CH \$290.00 8780686

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 ETAS ID: TM563916

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
SMULE, INC.		02/21/2020	Corporation: DELAWARE

RECEIVING PARTY DATA

Name:	WESTERN ALLIANCE BANK
Street Address:	55 ALMADEN BOULEVARD, SUITE 100
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95113
Entity Type:	Corporation: ARIZONA

PROPERTY NUMBERS Total: 11

Property Type	Number	Word Mark
Serial Number:	87806864	LET'S MUSIC TOGETHER
Registration Number:	5962611	ALONE, IT'S MUSIC. TOGETHER, IT'S MAGIC.
Registration Number:	4210527	AUTORAP
Registration Number:	4867515	CONNECTING THE WORLD THROUGH MUSIC
Registration Number:	4469932	GUITAR! BY SMULE
Registration Number:	5823143	LIVEJAM
Registration Number:	4157876	MADPAD
Registration Number:	3996521	MAGIC PIANO
Registration Number:	4193535	REMIX YOUR LIFE
Registration Number:	3719489	SMULE
Registration Number:	5627894	SMULE

CORRESPONDENCE DATA

Fax Number: 8585506420

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: 858-550-6433

Email: jmfitzpatrick@cooley.com **Correspondent Name:** JENNIFER FITZPATRICK

Address Line 1: C/O COOLEY LLP
Address Line 2: 4401 EASTGATE MALL

REEL: 006875 FRAME: 0911

TRADEMARK

900537250

Address Line 4: SAI	N DIEGO, CALIFORNIA 92121
ATTORNEY DOCKET NUMBER:	305983-1172
NAME OF SUBMITTER:	JENNIFER FITZPATRICK
SIGNATURE:	/JENNIFER FITZPATRICK/
DATE SIGNED:	02/26/2020
Total Attachments: 18 source=IPSA - Smule#page1.tif source=IPSA - Smule#page2.tif	
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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of February 21, 2020 (the "Agreement") between WESTERN ALLIANCE BANK, an Arizona corporation ("Lender") and Smule, Inc. ("Grantor") is made with reference to the Loan and Security Agreement, dated as of March 13, 2017 (as amended from time to time, the "Loan Agreement'), between Lender and Grantor. Terms defined in the Loan Agreement have the same meaning when used in this Agreement.

For good and valuable consideration, receipt of which is hereby acknowledged, Grantor hereby covenants and agrees as follows:

To secure the Obligations under the Loan Agreement, Grantor grants to Lender a security interest in all right, title, and interest of Grantor in any of the following, whether now existing or hereafter acquired or created in any and all of the following property (collectively, the "Intellectual Property Collateral"):

- (a) copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held (collectively, the "Copyrights"), including the Copyrights described in Exhibit A;
- (b) trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks (collectively, the "Trademarks"), including the Trademarks described in Exhibit B;
- (c) patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same (collectively, the "Patents"), including the Patents described in Exhibit C;
- (d) mask work or similar rights available for the protection of semiconductor chips or other products (collectively, the "Mask Works");
- (e) trade secrets, and any and all intellectual property rights in computer software and computer software products;
 - (f) design rights;
- (g) claims for damages by way of past, present and future infringement of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;
- (h) licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works, and all license fees and royalties arising from such use to the extent permitted by such license or rights;

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- (i) amendments, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and
- (j) proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

The rights and remedies of Lender with respect to the security interests granted hereunder are in addition to those set forth in the Loan Agreement, and those which are now or hereafter available to Lender as a matter of law or equity. Each right, power and remedy of Lender provided for herein or in the Loan Agreement, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein, and the exercise by Lender of any one or more of such rights, powers or remedies does not preclude the simultaneous or later exercise by Lender of any other rights, powers or remedies. This Agreement and any rights granted hereunder shall terminate upon the termination of the Loan Agreement pursuant to its terms.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

GRANTOR:	LENDER:
SMULE, INC.	WESTERN ALLIANCE BANK, an Arizona corporation
Ву:	253
Name: Tether San	By:
Title: CEO	Name:
Chould the	Title:
John Le Chewllin, CAO Address for Notices:	Address for Notices:
Attn: 139 Townsend Street, Suite 300	Attn: 55 Almaden Boulevard, Suite 100
San Francisco, CA 94107	San Jose, California 95113
Tel:	Tel: (408) 556-6501
Fax:	Fax:(408) 282-1681

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

GRANTOR:	LENDER:
SMULE, INC.	WESTERN ALLIANCE BANK, an Arizona corporation
Ву:	By:
Name:	
	Name: Larry Sherman
Title:	Title: Sevier Drecher
Address for Notices:	Address for Notices:
Attn: 139 Townsend Street, Suite 300	Attn: 55 Almaden Boulevard, Suite 100
San Francisco, CA 94107	San Jose, California 95113
Tel:	Tel: (408) 556-6501
Fax:	Fax:(408) 282-1681

EXHIBIT A

COPYRIGHTS

None.

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EXHIBIT B

TRADEMARKS

Please see attached Schedule

Trademark	Country	Status	Serial No.	File Date	Reg. No.	Reg. Date	Classes
ALONE, IT'S MUSIC.	Australia	Pending	1483125	May 14			9, 42
TOGETHER, IT'S MAGIC.				2019			
ALONE, IT'S MUSIC.	Canada	Pending	1963147	May 15			
TOGETHER, IT'S MAGIC.				2019			
ALONE, IT'S MUSIC.	Indonesia	Pending	1483125	May 14			9, 42
TOGETHER, IT'S MAGIC.				2019			
ALONE, IT'S MUSIC.	Japan	Pending	1483125	May 14			9, 42
TOGETHER, IT'S MAGIC.				2019			
ALONE, IT'S MUSIC.	Mexico	Pending	1483125	May 14			9, 42
TOGETHER, IT'S MAGIC.				2019			
ALONE, IT'S MUSIC.	United	Registered	88/142,885	Oct 4 2018	5,962,611	Jan 14	9, 41, 42,
TOGETHER, IT'S MAGIC.	States of America					2020	45
ALONE, IT'S MUSIC.	WIPO	Registered	1483125	May 14	1483125	May 14	9, 42
TOGETHER, IT'S MAGIC.				2019		2019	
AUTORAP	Australia	Registered	1264493	May 22 2015	1264493	Jan 27 2016	9
AUTORAP	Brazil	Registered	909449376	May 28 2015	909449376	Jan 30 2018	9
AUTORAP	Canada	Registered	1730071	May 27 2015	TMA960095	Jan 12 2017	9
AUTORAP	EUTM	Registered	1264493	May 22 2015	1264493	Jul 22 2016	9
AUTORAP	India	Registered	1264493	May 22 2015	1264493	Feb 4 2017	9
AUTORAP	Japan	Registered	1264493	May 22 2015	1264493	Feb 10 2016	9
AUTORAP	Mexico	Registered	1264493	May 22 2015	1264493	May 22 2015	9
AUTORAP	New Zealand	Registered	1264493	May 22 2015	1264493	Feb 2 2016	9
AUTORAP	Philippines	Registered	1264493	May 22 2015	1264493	Apr 15 2016	9
AUTORAP	Switzerland	Registered	1264493	May 22 2015	1264493	Aug 22 2016	9
AUTORAP	United	Registered	85/047,089	May 25	4,210,527	Sep 18	9
	States of America			2010		2012	
AUTORAP	WIPO	Registered	1264493	May 22 2015	1264493	May 22 2015	9
CONNECTING THE WORLD THROUGH MUSIC	Australia	Pending	1395808	Jan 2 2018			9
CONNECTING THE WORLD THROUGH MUSIC	India	Pending	1395808	Jan 2 2018			9

Trademark	Country	Status	Serial No.	File Date	Reg. No.	Reg. Date	Classes
CONNECTING THE WORLD THROUGH MUSIC	Indonesia	Registered	1395808	Jan 2 2018	1395808	Jan 15 2019	9
CONNECTING THE WORLD THROUGH MUSIC	United Kingdom	Registered	1395808	Jan 2 2018	1395808	Dec 11 2018	9
CONNECTING THE WORLD THROUGH MUSIC	United States of America	Registered	86/056,076	Sep 4 2013	4,867,515	Dec 8 2015	9
CONNECTING THE WORLD THROUGH MUSIC	WIPO	Registered	1395808	Jan 2 2018	1395808	Jan 2 2018	9
GUITAR! BY SMULE	United States of America	Registered	85/946,110	May 30 2013	4,469,932	Jan 21 2014	9
LET'S MUSIC TOGETHER	United States of America	Pending	87/806,864	Feb 22 2018			9, 41, 42, 45
LIVEJAM	Australia	Registered	1452970	Jan 10 2019	1452970	Sep 9 2019	9
LIVEJAM	Canada	Pending	1940087	Jan 10 2019			9, 42
LIVEJAM	China	Registered	1452970	Jan 10 2019	1452970	Apr 25 2019	9
LIVEJAM	Indonesia	Pending	1452970	Jan 10 2019			9
LIVEJAM	Mexico	Pending	1452970	Jan 10 2019			9
LIVEJAM	New Zealand	Registered	1452970	Jan 10 2019	1452970	Jul 11 2019	9
LIVEJAM	Norway	Pending	1452970	Jan 10 2019			9
LIVEJAM	Philippines	Registered	1452970	Jan 10 2019	1452970	Oct 24 2019	9
LIVEJAM	Switzerland	Pending	1452970	Jan 10 2019			9
LIVEJAM	United States of America	Registered	88/032,209	Jul 10 2018	5,823,143	Jul 30 2019	9
LIVEJAM	WIPO	Registered	1452970	Jan 10 2019	1452970	Jan 10 2019	9
MADPAD	United States of America	Registered	85/462,584	Nov 2 2011	4,157,876	Jun 12 2012	9
MAGIC PIANO	Australia	Registered	1260840	May 22 2015	1260840	Jan 15 2016	9
MAGIC PIANO	Brazil	Registered	909449422	May 28 2015	909449422	Jan 30 2018	9
MAGIC PIANO	Canada	Registered	1730073	May 27 2015	TMA969323	Apr 27 2017	9
MAGIC PIANO	China	Registered	1260840	May 22 2015	1260840	Jun 6 2017	9

Trademark	Country	Status	Serial No.	File Date	Reg. No.	Reg. Date	Classes
MAGIC PIANO	EUTM	Registered	1260840	May 22	1260840	Jun 15	9
MAGIC PIANO	Japan	Registered	1260840	2015 May 22 2015	1260840	2016 Jan 28 2016	9
MAGIC PIANO	Mexico	Registered	1260840	May 22 2015	1260840	Jul 19 2016	9
MAGIC PIANO	New Zealand	Registered	1260840	May 22 2015	1260840	Jan 6 2016	9
MAGIC PIANO	Norway	Registered	1260840	May 22 2015	1260840	Mar 18 2016	9
MAGIC PIANO	Philippines	Registered	1260840	May 22 2015	1260840	Oct 8 2015	9
MAGIC PIANO	Republic of Korea (South)	Registered	1260840	May 22 2015	1260840	Jun 17 2016	9
MAGIC PIANO	Switzerland	Registered	1260840	May 22 2015	1260840	Aug 4 2016	9
MAGIC PIANO	United States of America	Registered	85/126,165	Sep 9 2010	3,996,521	Jul 19 2011	9
MAGIC PIANO	WIPO	Registered	1260840	May 22 2015	1260840	Aug 13 2015	9
REMIX YOUR LIFE	United States of America	Registered	85/462,610	Nov 2 2011	4,193,535	Aug 21 2012	9
SMULE	Australia	Registered	991513	Dec 30 2008	991513	Oct 8 2009	9
SMULE	Bahrain	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Brazil	Registered	909449473	May 28 2015	909449473	Jan 30 2018	9
SMULE	Canada	Registered	1730075	May 27 2015	TMA958501	Dec 20 2016	0
SMULE	China	Registered	991513	Dec 30 2008	991513	Jun 14 2017	9
SMULE	China	Registered	991513	Dec 30 2008	991513	Jun 14 2017	9
SMULE	Croatia	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Democratic People's Republic of Korea (North)	Registered	991513	Dec 30 2008	991513	Jan 30 2010	9
SMULE	EUTM	Registered	991513	Dec 30 2008	991513	Jan 10 2010	9
SMULE	Georgia	Registered	991513	Dec 30 2008	991513	Mar 30 2010	9
SMULE	Iceland	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	India	Registered	1264492	May 22 2015	1264492	Feb 4 2017	9

Trademark	Country	Status	Serial No.	File Date	Reg. No.	Reg. Date	Classes
SMULE	Indonesia	Pending	991513	Dec 30 2008			9
SMULE	Iran	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Japan	Registered	991513	Dec 30 2008	991513	May 27 2010	9
SMULE	Liechtenstein	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Macedonia	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Mexico	Registered	1264492	May 22 2015	1264492	Jul 17 2017	9
SMULE	Monaco	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Mongolia	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Norway	Registered	991513	Dec 30 2008	991513	Jul 29 2009	9
SMULE	Oman	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Philippines	Registered	1264492	May 22 2015	1264492	Apr 15 2016	9
SMULE	Russian Federation	Registered	991513	Dec 30 2008	991513	Jan 27 2010	9
SMULE	Serbia	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Singapore	Registered	991513	Dec 30 2008	991513	May 21 2009	9
SMULE	Switzerland	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	Turkey	Registered	991513	Dec 30 2008	991513	Feb 10 2010	9
SMULE	Ukraine	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	United States of America	Registered	77/513,478	Jul 2 2008	3,719,489	Dec 1 2009	9
SMULE	United States of America	Registered	87/930,113	May 21 2018	5,627,894	Dec 11 2018	41, 42, 45
SMULE	Vietnam	Registered	991513	Dec 30 2008	991513	Feb 26 2009	9
SMULE	WIPO	Registered	1264492	May 22 2015	1264492	May 22 2015	9
SMULE	WIPO	Registered	991513	Dec 30 2008	991513	Dec 30 2008	9

EXHIBIT C

PATENTS

Please see attached Schedule

73 Inselect CLS, Servicin, area design registrations) 36 Currorally Physicing LLS, force Mill 3. Alloward, LLS, and Sharighy (Instituted in "Currorally Physicing") 3. New Fairners (CLS, Priv. and Spotent Silves in 2001)	

Reference#	Prior Reference	C TY	Tide	ype	inventor Names Combined	Servel #	Filed Date	Phonty Date	Patent #	issue Date	Status
50342:00001	140-0001 U.S.	US	System And Method For Communication Between	un	Cook, Perry R	12/963788	9/3/09	9/3/08	8750473	6/10/14	ISSUED
			Mobile Devices Using Digital/Acquistic Techniques								
50342:00001US02	50842.00077	US.	System: And Method For Communication Between	UTL	Cook, Perry R	14/295/106	6/3/14	9/3/08	9063451	7/14/15	ISSUED
			Mobile Devices Using Digital/Acoustic Techniques								
50342:0000 1 US03	50942.00077USQ3	US.	System: And Methad For Communication Between	UTL	Cask, Perry R	14/752283	8/26/15	9/3/08	9598008	3/14/17	SSUED
			Mobile Devices Using Digital/Acoustic Techniques								
50342 0000 RJ 504	50342:00077US04	US:	System: And Methad For Communication Between:	UTL	Gook, Perry R	19/457292	3/13/17	9/3/08	10103820	10/16/18	ISSUED
			Mobile Devices Using Digital/Acoustic Techniques								
50342.00012	140-0007-US	us	System And Method For Capture And Rendering Of Performance On Synthetic Musical Instrument	UTL	Salazar, Spencer Wang, Ge Cook, Perry R.	12/612500	11/4/09	11/4/09	8222507	7/17/12	ISSUED
50342.00013	140-0007-1US		System And Method For Capture And Rendering Of Performance On Synthetic Musical Instrument	UTL	Salazar, Spencer Wang, Ge Cook, Perry R.	13/532321	6/25/12	11/4/09	8686276	4/1/14	ISSUED
50342 00014	140-0008-US	υs	Continuous Pitch-Corrected Vocal Capture Device	UTL	Cook, Perry R Selazar, Spencer	12/878131	9/4/10	12/15/09	9058797	6/16/15	ISSUED
			Cooperative With Content Server For Backing Track		Selezar, Spercer Frebrink, Rebecca A Wang, Ge						
			Mix		Ljungstrom, Mattias Smith, Jeffrey C						
50342:000141/502		US	Continuous Pitch-Corrected Vocal Capture Davice	UTL	Cook, Perry R. Salazar, Spencer	14720020	5/22/15	12/15/09	9754571	95/17	SSUED
			Cooperative with Content Server for Backing Track Mix.		Frebrick, Robecca A. Wang, Ge						
					Ljungstrom, Mattias Smith, Jeffrey C						
50342:000141503		US.	Continuous Pitch Corrected Viscal Capiture Device	UT 1	Cook, Perry R. Salazar, Spancar	15/693946	9/1/17	12/15/09			PENDING
			Cooperative With Cartent Sarver Far Backing Track		Frebrink, Rebessa A. Wang, Ge						
			Mix		Ljungstrom, Metties Smith, Jeffrey C.						
50342:00015	140-0008-AU	AU	Continuous Pitch-Corrected Vocal Capture Davice	UTL	Wang Ge Salazar Spancer	2010382041	12/13/10	12/16/09	2010332041	10/16/14	ISSUED
			Cooperative With Content Server		Frebrink, Rebecca A. Smith, Jeffrey C.						
					Liungstrom, Metties Cook, Perry R						
50342,00016	140-0008-CA	ÇA	Continuous Pitch-Corrected Vocal Capiture Device	un	Wang, Ge Salazar: Spencer	Z786241	12/13/10	12/15/09	2786241	6/12/19	SSUED
			Cooperative With Content Server		Fishrink, Robecta A. Smith, Jeffrey C.						
					Ljurgstrom, Mattias Cook, Perry R						
50242:00017	140-0008:GB	GB:	Cartriuous Pitch: Carracted Vocal Capture Device	un.	Wang Ga Salazar Spencer	1211878.8	12/13/10	12/15/09	2488957	5/31/17	SSUED
			Casperative With Content Server		Fiebrink, Rebecca A. Smith, Jeffrey C.						
50342.00025US01	140-0010	LIC.	District Committee Officeral		Ljungstrom, Mattias Gook, Perry R	13/085413	4/12/11	4/12/10	8868411	10/21/14	iệc IED
		US	Pitch-Correction Of Vocal Performance In Accord With Score-Coded Harmonies	UTL	Cook, Perry R. Lazier, Ari Lieber, Tom Kirk, Turner Evan						ISSUED
50342.00025U\$02	140-0010-1	US	Pitch-Correction Of Vocal Performance In Accord With Score-Coded Harmonies	UTL	Cook, Perry R. Lazier, Ari Lieber, Tom Kirk, Turner Evan	14/517647	10/17/14	4/12/10	9852742	12/26/17	ISSUED
50342.00025US03			Pitch-Correction Of Vocal Performance In Accord With Score-Coded Harmonies	UTIL	Cook, Perry R. Lazier, Ari Lieber, Tom Kirk, Turner Evan	15/849194	12/20/17	4/12/10			PENDING
50342.00025CA01	140-0010-CA		Continuous Score-Coded Pitch Correction And Harmony Generation Techniques For	UTL	Lieber, Tom Cook, Perry R. Lazier, Ari Kirk, Turner Evan	2796241	4/12/11	4/12/10			PENDING
			Geographically Distributed Glee Club								
50342:00025GB01	140-0010-GB1	GB	Pitch Correction And Harmony Generation Techniques For Geographically Distributed	UTL	Lieber, Tom Cook, Perry R. Lazier, Ari Kirk, Turner Evan	1218365.3	4/12/11	4/12/10	2493470	6/7/17	ISSUED
50342.00025GB02	140-0010-GB2	GB	Glee Club Continuous Score-Coded Pitch Correction And Harmony Generation Techniques For Geographically Distributed	UTL	Lieber, Tom Cook, Perry R. Lazier, Ari Kirk, Turner Evan	1706935.2	4/12/11	4/12/10	2546686	10/11/17	ISSUED
50342.00025GB03	140-0010-GB3	GB	Glee Club Continuous Score-Coded Pitch Correction And Harmony Generation Techniques For Geographically Distributed Glee Club	UTL	Lieber, Tom Cook, Perry R. Lazier, Ari Kirk, Turner Evan	1706936.0	4/12/11	4/12/10	2546687	3/7/18	ISSUED
50342.00025HK02		HK	Continuous Score-Coded Pitch Correction And Harmony Generation Techniques For Geographically Distributed Glee Club		LIEBER, Tom COOK, Perry R. LAZIER, Ari KIRK, Turner Evan	18101330.7	1/26/18	4/12/10	1242485	9/13/19	ISSUED

50342.00025HK03		HK	Continuous Score-Coded		LIEBER, Tom	18101314.7	1/26/18	4/12/10	1242037	9/6/19	ISSUED
			Pitch Correction And Harmony Generation Techniques For		COOK, Perry R. LAZIER, Ari KIRK, Turner Evan						
			Geographically Distributed Glee Club								
50342:00028	140-00121/5	US	Coordinating And Mixing Vocals Captured From	UTIL	Cook, Perry R Lazrer, Ari	19065414	4/12/11	4/12/10	8963929	3/17/15	ISSUED
Third of blanch food			Geographically Distributed Partomiers		Lisber, Tool Kirk, Torner Evan	110000	A166600		continue		In N. Vers
80342 00029US02		us	Coordinating and Mixing Vocals Captured from Geographically Distributed	UM.	Cook Perry R Lazier, Ari Linder, Too	14/656344	3/12/15	4/12/10	9721579	8/1/17	SSUED
50342 000290/503		U\$	Parformers Coordinating And Mixing	un.	Kirk, Tomer Evan Cook, Perry R	15/664659	7/31/17	4/12/10	10395888	8/27/19	SSUED
			vocals Captured From Gaographically Distributed		Lazier, Ari Lieber, Tom						
50342:00028U304		us	Performers Coordinating And Mixing	un.	Kirk, Turner Evan Cook, Parry R	187560789	8/28/19	4/12/10			PENDING
			Vocals Captured From Geographically Distributed Performers		Lazior, Ari Lieber, Torn Kirk, Tumer Eyan						
50342.00029	140-0013 US	US	Computational Techniques For Continuous Pitch	UTL	Cook, Perry R. Lazier, Ari	13/085415	4/12/11	4/12/10	8996364	3/31/15	ISSUED
		,	Correction And Harmony Generation		Lieber, Tom			,,,,			,
50342:00032	140-0015125	US	Continuous Score-Coded Pitch Correction	UTL	Caak, Perry R Selazar, Spencer Frebrick, Rebecca A	12/876192	94/10	4/12/10	9147395	9/29/15	SSUED
					Wang Ga Ljungstrom Mattias						
50342:000326/802		US	Combinuous Seare-Coded	UH	Smith Jeffrey C Gazik, Perry R	14/856/152	9/16/15	4/12/10	9754572	9/5/17	SSUED
			Pitch Correction		Salazar, Spancar Frebrick, Rebassa A Wasar Gis						
					Wang, Ge Lungstrom, Mattias Smith, Jaffrey C						
80342 00032US03		US	Continuous Score-Coded Pitch-Correction	U11L	Gaak, Perry R Salazar, Spencer	15/594461	9/1/17	4/12/10			PENDING
					Fiebrink, Rebette A. Wang, Ge						
50342.00033	140-0016 US	US	World Stage For Pitch-	UTL	Lpangstrom, Metties Smith, Jeffrey C. Wang, Ge	12/876133	9/4/10	12/15/09	8682653	3/25/14	ISSUED
50072.0000	140 0010 00	00	Corrected Vocal Performances	O1L	Salazar, Spencer Fiebrink, Rebecca A.	12070100	U-110	12.10.00	owew.	W20 P4	I SOULD
					Ljungstrom, Mattias Smith, Jeffrey C.						
50942:00094	140-0017 US	us	System: And Method For Capture And Rendering Of	un	Yang, Jeannie Wang, Ga Yang, Jeannie	13/202773	11/9/11	11/9/19	8772621	7/8/14	ISSUED
			Performance Of Synthetic String: instrument		Oh, Jieun Lieber, Tom						
50342:00034US02	50842.00081	US	System And Method For Capture And Rendering Of	unc	Wang, Ga Yang, Jeannie	14/323667	7/3/14	11/9/10	9640460	502/17	ISSUED
	ann mannais ann		Perfamo ance On Synthetic String:instrument		Ob, Jieub Lieber, Tam	A Company	-Aug		202000000	and the second s	marca
50342,00034US03	50842:00081fuS03	US	System And Method For Capture And Rendering Of Performance On Synthetic	UTL	Wang Ge Yang Jeannie Oh Jiaun	15/583632	5/1/17	11/9/10	10163428	12/25/18	ISSUED
50342.00037	140-0018 US	US	String Instrument Audiovisual Sampling For	UTL	Lieber, Tam Kruge, Nicholas M.	13/607153	9/7/12	9/7/11	9176610	11/3/15	ISSUED
			Percussion-Type Instrument With Crowd-Sourced Content		Wang, Ge Cook, Perry R.						
50342 00039	140-0019-05	us	Sourcing And Distribution Synthetic Musicel Instrument	eren co	Hamilton, Robert	13/864939	19/31/12	10/31/11	9062380	7/14/15	ISSUED
			With Parformance And/Or Skill-Adaptive Score Tempo		Chauthery, Amenda S. Lezter, Ari						
50342:00039US02		us	Synthetic Musical Instrument	un	Smith, Jeffrey C. Hamilton, Robert	14/79/695	7/13/15	10/31/11	9620095	4/11/17	SSUED
			With Performance - And/Or Skill-Acaptive Score Tempo		Lazier, Ari Smith, Jeffrey C, Chauchary, Amar						
50342.00041	140-0020 US	US	Synthetic Multi-String Musical Instrument With Score Coded	UTL	Hamilton, Robert Kruge, Nicholas M.	13/715920	12/14/12	12/14/11	9035162	5/19/15	ISSUED
			Performance Effect Cues And/Or Chord Sounding		Wang, Ge						
50342 00048	140-00221/S	US.	Gesture Capture Automatic Conversion Of Speech Into Song, Rap Or	un.	Chordia: Parag P Codfrey: Mark T	13963769	3/29/13	3/29/12	9324330	4/26/16	ISSUED
			Other Audible Expression Having Target Meter Or		Ree, Alexander M.D. Gupte, Prema						
50342:00046US02	140-0022-1US	US	Rhythm Autoroatic Conversion Of	UHL	Cook, Perry R Gupta: Prierna	13/910949	95/13	3/29/12	9666199	5/30/17	ISSUED
	50942.00069		Speech Into Song, Rap, Or Other Audible Expression Having Target Meter Or		Cask, Perry R Chordia: Parag Godfrey, Mark						
50342.000460/503	50942.00080US02	US.	Rhythm Autoroatis: Canversian Of	UTL	Rae, Alexander Chardia, Parag	15/606111	S/26/17	S/29/12	10290307	5/14/19	ISSUED
			Speech Rito Song, Rap, Or Other Audible Expression		Goothey Mark Ras Atexander						
50342 00046US04	50342:00063US03	US	Hawng Tangat Malar Or Rhythin Autoroatin: Conversion Of	UH.	Gupta: Proma Cook: Perty R. Chartie: Parag	16/410590	5/13/19	5/28/17			PENDING
	CONTRACTOR		Speech into Song, Rap, Or Other Audible Expression	416	Gedrey, Mark Ras, Atexander	- COAN		Section 19			
			Hewing Tanget Meter Or Rhythm		Gupta, Prema Gook, Perry R						
50342.00083		KR.	Automatic Conversion Of Speech tric Song, Rap Or Other Autobas Speech (1997)	WTL.	Godfrey, Mark	2014-7090440	3/29/19	3/29/12			ALLOWED
			Other Audible Expression Having Target Meter Or Rhythm								
50942:00094		æ	Automatic Conversion Of Speech into Song, Rap Or	um.	Rae, Alexander	2015:503661	3/29/13	3/29/12	6290858	2/16/16	ISSUED
			Other Audible Expression Having Target Meter Or								
50342.00066US01	140-0028-US	US	RRythm Automatic Estimation Of Latency For Synchronization	UTL	Gupta, Prerna	14/216136	3/17/14	3/15/13	9412390	8/9/16	ISSUED
			Of Recordings In Vocal Capture Applications								
	l		Capture Applications		l		l	l .		L	l

50342.00068US02	US	Crowd-Sourced Device	UTL	Cook, Perry R.	15/178234	6/9/16	3/15/13	10284985	5/7/19	ISSUED
303+2.000000 302	03	Latency Estimation For Synchronization Of Recordings In Vocal Capture Applications	OIL	COOK, POLY IX.	13 17020+	us io	3 13/13	1020-900	Jiii 19	ISSUED
50342.00068US03	US	Crowd-Sourced Device Latency Estimation For Synchronization Of Recordings in Vocal Capture Applications	UTL	Chaudhery, Amanda Steinwedel, David Shimmin, John Jabr, Lance Leistikow, Randal	16/403939	5/6/19	3/15/13			PENDING
50342.00069	US	Sixial Music System And Method With Continuous, Real: Time Pitch Correction	U11.	Yang Jeanois Kroge Nicholas M Thompson, Gregory C	13/960664	8893	B/7/12	963112?	3/21/17	ISSUED
		Of Vocal Perbiroance And Dry Vocal Capture For Subsequent Re-Rendering		Cook, Perry R.						
		Based On Setectively Applicable Vocal Effect(s) Schedule(s)								
50942.00069US02	us:	Social Music System And Method With Continuous	un.	Yang Jeanne Kruge, Nicholas M	15/463878	3/20/17	412/10	10229662	3/12/19	SSUED
		Real-Time Pitch Correction Of Vocal Performance And Dry Vocal Capture For		Thompson, Gregory C. Cook, Perry R.						
		Subsequent Re-Rendering Based On Selectively								
50342:00069US03	US	Applicable Vocal Effect(s) Schedule(s) Social Music System And	UTL	Yang, Jaannia	16/296391	3/8/19	A/12/10			PENDING
		Method With Continuous Real-Time Pitch Correction	V .	Kruge; Nicholas M Thompson, Gregory C		PM 10	7.10 W			1.000
		Of Vocal Performance And Dry Vocal Capture For Subsequent Re-Rendering		Cook, Perry R						
		Based On Selectively Applicable Vocal Effect(s)								
50342 00070JP01	jβ	Schedule(s) Karaoke System And Method With Real: Time Continuous	U11	Yang Jeannia Kroge Nicholas M	2015-S26880	8843	8/7/12	6371283	7/20/18	SSUED
		Pitch Correction Of Vecal Performance And Dry Vecal		Bruge, Nicholas M Thompson, Gregory C Cook, Perry R						
hosas novyskanaa	V6	Captura Far Subsaquent Re- Recendering	a les	U.C.	***** ********	okan	60%3			nesou.c
50342:00070KR01	KIR	Karacke System And Method With Real-Time Continuous Pitch Correction Of Vocal	UTL	Yang, Jeannie Kruge, Nicholas M Thompson, Gregory C	2015-7005988	8/6/13	8/7/12			PENDING
		Performance And Dry Vocal Capture For Subsequent Re- Recendering		Cook, Perry R						
50342.00073	US	Audiovisual Capture And Sharing Framework With	UTL	Chordia, Parag P. Cook, Perry R.	14/104618	12/12/13	12/12/12	9459768	10/4/16	ISSUED
		Coordinated User-Selectable Audio And Video Effects Filters		Godfrey, Mark T. Gupta, Prerna Kruge, Nicholas M.						
		i iitei s		Leistikow, Randal J. Rae, Alexander M.D.						
50342.00073US02	US	Audiovisual Capture And Sharing Framework With Coordinated, User-Selectable Audio And Video Effects Filters	UTL	Simon, lan S. Chordia, Parag P. Cook, Perry R. Godfrey, Mark T. Gupta, Prena Kruge, Nicholas M. Leistikow, Randal J.	15/284229	10/3/16	12/12/12			ALLOWED
80342 00075(4501	us	Computationally: Assisted	en	Rae, Alexander M.D. Simon, Ian S. Leistikow, Randal	14/587625	12/31/14	12/31/13	10262644	AV16/19	ISSUED
		Musical Sequencing Ana/Or Composition Techniques Por Secial Music Chaltenge Or		Geefrey Mark Simon, lan S. Yang Jeennie						
50342.00075US02	us	Competition Competition	un	Atlen, Michael W. Leistkow, Randat	18084273	4/15/19	12/31/13			PENDING
		Musical Sequencing And/Or Composition Techniques For Social Music Challenge Or		Godfrey, Mark Simon, Ian S. Yang, Jeannie						
50342.00078US01	us	Competition Score-Directed String	UTL	Atlen, Michael W. Godfrey, Mark	14/285391	5/22/14	5/22/13	9472178	10/18/16	ISSUED
		Retuning And Gesture Cueing In Synthetic Multi-String Musical Instrument								
50342:00079AJSD1	IJS.	Coordinated Audiovisual Montage From Selected	UTL	Simon, lan S	14739910	6/45/15	6/13/14			PENDING
		Crowd-Sourced Centers With Alignmens To Audio Baseline								
50342:00079M/C/01	WQ	Goordineted Audiovisual Montage From Selected	UTIL	Yang Jeannie	PCT/US2015/085800	6/15/15	8/13/14			EXPIRED
		Crews Sourced Content With Alignment To Audio Baseline								
50342.00086US01	us	Coordinating And Mixing Audiovisual Content Captured From Geographically Distributed Performers	UTL	Allen, Michael W.	14/928727	10/30/15	10/30/14	9866731	1/9/18	ISSUED
50342.00086W O01	wo	Coordinating And Mixing Audiovisual Content Captured From Geographically Distributed Performers	UTL	Godfrey, Mark T. Cook, Perry R.	PCT/US2015/068373	10/30/15	10/30/14			EXPIRED
50342.00088U \$01	US	Coordinating And Mixing Audiovisual Content Captured From Geographically Distributed Performers	UTL	Godfrey, Mark T. Cook, Perry R.	14/928727	10/30/15		9866731	1/9/18	ISSUED
50342.00088U S02	US	Coordinating And Mixing Audiovisual Content Captured From Geographically Distributed Performers	UTL	Godfrey, Mark T. Cook, Perry R.	15/864819	1/8/18	4/12/11			ALLOWED
50342,00087USD1	US	Automates Generation Of Coerdinates Audomassal Work Beach On Content Captured Geographically Distributes Performers	UTL	Sung, Revin Maldover, Joh Cook, Perry B Kim, Bans Shiromin, John	15/173041	63/16	8/3/15	9911403	36/18	ISSUED

50342:00087USD2	US.	Automated Generation Of Ceardinated Audiovasual Work Based On Content	UH.	Sung Kevin Misidover Joh Cook, Perry R.	15/910846	32/18	6/3/15	10424263	9/24/19	GRANTED
		Captured Geographically Distributed Performers		Kim; Bane Shimmin; John Yang, Jeannie						
50342.00087U\$03	US	Automated Generation Of Goordineted Audiovisual Work Based On Content	UH.	Sung Revin Malasver Jan Cook, Perry R	19/574971	9/18/18	8/3/15			PENDING
50342:0008744-Q01	WQ.	Captured Geographically Distributed Performers Automated Generalism Of	UM.	Kint, Bona Shimmin, John Yang, Jeannie Molawer, Jon	PCT/US2019/035919	63/16	8/3/19			EXPIRED:
00092.0000793.07	** **********************************	Coordinated Audiovisual Wark Based On Contact Ceptured Fran		191(#12042# / 3.561)	r O. Fel Geo. Hartona Ia	SPG TO	3.3.3			LIVER
50342 00067AU61	ALI	Geographically Distributed Parformers Automated Generation Of		Gasik, Perry R	2018270362	8P.E/G	6/3/15			PENDING
		Coordinated Audiovisual Wark Bassel On Content Captured Franc								
50942:00087CNG\$	ÇIN .	Geographically Distributed Performers Automated Generation Of Coordinated Audiovisual		Karn: Bionia	201680032651.6	5/3/16	6/3/16			PENDING
		Work Based On Content Captured From Geographically Distributed								
50342:00087GB01	C383	Performers Automated Generation Of Coordinated Audomosual		Shiromin; John	1719624.7	6/3/18	8/3/15			PENDING
		Work Based On Content Captured From Geographically Distributed								
50342:000879-1K04	ЫK	Performers Automated Generation Of Coardinated Audiovisual Work Based On Content		Yang, Jeerwie	18114438.1	11/12/18	8/3/16			PENDING
		Captured From Geographically Distributed Performers								
50342:00087KRD1	KR.	Automated Generation Of Coordinated Audiovisual Work Based On Content Captured From		Sung, Kakin Maldover, Joh Cook, Perry R Kim, Bona	2017-7034851	63/16	6/3/15			PENDING
50342.00089US01	us	Geographically Distributed Pertamours Synthetic Musical Instrument	UTL	Shimmin; John Yang; Jeannie Cook, Perry R.	15/275807	9/26/16	10/31/11	9761209	9/12/17	ISSUED
		With Touch Dynamics And/Or Expressiveness Control		Yang, Jeannie Woo, Yuning Shimmin, John						
50342.00089U \$02	US	Sunthalia Musical Instrument	UTI	Leistikow, Randal Berger, Michael Smith, Jeff	15/697877	9/7/17	10/31/11			ABANDONED
30342.000890.302	05	Synthetic Musical Instrument With Touch Dynamics And/Or Expressiveness Control	UIL	Cook, Perry R. Yang, Jeannie Woo, Yuning Shimmin, John	13/09/07/	anni	10/31/11			ABANDONED
				Leistikow, Randal Berger, Michael Smith, Jeff						
50342.00089W O01	wo	Synthetic Musical Instrument With Touch Dynamics And/Or	UTL	Cook, Perry R. Yang, Jeannie	PCT/US2016/053731	9/26/16	9/24/15			EXPIRED
1		Expressiveness Control		Woo, Yar						
				Woo, Yar Shimmin, John Berger, Michael Leistikow, Randal Smith, Jeff						
\$D\$42.000800.\SQ2	üŞ	Expressiveness Control	DES	Woo, Yar Shimmin, John Berger, Michael Leistikow, Randal Smith, Jeff Fiersh, Benjamin Shiromin, John Yang, Jeanne	29°46441	\$126/16	108/15	O030267	1/29/6	issueo
90047:0000018d2 50047:0000018d3	US	Expressiveness Control Display Screen or Portion Display Screen or Portion	DES	Woo, Yar Shimmin, John Berger, Michael Leistikow, Randal Smith, Jeff Biersh, Bensmin Shimman, John	29566681 78596683	\$25/16 \$25/18	108/15 108/15	C0130207 C013020734	1/29/16	ISSUED ISSUED
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50942 000904/S03	US	Expressiveness Control Olispita; Scheen or Portion Therof with Ammates Graphical User Interface Dispita; Scheen ar Portion Thereof with Ammates Craphical User Interface Dispita; Scheen CP Portion Thereof With Ammates Craphical User Interface Dispita; Scheen CP Portion Thereof With Ammates Craphical User Interface	DES	Woo, Yer Shimmin, John Berger, Michael Leistkow, Randal Smith, Jeff Her M. Bergeron Streems, John Streems Cook, Penry R. Hersel, Bergeron Co	285963952	5/28/19	1038/15	D800751	10/24/17	ISSUED
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\$0042,000901,505 \$0042,000901,504 \$00542,000901,505	US US US	Expressiveness Control Display Screen or Porton Theref selfs Assentate Graphical User Interface Display Screen or Porton Theref selfs Avantated Graphical User Interface Display Screen or Porton Therefor with Avantated Graphical User Interface Display Screen Or Porton Therefor With Avantated Graphical User Interface Display Screen Or Porton Therefor With Avantate Graphical User Interface Tripling User Interface Or A Display Screen Or Porton Tripling Or Or Porton Therefor Or Or Or Porton Therefor Or Or Or Porton Therefor Or	DES DES	Woo, Yar Shimmin, John Bergar, Michael Lesikkov, Randal Smith, Jeff Hera Bargaroni Shimmin, John Shimmin, John Shimmin, John Yang, Jenerua Bargaroni Shimmin, John Yang, Jenerua Cook, Penry R. Hacub, Bargaroni Shimmin, John Yang, Jenerua Cook, Penry R. Hasah, Bargaroni Shimmin, John Yang, Jenerua Cook, Penry R. Hasah, Shimmin, John Yang, Jenerua Cook, Penry R. Shimmin, John Yang, Jenerua Cook, Penry R. Shimmin, John Yang, Jenerua Cook, Penry R. Shimmin Shimmin Cook, Penry R. Shimmin John Yang, Jenerua Cook, Penry R. Shimmin John	26756255 26756255 26756242 26756242	520°16 522°16 982716 522718	108/15 108/16 108/16	D802794 D806528 D806039	10/2017 12/19/17 12/19/17	ESUED ESUED SSUED
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50947-000804/S05 50942-000804/S04 50942-000804/S05 50942-000804/S07 50942-000804/S05	US US US	Expressivaness Control Display Screen or Portion Therefyelts Ayeriste Graphical User Interface Graphical User Interface Display Screen or Portion Therefyelt Ayeriste Craphical User Interface Display Screen Or Portion Therefyelt Ayeriste Craphical User Interface Display Screen Or Portion Therefyelt Ayeriste Craphical User Interface Display Screen Or Portion Therefyelt Or A Display Screen Or Portion Therefyelt User Interface Display Screen Or Portion Therefyelt User Interface Original User Interface	DES DES DES DES	Woo, Yar Shimmin, John Berger, Michael Lestikov, Randal Smith, Jeff Here M. England Smith, Jeff Here M. England Smith, Jeff Here M. England Smith, Jeff Yang, Jenerya Cook, Penry R. For ah, Bengaran John Tang, Jenerya Cook, Penry R. For ah, Bengaran John Tang, Jenerya Cook, Penry R. Fee ah, Bengaran John Tang, Jenerya Cook, Penry R. Fee ah, Bengaran John Tang, Jenerya Cook, Penry R. Farsah, Bengaran Smith John Tang, Jenerya Cook, Penry R. Farsah, Bengaran Smith John Tang, Jenerya Cook, Penry R. Fee ah, Bengaran John Tang, Jenerya Cask, Penry R. Fee ah, Bengaran John Tang, Jenerya Cask, Penry R. Fee ah, Bengaran John Tang, Jenerya Cask, Penry R. Fee ah, Bengaran John Tang, Jenerya Cask, Penry R. Fee ah, Bengaran John Tang, Jenerya Cask, Penry R. Fee ah, Bengaran John Tang, Jenerya Cook, Penry R. Fee ah, Bengaran John Tang, Jenerya Cook, Penry R. Fee ah, Bengaran John Tang, Jenerya Cook, Penry R. Fee ah, Bengaran John Tang, Jenerya Cook, Penry R. Fee ah, Bengaran John Tang, Jenerya Khengaran John Tang, Jenerya Khengara	28598532 2856828 2856824 2856825 28586370	\$20/16 \$22/16 \$22/16 \$22/16 \$22/16	108/15 108/15 108/15 108/15 108/15	D800754 D806025 D806036 D806036 D807564	10/26/17 12/16/17 12/16/17 12/16/17 12/16/17 12/16/17	SSUED SSUED SSUED SSUED SSUED SSUED
50042 (000004) 5005 50042 (000004) 5004 50042 (000004) 5005 50042 (000004) 5007 50042 (000004) 5009 50042 (000004) 5009	US US US	Expressivaness Control Display Scheen or Portion Theref with Avenates Graphical User Interface Display Scheen or Portion Theref with Aumated Graphical User Interface Display Scheen Or Portion Theref With Aumated Graphical User Interface Display Scheen Or Portion Theref With Avenates Graphical User Interface Annoting Graphical User Interface Scheen Or Portion Theref With Avenated Graphical User Interface Display Scheen or Portion Theref With Avenated Graphical User Interface Craphical User Interface Craphical User Interface Craphical User Interface Craphical User Interface Display Scheen Or Portion Theref With Avenated Graphical User Interface Craphical User Interface Display Scheen Or Portion Theref With Avenated Graphical User Interface For A Display Scheen Or Portion Theref With Avenated Display Scheen Or Portion Theref With Avenated Display Scheen Or Portion Therefor with Chaphical User Interface Display Scheen Or Portion Therefor with Chaphical User Interface Display Scheen Or Portion Therefor With Avenated	DES DES DES DES	Woo, Yar Shimmin, John Bergar, Michael Lesikkov, Randal Smith, Jell Sangaroni Shimmin, John Shimmin,	291980302 291980303 291980302 291980304 291980304 291980304	\$27716 \$22716 \$22716 \$22716 \$22716 \$22716 \$22716	108/15 108/15 108/15 108/15 108/15 108/15	D800791 D806528 D806528 D807961 D807961	10/20/17 12/19/17 12/19/17 12/19/17 12/19/17 13/19/17 13/19/17	SSUED SSUED SSUED SSUED SSUED SSUED SSUED
50942 000904 504 50942 000904 504 50942 000904 505 50942 000904 507 50942 000904 507 50942 000904 507	US US US	Expressivaness Control Display Screen or Portion Therof with Avenage Graphical User interface Display Screen or Portion Therof with Avenage Graphical User interface Display Screen Or Portion Therof with Avenage Graphical User interface Display Screen Or Portion Therof With Avenage Display Screen Or Portion Therof With Avenage Graphical User interface Avenage Avenage Graphical User interface Display Screen Or Portion Therof With Avenage Graphical User interface Original User interface Original User interface Original User interface Graphical User interface Original User interface	DES DES DES DES DES DES DES	Woo, Yar Shimmin, John Berger, Michael Lestikov, Randal Smith, Jeff Here M. Stephene	291980302 291980303 291980302 291980304 291980304 291980304	\$27716 \$27716 \$27716 \$27716 \$27716 \$27716 \$27716 \$27716	1006/15 1006/15 1006/15 1006/15 1006/15 1006/15	D800791 D805086 D806086 D806086 D807361 D807364	12/9/17 12/9/17 12/9/17 12/9/17 12/9/17 12/9/17 11/2/17	SSUED SSUED SSUED SSUED SSUED SSUED SSUED SSUED

50342:00090US#4	US.	Graphical User interface For	DE\$	Hersh, Benjamin	29/566269	5/27/16	10/8/15	D813265	3/20/18	ISSUED
		A Display Screen Or Portion Thereof		Shimmin, John Yang, Jeannie						
				Cook, Perry R						
50342-00090US15	US	Graphical User Inforface For A Display Screen Or Portion Thereof	DES	Hersh, Benjamin Shimmin, John Yang, Jeanne Cook, Perry R	29/566279	5/27/16	10/8/15	D805531	12/19/17	ISSUED
50342:00090US16	US		DES	Hersh Benjamin	29/566288	5/27/16	40/8/15	D813266	3/20/18	ISSUED:
		A Display Screen Or Portion. Thereof		Shinomin, John Yang Jeanois						
				Cook Percy R						
50342.00091US01	US	Audiovisual Media Application Platform with Wireless	UTL	Hersh, Benjamin Shimmin, John	15/337866	10/28/16	10/28/15			ALLÓWED
		Handheld Audiovisual Input		Yang, Jeannie Cook, Perry R.						
50342.00091US02	US	Wireless Handheld Audio	UTL	Hersh, Benjamin	15/337891	10/28/16	10/28/15			PENDING
		Capture Device and Multi- Vocalist Method for		Shimmin, John Yang, Jeannie						
		Audiovisual Media Application		Cook, Perry R.						
50342.00091W O01	wo	Audiovisual Media Application	UTL	Hersh, Benjamin	PCT/US2016/059531	10/28/16	10/28/15			EXPIRED
		Platform, Wireless Handheld Audio Capture Device And		Shimmin, John Yang, Jeannie						
		Multi-Vocalist Methods Therefor		Cook, Perry R.						
50342:000950:501	US	Score-Coding with Group	UTL	Berger, Michael						CLOSED
		Parts and interface to Facilitate Grows Sourced		Schaffer, Deen						
50342.00096US01	US	Authorship Thereof Crowd-Sourced Technique	UTL	Sullivan, Stefan	15/649040	7/13/17	7/13/16	10460711	10/29/19	ALLOWED
50342.000960.501	US	For Pitch Track Generation	UIL	Shimmin, John	13/049040	// Lav I/	// 13/ 16	10400711	10/29/19	ALLOWED
				Schaffer, Dean Cook, Perry R.						
50342.00096US02	us	Crowd-Sourced Technique	UTL	Sullivan, Stefan	16/665611	10/28/19				PENDING
		For Pitch Track Generation		Shimmin, John Schaffer, Dean						
50342.00096CN01	ĊN	Crowd-Sourced Technique	_	Cook, Perry R. Sultivan, Stefan	201780056045.2	7/13/17	7/13/16			ABANDÔNED
55512.0555551101		For Pitch Track Generation		Shimmin, John	EU I OUGOS IOIE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7.0.10			, El TIBONES
	 L_		L_	Schaffer, Dean Cook, Perry R.						
50342.00096EP01	₽	Crowd-Sourced Technique For Pitch Track Generation		Sultivan, Stefan Shimmin, John	17828471.7	2/13/19	7/13/16			ABANDONED
				Schaffer, Dean						
50342.00096IN01	IN	Crowd-Sourced Technique		Cook, Perry R. Sullivan, Stefan	201917005306	2/11/19	7/13/16			PENDING
		For Pitch Track Generation		Shimmin, John Schaffer, Dean						
				Cook, Perry R.						
50342.00096W O01	wo	Crowd-Sourced Technique for Pitch Track Generation	UTL	Sullivan, Stefan Shimmin, John	PCT/US2017/041952	7/13/17	7/13/16			EXPIRED
				Schaffer, Dean Cook, Perry R.						
50342:00097QS01	us	Musical Composition	Uff	Espeleta Charles	15/667372	8/2/17	8/2/16	10039908	772/16	SSUED
		Authoring Environment Integrated With Synthetic		Yang Jeannie Geek Perry R						
		Musicel instrument		Correl; Oscar Moody, Jonathan						
				Xie:Ran						
				Smith, Jeffrey C. Schaffer, Deen						
				Ling alessings						
50342.00098US02	US	Animated Graphical User Interface for a Display Screen	DES	Espeleta, Charles Yang, Jeannie	29/600446	4/12/17	8/2/16	D844664	4/2/19	ISSUED
		or Portion Thereof		Correl, Oscar Moody, Jonathan						
,										
				Xie, Ran						
				Xie, Ran Smith, Jeffrey C. Hamilton, Robert						
50342.00098U\$03	us	Graphical User Interface for a	DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeleta, Charles	29/600449	4/12/17	8/2/16	D845342	4/9/19	ISSUED
50342.00098US03	us	Graphical User Interface for a Display Screen or Portion Thereof	DE\$	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeleta, Charles Yang, Jeannie Corral, Oscar	29/600449	4/12/17	8/2/16	D845342	4/9/19	ISSUED
50342.00098U.S03	lus	Display Screen or Portion	DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran	29/000449	4/12/17	8/2/16	D845342	4/9/19	ISSUED
50342.00099U S03	us	Display Screen or Portion	DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeleta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan	29/000449	4/12/17	8/2/16	D845342	4/9/19	ISSUED
50342 00099U S03 50342 00099U S04	us	Display Screen or Portion Thereof Arimated Graphical User	DE\$	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeleta, Charles Yang, Jsanvie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeleta, Charles	29f00449 29f00450	4/12/17	8/2/16	D844542	4/9/19	ISSUED
		Display Screen or Portion Thereof		Xie, Ran Smith, Jeffrey C, Hamilton, Robert Espedist, Charles Yang, Jeannie Corral, Oscar Micosy, Jenathan Xie, Ran Smith, Jeffrey C, Hamilton, Robert Espelota, Charles Yang, Jeannie Corral, Oscar						
		Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen		Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Hamilton, Robert Espetiek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Moody, Jonathan Xie, Ran						
		Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen		Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espetietz, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espetietz, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C.						
		Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a	DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Churles						
50342.00099US04	us	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof	DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiek, Churles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiek, Churles Yang, Jeannie Corral, Oscar Corral, Oscar	29'800450	4/12/17	B/2/16	D844646	4/2/19	ISSUED
50342.00099US04	us	Display Screen or Portion Thereof Animates Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion	DES	Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Yang, Jeannie Corral, Oscar Moody, Jonathan Corral, Oscar Moody, Jonathan Moody, Jonathan Moody, Jonathan Moody, Jonathan	29'800450	4/12/17	B/2/16	D844646	4/2/19	ISSUED
50342.00099US04	us	Display Screen or Portion Thereof Animates Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion	DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeteta, Charles Losera Moody, Jonathan Xie, Ran	29'800450	4/12/17	B/2/16	D844646	4/2/19	ISSUED
50342.00099US04	us	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a	DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiac, Charles Yang, Jisamini Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiac, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetiac, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Smith, Jeffrey C. Hamilton, Robert Smith, Jeffrey C. Hamilton, Robert Smith, Jeffrey C. Hamilton, Robert Espetiac, Charles Smith, Jeffrey C.	29'800450	4/12/17	B/2/16	D844646	4/2/19	ISSUED
50342.00098US04 50342.00098US05	us	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion	DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Espeteta, Charlos Yang, Jeannie Espeteta, Charlos Yang, Jeannie Espeteta, Charlos Yang, Jeannie	29'600450 29'600452	4/12/17	872/16	D844646 D844666	4/2/19 4/2/19	ISSUED
50342.00098US04 50342.00098US05	us	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a	DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Kong, Jonathan Kennie Corral, Oscar Moody, Jonathan Kennie Corral, Oscar Moody, Jonathan Moody, Jonathan Moody, Jonathan Moody, Jonathan Moody, Jonathan Moody, Jonathan	29'600450 29'600452	4/12/17	872/16	D844646 D844666	4/2/19 4/2/19	ISSUED
50342.00098US04 50342.00098US05	us	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion	DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetata, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetata, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran	29'600450 29'600452	4/12/17	872/16	D844646 D844666	4/2/19 4/2/19	ISSUED
50342.00069U.S04 50342.00099U.S05 50342.00099U.S06	us	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion	DES DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espetek, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espeteka, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robert Espeteka, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Kan Kan Xe. Kan	29'600450 29'600452	4/12/17 4/12/17 4/12/17	872/16	D844646 D844666	4/2/19 4/2/19	ISSUED
50342.00098US04 50342.00098US05	US US	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof	DES DES	Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Samith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran. Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie	29'800450 29'800452 29'800455	4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED
50342.00069U.S04 50342.00069U.S05 50342.00069U.S05	US US	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Graphical User Interface for a	DES DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Vang, Jeannie Corral, Oscar Moody, Jonathan Oscar Moody, Jonathan	29'800450 29'800452 29'800455	4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED
50342.00069U.S04 50342.00099U.S05 50342.00099U.S06	US US	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof	DES DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetata, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert Espetata, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Xi	29'800450 29'800452 29'800455	4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED
50342.00069U.S04 50342.00069U.S05 50342.00069U.S06	us us	Display Screen or Portion Thereof Arimated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof	DES DES DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jasannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort	29'800450 29'800452 29'800456	4/12/17 4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED
50342.00069U.S04 50342.00069U.S05 50342.00069U.S05	US US	Display Screen or Portion Thereof Arimated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof	DES DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charlos Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Xe	29'800450 29'800452 29'800455	4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED
50342.00068U.S04 50342.00069U.S05 50342.00069U.S06	us us	Display Screen or Portion Thereof Animated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Animated Graphical User	DES DES DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan	29'800450 29'800452 29'800456	4/12/17 4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED
50342.00069U.S04 50342.00069U.S05 50342.00069U.S06	us us	Display Screen or Portion Thereof Arimated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof	DES DES DES	Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Corral, Oscar Moody, Jonathan Xie, Ran Kooty, Jonathan Xie, Ran Moody, Jonathan Xie, Ran Xie,	29'800450 29'800452 29'800456	4/12/17 4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED
50342.00099U.S04 50042.00099U.S05 50042.00099U.S06	us us	Display Screen or Portion Thereof Arimated Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof Graphical User Interface for a Display Screen or Portion Thereof	DES DES DES	Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xe. Ran Smith, Jeffrey C. Hamilton, Robort Espeteta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan	29'800450 29'800452 29'800456	4/12/17 4/12/17 4/12/17 4/12/17	8/2/16 8/2/16	D844646 D844666 D844666	4/2/19 4/2/19 4/2/19	ISSUED ISSUED

50342.00099U S09	US	Arrimated Graphical User Interface for a Display Screen or Portion Thereof		Espeleta, Charles Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C.	29/600460	4/12/17	8/2/16	D845319	4/9/19	ISSUED
50342.00098US10	US	Animated Graphical User	DES	Hamilton, Robert Espeleta, Charles	29/600461	4/12/17	8/2/16	D837246	1/1/19	ISSUED
	US	Interface for a Display Screen or Portion Thereof		Yang, Jeannie Corral, Oscar Moody, Jonathan Xie, Ran Smith, Jeffrey C. Hamilton, Robert				D63/ 246	DIVIS	
50342:00099PV01	US.	Audioviscal Cobaloration Method with Latency Management for Wide Area Broadcast	PRV	Hersh, Benjamin Yang, Jaannia Cook, Perry R	82/480610	AS(17	A/3/17			EXPIRED
80342:00099PV02	US	Audiovisual Colfaboration System and Mathod with	PRV	Smith: Jeffrey C Helmberg, Anton Hersh: Benjamin Yang, Jeanore	62/685727	6/15/18	8/15/18			EXPIRED
		Latency Management for Wide:Area Broadcast and Social Matter Type User		Woo, Yuning Liang, Weng						
		interface Mechanics		Catali, Percy R Smith: Jaffray C.						
50342 00099US01	U\$	Audioviscal Collaboration Method with Latency Management for Wide-Area	UTIL	Fibiriberg, Arton Hersh, Bonjamin Yang, Jeannie	15/944;537	4/3/16	43/17			PENDING
		Broaccast		Gook, Perry R Smith, Jeffrey C						
50042 00099U S02	US	Audiovisual Caltaboration System and Method with Latency Management for	WTIE:	Holmberg, Acton Hersb, Benjamin Yang, Jaannie	16/443022	8/17/19	8/15/18			PENDING
		Wide-Area Brosticast and		УУже. Yuning						
croso roson (en	Ge.	Social Media Type User Interface Medianics		Liang: Wang Cook, Parry R. Smith, Jeffrey C.						DECHOREC
50342:00099US03 50342:00099US04	US US									PROPOSED PROPOSED
50342:00099NY CIO2	PCT	Audiovisual Collaboration	P¢T	Holmberg, Anton	PCT/US2019067479	6/17/19	6/15/18			PENDING
		System and Method with Letency Management for		Hersh; Benjaroin Yang, Jeannie						
		Wide Area Breadcast and Social Media Type Daar		Was, Yoning Liang, Wang						
		Interface Mechanics		Cook, Perry R. Smith, Jeffrey C.						
50342.00099A4 OO1	PCT	Audiovisual Collaboration Methed with Latency	PCT	Hersh Benjamin	PCT/US18/25957	4/3/18	4/3/17			EXPIRED
		Management for Wide Area Broadcast								
50342:00099CN01	GN	Audiovisual Collaboration		Hersh, Benjamin	2018800366724	43/18	4/3/17			PENDING
		Method with:Letency Menagement for Wide-Area Broscicast								
50342 000900E01 50342 00101US01	Œ	Audiovisual Collaboration Method with Latency Management for Wide-Area Broadcast	- 15	Hersh, Benjamin	Awig 16/107351	4/3/19 8/21/18	4(3)117 B/21/17			PENDING PENDING
	US	Audio-Visual Effects System for Augmentation of Captured Performance Based on Content Thereof	US	Yang, Jeannie	10/10/301					
50342.00101W O01	PCT	for Augmentation of Captured Performance Based on	PCT	Woo, Yuning	PCT/US2018/047325	8/21/18	8/21/18			PENDING
50342.00101PV01	US	for Augmentation of Captured Performance Based on Emotional Content Thereof		Liang, Wang	62/548122	8/21/17	8/21/17			EXPIRED
50342:00184PV01	US.	Capture Techniques for Karaoke-Style Content		Gook; Perry R	92/574490	5/21/18				EXPIRED
50342:00104PV02	us	Non-Linear Media Segment Capture And Edit Platform For	PRV	Smith, Jeffrey C.	62/092129	6/29/18				EXPIRED
		Karaoke-Style Content And/Or Freeform Collaboration								
50342.00184PV03	us.	Shorf-Seed Or Clip Generation For User Engagement to Viscal	PRV	Moldover, Jan Sternwedel, David Smith, Jeffrey C.	92/891412	8/25/18				PENDING
50342:001040/501	us	Capture Applications	UTL	Capik, Perry R. Steinwedel, David	16/418859	5/21/19	5/21/18			PENDING
				Stobodien; Andrea Creek, Perry R. Chir. Paul Smith: Jeffrey C.						
50942.00409US02	us	Audiovisual Collaboration System and Method with Seed/Join Mechanic	un.	Sman, Jeaney C. Steinwedel, Devid Stabodien, Andrea Smith, Jefrey C. Perry R. Cook	16/468560	7/1/19	ବ୍ୟ ରମଞ			PENBING
50342:00194W/O01	US			Statowadal, Devid	PCT/US2019/083368	521/19	S/21/18			PENDING
		Capture And Edit Platform Fair Karaoka: Skyla Contant And/Or Freelarm: Collaboration		Slobstien, Andree Cook, Perry R Chi, Ped Smith, Jeffrey C						
50342:00104W-Q02	US	Audiovisual Collaboration System and Method with Seed/John Mechanic	PCT	Steinwedsl, David Stobotien, Andrea Smith, Jeffrey D	PCT/US19/40113	7/1/19	6/29/16			PENDING
50342.00105US01	us	Non-Linear Media Segment Capture Techniques and		Perry R. Cook Steinwedel, David Chi, Paul T.	15/965519	5/21/18				ABANDONED
50342 00109US01	us:	Graphical User Interfaces Therefor Selfia: Chat Capture:		Slobodien, Andrea Cook, Perry R. Geek, Percy R. (and others:						PROPOSED (CLAMS
50342.00107US01	US	Mechanism for Scottl Media (prov) Audiovisual Collaboration with		tis be confirmed) Cook, Perry R. (and others						IN 99PV02) PROPOSED (CLAIMS
		User Part Arbitration (prov)		to be confirmed)						IN 99PV02)

G0042:00108FP/01	US	Augmented Reality Filters For PRO Captured Audiovisual Performances	Stanwerd Devid Homberg, Arton Wileges, Javier Cht. Part T Young, Oavid E Cook, Perry R	52774894	125/18	EXPIRED
GUSGE (VETUBLUSD)	US	Augmented Reality Filters For UT1 Captured Audiovisual Platformances	Stanwoold David Halmberg, Anton Willages, Javier Chi, Paul T Young, Oavid E Cook, Perry R			PROPOSED (CLAMS IN 108PVOT)
50362 001094,502	US	Augmentes Reality Filters For UTE Captures Audioviscel Partonnauces	Strawedst David Halmberg, Arten Willeges, Javier Chs, Paul T Young, David E. Cook, Perry F.			PROPUSED (CLAIMS N-108P/01)
90642 DOTCHWOOT	WO	Augmentier Reality Filters For PCT Capturer Auditoriscel Performances	Sterrwedel, David Freinberg, Anton Willeges, Javier Chr. Paul I Young, David E Cook, Perry R	PCTNUS2019/06/250	12/3/19	BASSELFECT-BOMO DEAQLINE 4/3/22/20 AMENIOMENT OF CLAIMS
50542 001004 (501	us	Augmented Reality Fitters For UTL Captured Auditoriscal Performances	Serroedel David Florriberg, Anton Villeges, Javier Chi, Paul T Young, David E Gook, Perry R			PROPOSED (GLAMS) IN 106PV(1)

RECORDED: 02/26/2020