSIGN	EE'S LEGAL REPRESENTATIVES
to insert the	Application No., f	iling date, and Office into	the following table for any
APPLICATION	N DERIVATIVES 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).

Inventor's Signature

Adeel Jamil SIDDIQUI

Printed Name in English

Date

Printed Name in Native Language (if other than English)

I, Onur TUNA, ("ASSIGNOR") am the original inventor or an original joint inventor
of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled
"COMPUTER-IMPLEMENTED EXPOSOMIC CLASSIFIER" ("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 June 21, 2021 and given Application No. 17/352,531 by
the following Office <u>US – United States Patent and Trademark Office</u>)
this APPLICATION's Application No., filing date, and Office, when
known;
was filed on and was given Application No by the following 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

Quittura	June 15, 2021
Inventor's Signature	Date
Onur TUNA	
Printed Name in English	Printed Name in Native Language
	(if other than English)